



City of Abilene City Council Agenda

Weldon Hurt, Mayor Pro-tem
Shane Price, Council Member
Jack Rentz, Council Member
Robert Hanna, City Manager

Anthony Williams, Mayor

Donna Albus, Council Member
Kyle McAlister, Council Member
Travis Craver, Council Member
Stanley Smith, City Attorney
Shawna Atkinson, City Secretary

Notice is hereby given of a meeting of the City Council of City of Abilene to be held on October 8, 2020, at 8:30 a.m., at City Hall, 555 Walnut Street, Council Chambers, Abilene, Texas, for the purpose of considering the following agenda items. All agenda items are subject to action. The City Council reserves the right to meet in a closed session on any agenda item should the need arise and if applicable pursuant to authorization by Title 5, Chapter 551, of the Texas Government Code.

CALL TO ORDER

INVOCATION

1. Deputy Mayor Pro-tem Donna Albus

PLEDGE TO THE UNITED STATES FLAG AND THE TEXAS FLAG

PRESENTATIONS, RECOGNITIONS, PROCLAMATIONS AND ANNOUNCEMENTS

2. **Proclamations:**

- National Disability Employment Awareness Month
- National Physical Therapy Month
- Emergency Nurses Week

3. **Presentation:**

- Yellow Rose of Texas

CONSENT AGENDA

All consent agenda items listed are considered to be routine by the City Council and will be enacted by one motion. There will be no separate discussion of these items unless a Councilmember or Citizen so requests, in which event the item will be removed from the Consent Agenda and considered separately.

4. **Minutes:** Receive a Report, Hold a Discussion and Take Action on Approving the Minutes from the Regular Meeting Held on September 24, 2020, and the Special Joint Planning & Zoning Commission Meeting Held on October 1, 2020 **(Shawna Atkinson)**
5. **Resolution:** Receive a Report, Hold a Discussion and Public Hearing, and Take Action to Substitute DPR Construction as the General Contractor in the Master Development Agreement with Garfield Public/Private **(Robert Hanna)**
6. **Resolution:** Receive a Report, Hold a Discussion and Public Hearing, and Take Action on Awarding Bid No. 2080 to Bontke Brothers Construction Inc. on Water Department Street and Miscellaneous Repair Work 2020-2021 **(Greg McCaffery)**
7. **Resolution:** Receive a Report, Hold a Discussion and Public Hearing, and Take Action on approving the 2020-2024 Consolidated Plan, FY 2020/2021 Action Plan, and proposed use of Community Development Block Grant (CDBG) and Home Investment Partnerships Program (HOME) funds **(Zack Rainbow)**
8. **Ordinance (First Reading):** Receive a Report, Hold a Discussion and Public Hearing, and Take Action on an ordinance amending Chapter 32, "Utilities", Article III, "Industrial Wastes", of the Abilene Municipal Code, by amending certain sections as set out below; proving a severability clause, and declaring a penalty **(Rodney Taylor)**

REGULAR AGENDA - ORDINANCES AND PUBLIC HEARINGS - RESOLUTIONS

9. **Ordinance (Final Reading):** Receive a Report, Hold a Discussion and Public Hearing, and Take Action to Change the Time Limits and Metered Parking Zones for Downtown Parking **(Greg McCaffery)**
10. **Ordinance (Final Reading) Z-2020-10:** Receive a Report, Hold a Discussion and Public Hearing, and Take Action on a request from Sharon Riley, agent H.C. Zachry, to amend existing Planned Development (PD) District Number 32 by removing from subparagraph (f) 1 and 2 stating "no other signs shall be allowed" from Lots 25-30 and allowing all signage allowed in General Retail (GR) **(Mike Warrix)**
11. **Ordinance (Final Reading) Z-2020-13:** Receive a Report, Hold a Discussion and Public Hearing, and Take Action on a request from Denise Dilliard Rister and Jerry Lynn Rister to rezone property from General Commercial (GC) to General Retail (GR) District **(Mike Warrix)**
12. **Ordinance (Final Reading) CUP-2020-06:** Receive a Report, Hold a Discussion and Public Hearing, and Take Action on a request from Hit Ventures LLC, agent Cody Myers, for approval of Conditional Use Permit allowing light manufacturing and, in particular, coffee processing in a Heavy Commercial (HC) District **(Mike Warrix)**

PUBLIC COMMENTS

There will be no votes or any formal actions taken on subjects presented during public comment. The public comment period will only allow members of the public to present ideas and information to city officials and staff.

EXECUTIVE SESSION

13. **The City Council of the City of Abilene reserves the right to adjourn into executive session at any time during the course of this meeting to discuss any of the matters listed below, as authorized by the noted Texas Government Code Sections:**

A. 551.071 (Consultation with Attorney)

1. Ruby Flores and Cory Almanza v. Jesus Verastegui, Alfredo Verastegui, Rosalva Verastegui, and City of Abilene, Cause No. 49368-A, 42nd District Court, Abilene, Taylor County, Texas, filed April 13, 2016
2. Robert Steven Reitz v. City of Abilene, Texas, et al., Case No. 1:16-cv-00181-BL; In the U.S. District Court, Northern District of Texas, Abilene Division, filed October 10, 2016
3. Officer Patrick Sumrall and City of Abilene, Case No. 01-18-000-8653; Appeal of Indefinite Suspension to Arbitration, filed February 6, 2018
4. Alfredo Valencia v. Corey Davis and City of Abilene; Case No. 1:19-cv-00017-C; In the United States District Court, Northern District of Texas, Abilene Division, filed February 4, 2019.
5. City of Abilene v. Patrick Sumrall; Cause No. 27,733-B, In the 104th Judicial District Court, Taylor County, Texas, filed May 28, 2019
6. City of Abilene v. 3118 South 22nd Street, Abilene, Texas, et al.; Cause No. 11968-D, In the 350th Judicial District Court, Taylor County, Texas; filed October 11, 2019
7. City of Abilene, Texas and Garfield Public/Private LLC v. Ken Paxton, Attorney General of Texas; Cause No. D-1-GN-20-000900, In the 261st Judicial District Court, Travis County, Texas, filed February 13, 2020
8. Chandler Brooks v. Taylor County, et al.; Civil Action No. 1:20-cv-00049, In the United States District Court, Northern District of Texas, Abilene Division; filed March 5, 2020
9. John Doe v. Robert Hanna, Individually and as City Manager; Cause No. 28078-B; In the 104th Judicial District Court, Taylor County, Texas; filed July 7, 2020
10. Kimberly Mattson v. City of Abilene (Board of Building Standards); Cause No. 12197-D, In the 350th Judicial District Court, Taylor County, Texas, filed July 30, 2020
11. The City of Abilene, Texas v. Ken Paxton, Attorney General of Texas; Cause No. D-1-GN-20-004598, In the 53rd Judicial District Court, Travis County, Texas; filed September 1, 2020
12. Cockrell Investment Partners, L.P. v. Middle Pecos Groundwater Conservation District, et al.; Cause No. P-8277-83-CV, In the 83rd Judicial District Court, Pecos County, Texas; filed September 11, 2020
13. Sharra Sampson v. City of Abilene; Cause No. 8144-B, In the 104th Judicial District Court, Taylor County, Texas; filed September 14, 2020
14. Governor's Executive Orders - COVID-19

B. 551.072 (Deliberations about Real Property)

1. Clyde Water

C. 551.073 (Deliberations about Gifts and Donations)

D. 551.074 (Personnel Matters)

1. City Council may consider appointment, employment, compensation, reassignment, duties, discipline, or dismissal of public officers or employees, City Manager, City Attorney, Municipal Court Judge, City Secretary, and City Board and Commission Members
2. City of Abilene Boards & Commissions May be Discussed, as needed for (re)appointment

E. 551.076 (Deliberations about Security Devices)

F. 551.087 (Business Prospect/Economic Development)

1. Abilene Convention Center Hotel Project

RECONVENE

REGULAR AGENDA

14. **Resolution:** Receive a Report, Hold a Discussion and Public Hearing, and Take Action on Appointing Members to Various Boards and Commissions per the City Charter **(Shawna Atkinson)**

- Abilene-Taylor County Public Health District Board
- Abilene-Taylor County Venue District Board

ADJOURNMENT

In compliance with the Americans with Disabilities Act, the City of Abilene will provide for reasonable accommodations for persons attending City Council meetings. To better serve you, requests should be received 48 hours prior to the meetings. Please call 325-676-6208.

CERTIFICATION

I hereby certify the above meeting notice was posted on the bulletin board at the City Hall of the City of Abilene, Texas, on the 2nd day of October, 2020, at 2:40 p.m.

Shawna Atkinson, TRMC
City Secretary



**City Council
Agenda Memo**

City Council Meeting Date: 10/8/2020

TO: Honorable Mayor & Members of City Council

FROM: Shawna Atkinson, City Secretary

SUBJECT: 4. Minutes: Receive a Report, Hold a Discussion and Take Action on Approving the Minutes from the Regular Meeting Held on September 24, 2020, and the Special Joint Planning & Zoning Commission Meeting Held on October 1, 2020 (*Shawna Atkinson*)

GENERAL INFORMATION

Approval of the Minutes from the Regular Meeting Held on September 24, 2020

SPECIAL CONSIDERATIONS

None.

FUNDING/FISCAL IMPACT

None

STAFF RECOMMENDATION

Approval of the Minutes

BOARD OR COMMISSION RECOMMENDATION

N/A

ATTACHMENTS:

1. 09-24-2020 Minutes - Regular - Evening
2. 10-01-2020 Minutes - Special with P&Z

CITY COUNCIL MEETING
September 24, 2020 at 4:00 p.m.

CITY COUNCIL OF THE CITY OF ABILENE, TEXAS
COUNCIL CHAMBERS, CITY HALL

The City Council of the City of Abilene, Texas met in Regular Session on September 24, 2020, at 4:00 p.m. in the Council Chambers, 555 Walnut St. Mayor Anthony Williams was present and presiding with Mayor Pro-tem Weldon Hurt, Deputy Mayor Pro-tem Donna Albus and Councilmembers Shane Price, Jack Rentz, Kyle McAlister and Travis Craver. Also present were City Manager Robert Hanna, City Attorney Stanley Smith, City Secretary Shawna Atkinson, and various members of the City staff.

EXECUTIVE SESSION

Mayor Williams recessed into Executive Session at 4:00 p.m. pursuant to the following of the Open Meetings Act, with the following issues discussed during this session, as listed on the agenda and authorized by the noted Texas Government Code Section:

- 22. B. 551.072 (Deliberations about Real Property)
 - 1. 200 Block of Walnut Street
- 22. D. 551.074 (Personnel Matters)
 - 1. Municipal Court Judge (also agenda item #23)
 - 2. City Attorney (also agenda item #24)
- 22. F. 551.087 (Business Prospects/Economic Development)
 - 1. DCOA Project ERG-9 (also agenda item #25)

The Executive Session ended at 5:25 p.m. and reconvened to Open Session at 5:30 p.m. as noted on the posted agenda. Mayor Williams reported no votes or action were taken in Executive Session.

Mayor Pro-tem Weldon Hurt delivered the invocation and led the Pledge of Allegiance to the Flag of the United States of America and State of Texas Flag.

CONSENT AGENDA

The Consent Agenda consisted of items 4-18. Item #7 was pulled for individual consideration.

Items pulled for individual consideration were as follows:

- David Swart, citizen – Item #7

Councilmember McAlister had a conflict of interest on Item 16 and abstained from voting on that item alone. The vote for Item 16 only was as follows:

AYES (6): Mayor Williams, Mayor Pro-tem Hurt, Deputy Mayor Pro-tem Albus and Councilmembers Price, Rentz and Craver
NAYS (0): None
ABSTAIN (1): McAlister

Mayor Pro-tem Hurt moved to approve the Consent Agenda, now consisting of items 4-6, 8-15 and 17-18. Councilmember Rentz seconded the motion. Motion carried.

AYES (7): Mayor Williams, Mayor Pro-tem Hurt, Deputy Mayor Pro-tem Albus and Councilmembers Price, Rentz, McAlister and Craver
NAYS (0): None

4. Minutes: Receive a Report, Hold a Discussion and Take Action on Approving the Minutes from the Regular Meeting Held on September 10, 2020
5. Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on Utilizing Cares Act Grant Funds for Abilene ISD's Distance Learning Initiative
[ASSIGNED RESOLUTION NO. 185-2020]
6. Resolution: Receive a Report, Hold a Discussion and Public Hearing and Take Action to Award a Contract to Collier Construction to Build the New Aircraft Rescue and Fire Fighting Station at Abilene Regional Airport
[ASSIGNED RESOLUTION NO. 186-2020]
8. Resolution: Receive a Report, Hold a Discussion and Public Hearing and Take Action to Approve a Contract with Informa Princeton, LLC for Air Service Development Consulting
[ASSIGNED RESOLUTION NO. 188-2020]
9. Resolution: Receive a Report, Hold a Discussion and Public Hearing and Take Action to award a Restaurant Operating Agreement to Jessie L. Scifres dba Abilene Pizza Company and The Flour Shop Bakery at Abilene Regional Airport
[ASSIGNED RESOLUTION NO. 189-2020]
10. Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on Awarding Purchase of Two Stop Trucks from Rush Truck Center for Sewage Collection
[ASSIGNED RESOLUTION NO. 190-2020]
11. Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on Awarding Purchase of One Backhoe Loader for Water Distribution
[ASSIGNED RESOLUTION NO. 191-2020]
12. Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on Approval for a Change Order with Bontke Construction for Minter Park
[ASSIGNED RESOLUTION NO. 192-2020]
13. Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on Water Department Street and Miscellaneous Repair Work 2019-2020 Change Order
[ASSIGNED RESOLUTION NO. 193-2020]
14. Resolution: Receive a Report, Hold a Discussion and Take Action on Awarding Annual Street Services Division Materials Bid #CB-2077
[ASSIGNED RESOLUTION NO. 194-2020]
15. Ordinance (First Reading): Receive a Report, Hold a Discussion and Public Hearing, and Take Action to Change the Time Limits and Metered Parking Zones for Downtown Parking
16. Ordinance (First Reading) Z-2020-10: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on a request from Sharon Riley, agent H.C. Zachry, to amend existing Planned Development (PD) District Number 32 by removing from subparagraph (f) 1 and 2 stating "no other signs shall be allowed" from Lots 25-30 and allowing all signage allowed in General Retail (GR)

17. Ordinance (First Reading) Z-2020-13: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on a request from Denise Dilliard Rister and Jerry Lynn Rister to rezone property from General Commercial (GC) to General Retail (GR) District
18. Ordinance (First Reading) CUP-2020-06: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on a request from Hit Ventures LLC, agent Cody Myers, for approval of Conditional Use Permit allowing light manufacturing and, in particular, coffee processing in a Heavy Commercial (HC) District

ITEMS PULLED FOR INDIVIDUAL CONSIDERATION

7. Resolution: Receive a Report, Hold a Discussion and Public Hearing and Take Action to Approve Change Order 1 to the Contract with Collier Construction for the Aircraft Rescue and Fire Fighting Station
[ASSIGNED RESOLUTION NO. 187-2020]

The item was pulled by David Swart, citizen.

Having pulled the item, David Swart stated that this is a 28-year-old station, which leads him to believe that it was not built big enough the first time. Mr. Swart urged staff to ensure that this station is built big enough to accommodate bigger vehicles.

With no other speakers coming forward, the public comment period was closed.

Don Green, Director of Transportation, responded to Mr. Swart's concerns stating that they have made significant changes to the design, and that the large bays will accommodate everything to FAA specifications.

Councilmember Price moved to approve the item as presented. Councilmember McAlister seconded the motion; motion carried.

AYES (7): Mayor Williams, Mayor Pro-tem Hurt, Deputy Mayor Pro-tem Albus and Councilmembers Price, Rentz, McAlister and Craver

NAYS (0): None

REGULAR AGENDA

19. Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action to Approve an Agreement with Ceridian HCM, Inc. to provide a Human Capital Management (HCM) System
[ASSIGNED RESOLUTION NO. 195-2020]

Brenda Alexander, Director of Human Resources, presented the item. Adoption of the item would approve an agreement with Ceridian HCM, Inc. to provide a Human Capital Management System, that consists of managing the entire life cycle of an employer's workforce.

Mayor Williams opened the public hearing. The following addressed the Council:

- David Swart – questioned that since this system will be implemented in October 2021, which budget will the first payment come out of – fiscal year 2021 or 2022?

With no other speakers coming forward, the public hearing was closed.

Robert Hanna, City Manager, responded to Mr. Swart's question stating that the one time cost would come out of FY 2021 and the monthly subscription will start in October 2021, which would be FY 2022.

Councilmember Price moved to approve the item as presented. Councilmember Rentz seconded the motion; motion carried.

AYES (7): Mayor Williams, Mayor Pro-tem Hurt, Deputy Mayor Pro-tem Albus and Councilmembers Price, Rentz, McAlister and Craver

NAYS (0): None

20. Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on Modifying and Extending the Declaration of Local Disaster Issued August 27, 2020
[ASSIGNED RESOLUTION NO. 196-2020]

Robert Hanna, City Manager, presented the item. Adoption of the item would modify and extend the Declaration of Local Disaster issued on August 27, 2020.

Mayor Williams opened the public hearing. The following addressed the Council:

- David Swart – stated that the City and State government budgets will start over on October 1st, as well as any left over Cares Act benefits will expire at the same time. Mr. Swart stated he understands why we need to modify this declaration, but expressed his support for reopening everything.

With no other speakers coming forward, the public hearing was closed.

Councilmember McAlister moved to approve the item as presented. Councilmember Price seconded the motion; motion carried.

AYES (6): Mayor Williams, Deputy Mayor Pro-tem Albus and Councilmembers Price, Rentz, McAlister and Craver

NAYS (1): Mayor Pro-tem Hurt

21. Oral Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on the Letter Sent to the Governor of Texas Regarding Support of Local Businesses and Local Control of COVID-19 Response
[ORAL RESOLUTION]

Robert Hanna, City Manager, presented the item. Adoption of the item would approve a letter sent to the Governor of Texas regarding support of local businesses and local control of COVID-19. This letter was supposed to be approved by the Committee only (Mayor Williams, Mayor Pro-tem Hurt and Councilmember Price), but the Committee felt like the original language wasn't strong enough and wanted the rest of Council to weigh in. City Manager Hanna read the proposed letter.

Mayor Williams opened the public hearing. The following addressed the Council:

- David Swart – stated that this is at the national level and all regions are not the same. Abilene is not Dallas, Houston or even Lubbock and we need to be able to handle our own situation.

With no other speakers coming forward, the public hearing was closed.

Councilmember Price moved to approve the item as presented. Mayor Pro-tem Hurt seconded the motion; motion carried.

AYES (7): Mayor Williams, Mayor Pro-tem Hurt, Deputy Mayor Pro-tem Albus and Councilmembers Price, Rentz, McAlister and Craver

NAYS (0): None

23. Oral Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on the Evaluation of the Municipal Court Judge
[ORAL RESOLUTION]

Earlier in the meeting, under Section 551.074 (Personnel Matters) of the Open Meetings Act, the item was discussed during the Executive Session, which started at 4:00 p.m. and ended at 5:25 p.m. No votes or actions were taken at that time.

Mayor Williams opened the public hearing, and with no speakers coming forward, the public hearing was closed.

Councilmember McAlister moved to approve the evaluation and salary adjustment of the Municipal Court Judge. Deputy Mayor Pro-tem Albus seconded the motion; motion carried

AYES (7): Mayor Williams, Mayor Pro-tem Hurt, Deputy Mayor Pro-tem Albus and Councilmembers Price, Rentz, McAlister and Craver

NAYS (0): None

24. Oral Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on the Evaluation of the City Attorney
[ORAL RESOLUTION]

Earlier in the meeting, under Section 551.074 (Personnel Matters) of the Open Meetings Act, the item was discussed during the Executive Session, which started at 4:00 p.m. and ended at 5:25 p.m. No votes or actions were taken at that time.

Mayor Williams opened the public hearing, and with no speakers coming forward, the public hearing was closed.

Councilmember Craver moved to approve the evaluation and salary adjustment of the City Attorney. Councilmember McAlister seconded the motion; motion carried

AYES (7): Mayor Williams, Mayor Pro-tem Hurt, Deputy Mayor Pro-tem Albus and Councilmembers Price, Rentz, McAlister and Craver

NAYS (0): None

25. Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on a Resolution Approving an Agreement with Project ERG-9
[ASSIGNED RESOLUTION NO. 198-2020]

Earlier in the meeting, under Section 551.087 (Business Prospects/Economic Development) of the Open Meetings Act, the item was discussed during the Executive Session, which started at 4:00 p.m. and ended at 5:25 p.m. No votes or actions were taken at that time.

Misty Mayo, CEO of the Development Corporation of Abilene, presented the item. Adoption of the item would approve an agreement with Petrosmith for Project ERG-9.

Mayor Williams opened the public hearing and with no other speakers coming forward, the public hearing was closed.

Mayor Pro-tem Hurt moved to approve the item as presented. Councilmember Craver seconded the motion; motion carried.

AYES (5): Mayor Williams, Mayor Pro-tem Hurt and Councilmembers Price, McAlister and Craver

NAYS (2): Deputy Mayor Pro-tem Albus and Councilmember Rentz

PUBLIC COMMENTS

Mayor Williams opened the public comment period. The following addressed the city council:

- David Swart – spoke in regards to the group of local preachers petitioning to keep Police Chief Standridge. Mr. Swart is in support of selecting someone local for the position.
- Chuck Farina – stated he is in support of keeping Police Chief Standridge and presented a petition with over 2,000 signatures asking Council to reconsider his resignation and ask him to stay.
- Jeff Hatcher – spoke in support of keeping Police Chief Standridge.
- Terry Davis – questioned if anyone had outright asked Police Chief Standridge to stay in Abilene. Mr. Davis is in support of keeping Police Chief Standridge.
- Scott Beard – stated that he is a good friend of Chief Standridge and is urging Council to reconsider his resignation letter.
- Victoria Caren – stated that there was a survey taken within the Police Department and the morale there was low, and also that a lawsuit was brought against Police Chief Standridge. Ms. Caren stated the reason he resigned was because of a group of officers complained about his relationship with the Police Chaplain and he took the noble way out by resigning. Ms. Caren is against keeping Police Chief Standridge.
- Randy Roy – stated that we do not need a “metroplex-type” for our Chief of Police. Mr. Roy is in support of reconsidering Police Chief Standridge’s resignation.
- Harold Summerall – stated that he has spent his life in Abilene and Taylor County law enforcement and the employees at the Police Department are afraid of Chief Standridge. Mr. Summerall stated that keeping Chief Standridge would be a disservice and we need new blood.
- Anne Holder – stated that Police Chief Standridge has been the Chief of Police for 11 years and that she would like Council to ask him to stay.
- Ryan Goodwin – stated he is in support of keeping Police Chief Standridge.

With no other speakers coming forward, the public comment period was closed.

ADJOURNMENT

There being no further business, the meeting adjourned at 6:54 p.m.

Shawna Atkinson
City Secretary

Anthony Williams
Mayor

Minutes approved on: _____

SPECIAL CALLED/JOINT MEETING

October 1, 2020 at 5:30 p.m.

CITY COUNCIL OF THE CITY OF ABILENE, TEXAS WITH PLANNING AND ZONING COMMISSION CONFERENCE ROOM 2, ABILENE CONVENTION CENTER

The City Council of the City of Abilene, Texas met in a Special Called/Joint Meeting with the Planning and Zoning Commission on October 1, 2020, at 5:30 p.m., in Conference Room 2 of the Abilene Convention Center, 1100 N 6th Street, Abilene, Texas. Mayor Anthony Williams was present and presiding with Mayor Pro-tem Weldon Hurt, Deputy Mayor Pro-tem Donna Albus, and Councilmembers Shane Price and Jack Rentz. Councilmembers Kyle McAlister and Travis Craver were absent. Also present were Assistant City Manager Michael Rice, First Assistant City Attorney Kelley Messer, City Secretary Shawna Atkinson, and various members of City staff.

Members representing the Planning and Zoning Commission were Chairman Fred Famble, Vice-Chairman Clint Rosenbaum (who arrived late), Members Izair Lankford, Alex Russell and Bill Noonan.

Mayor Williams called the City Council meeting to order at 5:30 p.m. Planning & Zoning Commission Chair Famble called the Planning & Zoning Commission meeting to order at 5:30 p.m.

Mayor Williams delivered the invocation, and led Pledge of Allegiance to the Flags of the United States of America and the State of Texas.

PUBLIC COMMENTS

Mayor Williams opened the public comment period, and with no speakers coming forward, the public comment period was closed.

REGULAR AGENDA

2. Introductions:

Cheryl Sawyers, Planning Manager, opened the meeting and introduced Brennan Kane, Director of Planning with Halff Associates, who introduced his team.

3. Presentation: What is a Comprehensive Plan?

Mr. Kane went over the definition of a comprehensive plan, where the City of Abilene is now in regards to population and growth, the comprehensive plan background and the plan's purpose and intended outcomes. He introduced the Connect Abilene themes of Environment, Livability, and Prosperity, to create a "complete" community.

Bresa Bryford with Civic Brand went into further detail about the Connect Abilene brand, as well as the goals of project branding and the types of connections that will be made – physical, personal and planning goals. The hashtag #connectabilene will go live on social media, as well as the connectabilene.com website.

Kendall Howard with Halff Associates went over the timeline for the Comprehensive Plan, which is a 15 to 16 month timeline made up of five phases. She went over the tentative meeting schedule for the next 15 to 16 months.

4. Introductions:

City Council, Planning & Zoning and the members of the Comprehensive Plan Action Committee participated in an ice breaker exercise, consisting of each member introducing themselves and their organization, and expressing what they think or hope Abilene will look like in the year 2040. They then completed a handout exercise that was collected by Halff Associates.

5. Visioning Exercises:

Kaylee Sager with Halff Associates led group members through a guiding principles exercise, where each table worked together to come up with guiding principles for the City of Abilene. After the exercise was complete, the tables shared their findings with the group.

Mayor Williams left the meeting at 6:25 p.m., and Mayor Pro-tem Weldon Hurt presided over the remainder of the meeting.

The final exercise was a Perception of Abilene Today mapping exercise. Group members worked with their table to highlight areas around Abilene they feel best represented Abilene, least represented Abilene, enjoy visiting and avoid visiting. A representative from each group brought up their group's map to the front at the end of the exercise and presented their findings.

ADJOURNMENT

There being no further business, Chair Famble adjourned the Planning & Zoning Commission meeting at 7:25 p.m., and Mayor Pro-tem Hurt adjourned the City Council meeting at 7:25 p.m.

Shawna Atkinson, TRMC
City Secretary

Anthony Williams
Mayor

Minutes approved on: _____



**City Council
Agenda Memo**

City Council Meeting Date: 10/8/2020

TO: **Honorable Mayor & Members of City Council**

FROM: **Robert Hanna, City Manager**

SUBJECT: **5. Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action to Substitute DPR Construction as the General Contractor in the Master Development Agreement with Garfield Public/Private (Robert Hanna)**

GENERAL INFORMATION

On August 26, 2016, the City of Abilene, Texas, published a competitive procurement Request for Proposals regarding the potential construction of a full-service, downtown convention center hotel in Abilene, Texas.

Garfield Public/Private submitted to the City its Proposal for Convention Center Hotel and Festival District, which included a development team consisting of architecture, engineering and construction contractor services, as well as developer services of Garfield.

Thereafter, after the City reviewed and ranked the proposals it received, it selected Garfield as the best proposal to begin negotiations of a contract.

On June 19, 2017, Garfield and the City entered into a Pre-Development Services Memorandum of Understanding (“MOU”), which outlined the process to negotiate a contract between the City and Garfield.

After successful negotiations, on October 7, 2019, the City of Abilene, the Abilene Convention Center Hotel Development Corporation, and Garfield Public/Private entered into a Master Development Agreement for design and construction of a full-service downtown convention center hotel.

The General Contractor, named in Garfield's Proposal and the Master Development Agreement,

is Lee Lewis Construction, Inc. After execution of the Master Development Agreement, and during subsequent discussions pertaining to the construction contract, it has become apparent that Lee Lewis is not the best fit to construct Abilene's downtown convention center hotel.

Garfield Public/Private has submitted DPR Construction as the substitute General Contractor to construct Abilene's downtown convention center hotel. DPR Construction is most qualified to construct Abilene's downtown convention center hotel, and has preeminent experience in constructing hotels and other hospitality projects.

City staff has reviewed and approves the proposal by Garfield Public/Private to substitute DPR Construction as the General Contractor to construct the downtown hotel.

SPECIAL CONSIDERATIONS

FUNDING/FISCAL IMPACT

Substitution of DPR Construction as the General Contractor will not increase the City of Abilene's cost to construct the downtown hotel.

STAFF RECOMMENDATION

Staff recommends approval of Garfield Public/Private's proposal to substitute DPR Construction as the General Contractor in the parties' Master Development Agreement.

BOARD OR COMMISSION RECOMMENDATION

ATTACHMENTS:

1. 2020 Resolution - Amend MDA - DPR Construction
2. 2020.01.09_DPR Construction - Hospitality Qualifications Package
3. 2020.03.03_DPR Accolades - 2019
4. DPR Construction Ppt

RESOLUTION NO. _____

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS
APPROVING DPR CONSTRUCTION AS THE GENERAL CONTRACTOR AND
AUTHORIZING THE CITY MANAGER TO EXECUTE AN AMENDMENT TO THE
MASTER DEVELOPMENT AGREEMENT WITH GARFIELD PUBLIC PRIVATE TO
SUBSTITUTE DPR CONSTRUCTION AS THE GENERAL CONTRACTOR**

WHEREAS, the City of Abilene, Texas, published a competitive procurement Request for Proposals regarding the potential construction of a full-service, downtown convention center hotel in Abilene, Texas; and

WHEREAS, Garfield Public/Private submitted to the City its Proposal for Convention Center Hotel and Festival District, which included a development team consisting of architecture, engineering and construction contractor services, as well as developer services of Garfield; and

WHEREAS, after the City reviewed and ranked the proposals it received, it selected Garfield as the best proposal to begin negotiations of a contract; and

WHEREAS, Garfield and the City entered into a Pre-Development Services Memorandum of Understanding (“MOU”), which outlined the process to negotiate a contract between the City and Garfield; and

WHEREAS, after successful negotiations, on October 7, 2019, the City of Abilene, the Abilene Convention Center Hotel Development Corporation, and Garfield Public/Private entered into a Master Development Agreement for design and construction of a full-service downtown convention center hotel; and

WHEREAS, the General Contractor, named in Garfield's Proposal and the Master Development Agreement, is Lee Lewis Construction, Inc.; and

WHEREAS, after execution of the Master Development Agreement, and during subsequent discussions pertaining to the construction contract, it has become apparent that Lee Lewis is not the best fit to construct Abilene's downtown convention center hotel; and

WHEREAS, Garfield Public/Private has submitted DPR Construction as the substitute General Contractor to construct Abilene's downtown convention center hotel, and DPR Construction is most qualified to construct Abilene's downtown convention center hotel, and has preeminent experience in constructing hotels and other hospitality projects; and

WHEREAS, City staff has reviewed and approves the proposal by Garfield Public/Private to substitute DPR Construction as the General Contractor to construct the downtown hotel.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

Part 1: The City Council approves the substitution of DPR Construction as the General Contractor named in the parties’ Master Development Agreement.

Part 2: The City Council authorizes the City Manager to execute an amendment to the Master Development Agreement with Garfield Public Private substituting DPR Construction as the general contractor.

Part 3. That this Resolution takes effect immediately upon its adoption.

ADOPTED this 8th day of October, 2020.

ATTEST:

Shawn Atkinson, City Secretary

Anthony Williams, Mayor

APPROVED:

Stanley Smith, City Attorney

Hospitality Qualifications

DPR Construction

January 2020



We Exist to Build Great Things®

Hospitality Qualifications

DPR Construction

January 2020

Contents

- 1** Company Overview
- 2** Hospitality Expertise
- 3** Project Experience

1. Company Overview



Company Overview

DPR serves customers through regional offices around the country. As one of the nation’s leading general contractors, we match the strength of top-technical talent and national expertise with the flexibility and responsiveness of a regional builder to help customers meet the ever-changing demands of the marketplace.



FOCUSED MARKETS. FOCUSED RESULTS.

DPR Construction is a unique technical builder with a passion for results. Ranked in the top 50 general contractors in the country since 1997, we are a national commercial contractor and construction manager that has grown with our customers by delivering measurably more value.

Whether a multi-million-dollar technical facility or a conference room renovation, we execute every project with relentless accountability. We listen to your goals. We develop strategies based on your business. We track our performance. We do everything we can to earn your trust and build great lasting relationships.

PAST FIVE YEARS REVENUE

YEAR	REVENUE
2018	\$6,000,000,000
2017	\$4,590,000,000
2016	\$4,000,000,000
2015	\$3,085,975,000
2014	\$2,910,598,000

Core Values



integrity

We conduct all business with the highest standards of honesty and fairness; we can be trusted.



enjoyment

We believe work should be fun and intrinsically satisfying; if we are not enjoying ourselves, we are doing something wrong.



uniqueness

We must be different from and more progressive than all other construction companies; we stand for something.



ever forward

We believe in continual self-initiated change, improvement, learning and the advancement of standards for their own sake.

CORE IDEOLOGY

DPR Construction exists to build great things. It's really that simple. We are a company of builders building great projects, great teams, great relationships, great value.

Our purpose and core values help clearly define who we are and what we stand for as a company. They underlie the passion that drives us to be better and different; they allow us the freedoms of our entrepreneurial organization, where people can make a difference with their ideas and hard work.

We focus on five core markets: Advanced Technology, Life Sciences, Higher Education, Healthcare, and Commercial.

BUILT ON COLLABORATION

DPR's collaborative spirit is exemplified through shared leadership. It began with DPR's three co-founders, Doug Woods, Peter Nosler and Ron Davidowski, and continues with DPR's Management Committee and throughout the company. Shared leadership focuses on combining the strengths of people to produce high-performing teams ready to build great things.

Trust and open communication are the foundation of every project. Issues always arise. It is how those items are handled and communicated that makes all the difference. At DPR, we put our experience and expertise to work to create new processes and offer practical solutions, along with pricing and schedule impacts, for timely and informed decision-making. This is what it means to be part of a collaborative team—working together to develop methods and find solutions to ensure project success.

SMART CONSTRUCTION

Today's sophisticated facilities and accelerated business environments place greater demands on the entire project team. It's

not just about building great buildings; it's about engaging the right people at the right time. It's about establishing thoughtful processes to eliminate waste and maximize resources. It's about exceeding expectations and delivering a better experience for customers and their end-users.

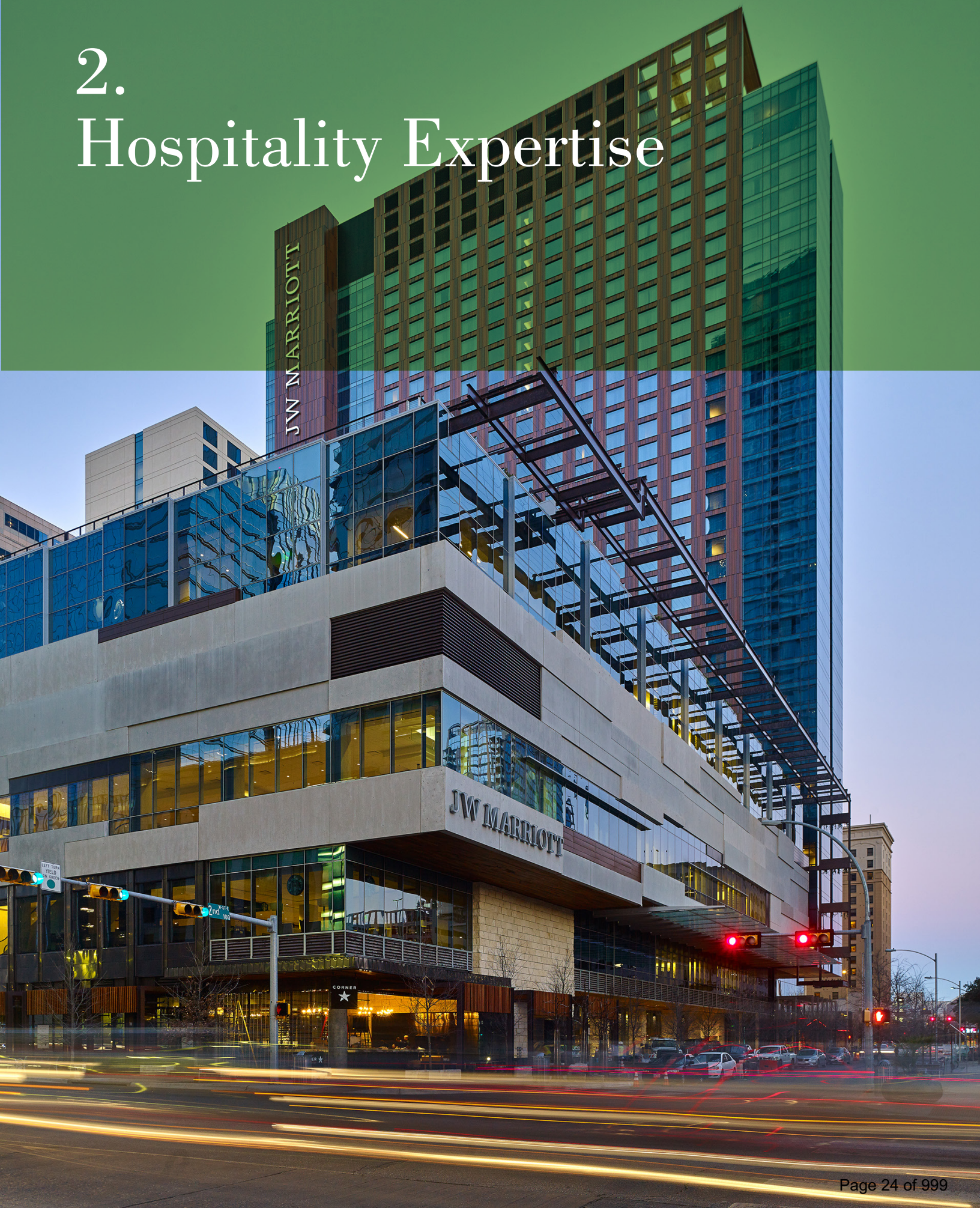
DPR's proven team of estimators, managers, engineers, MEP specialists and self-perform craftspeople dissect each project in detail, offering inventive low-cost solutions for achieving better outcomes. We integrate early and support customers in meeting their cost targets while maintaining high standards of quality and schedule. More than simply a high-tech contractor, we become a strategic partner—someone you can trust and count on to build great things for you.

SAFETY

Many companies have great safety programs. DPR has a great safety culture. We promote and nurture an Injury-Free Environment (IFE), with the goal of achieving zero incidents on every project. Our teams measure and evaluate safety data daily. We use a mobile safety audit system to collect and analyze raw data from each jobsite, which helps teams identify leading indicators—those elements that lead to incidents occurring—and develop meaningful and valuable prevention plans.

DPR's approach to safety centers on training, instilling and reinforcing safe behaviors throughout the company and entire project team, including owners, architects, and subcontractors. We provide the tools and information people need to make informed decisions through detailed root-cause analysis and pre-task planning. The output is a robust, value-based safety program that looks upstream at leading indicators to produce exceptional downstream results.

2. Hospitality Expertise



Hospitality Expertise

DPR's 28 years of expertise and broad knowledge of this specialized area of construction ranges from development through design/build, construction and delivery of FF&E, which has given us a special insight into the hospitality development and construction processes. DPR has been chosen to work on hospitality properties such as: Hilton, Hyatt, InterContinental, Marriott, Ritz-Carlton, Starwood, W, Walt Disney, and Westin.

INNOVATION

Our means of measuring innovation is by the value it brings our client. By consistently looking at various technological methodologies and fostering an environment to think beyond the box, every team member is empowered to build that much smarter.

COLLABORATIVE VIRTUAL BUILDING AND BIM

As a long-established leader in BIM, experience has proven that it is the combination of technology and a collaborative ideology that yields the greatest results for our customers.

SUSTAINABLE CONSTRUCTION

DPR combines experienced, LEED® accredited professionals, a collaborative methodology and custom green tools to help customers develop and implement the best strategy to meet your environmental and business goals.

PRECONSTRUCTION

Overall project success (whether optimizing value, controlling costs, meeting aggressive schedules or all of the above) relies heavily upon the decisions made at the initial stages of the job.

SPECIAL SERVICES GROUP

Created specifically to meet your small to mid-size project needs, DPR's Special Services Group teams the right people for the job, whether a simple countertop or door installation to a more complex tenant improvement.

SELF-PERFORM WORK

Reap the rewards from DPR's ability to self perform several key elements of the project, including concrete, drywall and carpentry.

SAFETY

As one of the safest general contractors in the country, we focus on people, education and training for the entire project team and with a strong belief that zero accidents is an achievable goal.

QUALITY

Quality is incorporated into our everyday practice; we truly believe that a successful quality control process requires planning quality into every step of the project—as work goes in, rather than inspections after the fact.

THE PREMIER HOSPITALITY BUILDER

DPR's broad range of hotel and timeshare experience, from concept to opening, gives us the tools to understand the hospitality business and timeshare development as a whole. Our track record of preconstruction and construction phase services, and delivering quality on limited services as well as full-service hotels on time, in budget, is unparalleled. With deep roots in the hospitality and long-standing ties to numerous hospitality brands, DPR has been involved in new construction projects ranging from lobby renovations to multi-million dollar ground-up projects.

Our twenty-eight (28) plus years of expertise and broad knowledge of this specialized area of construction with experience in hotel development, FF&E purchasing and installation, asset management and ownership have given us unique insight into the hospitality development and construction processes. We have been chosen to work on properties flagged as: Hilton, Hyatt, InterContinental, Marriott, Ritz-Carlton, Starwood, W, Walt Disney, and Westin. Our broad and diverse experience allows us to make smarter decisions and provide leading edge solutions.

These types of accomplishments can not only be measured by our own unique delivery method, but with the help of "Team Member" style subcontractors.

DPR's national hospitality experience includes hotels and hotel renovations, timeshares, resorts and vacation clubs.

Our team of dedicated hospitality experts has a tremendous understanding of working in a hospitality environment, both on new and active facilities. This is what they do day-in and day-out, and we are able to bring this expertise to the table.

We do not wait for the design team to complete the plans and then merely price the project. Instead, we actively collaborate with the owner and design team as an interactive design partner.

What does that mean to our clients? It means knowing confidently that with DPR you have a skilled, quality hospitality builder with exceptional local knowledge on your team.

COLLABORATIVE VIRTUAL BUILDING AND BIM

BUILDING A NEW FRAMEWORK

Providing measurably more value is DPR's guiding principle in using technology to enhance project delivery. As a long-established leader in Virtual Design and Construction (VDC) and

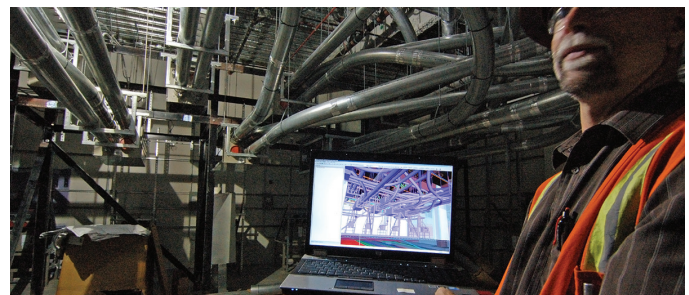


Building Information Modeling (BIM), we know that technology alone cannot deliver the level of results we have all come to expect. Team members must be able to skillfully use and improve the application of the most relevant technologies to help achieve better value and savings, while creating practical and innovative solutions. Experience has proven that it is a combination of technology and a collaborative ideology, such as integrated project delivery (IPD) or design-build approach, that yields the greatest returns.

SERVICES

With more than 400 individuals trained in advanced BIM and virtual builders on staff across the country, DPR offers a wide range of virtual building services:

- VDC/BIM Consulting
- VDC Execution Planning
- Model-Based Quantity Take-off
- Model-Based Estimating
- Self-Perform Work Detailing and Tracking
- MEP Coordination
- 4D Sequencing
- BIM-Enabled Constructability Analysis
- Laser Scanning
- Total Station Integration
- Site Logistics Planning



Employee holding laptop showing the BIM model of the MEP systems in front of the actual systems.

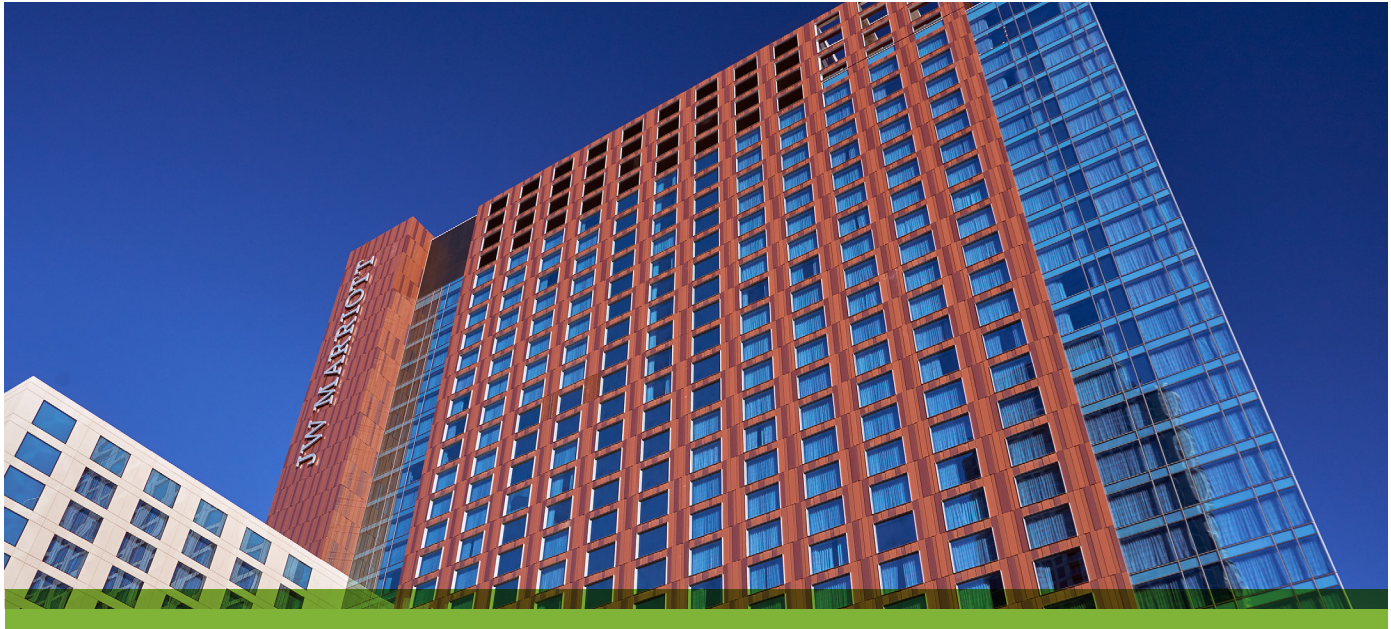
3. Project Experience



JW Marriott Austin

White Lodging Services Corporation

Austin, TX



PROJECT DESCRIPTION

34-story upscale conference center hotel contains 1,012 guestrooms, a 76,335-sq. ft. grand ballroom, junior ballroom and exhibit hall, 35,777-sq.ft. of meeting rooms, a 22,455-sq.ft. kitchen, and a 3,243-sq.ft. fitness area. The hotel sits on top of a three-level, 471-space parking garage.

The JW Marriott team reached a major milestone in February 2014 with the topping out of the hotel, located in the heart of downtown Austin, followed by a 2-month early grand opening just one year later. With more than 112,000 sq. ft. of event space, the hotel is the largest JW Marriott in the nation and the second largest in the world.

According to White Lodging, the fully integrated developer that manages the JW Marriott Austin, more than 340,000 rooms were contracted when the hotel opened on February 13, 2015. To help ensure an on-time completion, the project team developed several value-adding benefits, including unitizing the entire skin and prefabricating all exterior features on a curtain wall system.

To help ensure an on-time completion, the project team developed several value-adding benefits, including unitizing the entire skin and prefabricating all exterior features on a curtain wall system.

Customer

White Lodging Services Corp.

Architect

HKS, Inc.

Project Value

\$206,539,043

Project Dates

August 2012 - January 2015

Square Footage

1,266,202 SF



Marriott Cesar Chavez Hotel

White Lodging Services Corporation
Austin, TX



PROJECT DESCRIPTION

34-story, 385-foot tall, 613-key Convention Center Marriott hotel located across the street from the Austin Convention center. The hotel includes three levels of below-grade parking, six levels of Podium space, and an elaborate amenity deck on level seven with an outdoor pool, gym and bar. Project also includes 60,000 sq. ft. of meeting rooms, exhibit hall and ballrooms located throughout the Podium levels along with food and beverage spaces. Lobby level will consist of a full-service restaurant and bar.

Vertical transportation includes 15 elevators that will be operated via destination dispatch style call stations and eight escalators that move guests throughout the Podium levels. The Podium structure is steel while the guest tower structure is post-tensioned concrete deck. The skin consist of curtain wall, panelized EIFS and metal panel along with a sleuth of other systems throughout the Podium. The retention of the basement will be achieved utilizing a Diaphragm wall.

Customer

White Lodging Services Corp.

Architect

HKS Architects, Inc.

Project Value

\$180,969,914

Project Dates

October 2017 - August 2020

Square Footage

657,735 SF



Eilan Mixed-Use Development

Wereldhave USA, Inc
San Antonio, TX



PROJECT DESCRIPTION

èilan Hotel and Residences is one of the largest private developments in Texas. The innovative, urban-style mixed-use development in San Antonio is inspired by a Tuscan design and sustainable features. It offers its guests and residents the convenience of a small city with the comforts of a resort. The community includes upscale residential apartments, office space, boutique shops, and a luxury boutique hotel.

DPR's scope of work included: 1) the three-level, 800,000-sq.-ft. podium parking structure supporting seven, six-story, residential buildings and a 10-story hotel. The top level of the podium includes a plaza with decorative pavers, lighting, grand staircase, landscape and trolley system; 2) the 10-story, 165-key, luxury boutique hotel, featuring a full-service restaurant, full service spa, fitness center, indoor pool hot tub/area, tennis courts, and an interactive outdoor "Feature Pool" area, which has a main pool, hot tub, pool bar, and cabanas for guests; and 3) the Central Chilled Water Plant/Trolley Barn houses the èilan's trolley, and serves as the hotel, podium, and residential buildings' Central Chilled Water Plant.

Customer

Wereldhave USA, Inc

Architect

HKS Architects, Inc.

Project Value

Confidential

Project Dates

October 2009-June 2012

Square Footage

1,291,500 SF

The residential portion of the project includes 539 high-end apartment units in seven separate mid-rise, wood-framed structures that are constructed on top of the podium parking deck. All of the units are served by interior double-loaded corridors with centrally located elevators that also access each level of the parking garage. Each building has multiple secured access entry points with natural stone floored lobbies at the Plaza and ground-level locations.

There are over 130 different residential unit types ranging in size from approximately 500-sq.-ft. to over 2000-sq.-ft. The majority of the units are 2-bedroom-2-1/2 bath and approximately 1300-sq.-ft. The apartment interiors include bamboo flooring, granite counter tops, fully tiled showers and bath surrounds, full-size wood blinds and “elite” level appliances. The units located on the upper level of each building typically have ceiling heights of 20 feet or more. There are over 3500 windows in the project and combined with the layout of the exterior walls most of the apartment units have multi-directional views of the surrounding hill country. The exterior finish is generally stucco in multiple colors, but also includes many large areas clad in stacked limestone. All of the buildings have multiple roof lines and are covered with concrete tile.



Celebrity chef Stephan Pyles is bringing his signature style and culinary flair to Sustenio, the flagship restaurant in éilan Hotel Resort & Spa.

Omni Houston Hotel



TRT Holdings, Inc.

Houston, TX



PROJECT DESCRIPTION

DPR was selected to provide preconstruction and construction phase services for repair and renovation of the Omni Houston Hotel due to flood waters from Hurricane Harvey. The project scope included renovation and restoration of the Lobby amenities including Birdies Café & Bar, La Reserve Whiskey Bar, large Constellation Ballroom, Board Rooms, and added Meeting Rooms (named to celebrate NASA history), Black Swan nightclub, Mokara Spa, Common Color retail area, lower level office and support areas, commercial kitchen, and public areas elevator cab interiors. With 40,000 sq. ft. of newly renovated meeting spaces, including three ballrooms, two boardrooms, and 26 re-imagined reception and conference rooms, there is a perfect combination of venues for any size event. Included in the project scope were measures throughout the site including civil engineering improvements and waterproofing.

Customer

TRT Holdings, Inc.

Architect

Perkins + Will

Project Value

\$11,352,188

Project Dates

April 2018 - November 2018

Square Footage

131,000 SF

Hilton Americas Hotel



Houston First Corporation

Houston, TX



PROJECT DESCRIPTION

Starbucks

Installation of Starbucks Outlet inside Hilton main lobby, including all new MEP to be bored underground and into the basement. Existing glass replaced on the first two levels of the exterior curtain wall system and metal panels installed on the exterior and interior of the space.

Restrooms

The success and relationship built during the Starbuck's project led to DPR performing renovations to the hotel common area restrooms as well as hotel mock up rooms for a future full building renovation.

Skyline Lounge

Complete renovation and addition of the Executive Lounge on the 24th floor of the hotel. Project had a new dining/serving area, bar and lounge areas with limited access for executive level guests.

Customer

Houston First Corporation

Architect

Gensler

Project Value

Starbucks:	\$1,260,000
Restrooms:	\$330,000
Skyline Lounge:	<u>\$411,000</u>
Total:	\$2,001,000

Project Dates

Starbucks: July 2015 - Oct. 2015
Restrooms: Dec. 2015 - Feb. 2016
Skyline Lounge: Sept. 2016 - Dec. 2016

Square Footage

48,000 SF

JW Marriott Charlotte



White Lodging Services Corporation

Charlotte, NC



PROJECT DESCRIPTION

DPR is building the new 22-story JW Marriott Charlotte. A luxury hotel, with 381 rooms, features modern guest rooms in addition an expansive outdoor terrace on the 5th floor including a swimming pool and bar. The 345,000-sq.-ft. building is on the corner of Stonewall and College Streets in Uptown Charlotte and is part of a mega block development scheduled to open in April of 2021.

The hotel will include two full-service kitchens, a co-working executive lounge, two restaurants, and the Spa by JW, a full-service luxury spa concept. A bar with outdoor seating will connect to the adjacent businesses. The hotel will also include 22,000 sq. ft. of meeting and event space including a grand ballroom.

PROJECT SITE CHALLENGES AND SOLUTIONS

The new JW Marriott Charlotte is in the heart of Uptown Charlotte and is being built concurrently with a 742,000-sq.-ft. office tower and parking garage on the same site. Not only is the project on a very tight urban site with no designated laydown or staging areas, DPR is working in close coordination with the other general contractor on the site to coordinate work activities, delivery, and logistics. As part of the same Charlotte-Mecklenburg “mega project,” the three structures will be finished at the same time requiring close schedule coordination and communication.

Customer

White Lodging Services Corp.

Architect

HKS Architects, Inc.

Project Value

Confidential

Project Dates

May 2019 - March 2021

Square Footage

345,000 SF



AC Hotel Austin & The Otis Hotel

White Lodging Services Corporation
Austin, TX



PROJECT DESCRIPTION

The new Autograph Collection by Marriott hotels is a 4.5-star, 347-key, full-service dual-branded hotel located a block from the new University of Texas Graduate School of Business. AC Hotel Austin will include 156 rooms with two suites and at The Otis Hotel 191 rooms and 29 suites.

The new hotel will include three levels of below-grade parking, 7,500-sq.-ft. of flexible meeting space that will include 3,480-sq.-ft. ballroom as well as a 4,000-sq.-ft. rooftop deck, complete with an outdoor pool, cabanas, a bar, and expansive terrace. The hotel will also offer a full-service restaurant on the first level and a bar with outdoor seating on the second floor.

Customer

White Lodging Services Corp.

Architect

HKS Architects, Inc.

Project Value

\$81,638,875

Project Dates

June 2017 - November 2019

Square Footage

301,166 SF

Aloft Austin Downtown & Element Austin Downtown



White Lodging Services Corporation
Austin, TX



PROJECT DESCRIPTION

33-story, LEED certified, 278-key Aloft Austin Downtown and 144-key Element Austin Downtown is a dual-branded development located in heart of downtown Austin, Texas.

The hotel features and amenities include a restaurant and associated kitchen, indoor/outdoor bar, coffee and lobby bars and guest laundry. The hotels have shared amenities including a street-level terrace overlooking Congress Avenue, an 24-hour fitness center and nearly 2,500-sq.-ft. flexible meeting space. The street scape package includes covered outdoor dining area and planters. The development does not include onsite parking.

The scope included demolition of existing structure and excavation of one-story below grade. The project construction includes post-tensioned concrete structure with EIFS and metal panel skin. Levels 5-34 are cladded utilizing prefabricated panels with glazing installed and caulked offsite. Vertical transportation includes five highrise and two low-rise traction elevators.

This was DPR's fourth project with White Lodging, a nationwide hotel ownership, development and management company.

Customer

White Lodging Services Corp.

Architect

HKS Architects, Inc.

Project Value

\$64,019,511

Project Dates

July 2015 - June 2017

Square Footage

260,795 SF

Hilton Garden Inn Downtown 17th Street & Lavaca Hotel



HRI Properties
Austin, TX



PROJECT DESCRIPTION

140,000-sq.-ft., 17-story, 215-key new HGI 17th Street and Lavaca Hotel will be located in downtown Austin near the UT Campus. This negotiated design-build project will include a rooftop pool, but no onsite parking spaces; instead off-site valet parking would be used.

The project will also include a restaurant and outdoor seating on the ground floor as well as 1,900-sq.-ft. bar/dining area. Level 2 will include 1,300-sq.-ft. kitchen, 1,600-sq.-ft. multi-purpose dining area with 400-sq.ft. for overflow.

DPR Construction was tasked with building a full-service hotel on an approximately 8,000-sq.-ft. floor plate with no below-grade back-of-house space. After being provided an early schematic layout of the floor plans, the design-build team ultimately added a small mezzanine for the support equipment and revised the typical guest room and core layout removing one level of the building while still maintain the same number of keys. The design-build team made the most cost-effective decisions for every design element without sacrificing quality and the guest experience. The decisions were a collaborative effort between the owner, design team and DPR.

To increase efficiency, quality, safety and schedule, the project utilized a pre-fabricated exterior skin solution with trade design-assist support. DPR also provided critical self-perform work support during the design phase with the help of DPR's Concrete, Interiors, Division 7 and Electrical divisions. The project is targeting an Austin Energy Green Building 2-Star rating.

Customer

HRI Properties

Architect

Gensler

Project Value

\$45,000,000

Project Dates

April 2019 - December 2020

Square Footage

140,000 SF

Veramendi House



Soledad House LLC

San Antonio, TX



PROJECT DESCRIPTION

Project consists of turning five historic buildings into one 86,000-sq.-ft., 82-key boutique hotel that will also include a courtyard, retail space, pool along with deck, and river level dining. The scope will include abatement, demolition, structural foundation and exterior skin repairs prior to build out.

Customer

Soledad House LLC

Architect

Clayton & Little

Project Value

\$37,000,000

Project Dates

January 2018 - April 2020

Square Footage

86,000 SF

Hilton Garden Inn Domain



Lions Veldt

Austin, TX



PROJECT DESCRIPTION

New seven-story, 154-key Hilton Garden Inn hotel located near the Domain in Austin, Texas. The project consists of 103,906-sq.-ft. of hotel on five levels and around three levels of parking at 84,404 sq. ft.; this includes approximately 173 parking spaces. The Hotel will offer amenities and a restaurant.

The building construction includes a concrete structure with exterior wall construction consisting of stone veneer, metal wall panels, and EIFS finish. To increase efficiency, quality, safety and schedule, the project anticipates using a pre-fabricated exterior skin solution and interior pre-fabricated wall system.

Customer

Lions Veldt

Architect

TAG International, LLP

Project Value

\$29,500,000

Project Dates

April 2018 - July 2020

Square Footage

188,310 SF



Carpenter Hotel

Carp 1266 LP

Austin, TX



PROJECT DESCRIPTION

A ground up, four-story 93-key boutique hotel and 6,000-sq.-ft. renovation of Carpenter's Union Hall into a bar, café with a commercial kitchen, reception area and coffee shop. Hotel is located near South Lamar and Barton Springs Road and features a new 1,000-sq.-ft. outdoor pavilion, pool, extensive landscaping and on-site parking.

Project challenge included working on a congested site with minimal laydown area once all of the piers were completed for the hotel. A 250,000-gallon underground cistern was installed between piers with only about 20 parking spaces of extra room. The mass excavation required numerous trucks for a just-in-time haul-off approach.

DPR self-performed the concrete, drywall, millwork, specialties, electrical, waterproofing, and caulking.

Customer

Carp 1266 LP

Architect

Specht Architects

Project Value

\$21,262,304

Project Dates

January 2017 - October 2018

Square Footage

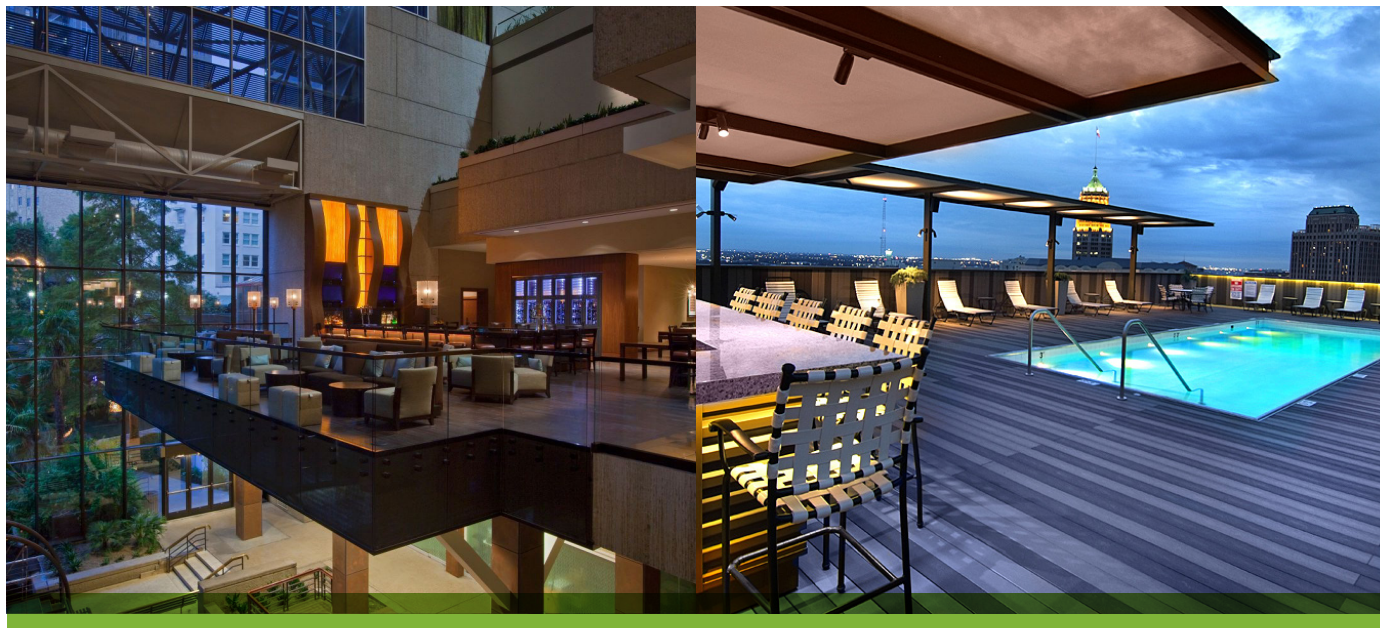
67,000 SF

Hyatt Regency San Antonio Riverwalk Public Area Renovations Phase 1 & 2



Global Hyatt Corporation

San Antonio, TX



PROJECT DESCRIPTION

Phase I was a 40,000-sq.-ft. renovation of hotel lobby and porte cochere, including demolition and replacement of reinforced concrete bar slab and structure, new finishes in lobby, restaurant, meeting rooms and 20,000-sq.-ft. conference center, new sprinkler system, 500-sq.-ft new retail space, new hardscape and landscaping at the exterior of the hotel and conference center, new escalators, and elevator cabs.

Phase II involved a 78,000-sq.-ft. makeover of the existing ballrooms, pre-function spaces, restrooms, and meeting rooms, as well as the complete renovation of rooftop pool and construction of a new bar. Renovation included complete demolition of existing spaces down to framing, alteration of framing, new MEP and low voltage systems, and 100% new finishes. Upgrades to audio/visual equipment were included to modernize the hotel for business travelers.

This renovation is the fourth renovation of the San Antonio Hyatt Regency on the Riverwalk completed by the company.

Customer

Global Hyatt Corporation

Architect

Douglas Architects

Project Value

Phase I:	\$11,197,854
Phase II:	<u>8,002,413</u>
Total:	\$19,200,267

Project Dates

Phase I:	Oct. 2009 - Nov. 2010
Phase II:	Aug. 2010 - Oct. 2011

Square Footage

Phase I:	60,500 SF
Phase II:	<u>78,000 SF</u>
Total:	138,500 SF

Hyatt Regency Hill Country Resort & Spa Ballroom Expansion & Room Renovation



Woodbine Development Corporation
San Antonio, TX



PROJECT DESCRIPTION

Hyatt Regency Hill Country Resort and Spa is a world-class resort destination that established the “destination resort” market in San Antonio. The expansion and renovation project essentially doubled the Resort’s indoor function space, triple its pre-function space, added new outdoor function space, enhanced and refreshed the guestrooms and parking.

The ballroom expansion included approximately 9,500-sq.-ft. of pre-function space and a corridor was added to the existing ballrooms that connected to a new ballroom wing consisting of approximately 36,200-sq.-ft. In addition to the conditioned area expansion, site amenities included an internal courtyard (approximately 7,700 sq. ft.), an event lawn and open-air pavilion (approximately 3,600-sq.-ft.) and outdoor terraces. A new motor court with a separate entrance where guests have the opportunity to be dropped off curbside as well as modifications to existing parking layouts were also included to accommodate the expansion.

The room renovation consisted of 490 guestrooms that were completed in four months while the building remained occupied. DPR removed existing FFE (chairs, desks, beds, art), miscellaneous items (light fixtures, restroom accessories, signage), and demoed the existing finishes, which included carpet, popcorn ceilings, vinyl wall coverings, tile

Customer

Woodbine Development Corporation

Architect

HKS Architects, Inc.

Project Value

\$16,000,000

Project Dates

August 2012 - August 2013

Square Footage

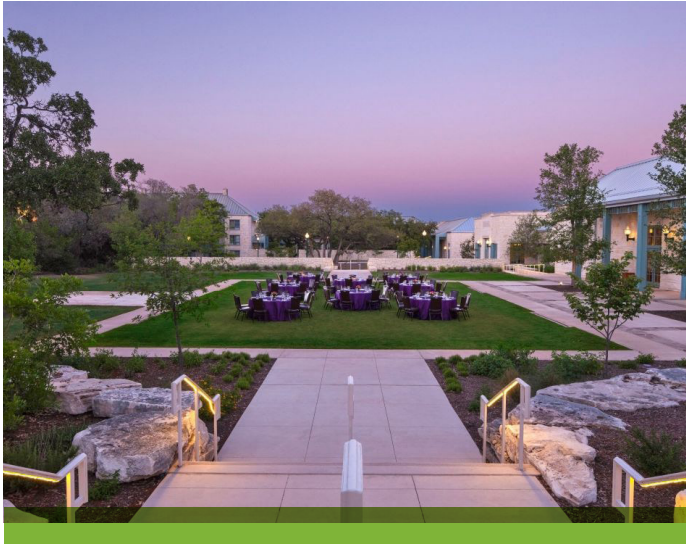
504,550 SF

Services Provided

Pre-Construction Services

shower surrounds and wood curtain valance. All removed carpet was recycled, and mattresses and window curtains liquidated. In the handicap rooms, we removed the bath area floor tile and prepared walls/ceilings for new texture, paint, vinyl wall covering and shower tile. New carpet was installed and handicap units received new bathroom floor tile. We also installed new smoke seals and door sweeps in guestroom entry doors.

As units begin to turnover, DPR performed a final clean and moved FFE/miscellaneous items back into the rooms. While remaining rooms were being punched, we also completed the renovation of the corridors and atrium, which included removal and reinstallation of texture, paint, vinyl wall coverings, corner guards, carpet and base. Also, new data cabling was installed in each of the rooms.



JW Marriott Post-Opening Projects



White Lodging Services Corporation
Austin, TX



PROJECT DESCRIPTION

OP Wine Bar: Installed temporary walls to separate construction work zone from OP Restaurant. Removed existing flooring, millwork and finishes. Installed new bar, millwork, tile, lighting, drains, and hooked-up kitchen equipment.

Burger Bar Improvements: Installed temporary walls to separate construction work zone from Corner Restaurant. Installed exterior canopy, interior condiment counter, and interior and exterior fixed-seating tables.

Amenities Deck Remodel: Constructed new plaster exterior walls, demoed storefront, installed new cabanas, installed new green wall and fireplace outside of existing exterior wall, installed artificial turf on existing topping slab, and covered existing stair parapet walls with metal panels.

Spa Remodel: Installed temporary walls to separate construction work zone from hotel. Added bathroom in Fitness area, renovated existing fitness locker rooms, demoed existing walls, constructed new walls for Spa layout, renovated lighting, plumbing, mechanical, and fire sprinkler, and installed new finishes.

Customer

White Lodging Services Corp.

Architect

HKS Architects, Inc.

Project Value

\$10,000,000

Project Dates

June 2015 - August 2017

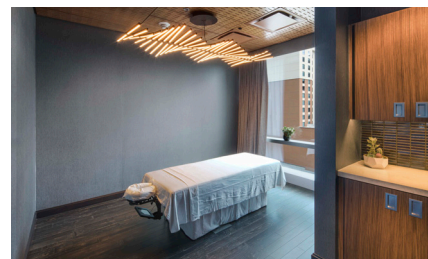
Square Footage

10,000 SF

Concierge Relocation: Installed temporary walls to separate construction work zone from hotel lobby. Salvaged and relocated existing concierge desk to shift it further out into Lobby. Installed new wall, doors, lighting, etc. to create bell cart storage behind concierge.

Parking Garage Elevator Lobby Entrance Renovations: Demoed existing HM doors, installed new storefront doors with auto-openers, added soffit and wall framing, lighting, and traffic topping on garage side to redefine the space.

Cabanas and Pantry: Demoed storefront, framed new exterior plaster walls, added suspended cedar ceiling, audio/visual, tile flooring, and lighting for Cabanas. Renovated an existing meeting room into a pantry by demolishing existing finishes and added tile and acoustical ceiling, added drainage over existing Grand Ballroom, and hooked-up kitchen equipment.



“The execution and delivery were better than anyone expected. The hotel was extremely impressed with the way you handled the construction. As I renovate about every hotel we build these days, I know it’s not easy and/or done correctly. Keep up the good work. While small projects, they do get noticed.”

Dustin Louderback
White Lodging Services Corp.

Additional Projects



Disney's Art of Animation Resort

Owner: Walt Disney Imagineering
Location: Bay Lake, FL
Architect: KBJ Architects, Inc.
Project Value: \$181,000,000
Project Dates: 05/2010 - 07/2012
Square Footage: 2,200,000

1,206,000 sq. ft., 69-acre resort including 1,124,000-sq.-ft. hotel with 1,120 suites and 864 hotel rooms, 70,000-sq.-ft. commercial building, 12,000-sq.-ft. outbuildings, dining and food prep facilities and 110,000-sq.-ft. of on-grade parking.



Oceanside Beachfront Resort

Owner: S.D. Malkin Properties
Location: Oceanside, CA
Architect: Delawie
Project Value: \$160,000,000
Project Dates: 05/2018 - 02/2020
Square Footage: 357,000

Development of two adjacent full block oceanfront parcels including a 218-key, four-star hotel and a 158-key, boutique hotel with below-grade parking, a conference center and mixed-use component including restaurants, retail and spa. Also included is a reconstructed 19th century historic beach house to become an onsite bar.



Disney's Bay Lake Tower

Owner: Walt Disney Imagineering
Location: Lake Buena Vista, FL
Architect: Glover Smith Bode Inc.
Project Value: \$142,955,773
Project Dates: 04/2007-06/2009
Square Footage: 525,000

Disney's Contemporary Suites is a 15-story, 525,000-sq.-ft. tower located to the north of the existing Contemporary Hotel tower and is connected to it by a 30-foot-long serpentine pedestrian bridge at the 5th floor level. The tower includes 295 vacation club suites, a 4-story lobby plus a member's lounge on the top floor. The suites facing to the West overlook the Magic Kingdom Theme Park and Seven Seas Lagoon while the suites facing East overlook 200-acre Bay Lake.



Ritz-Carlton Spa & Guest Room Addition, Palm Beach

Owner: Acorn Asset Manager
Location: Manalapan, FL
Architect: CallisonRTKL
Project Value: \$120 million
Project Dates: 06/2007-01/2009
Square Footage: 119,500

This project includes 42,000-sq.-ft. Grand Spa, 24-room Guest Tower, eight executive meeting rooms, retail corridor, Kids' & Teens' Club, a 2,800-sq.-ft. Presidential Suite and miscellaneous property improvements.



W Atlanta Downtown Hotel and Residences

Owner: Barry Real Estate Companies
Location: Atlanta, GA
Architect: HKS, Inc.
Project Value: \$99 million
Project Dates: 01/2007-05/2009
Square Footage: 545,000

460,000-sq.-ft.; 15 levels of hotel; 12 levels of condominiums and 1 amenities level. 237 guestrooms and 76 condo units.



Copper Creek Villas & Cabins at Disney's Wilderness Lodge

Owner: Walt Disney Imagineering
Location: Bay Lake, FL
Project Value: \$76.5 million
Project Dates: 10/2015-05/2017

Conversion of 394 existing hotel units to Disney Vacation Club suites. New construction consisted of 26 lakeside cabins along with a pool bar, pool toilet building and miscellaneous site structures. Scope also includes 10+ acres of extensive site development – hardscape, rockwork, landscaping and boardwalk.



Margaritaville Resort Hotel Orlando

Owner: Encore Capital Management
Location: Kissimmee, FL
Architect: Nichols, Brosch, Wurst Wolfe & Associates
Project Value: \$63 million
Project Dates: 06/2017-12/2018
Square Footage: 298,744

11-story hotel and convention center with 300 hotel rooms and 30,000-sq.-ft. of convention/meeting space. Project includes full-height open atrium, full-service kitchen, restaurant, bar, swimming pool, spa, fitness room and retail space.



The Perry Lane Hotel

Owner: Flank Architecture
Location: Savannah, GA
Architect: Hansen Architects
Project Value: \$54 million
Project Dates: 01/2016-05/2018
Square Footage: 170,107

167-room boutique hotel that consists of two individual buildings, both five stories, with event spaces, a pool and a bar on the roof top. Also includes is a 30,000-sq.-ft. subsurface parking structure.



Henderson Beach Resort Hotel, Parkside Building, Phase 1

Owner: Dunavant Enterprises
Location: Henderson Beach, FL
Architect: Glover Smith Bode Inc.
Project Value: \$53 million
Project Dates: 08/2014-09/2016
Square Footage: 262,000

262,000-sq.-ft., 171-room luxury hotel with conference center, 2,900-sq.-ft. restaurant, 1,450-sq.-ft. bar, spa, pools and roof observation deck. Also includes a 77,000-sq.-ft., 222-space, 2-level attached parking deck.



Embassy Suites Orlando - Lake Buena Vista South

Owner: Sierra Land Group
Location: Kissimmee, FL
Architect: Helman Hurley Charvat Peacock
Project Value: \$51 million
Project Dates: 08/2013-02/2016
Square Footage: 430,000

365,000-sq.-ft., 11-story, 300-room suites hotel with a 30,000-sq.-ft. Convention Center. Amenities include a full-service kitchen and restaurant, retail, fitness room, pool and spa, and an open, full-height atrium with a focal bar.



Charleston Midtown | Hyatt Place & Hyatt House

Owner: Regent Partners
Location: Charleston, SC
Architect: Cooper Carry
Project Value: \$50 million
Project Dates: 01/2007-05/2009
Square Footage: 430,000

430,000-sq.-ft., 304-room, dual-branded hotel with 6 buildings. Hyatt Place includes 191 keys and Hyatt House includes 113 keys. Hotel has a rooftop bar, ballroom, meeting space, dual lobbies and kitchens, large entry courtyard, restaurant space, parking deck and 2 office buildings and 2 existing historical buildings that were renovated.



The Villages Brownwood Hotel & Spa

Owner: The Villages CAHB, LLC
Location: The Villages, FL
Project Value: \$47 million
Project Dates: 7/2018-12/2019
Square Footage: 215,000

215,000, 150-key hotel and conference center adjoining the new ambulatory facility. The project includes 10,000 sq. ft. of conference center, full service restaurant, pool, coffee shop and spa.



Renaissance Atlanta Midtown Hotel

Owner: Kim King Associates, LLC
Location: Atlanta, GA
Architect: Smallwood, Reynolds, Stewart, Stewart & Associates, Inc.
Project Value: \$63 million
Project Dates: 08/2007-04/2009
Square Footage: 324,509

324,509-sq.-ft., 20-level, 304-room hotel with a 53,509-sq.-ft., 3-level parking deck. Includes a ballroom, meeting rooms, terrace bar, fitness room, restaurant and kitchen.



Westin Tampa Bay Airport Hotel

Owner: Impact Properties, Inc.
Location: Tampa, FL
Architect: Bessolo Design Group, Inc.
Project Value: \$40 million
Project Dates: 08/2007-12/2008
Square Footage: 438,207

16-story, 255-room hotel includes a cascading waterfall, lushly-landscaped courtyard, boardwalk on a private beach, heated indoor pool and whirlpool, Westin workout facility, meeting rooms, elevated outdoor garden terraces, Starbucks Coffeehouse, restaurant, a roof-top banquet area, and five levels of parking.



Lake Nona Town Center | Marriott Courtyard & Residence Inn

Owner: Tavistock Development Company
Location: Orlando, FL
Architect: Cooper Carry
Project Value: \$38 million
Project Dates: 05/2014-10/2015
Square Footage: 452,120

452,120 total square feet: 139,256-sq.-ft., 204-key Residence Inn/ Marriott Courtyard; 85,352 sq.-ft. 4-story office building; 600-space, 228,512-sq.-ft. parking deck.



OceanWatch Villas at Grande Dunes - Phase IV

Owner: Marriott Ownership Resorts International
Location: Myrtle Beach, SC
Architect: HKS, Inc.
Project Value: \$35 million
Project Dates: 09/2006-03/2008
Square Footage: 242,000

124,000-sq.-ft., 16-story tower with 75-unit timeshare building. Includes an 8,000-sq.-ft. activities center with fitness center, sauna, steam room, and indoor pool. The grounds incorporate a 3-story, 287-space parking deck, "Woodsy Pool" with water slide, outdoor spa, playground area, and hardscape/landscape package.



Hyatt Place Nashville/Downtown

Owner: Host Hotels & Resorts, Inc.
Location: Nashville, TN
Architect: PFVS Architecture, Inc.
Project Value: \$29.5 million
Project Dates: 6/2012-10/2013
Square Footage: 233,539

The Hyatt Place Nashville Downtown hotel is a 164,208-sq.-ft., 9-story, 255-key hotel atop a 69,331-sq.-ft., 4-level, 163-space parking garage. Amenities include laundry and back-of-house facilities, meeting rooms, kitchen and dining area, fitness center, and an indoor pool.



Courtyard & Residence Inn & Valentine Museum First Freedom Center

Owner: Apple Nine Hospitality
Location: Richmond, VA
Architect: PFVS Architecture, Inc.
Project Value: \$26 million
Project Dates: 05/2013-12/2014
Square Footage: 136,654

6-story, 210-room combination Courtyard and Residence Inn by Marriott which is also home to local nonprofit First Freedom Center and contains a museum showcasing Virginia history.



Village of Imagine

Owner: Intrawest Placemaking
Location: Orlando, FL
Architect: Baker Barrios Architects, Inc.
Project Value: \$11.3 million
Project Dates: 03/2006-07/2008
Square Footage: 377,771

261,546-sq.-ft., 12-story, 315-unit condo hotel with 116,165 sq. ft. of elevated parking and 17 acres of sitework. Amenities include a pool, workout area, one full kitchen and restaurant, a smaller warming kitchen, and 4 meeting rooms.



Shephard's Beach Resort | Guest Tower Addition

Owner: Shephard's Beach Resort
Location: Clearwater, FL
Architect: Behar + Peteranecz
Project Value: \$10 million
Project Dates: 02/2013-02/2014
Square Footage: 97,965

Six-story Guest Tower Addition, which includes 90 spectacular pool and island-view rooms, a first-floor lobby, and three levels of parking. The construction was successfully completed while keeping the hotel and tiki bar open for business.

Building Great Things



March 3, 2020

RE: 2019 DPR Accolades

ENR Top 400 Contractor List (2019) Engineering News-Record

- #10 in ENR's Top 400 GCs
- #1 Pharmaceutical
- #3 Industrial Process
- #4 Telecommunication
- #4 Data Center
- #5 Commercial Offices
- #7 Healthcare
- #7 Hotels, Motels, and Convention Center
- #9 Semiconductor
- #10 Domestic Building
- #11 New Contracts
- #12 General Building
- #13 Manufacturing
- #16 Entertainment

BD+C Giants (2019) Building Design + Construction

- #5 in Top Contractors in the Nation
- #2 in Science and Technology
- #4 in Data Center
- #6 in Healthcare
- #7 in Office
- #8 in Hotel
- #10 in Industrial
- #12 in Cultural
- #14 in University

Tel (713)386-1300
3200 Southwest Frwy, Suite 1550
Houston, TX 77027
www.dpr.com

WE EXIST TO BUILD GREAT THINGS®

Resolution:

**To Substitute DPR Construction as
the General Contractor in the
Master Development Agreement
with Garfield Public/Private**



QUESTIONS?





**City Council
Agenda Memo**

City Council Meeting Date: 10/8/2020

TO: Robert Hanna, City Manager

FROM: Greg McCaffery

SUBJECT: 6. Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on Awarding Bid No. 2080 to Bontke Brothers Construction Inc. on Water Department Street and Miscellaneous Repair Work 2020-2021 (Greg McCaffery)

GENERAL INFORMATION

This Project was advertised as a Public Notice on September 13, 2020 and on September 20, 2020 with a bid opening dated September 29, 2020. This contract involves the on demand repair of pavement at various locations within Abilene that have been damaged by the repair of waterlines.

SPECIAL CONSIDERATIONS

This project period will end on September 30, 2021.

This Contract may be renewed for one additional term of one year at the current total amount bid upon mutual written consent of both the contractor and the City of Abilene.

FUNDING/FISCAL IMPACT

Funding for this project is allocated through funds from the Water Department.

STAFF RECOMMENDATION

Staff recommends bid award to Bontke Brothers Construction Co., Inc. for \$1,102,575.00, plus an additional \$1,102,575.00 for a one-year extension.

BOARD OR COMMISSION RECOMMENDATION

ATTACHMENTS:

1. 2020 Resolution Watercuts Proj on demand
2. Water Dept Street & Misc Repair Work Contract
3. CB2080 TABSHEET
4. Scope of Project
5. REV_Watercuts ppt

RESOLUTION NO. _____

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS, AWARDING
BID TO BONTKE BROTHERS CONSTRUCTION, INC., FOR ON DEMAND REPAIR**

WHEREAS, the City of Abilene duly advertised and gave such notice, as required by law, for bids for the on demand repair of locations within Abilene that have been damaged by the replacement of waterlines; and

WHEREAS, the project involves the on demand repair of locations within Abilene that have been damaged by the replacement of waterlines: and

WHEREAS, the following bid was received and opened on the September 29, 2020:

Bontke Brothers Construction Co., Inc., Abilene, Texas \$1,102,575.00

WHEREAS, Bontke Brothers Construction Co., Inc., Abilene, Texas submitted the best value bid in the amount of \$1,102,575.00 with the bid meeting specifications; and

WHEREAS, the Contract for on demand repair will provide for an extension of the service for an additional one-year period, subject to budget approval during the one-year extension period; and

WHEREAS, Staff recommends awarding the bid to the best value bidder, Bontke Brothers Construction Co., Inc., Abilene, Texas, with a one-year agreed extension period.

**NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY
OF ABILENE, TEXAS**

PART 1: That the City Council approves this bid in the amount of \$1,102,575.00.

PART 2: That the City Council approves the extension of the on demand repair contract for an additional one-year period, subject to consent of the City and Contractor, and subject to budget approval for the one-year extension period, in the additional amount of \$1,102,575.00.

PART 3: That this Resolution shall take effect immediately from and after passage.

ADOPTED this 8th day of October, 2020.

ATTEST:

Shawna Atkinson, City Secretary

Anthony Williams, Mayor

APPROVED:

Stanley Smith, City Attorney

CONSTRUCTION CONTRACT

BACKGROUND

THIS CONTRACT, made October 8, 2020, is between the City of Abilene, a Municipal Corporation of Taylor and Jones Counties, Texas ("City"), and Bontke Brothers Construction Company, Inc. of the City of Abilene, State of Texas. ("Contractor").

The City recognizes a need for high quality construction work; the Contractor agrees to complete the project in return for payment.

THE AGREEMENT

1. **Work and Consideration.** hereby agrees to commence and complete the construction of Work required in the Contract Documents -- incorporated herein by reference --

WATER DEPARTMENT STREET AND MISCELLANEOUS REPAIR WORK 2020-2021

All work to be performed will be completed in conformance with (1) Part I of the City of Abilene's Standard Specifications for Construction adopted September, 2006 with the attached amendments in these Contract Documents, (2) the Technical Specifications section of these Contract Documents, and (3) the Plans attached to these Contract Documents. City of Abilene specifications control over Texas Department of Transportation specifications in the event of a conflict.

- a) Contractor will complete the repair of each **new** Water Department street cut and miscellaneous work within 30 calendar days of receiving notice of the location of each **new** street cut. Failure to complete new street cut repairs within 30 calendar days shall be considered a breach of contract.

In consideration of this Work, the City will pay the Contractor the sum of **\$1,102,575.00 (One million one hundred two thousand five hundred seventy-five dollars and zero cents).**

2. **Term and Termination.** The term of this contract will be through September 30, 2021, contingent upon continued funding by the Governing Body of the City of Abilene. This contract may be renewed for one additional term of one year at the current total amount bid upon mutual written consent of both the contractor and the City of Abilene.

This contract may be terminated by the City for any reason, upon 60 days written notice by City to Contractor. In the event of termination, Contractor will be compensated for work satisfactorily performed before the termination date.

If, through any cause, the Contractor fails to fulfill obligations under this contract, or if the Contractor breaches any term of this Contract, the City has the right to send notice of the failure to fulfill obligations or breach to the Contractor. Contractor shall have 30 days from the date notice is sent, to fulfill the obligation or remedy any breach. If at the end of the 30 day period, Contractor has failed to fulfill its obligations or remedy any breach of the Contract, the City may immediately terminate the Contract in writing. The Contractor will be compensated for work satisfactorily performed before the termination date.

The Contractor, however, is not relieved of liability to the City for damages sustained by the City because of any breach of Contract by Contractor. The City may withhold any payments to Contractor for the purpose of set off until the exact amount of damages due the City from the Contractor is determined and paid.

3. **Payment.** If Performance and Payment Bonds are required, the City will pay Contractor according to the General Conditions (Paragraph 20). If Performance and Payment Bonds are not required, the City will pay Contractor according to the Instructions to Bidders.

4. **No liens.** No mechanic, contractor, subcontractor, supplier, or other person can or will contract for, or in any other manner have or acquire any lien upon the work of this Contract, or the land upon which it is situated. The laws of the State of Texas govern this Contract.

5. **Venue.** Venue for any legal proceeding is Taylor County, Texas.

6. **Indemnity.**

A. Definitions

For the purpose of this section the following definitions apply:

“City” shall mean all officers, agents and employees of the City of Abilene.

“Claims” shall mean all claims, liens, suits, demands, accusations, allegations, assertions, complaints, petitions, proceedings and causes of action of every kind and description brought for damages.

“Contractor” includes the corporation, company, partnership, or other entity, its owners, officers, and/or partners, and their agents, successors, and assigns.

“Contractor’s employees” shall mean any employees, officers, agents, subcontractors, licensee and invitees of Contractor.

“Damages” shall mean each and every injury, wound, hurt, harm, fee, damage, cost, expense, outlay, expenditure or loss of any and every nature, including but not limited to:

- (i) injury or damage to any property or right
- (ii) injury, damage, or death to any person or entity
- (iii) attorneys fees, witness fees, expert witness fees and expenses, and
- (iv) all other costs and expenses of litigation

“Premise Defects” shall mean any defect, real or alleged, which now exists or which may hereafter arise upon the premises.

“Proven” shall mean that a court of competent jurisdiction has entered a final unappealable judgment on a claim adjudging an entity or person liable for a monetary judgment.

“Sole negligence” shall mean negligence of a party that is unmixed with the fault of any other person or entity.

B. Indemnity

The Contractor must indemnify, hold harmless, and defend the City from and against liability for any claims arising out of the Contractor's work and activities conducted in connection with this Contract.

The Contractor is an independent contractor and is not, with respect to its acts or omissions, an agent or employee of the City.

Contractor must at all times exercise reasonable precautions on behalf of, and be solely responsible for, the safety of Contractor's employees while in the vicinity where the work is being done. The City is not liable or responsible for the negligence or intentional acts or omissions of the Contractor or Contractor's employees.

The City assumes no responsibility or liability for damages which are directly or indirectly attributable to premise defects. Responsibility for all such defects is expressly assumed by the Contractor.

The City and Contractor must provide the other prompt and timely notice of any covered event which in any way affects or might affect the Contractor or City. The City has the right to compromise and defend the same to the extent of its own interests.

BOTH CITY AND CONTRACTOR EXPRESSLY INTEND THIS CONTRACT'S INDEMNITY PROVISION TO REQUIRE CONTRACTOR TO INDEMNIFY AND PROTECT THE CITY FROM THE CONSEQUENCES OF THE CITY'S OWN NEGLIGENCE WHILE CITY IS PARTICIPATING IN THIS CONTRACT, WHERE THAT NEGLIGENCE IS A CONCURRING CAUSE OF THE DAMAGES. THIS CONTRACT'S INDEMNITY PROVISION DOES NOT APPLY TO ANY CLAIM WHERE DAMAGE IS PROVEN TO RESULT FROM THE SOLE NEGLIGENCE OF THE CITY.

7. **Insurance.** The Special Conditions found the City of Abilene's Standard Specifications for Construction adopted September, 2006, Part I, Division I, Item 3, contain the insurance requirements of this Contract.

8. **Overcharges.** The Contractor assigns to City any claims for overcharges related to this Contract which arise under antitrust laws of the United States, 15 U.S.C.A. Sec. 1 et seq, as amended.

9. **Contract Interpretation.** Any dispute about the Contract's meaning or application will be interpreted fairly and reasonably, and neither more strongly for or against either party.

10. **Indebtedness to City.** Contractor agrees that no payments owed by him of any nature whatsoever to the City, including payment in advance for service charges or any sums of any character whatsoever, shall become delinquent or in arrears.

The City will not knowingly award contracts for goods or services to any Bidder in arrears to the City for any debt, claim, demand, or account whatsoever, including taxes, penalty or interest. Contractor is responsible for ensuring that no indebtedness exists.

Section 130 of the City Charter authorizes the City to counterclaim and offset any debt, claim, demand or account owed by the City to any person, firm or corporation in arrears to the City for any debt, claim, demand or account of any nature whatsoever, including taxes, penalty or interest.

11. **Boycott of Israel.** In accordance with Chapter 2270, Texas Government Code, a governmental entity may not enter into a contract with a company for goods or services unless the contract contains a written verification from the company that it: (1) does not boycott Israel; and (2) will not boycott Israel during the term of the contract.

This section only applies to a contract that: (a) is between a governmental entity and a company with 10 or more full-time employees and (b) has a value of \$100,000 or more that is to be paid wholly or partly from public funds of the governmental entity. Additionally, "company" does not include a sole proprietorship.

If this section is applicable, the signatory executing this contract on behalf of company verifies that the company does not boycott Israel and will not boycott Israel during the term of this contract.

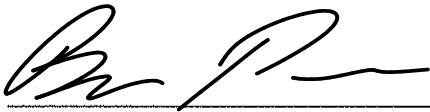
12. **Contract Execution.** The Contractor must sign the Contract first, with any necessary attestation and seal. The City Attorney or designee must review the Contract, and approve or disapprove it. If approved, the City's authorized agent will then sign. The City Secretary must keep a signed original in the City Secretary's Office.

13. **Contract Copies.** Each of the two executed copies is an original.

IN WITNESS WHERE OF, the parties hereto have executed this contract:

CONTRACTOR

Name of Contractor:
Bontke Brothers Construction Company, inc.


Signature

Brent Partain
Name - Typed or Printed
Project Manager
Title - Typed or Printed

Business Address:
102 college drive
Abilene, TX 79601

806-300-5577
Business Phone No.
75-1331325
Federal Tax I.D.#

ATTEST: (If Corporation)

Corporate Secretary's Signature

Corporate Seal
(if none, write "None")

CITY OF ABILENE

Authorized Signature

APPROVED:

City Attorney

ATTEST:

City Secretary

Seal:

**CITY OF ABILENE
PURCHASING DIVISION
TABULATION OF BIDS**

PAGE
1 OF 1

DEPARTMENT: ENGR
BID NO.: CB-2080
TIME OF OPENING: 11:00 A.M.
DATE OF OPENING: SEPTEMBER 29, 2020

BONTKE BROTHERS
ABILENE, TX

ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	EXTENSION	UNIT PRICE	EXTENSION	UNIT PRICE	EXTENSION	UNIT PRICE	EXTENSION	UNIT PRICE	EXTENSION	UNIT PRICE	EXTENSION
1.	WATER DEPARTMENT STREET AND MISCELLANEOUS REPAIR WORK 2020-2021				1,102,575.00										
BASE BID					1,102,575.00										
DISCOUNT															
TOTAL BID					1,102,575.00										

*NOTES: INDICATES RECOMMENDED AWARD

SCOPE OF PROJECT

| This Construction Contract involves but is not limited to the on demand repair of existing portions of streets that have been damaged by the replacement of water lines. The repair work details are shown on the Typical Section Sheet. There may also be sidewalk repair, curb and gutter repair and concrete alley apron repair as necessary. The contractor will be paid monthly for the work performed during the previous month. This repair will be determined by the City of Abilene Water Department, and sent to the contractor as they become available. The basis for payment under this contract is the unit price method. Payment will be for the actual amount of work done and material furnished. |

Water Dept. Street and Misc. Repair Work 2020-2021

Resolution: Bid Award #CB-2080 Water Dept. Street and Misc.
Repair Work 2020-2021

(G. McCaffery)



Agenda Item:

Water Dept. Street and Misc. Repair Work 2020-2021

- Construction Contract involves the on demand repair of locations within Abilene that have been damaged by the repair pavement at various of waterlines.
- This Contract may be renewed for one additional term of one year at the current total amount bid upon mutual written consent of both the contractor and the City of Abilene.
- Project Advertised September 13th 2020 & September 20th 2020, Bids Opened September 29th 2020.
- One bid was received.
- Staff recommends award of contract to Bontke Brothers Construction Inc. in the amount of \$1,102,575.00.



Questions?





**City Council
Agenda Memo**

City Council Meeting Date: 10/8/2020

TO: Robert Hanna, City Manager

FROM: Mike Warrix, Director

SUBJECT: 7. Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on approving the 2020-2024 Consolidated Plan, FY 2020/2021 Action Plan, and proposed use of Community Development Block Grant (CDBG) and Home Investment Partnerships Program (HOME) funds (Zack Rainbow)

GENERAL INFORMATION

As an entitlement city receiving funds from the U.S. Department of Housing and Urban Development (HUD), the City of Abilene is required to submit a Consolidated Plan that strategically addresses the City's goals and objectives for housing and community development over the course of a five-year period. The City of Abilene is also required to submit a One-Year Action Plan outlining specific uses of Community Development Block Grant (CDBG) and Home Investment Partnerships Program (HOME) funds planned for the coming fiscal year. The Office of Neighborhood Services Advisory Council (ONSAC) was instrumental in the development of the goals, objectives and budget of the Consolidated Plan and provided input into the FY 2020/2021 Action Plan.

SPECIAL CONSIDERATIONS

A public hearing and 6 community neighborhood meetings were held to receive input for the FY 2020/2021 Consolidated Plan and Action Plan. The needs discussed were: housing, community services, economic development, community/public facilities, public improvements and homeless services. Invitees were service providers and nonprofits, the homeless network, disability services, 211 A Call for Help, agencies, religious organizations/churches and neighborhood associations and residents. Professionals from housing, insurance, real estate and

lending were invited. All City directors and managers were invited along with all previous funding recipients. Discussion centered on the community needs that could be addressed with CDBG/HOME funds or alternative funds. Funding applications were accepted from May 15, 2020 - May 28, 2020. The Proposed FY **2020/2021** budget for the FY **2020/2021** Action Plan was published in the Abilene Reporter-News on June 5, 2020 (which began the HUD-required 30-day comment period). As of July 12, 2020, no written comments have been received in response to the proposed Action Plan and budget as published. A second public hearing on June 11, 2020, is required with approval of the attached resolution. The FY **2020/2021** Consolidated Plan and Action Plan must be received by HUD once approved.

FUNDING/FISCAL IMPACT

There will be no impact on local taxes. Projects are to be funded using 2020 Entitlements of \$870,932 CDBG and \$447,803 HOME. In addition, the City anticipates that it will receive \$500 program income from the CDBG program during FY **2020/2021**.

STAFF RECOMMENDATION

Staff recommends approval of the attached resolution approving the

FY **2020/2021** One-Year Action Plan for use of CDBG and HOME funds.

BOARD OR COMMISSION RECOMMENDATION

ATTACHMENTS:

1. Resolution 10-8-20 Con Plan Action Plan
2. City of Abilene 2020-2024 Consolidated Plan and Annual Action Plan FINAL DRAFT updated CDBG-CV 9-29-20
3. Redline Edits 10.5.20
4. Hazard Mitigation Plan Update
5. WCTCOG Hazard Mitigation Plan update
6. FY2020_21 Council Meeting 10.8.20 (1)

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL, OF THE CITY OF ABILENE, TEXAS, Approving the FY 2020/2024 Consolidated Plan and FY 2020/2021 Action Plan and projected use of Community Development Block Grant (CDBG) and Home Investment Partnerships Program (HOME) funds

WHEREAS, it is desirable and in the public interest that the City of Abilene request funds under the Community Development Block Grant Program and Home Investment Partnerships Program, authorized under Title I of the Housing and Community Development Act of 1974, Public Law 93-383, as amended, for the City of Abilene situated in the Counties of Taylor and Jones, State of Texas; and

WHEREAS, a minimum of two public hearings and six community meetings have been held as required by 24 CFR Part 91.105, Consolidated Plan for Community Planning and Development Program Final Rule, at which interested members of the public were invited to offer comments on housing and community development needs and funding requests/proposals; and

WHEREAS, the primary objective of the Community Development Program is to develop a viable urban community, including decent housing and a suitable living environment, and to expand economic opportunities principally for persons of low and moderate income. Consistent with the primary objective, the Federal assistance provided in the Community Development Program is for the support of the community development goals, objectives, and strategies which are eligible under applicable Federal regulations; and

WHEREAS, the primary objective of the HOME Program is to expand the supply of decent, safe, sanitary, and affordable housing for very low income and low income Americans. Consistent with that primary objective, the Federal assistance provided in the Community Development Program is for the support of the community development goals, objectives, and strategies which are eligible under applicable regulations;

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

Part 1. That the FY 2020/2024 Consolidated Plan and FY 2020/2021 Action Plan and Projected Use of Community Development Block Grant and HOME funds is hereby approved.

Part 2. That, upon approval, the FY 2020/2024 Consolidated Plan and FY 2020/2021 Action Plan be submitted to the United States Department of Housing and Urban Development.

Part 3. That the financial assistance authorized by the Community Development Block Grant and HOME Programs referred to above is required to enable the City of

Abilene to carry on appropriate community development activities directed toward meeting the objectives above.

Part 4. That the City Manager, or his designee, of the City of Abilene, Texas is hereby authorized to sign said application and any and all appurtenant documents on behalf of the City.

Part 5. That this resolution shall take effect immediately from and after its passage.

ADOPTED this 8th day of October, 2020.

ATTEST:

CITY SECRETARY

MAYOR

APPROVED:

CITY ATTORNEY

City of Abilene, Texas

2020-2024 Consolidated Plan

2020-2021 Annual Action Plan

DRAFT FOR PUBLIC COMMENT

Executive Summary

ES-05 Executive Summary - 24 CFR 91.200(c), 91.220(b)

1. Introduction

The City of Abilene's 2020-2024 Consolidated Plan serves as a planning document meeting the federal government statutory requirements in 24 CFR 91.200-91.230, with revisions for preparing a Consolidated Plan and guiding the use of CDBG funding based on applications to the U.S. Department of HUD. The major sections of the Consolidated Plan include a Housing Market Analysis, Housing and Homeless Needs Assessment, 5-year Strategic Plan, a 1-year Action Plan, and Consultation and Citizen Participation, with accompanying documentation relating to public comment. The Strategic Plan addresses specific needs that were identified in the data analysis, with specific goals and program targets for each category designated for funding. The Action Plan is a subset of the Strategic Plan, addressing funding options for the next fiscal year. The Consolidated Plan can be used by organizations in the community as a guide for identifying activities through which they can help the jurisdiction reach their housing and community development goals. The Consolidated Plan also serves as the baseline for measuring program effectiveness, as reported in the Consolidated Annual Performance and Evaluation Report (CAPER) required by HUD for each fiscal year's funding allocation. Incorporated into the Consolidated Plan are an analysis of the local housing market and a review of housing and homeless needs in Abilene as a means of defining the current environment in which federal funding is being used. The Consolidated Plan provides a strategic plan for meeting priority needs that were identified through the community participation process. The analytical parts of the document draw from the 2013-2017 American Community Surveys and 2012-2016 CHAS data provided by HUD. Other data sources include the 2010 U.S. Census and other information gathered locally, including a survey of citizens that was used to assist in prioritizing needs. The survey was available on the City's website and was distributed at community meetings, through community stakeholder lists, and at community organizations.

2. Summary of the objectives and outcomes identified in the Plan Needs Assessment Overview

This Consolidated Plan contains a range of goals, objectives, and outcomes formulated to address needs identified for homelessness, other special needs, affordable housing, non-housing community development, barriers to affordable housing, lead-based paint hazards, institutional structure, and coordination.

These objectives include:

- Continue to Plan, Monitor, and Administer Entitlement Grant Programs and ensure compliance with Federal Regulations
- Improve living conditions in Abilene by addressing non-housing community development needs

- Enhance the economic well-being of all citizens by addressing non-housing community development for special needs populations and low and moderate income persons
- Improve the condition and availability of affordable housing

3. Evaluation of past performance

Abilene has a history of successful programs funded through the Community Development Block Grant Program. The city has been focused on programs that address the condition of the housing stock in the recent years. The City has successfully funded housing rehabilitation activities targeting lower income and elderly households unable to properly maintain their homes. The City has worked actively with local homeless services providers to expand services aimed at helping those persons find employment, housing, health care services, and educational opportunities. Details of past performance can be found in the City's Consolidated Annual Performance and Evaluation Report (CAPER).

4. Summary of citizen participation process and consultation process

Based on the Community Participation Plan, outreach included public forums and focus group meetings, online survey accessed on the City of Abilene Website, and consultation with public and private agencies and organizations to capture public input as to the priority needs for the next five years. Participating persons, public and private agencies included the general public, neighborhood organizations, Abilene Housing Authority, Continuum of Care, Board of Realtors, Chamber of Commerce, public and social service agencies, colleges and universities, elected and appointed officials.

5. Summary of public comments

The public comment period was June 12, 2020 through July 12, 2020. A Public Hearing was held during the June 11, 2020 City Council Meeting. Two additional public hearings were held on August 11, 2020. During the City Council meeting, two Abilene citizens provided the following comments:

- Individual A – Stated her concerns on the current projects CDBG funds are used for and requested reallocation of funds to other projects, like low-income citizens.
- Individual B – Stated she thinks there is an insufficiency on multi-family housing in Abilene and is advocating for a resident housing committee.

During the 30-day public comment period, the City of Abilene received public comments from the following community organizations:

- West Texas Homeless Network
- Abilene Hope Haven
- FaithWorks of Abilene, Inc.
- West Central Texas Regional Foundation
- Community Foundation of Abilene
- United Way of Abilene/2-1-1

All community organizations requested that the City of Abilene partners with them in their common goal of ending homelessness in Abilene by removing the capital infrastructure/improvement restriction on CDBG/HOME funds.

A total of 25 community members participated in the two public hearing meetings on August 11, 2020. During the meeting, several individuals asked questions and provided the following comments:

- Individual A – The individual asked if funding was only available in certain areas of the city.
- Individual B – The individual asked about the different types of flood zones in the city and how they impacted funding.
- Individual C and D representing the Non-profit for the Stevenson Group – The individuals asked how the community can help residents that don't know how to search for much needed help, especially those with existing health conditions, with yard and house clean up.
- Individual E from New Fellowship Baptist Church – Offered the church as a location for future community meetings.

6. Summary of comments or views not accepted and the reasons for not accepting them

No comments were rejected.

In response to Individual A's comments during the June 11, 2020 public hearing, HUD requires that CDBG/HOME funds to be used on projects designated for low-income individuals. All individuals and organizations receiving funding must meet the income qualifications, which are available on the Office of Neighborhood Service's website.

In response to Individual B's comments during the June 11, 2020 public hearing, the City of Abilene acknowledges the individual's concerns. CDBG and HOME funds are primarily used for programs for homeowners. Most multifamily properties are owned by individuals not residing on the property and thus would not qualify funding.

The City of Abilene ONS team met with the six community organizations on July 10, 2020 to discuss their public comments. The meeting was positive and ONS better understands the concerns of the organizations and will continue to collaborate with the organizations on the common goal of ending homelessness in Abilene.

In response to many of the questions asked by individuals at the two public hearing meetings on August 11, 2020, many of the questions were about awareness of services and funding available through the Office of Neighborhood Services (ONS). ONS staff provided information about available funding programs and program criteria. Awareness of services available through the City of Abilene and other organizations in Abilene was identified as a need within the community during the citizen participation process.

7. Summary

This plan provides a framework through which Abilene manages its federal entitlement programs related to community development and homeless assistance. Data was provided through HUD's eCon software system, utilizing American Community Survey data, Comprehensive Housing Affordability Strategy (CHAS), and other sources, to construct the needs assessment and market analysis. The City worked with local service providers and other concerned citizens to develop the strategic plan and annual action plan, both designed to address needs within the city as identified through the public participation process and needs assessment.

The Process

PR-05 Lead & Responsible Agencies 24 CFR 91.200(b)

1. Describe agency/entity responsible for preparing the Consolidated Plan and those responsible for administration of each grant program and funding source

The following are the agencies/entities responsible for preparing the Consolidated Plan and those responsible for administration of each grant program and funding source.

Agency Role	Name	Department/Agency
CDBG Administrator		City of Abilene, Office of Neighborhood Services
HOME Administrator		City of Abilene, Office of Neighborhood Services

Table 1 – Responsible Agencies

Narrative

The City of Abilene, Texas followed its designated Community Participation Plan in developing the 2020-2024 Consolidated Plan and 2020-2021 Annual Plan. City of Abilene Neighborhood Initiatives Division, 555 Walnut, Suite 206, Abilene, TX 79601, served as lead agency for the development of the 2020-2024 Consolidated Plan and 2020-2021 Annual Plan. Zack Rainbow, Assistant Director of Planning & Development Services served as primary contact.

Consolidated Plan Public Contact Information

Lead Contact:

Zack Rainbow, Assistant Director of Planning & Development Services

City of Abilene

555 Walnut, Suite 206, Abilene, TX 79601

PR-10 Consultation - 91.100, 91.200(b), 91.215(l)

1. Introduction

Abilene works with a wide variety of agencies, organizations, and service providers in an effort to bring various viewpoints to bear in the identification of local housing and service needs. Ongoing relationships focused on specific needs and targeted meetings designed to bring public input into the Consolidated Plan process are two of the ways that the City utilizes outside organizations in the consultation process. A few of those agencies are listed in the tables below, but others were invited and/or participated that were not found in the HUD database.

Provide a concise summary of the jurisdiction's activities to enhance coordination between public and assisted housing providers and private and governmental health, mental health and service agencies (91.215(l)).

The City has ongoing relationships with several housing providers working on housing development activities. Through the Continuum of Care process, the City maintains relationships with mental health providers, homeless shelter and services providers, and other governmental agencies with specific responsibilities for homeless individuals and families. The City also participates in a variety of other coalitions that seek to address other issues that relate to housing and service needs.

Describe coordination with the Continuum of Care and efforts to address the needs of homeless persons (particularly chronically homeless individuals and families, families with children, veterans, and unaccompanied youth) and persons at risk of homelessness

The City of Abilene and the West Texas Homeless Network is involved in the development and activities of the local Continuum of Care System. Several local organizations such as social service agencies, charitable groups, and religious organizations provide services based on the practices and philosophies of "Housing First," as recommended by HUD and established best practices. This includes housing-focused outreach to Abilene citizens who are experiencing homelessness, prevention and diversion services for those who are at risk of homelessness, emergency shelter, transitional housing, rapid re-housing, permanent supportive housing, and a variety of supportive services with experienced case managers guiding the process. The City of Abilene participates in submitting and supporting applications for funding for homeless initiatives to the Texas Balance of State Continuum of Care, through the local homeless coalition.

Describe consultation with the Continuum(s) of Care that serves the jurisdiction's area in determining how to allocate ESG funds, develop performance standards and evaluate outcomes, and develop funding, policies and procedures for the administration of HMIS

Staff from Abilene participates in the development of the Continuum of Care, working with area service providers to include City resources, to the extent possible, in the provision of services to homeless individuals and families in Abilene.

2. Describe Agencies, groups, organizations and others who participated in the process and describe the jurisdictions consultations with housing, social service agencies and other entities

Table 2 – Agencies, groups, organizations who participated

1	Agency/Group/Organization	ABILENE HABITAT FOR HUMANITY
	Agency/Group/Organization Type	Housing
	What section of the Plan was addressed by Consultation?	Housing Need Assessment
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Participated in focus group on March 3, 2020
2	Agency/Group/Organization	CONNECTING CARING COMMUNITIES
	Agency/Group/Organization Type	Services-Health Services-Education
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Homeless Needs - Chronically homeless Non-Homeless Special Needs
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Participated in a stakeholder interview on April 2, 2020 Participated in a public hearing on August 11, 2020
3	Agency/Group/Organization	DAY NURSERY OF ABILENE
	Agency/Group/Organization Type	Services-Children
	What section of the Plan was addressed by Consultation?	Homeless Needs - Families with children Non-Homeless Special Needs
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Participated in a stakeholder interview on May 4, 2020
4	Agency/Group/Organization	WEST CENTRAL TX REGIONAL HOUSING
	Agency/Group/Organization Type	Regional organization
	What section of the Plan was addressed by Consultation?	Housing Need Assessment Economic Development Anti-poverty Strategy
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Participated in the community survey and a stakeholder interview on March 20, 2020

5	Agency/Group/Organization	ABILENE HOUSING AUTHORITY
	Agency/Group/Organization Type	PHA
	What section of the Plan was addressed by Consultation?	Public Housing Needs
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Participated in a focus group on March 2, 2020 and stakeholder interviews on April 13 and April 17, 2020
6	Agency/Group/Organization	LOVE AND CARE MINISTRIES
	Agency/Group/Organization Type	Services-Homeless
	What section of the Plan was addressed by Consultation?	Homeless Needs
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Participated in the community survey and a stakeholder interview on April 16, 2020.
7	Agency/Group/Organization	BETTY HARDWICK CENTER
	Agency/Group/Organization Type	Services-Mentally Ill Services-Disabled
	What section of the Plan was addressed by Consultation?	Mental Illness Needs Persons with Disability Needs
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Participated in a stakeholder interview on April 8, 2020.
	Agency/Group/Organization	ABILENE HOPE HAVEN
	Agency/Group/Organization Type	Services-Homeless
	What section of the Plan was addressed by Consultation?	Homeless Needs
	How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Participated in a stakeholder interview on April 15, 2020.
	Agency/Group/Organization	DISABILITIES IN ACTION
	Agency/Group/Organization Type	Services-Disabled
	What section of the Plan was addressed by Consultation?	Persons with Disabilities

How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Participated in a stakeholder interview on April 15, 2020.
Agency/Group/Organization	CHRISTIAN SERVICE CENTER
Agency/Group/Organization Type	Services-Homeless Services-Health
What section of the Plan was addressed by Consultation?	Homeless needs Housing Needs Assessment
How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?	Participated in a stakeholder interview on May 7, 2020.

Identify any Agency Types not consulted and provide rationale for not consulting

No specific organizations were intentionally left out of the public participation process. Abilene – Taylor County Public Health Department were not able to participate in any of the focus group or stakeholder interviews due to COVID-19 priorities within the department.

Other local/regional/state/federal planning efforts considered when preparing the Plan

Name of Plan	Lead Organization	How do the goals of your Strategic Plan overlap with the goals of each plan?
Continuum of Care	West Texas Homeless Network	The City staff participate in the CoC process, and the goals of Strategic Plan align with CoC in provision of affordable housing options, and services to persons at risk of homelessness and homeless persons

Table 3 – Other local / regional / federal planning efforts

Describe cooperation and coordination with other public entities, including the State and any adjacent units of general local government, in the implementation of the Consolidated Plan (91.215(l))

Abilene works closely with the West Texas Homeless Network and other local communities active in the Continuum of Care process, State agencies, local non-profit organizations, and other departments of the City of Abilene in the development of programs to address housing, homeless, and community development needs and other local issues covered by the Consolidated Plan.

Narrative (optional):

PR-15 Citizen Participation

1. Summary of citizen participation process/Efforts made to broaden citizen participation Summarize citizen participation process and how it impacted goal-setting

Based on Community Participation Plan, outreach included public forums and focus group meetings, an online survey provided on the City of Abilene Web Site, hard copy, and consultation with public and private agencies and organizations to capture public input as to the priority needs for the next five years. Participating persons, public and private agencies included the general public, neighborhood organizations, Abilene Housing Authority, Continuum of Care, local realtors, Chamber of Commerce, public and social service agencies, colleges and universities, elected and appointed officials. Four Public Forums and Stakeholder Focus Group sessions were held March 2 – 5 at several locations across the City. Supplemental interviews were conducted with and information and input received from various City Departments and Divisions, Abilene Housing Authority, Chamber of Commerce and Board of Realtors representatives, social and public service organization, community, professional and industry representatives to obtain information from those unable to attend the sessions. Participants in the sessions and supplemental interviews included Abilene City staff and other government representatives; administrators from local colleges, universities, and school districts; non-profit organizations, home builders, housing and social service agencies representatives; real estate and financial industry representatives; and the general public and other community representatives. Attendees for the Focus Groups and Public Forums were gathered through invitations sent to select resident and community leaders, organizations, industry professionals and public officials and a public meeting notice published in the local newspaper. At each Focus Group and Public Forum, general issues related to the housing market, neighborhoods conditions, community development needs and concerns pertaining to barriers to affordable housing in Abilene were discussed. The format also included discussions of the communities' priority needs for the next five years and their priorities for funding for the next program year. Participants in the focus groups and public forums and the general public were given an opportunity to complete a Priority Needs Survey as part of the Consolidated Plan process. The online community survey was made publicly available on the City's website, at various community organizations throughout the city, and emailed to community residents through various email list servs. A total of 232 survey responses were received.

The Abilene City Council held a briefing and public hearing for the 2020-2024 Consolidated Plan and 2020-2021 Annual Plan at Abilene City Hall Chambers on June 11, 2020 and took final Action to approve the 2020-2024 Consolidated Plan and 2020-2021 Annual Plan on **[Date to be determined]** October 8, 2020. The Consolidated Plan and Annual Plan was made available for a 30 day public comment period from June 12, 2020 to July 12, 2020. Two additional public hearing meetings were held on August 11, 2020. [Public comment for the CDBG-CV \(Community](#)

Development Block Grant – Coronavirus) funding was held from September 17, 2020 through September 23, 2020.

The Citizen Participation Plan requires that the participating jurisdiction (PJ) calculate whether the amendment (if there is one) be considered a substantial amendment or minor. A calculation must be made by multiplying the Entitlement by 25%. If the number is not 25% greater than the Entitlement, then the change is determined to be a minor amendment.

Zack Rainbow, Assistant Director of Planning & Development Services

City of Abilene

555 Walnut, Suite 206, Abilene, TX 79601

Citizen Participation Outreach

Sort Order	Mode of Outreach	Target of Outreach	Summary of response/attendance	Summary of Comments received	Summary of comments not accepted and reasons	URL (If applicable)
1	Focus Group: Gethsemane Template	Minorities Non-English Speaking - Specify other language: Spanish Persons with disabilities Non-targeted/broad community Residents of Public and Assisted Housing	8 community members	See appendix	None	
2	Focus Group: Alameda Community Center	Non-targeted/broad community	7 community members	See appendix		

Sort Order	Mode of Outreach	Target of Outreach	Summary of response/attendance	Summary of Comments received	Summary of comments not accepted and reasons	URL (If applicable)
3	Focus Group: Cobb Park	Seniors Persons with disabilities Non-target/broad community	8 community members	See appendix		
4	Focus Group: Rose Park	Seniors Non-target/broad community	12 community members	See appendix		
5	Stakeholder Interviews	Non-targeted/broad community	20 community members	See appendix		
6	Newspaper Ad	Non-targeted/broad community	None	None	None	

Sort Order	Mode of Outreach	Target of Outreach	Summary of response/attendance	Summary of Comments received	Summary of comments not accepted and reasons	URL (If applicable)
7	Community Priority Needs Survey	Minorities Non-English Speaking - Specify other language: Spanish Persons with disabilities Non-targeted/broad community Residents of Public and Assisted Housing	232 survey responses	Top 5 order of needs: Public Improvements, safe housing for seniors, mental health and substance abuse treatment services, childcare centers, and homeownership assistance.	None	

Sort Order	Mode of Outreach	Target of Outreach	Summary of response/attendance	Summary of Comments received	Summary of comments not accepted and reasons	URL (If applicable)
8	Public Hearing	Non-targeted/broad community		Individual A – Stated her concerns on the current projects CDBG funds are used for and requests reallocation of funds to other projects, like low income citizens. Individual B – Stated she thinks there is an insufficiency on multi-family housing in Abilene and is advocating for a resident housing committee.	None	

Sort Order	Mode of Outreach	Target of Outreach	Summary of response/attendance	Summary of Comments received	Summary of comments not accepted and reasons	URL (If applicable)
9	Public Comments	Non-targeted/broad community	• West Texas Homeless Network • Abilene Hope Haven • FaithWorks of Abilene, Inc. • West Central Texas Regional Foundation • Community Foundation of Abilene • United Way of Abilene/2-1-1	All community organizations requested that the City of Abilene partners with them in their common goal of ending homelessness in Abilene by removing the capital infrastructure/improvement restriction on CDBG/HOME funds.	None	

Sort Order	Mode of Outreach	Target of Outreach	Summary of response/attendance	Summary of Comments received	Summary of comments not accepted and reasons	URL (If applicable)
10	Public Hearing	Non-targeted/broad community	• 20 individuals at the morning session • 5 individuals at the evening session	• Individual A – The individual asked if funding was only available in certain areas of the city. • Individual B – The individual asked about the different types of flood zones in the city and how they impacted funding. • Individual C and D representing the Non-profit for the Stevenson Group – The individuals asked how the community can help residents that don't know how to search for much needed help, especially those with existing health conditions, with	None	

Sort Order	Mode of Outreach	Target of Outreach	Summary of response/attendance	Summary of Comments received	Summary of comments not accepted and reasons	URL (If applicable)
				yard and house clean up. Individual E from New Fellowship Baptist Church – Offered the church as a location for future community meetings.		
11	CDBG-CV Public Comments	Non-targeted/broad community	No comments received	No comments received		

Table 4 – Citizen Participation Outreach

Needs Assessment

NA-05 Overview

Needs Assessment Overview

The needs assessment analyzes a variety of housing, homeless, community development, and non-homeless special needs through an examination of census and CHAS data, which was created by the U.S. Census Bureau and the U.S. Department of Housing and Urban Development. This data quantifies housing problems, such as overcrowding and its cost burdens, and measures the magnitude of special needs populations, such as the elderly, frail elderly, and persons with HIV/AIDS. As shown in the following analysis, cost burdened (paying more than 30 percent of household income on housing expenses) and extreme cost burdened (paying more than 50 percent of household income on housing expenses) has a considerable impact on households in Abilene, particularly in lower income households. Measures of housing condition (lack of complete kitchen or plumbing facilities) do not provide a reliable measure of condition; although it represents the best, easily accessible data on the topic. Other needs are represented through various census and state data sources.

NA-10 Housing Needs Assessment - 24 CFR 91.205 (a, b, c)

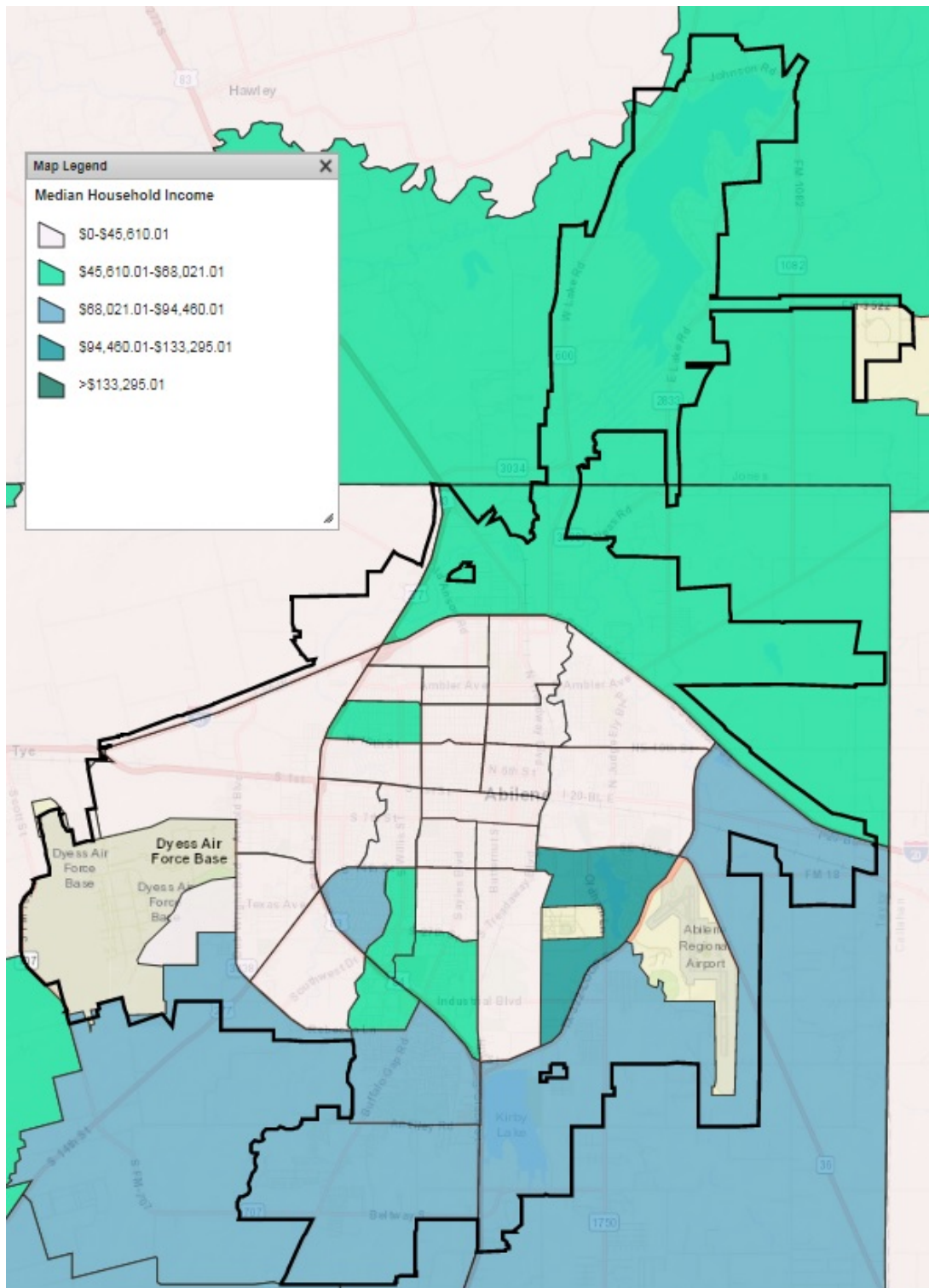
Summary of Housing Needs

The following data provides an analysis of housing problems in Abilene, including lack of complete plumbing or kitchen facilities, overcrowding (1.01 to 1.5 persons per room), severe overcrowding (more than 1.5 persons per room), cost burdened (paying more than 30% of household income on housing expenses), and severe cost burdened (paying more than 50% of household income on housing expenses). By far, the most common housing need related to cost burdened, impacting lower income households particularly hard, with over 63% of renter and owner households earning less than 30% of the Area Median Income (AMI) paying more than 50% of their income on housing expenses. For rental households, cost burdened is the most common housing problem with 67% of all renter households earning below 80% of the AMI paying more than 30% of their income on housing expenses. Likewise, cost burdened is most common for owner households where 68% of all owner households earning below 80% of the AMI paying more than 30% of their income on housing expenses, which is a significant increase from 44% in the previous 2015-2019 report. Homeowners experiencing severe cost burden (paying more than 50% of their income on housing expenses) has remained steady at 19%. The next most pressing housing problem in Abilene according to the qualitative data is overcrowding in rental housing, with just under five percent rental units.

Demographics	Base Year: 2010	Most Recent Year: 2017	% Change
Population	116,637	122,762	+5%
Households	42,705	42,287	-1%
Median Income	\$39,766.00	\$46,093.00	+16%

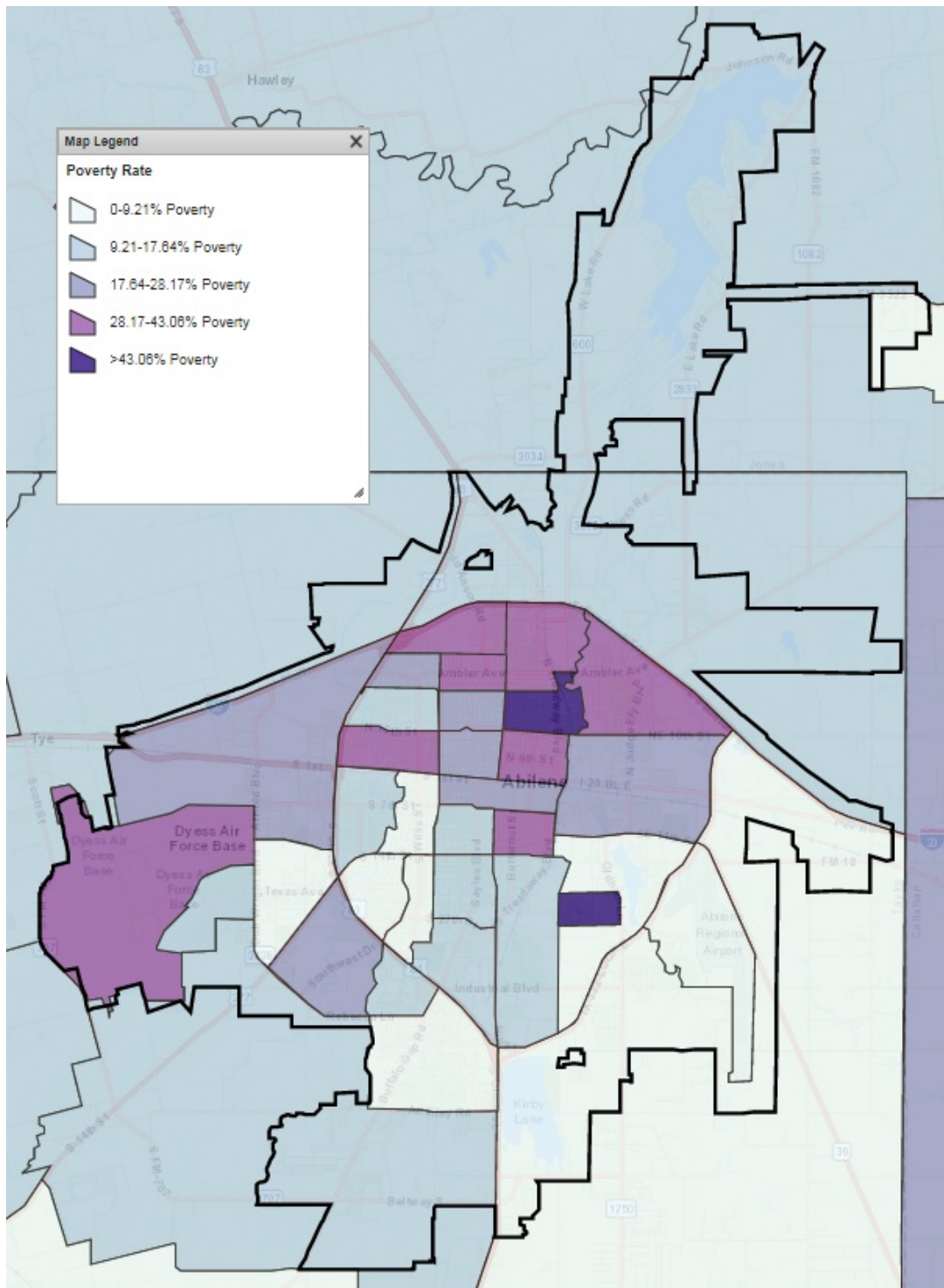
Table 5 - Housing Needs Assessment Demographics

Data Source: 2013-2017 American Community Survey, 5-Year Estimates



Median Household Income,

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.



Percent of Population Below Poverty Level,

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.

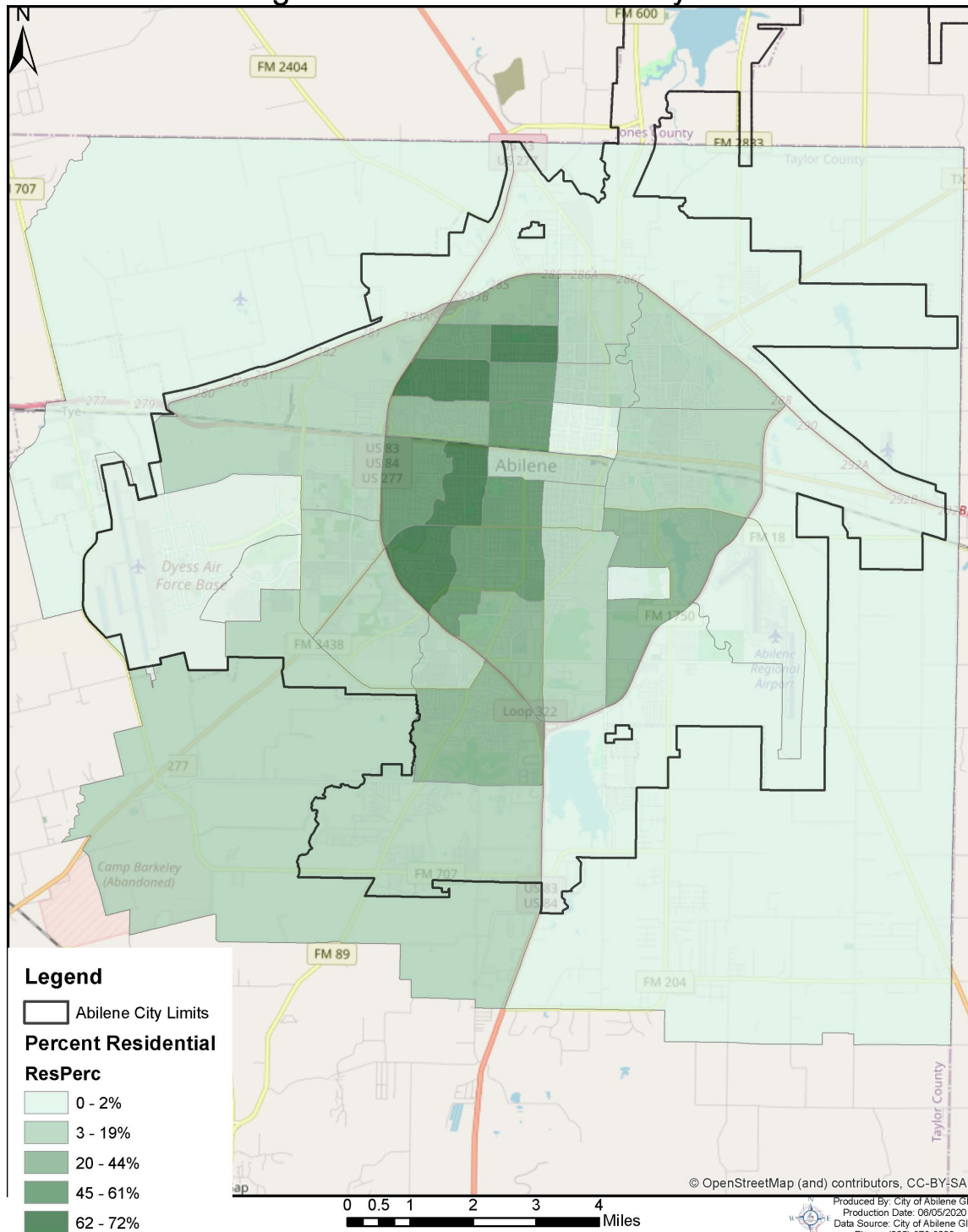
Number of Households Table

	0-30% HAMFI	>30-50% HAMFI	>50-80% HAMFI	>80- 100% HAMFI	>100% HAMFI
Total Households	5,455	5,420	7,805	4,465	19,295
Small Family Households	1,840	2,225	3,970	2,485	12,985
Large Family Households	415	355	800	355	1,585
Household contains at least one person 62-74 years of age	690	925	1,460	865	3,700
Household contains at least one person age 75 or older	825	665	1,200	445	1,750
Households with one or more children 6 years old or younger	935	1,210	1,615	830	2,960

Table 6 - Total Households Table

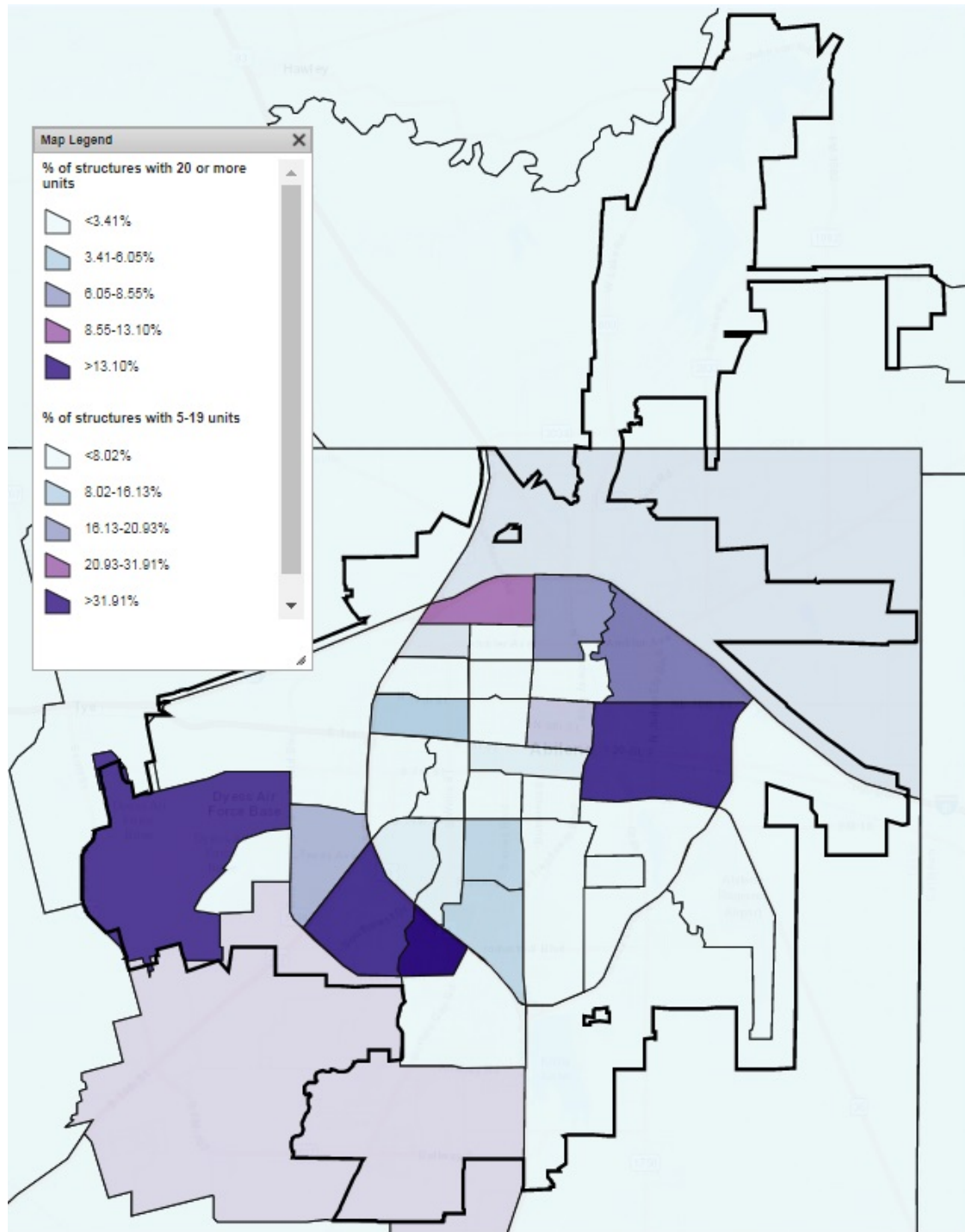
Data 2012-2016 CHAS
Source:

Percentage of Residential Land: City of Abilene



Percent Single-Family Housing Units

Map Source: City of Abilene



Percent Multifamily Housing (5 or more units)

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.

Housing Needs Summary Tables

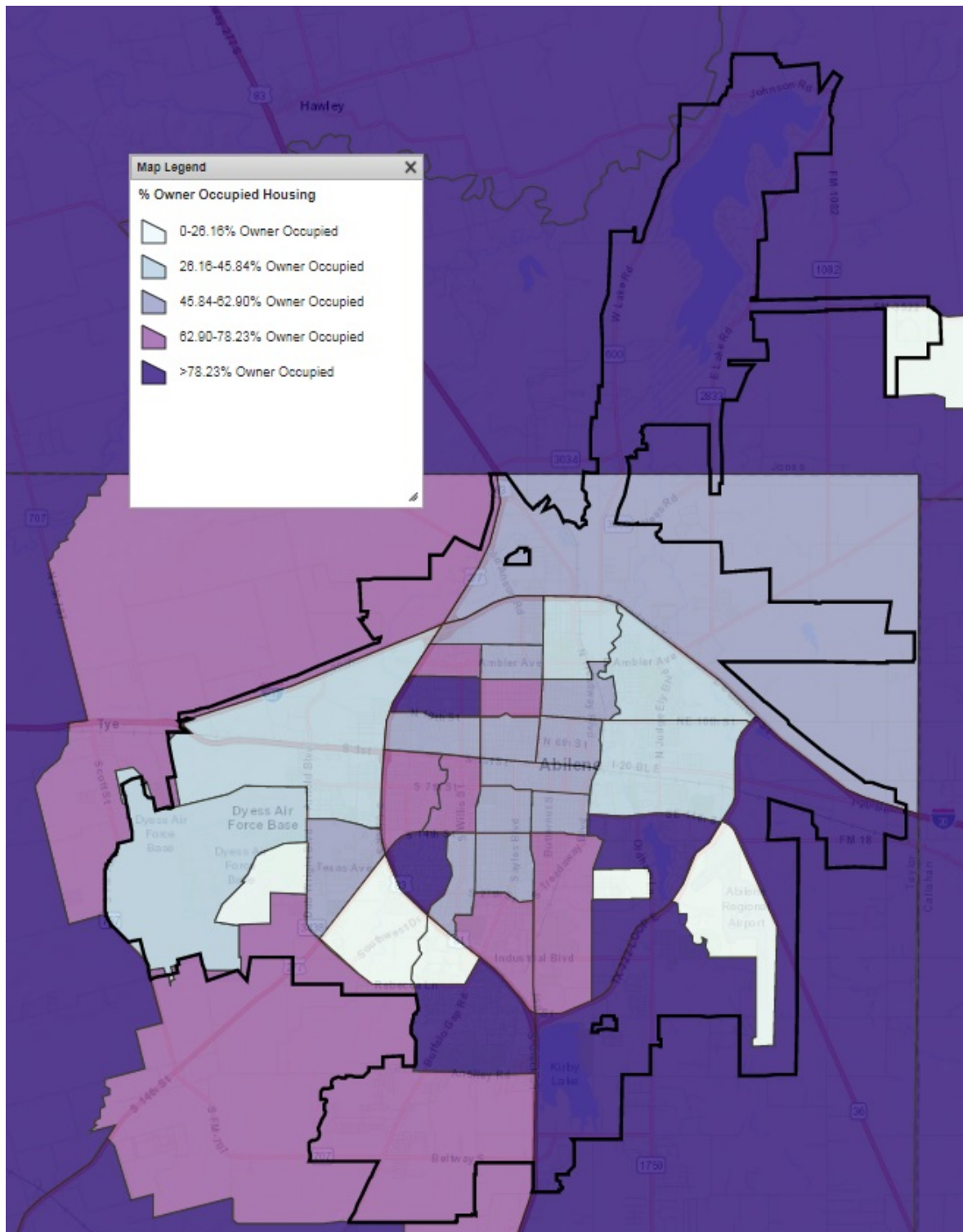
1. Housing Problems (Households with one of the listed needs)

	Renter					Owner				
	0-30% AMI	>30- 50% AMI	>50- 80% AMI	>80- 100% AMI	Total	0-30% AMI	>30- 50% AMI	>50- 80% AMI	>80- 100% AMI	Total
NUMBER OF HOUSEHOLDS										
Substandard Housing - Lacking complete plumbing or kitchen facilities	90	140	210	55	495	70	4	25	0	99
Severely Overcrowded - With >1.51 people per room (and complete kitchen and plumbing)	80	105	75	0	260	0	10	10	0	20
Overcrowded - With 1.01-1.5 people per room (and none of the above problems)	60	115	100	45	320	15	15	120	50	200
Housing cost burden greater than 50% of income (and none of the above problems)	2480	1040	360	70	3950	760	330	260	35	1385

	Renter					Owner				
	0-30% AMI	>30- 50% AMI	>50- 80% AMI	>80- 100% AMI	Total	0-30% AMI	>30- 50% AMI	>50- 80% AMI	>80- 100% AMI	Total
Housing cost burden greater than 30% of income (and none of the above problems)	2810	2510	1850	370	7540	1105	775	1135	330	3345
Zero/negative Income (and none of the above problems)	495	0	0	0	495	225	0	0	0	225

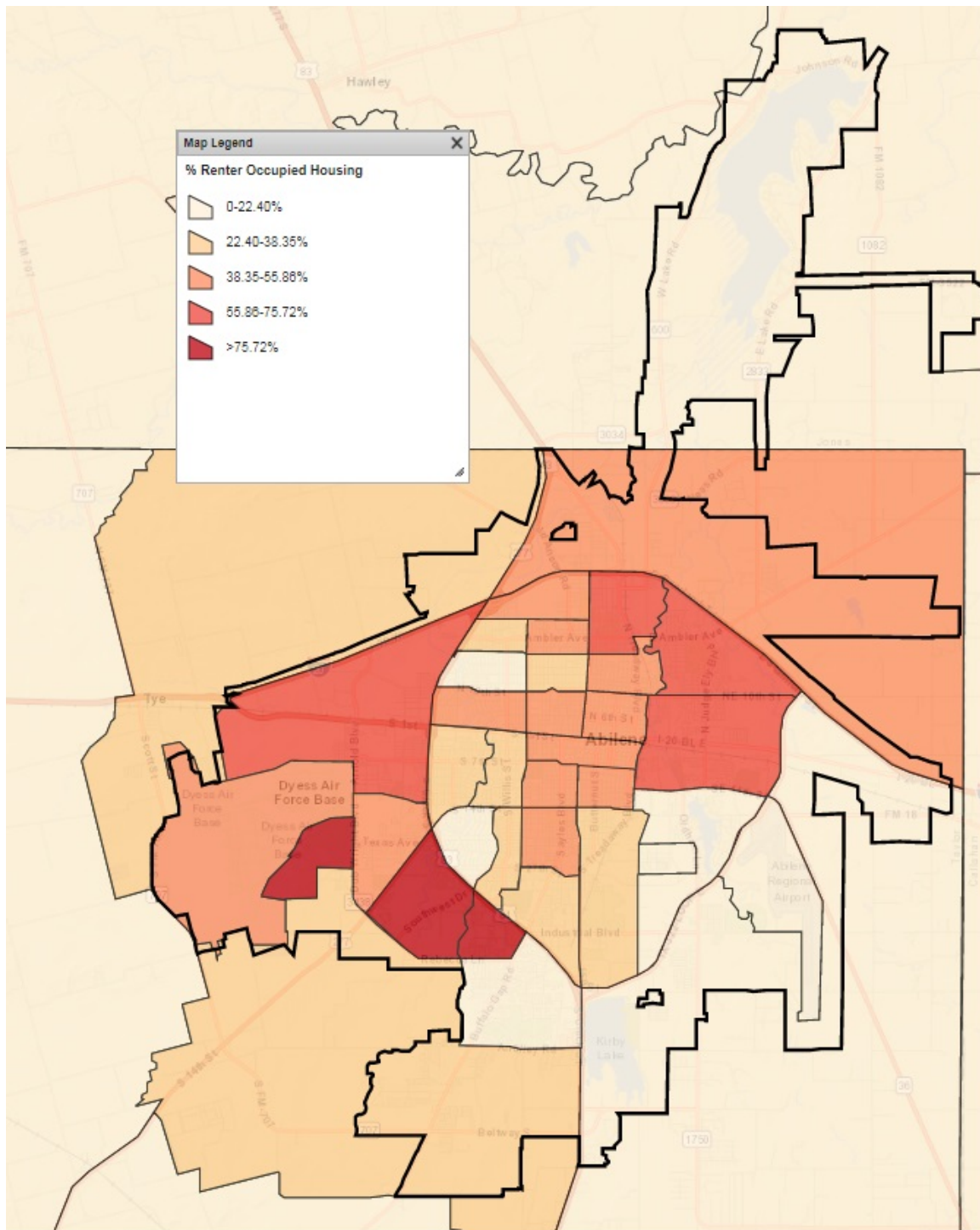
Table 7 – Housing Problems Table

Data 2012-2016 CHAS
Source:



Percent Owner-Occupied Housing Units,

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.



Percent Renter-Occupied Housing Units

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.

2. Housing Problems 2 (Households with one or more Severe Housing Problems: Lacks kitchen or complete plumbing, severe overcrowding, severe cost burden)

	Renter					Owner				
	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total
NUMBER OF HOUSEHOLDS										
Having 1 or more of four housing problems	3,040	2,865	2,235	475	8,615	1,190	810	1,285	380	3,665
Having none of four housing problems	345	635	1,990	1,680	4,650	240	1,110	2,295	1,935	5,580
Household has negative income, but none of the other housing problems	415	0	0	0	415	225	0	0	0	225

Table 8 – Housing Problems 2

Data 2012-2016 CHAS
Source:

3. Cost Burden > 30%

	Renter				Owner			
	0-30% AMI	>30-50% AMI	>50-80% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	Total
NUMBER OF HOUSEHOLDS								
Small Related	905	975	585	2,465	365	255	570	1,190
Large Related	250	140	190	580	55	45	150	250
Elderly	65	60	215	340	150	135	160	445
Other	1,720	1,620	1,075	4,415	605	365	309	1,279
Total need by income	2,940	2,795	2,065	7,800	1,175	800	1,189	3,164

Table 9 – Cost Burden > 30%

Data 2012-2016 CHAS
Source:

4. Cost Burden > 50%

	Renter				Owner			
	0-30% AMI	>30-50% AMI	>50-80% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	Total
NUMBER OF HOUSEHOLDS								
Small Related	785	265	30	1,080	255	145	120	520
Large Related	210	30	25	265	25	10	50	85
Elderly	55	45	140	240	85	30	20	135
Other	1,560	765	295	2,620	440	160	69	669
Total need by income	2,610	1,105	490	4,205	805	345	259	1,409

Table 10 – Cost Burden > 50%

Data 2012-2016 CHAS
Source:

5. Crowding (More than one person per room)

	Renter					Owner				
	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	>80-100% AMI	Total
NUMBER OF HOUSEHOLDS										
Single family households	100	165	145	65	475	0	15	104	40	159
Multiple, unrelated family households	0	45	50	0	95	15	10	24	4	53
Other, non-family households	45	4	20	0	69	0	0	0	0	0
Total need by income	145	214	215	65	639	15	25	128	44	212

Table 11 – Crowding Information – 1/2

Data 2012-2016 CHAS
Source:

	Renter				Owner			
	0-30% AMI	>30-50% AMI	>50-80% AMI	Total	0-30% AMI	>30-50% AMI	>50-80% AMI	Total
Households with Children Present	755	885	1015	2,655	180	325	600	1,105

Table 12 – Crowding Information – 2/2

Data Source: 2012-2016 CHAS

Describe the number and type of single person households in need of housing assistance.

According to the 2013-2017 American Community Survey (ACS), there were 11,668 single person households in Abilene (27.5% of all Abilene households), over 36% of which were elderly (age 65+). Forty-six percent of single person households were homeowners, with 54% renters. Sixty percent of single person households lived in single-family housing units, compared to 40% in two or more units. The median household income of single person male households was \$36,763, and single person female households was \$28,032. As shown in Table 10, severe cost burdened is experience across low-income households, including single person households.

Estimate the number and type of families in need of housing assistance who are disabled or victims of domestic violence, dating violence, sexual assault and stalking.

Data from the 2013-2017 American Community Survey showed that 16.2% of the population of Abilene reported some form of disability. Disabilities reported increase with age with the highest percentage (57.3%) in the 75 and older age group. Those below the age of five (5) are reporting 0.3% with a disability. In the 5 to 17 year age group, 6.8% are reported to have disabilities. In the 18 to 64 year age group with disabilities, 9.4% reported ambulatory difficulty, 7.7% reported cognitive difficulty, and 8.6% reported independent living difficulty. The ACS data also showed that 14.2% of the population of Abilene reported a disability and living in poverty. According to the City of Abilene Police Department 2019 Annual Report, there was 1,834 cases of domestic violence in the city. There was an 11% increase in cases compared to 2018. However, the number of rape cases decreased by 43% in 2019 (80) from 2018 (142). Aggravated assaults also decreased by 19% in 2019. According to the 2020 Homeless Count conducted by West Texas Homeless Network, of the 116 total respondents who had severe housing problems, 10.3% indicated that domestic violence played a role in their homelessness.

What are the most common housing problems?

By far, the most common housing problem in Abilene is cost burdened. According to the CHAS data in the tables above, over 74% of households in the 0-30% AMI income category (including renters and owners) had a cost burdened of over 30%, with over 62% having a cost burdened of over 50%. A 30% cost burdened means that a household is spending more than 30% of their gross income on housing expenses, including utilities. Over 73% of households in the 30-50% AMI income category had a 30% cost burdened, with 27 percent having a 50% cost burdened. About 54 percent of households in the 50-80% AMI category had a 30% cost burdened, with 10 percent having a 50% cost burdened. Looking at severe cost burdened by tenure, 69% of renter households and 49% of owner households earning less than 30% of the area median income (AMI) were paying more than 50% of their income on housing expenses. For rental households, cost burdened is the most common housing problem with over 68% of all renter households earning below 80% of the AMI paying more than 30% of their income on housing expenses, with severe cost at 36% paying more than 50% of their income on housing expenses. Cost burdened is the most common for owner households where 68% of all owner households earning below 80% of the AMI paying more than 30% of their income on housing expenses, with severe cost burdened at 20% paying more than 50% of their income on housing expenses. By comparison, the numbers for overcrowding and incomplete kitchen or plumbing facilities were low, with 4.6% of the lowest income category living in overcrowded conditions and four percent living without complete kitchen or plumbing facilities.

Are any populations/household types more affected than others by these problems?

Cost burdened and extreme cost burdened affect all household types in the lower income categories. In Abilene, 68% of both renters and homeowners spend more than 30% of their income towards housing expenses. The percentage stayed the same for renters, but there was a significant increase in the percentage of homeowners who are cost burdened compared to the previous 2015-2019 report. Thirty-six percent of renters and 20% of homeowners spent more than 50% of their income towards housing expenses. This remained the same since the last report. In simple numerical terms, it would appear that "Other" households, which includes single member households and households with unrelated members, bear much of the brunt of severe cost burdened among renters and owners, with 62% of the total number of renter households experiencing severe cost burdened and 47% of the total experiencing severe cost burdened in this category. Large related households comprised the smallest portion of those experiencing severe cost burdened.

Describe the characteristics and needs of Low-income individuals and families with children (especially extremely low-income) who are currently housed but are at imminent risk of either residing in shelters or becoming unsheltered 91.205(c)/91.305(c)). Also discuss the needs of formerly homeless families and individuals who are receiving rapid re-housing assistance and are nearing the termination of that assistance

In Abilene, many low-income individuals and families who are currently housed are at risk of either residing in shelters or becoming unsheltered. Many are living paycheck to paycheck, just making ends meet by working multiple low paying jobs. They are often one paycheck away from being homeless in the event of a sudden loss of employment, medical emergency or loss of transportation which redirects financial resources. These households span all types, including individuals living alone, small families, large families, and the elderly. Some households have relatives or friends with whom they can double-up, thus avoiding homelessness, at least in technical terms, but these accommodations are not long-term solutions to their needs and may lead to overcrowding. These households, particularly extremely low-income households, need a wide variety of assistance to help them meet those emergency needs that occasionally crop up in everyone's lives. This assistance could include job training to help them transition into higher paying professions, mortgage/rental assistance, medical clinics that provide low or no cost care, rent subsidies, transportation assistance, and other services that help absorb the costs that might redirect funds dedicated to housing.

Additionally, many homeless individuals are currently living with a mental health or substance use disorder and may need specialized care, such as transitional housing and access to specialized medical care. Formerly homeless families and individuals also need these services to reduce the prospect of returning to homelessness. Transitional housing units, permanent supportive housing, and rent subsidies help meet the housing expenses of households returning from homelessness, while job training programs help with identifying job prospects which can lead to permanent jobs. Other social services are needed on occasion as circumstances demand.

If a jurisdiction provides estimates of the at-risk population(s), it should also include a description of the operational definition of the at-risk group and the methodology used to generate the estimates:

The Point-in-Time Homeless Count provides the estimates of the various categories of homeless individuals and families in Abilene. These categories include chronic homeless, veterans, families with children, families without children, individuals, and unaccompanied children.

Specify particular housing characteristics that have been linked with instability and an increased risk of homelessness

Severe cost burdened is linked with housing instability and an increased risk of homelessness. When a household is paying too large a portion of their income on housing expenses, sudden and unexpected financial demands can tip the scales, forcing them from their homes and leaving them without permanent shelter. These demands might include the cost to treat illnesses requiring hospital stays or time away from their job, automotive problems requiring repairs or loss of work due to lack of transportation, high costs of utility bills that might delay a rent or mortgage payment, and legal problems that might require payments to lawyers or time away from their job. Lower income households are particularly susceptible to these financial impacts because they are less likely to have

savings that can cover these expenses and buffer the effects of monetary demands in covering unexpected events or expenses during periods of loss wages.

Discussion

Cost burdened and extreme cost burdened is the most common housing problem across all lower income households in Abilene for both renters and homeowners. Lower income brackets are more likely to experience extreme cost burden. Overcrowding is also a common problem in many lower income households, though the numbers are much lower than those of cost burdened. There is some concern with lack of complete plumbing and kitchen facilities, but these conditions are not widespread. As a proxy for housing condition, lack of complete kitchen or plumbing facilities does not tell the entire story. Many community members expressed that the quality of housing, especially for lower income households, is subpar. There are many vacant or abandoned homes in neighborhoods that with a little work could make nice homes for residents. Many homes need roof repairs, lawn care, and other general maintenance repairs to ensure houses are safe for residents.

NA-15 Disproportionately Greater Need: Housing Problems – 91.205 (b)(2)

Assess the need of any racial or ethnic group that has disproportionately greater need in comparison to the needs of that category of need as a whole.

Introduction

The 2012-2016 CHAS data, constructed from data collected by the US Census Bureau for HUD, outlines housing problems by income and race/ethnicity. The housing problems include incomplete kitchen or plumbing facilities, cost burdened greater than 30%, and overcrowding (more than 1.5 person per room). The tables below show the distribution of one or more problems by race/ethnicity for each of four lower income groups, 0 to 30 percent of the area median income, 30 to 50 percent of the area median income, 50 to 80 percent of the area median income, and 80 to 100 percent of the area median income. The discussion following the tables identifies disproportionately greater need within each income group for particular racial or ethnic group. The next section analyzes severe housing problems (severe overcrowding and extreme cost burdened).

0%-30% of Area Median Income

Housing Problems	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	4,230	585	640
White	2,450	160	505
Black / African American	495	64	4
Asian	69	0	50
American Indian, Alaska Native	29	0	0
Pacific Islander	0	0	0
Hispanic	1,105	360	80

Table 13 - Disproportionally Greater Need 0 - 30% AMI

Data 2012-2016 CHAS

Source:

*The four housing problems are:

1. Lacks complete kitchen facilities,
2. Lacks complete plumbing facilities,
3. More than one person per room,
4. Cost Burden greater than 30%

30%-50% of Area Median Income

Housing Problems	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	3,675	1,745	0
White	2,350	885	0
Black / African American	350	210	0
Asian	150	0	0
American Indian, Alaska Native	4	0	0
Pacific Islander	0	0	0
Hispanic	745	640	0

Table 14 - Disproportionally Greater Need 30 - 50% AMI

Data 2012-2016 CHAS

Source:

*The four housing problems are:

1. Lacks complete kitchen facilities,
2. Lacks complete plumbing facilities,
3. More than one person per room,
4. Cost Burden greater than 30%

50%-80% of Area Median Income

Housing Problems	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	3,520	4,285	0
White	2,295	2,640	0
Black / African American	155	465	0
Asian	140	60	0
American Indian, Alaska Native	45	8	0
Pacific Islander	0	0	0
Hispanic	785	1055	0

Table 15 - Disproportionally Greater Need 50 - 80% AMI

Data 2012-2016 CHAS

Source:

*The four housing problems are:

1. Lacks complete kitchen facilities, 2. Lacks complete plumbing facilities, 3. More than one person per room,
4. Cost Burden greater than 30%

80%-100% of Area Median Income

Housing Problems	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	855	3615	0
White	525	2375	0
Black / African American	165	315	0
Asian	20	35	0
American Indian, Alaska Native	0	65	0
Pacific Islander	0	0	0
Hispanic	125	785	0

Table 16 - Disproportionally Greater Need 80 - 100% AMI

Data 2012-2016 CHAS

Source:

*The four housing problems are:

1. Lacks complete kitchen facilities, 2. Lacks complete plumbing facilities, 3. More than one person per room,
4. Cost Burden greater than 30%

Discussion

Extremely Low Income (0-30% AMI)

An estimated 77.5 percent of all extremely low-income households in the city had at least one housing problem, compared with 78.7 percent of White households, 87.9 percent of Black/African American households, 60 percent of Asian households, 100 percent of American Indian /Alaska Native households, zero percent of Pacific Islander households, and 71.5 percent of Hispanic households. In the extremely low-income group, Black/African American and American Indian/Alaska Native households had a disproportionately greater need.

Very Low Income (30-50% AMI)

An estimated 67.8 percent of all very low-income households had at least one housing problem, compared with 72.6 percent of White households, 62.5 percent of Black/African American households, 100 percent of Asian households, 100 percent American Indian/Alaska Native households, zero Pacific Islander households, and 53.8 percent of Hispanic households. In the very low income group, Asian and American Indian/Alaska Native households had a disproportionately greater need.

Low Income (50-80% AMI)

An estimated 45.1 percent of low-income households had at least one housing problem, compared with 46.5 percent of White households, 25 percent of Black/African American households, 70 percent of Asian households, 84.9 percent American Indian/Alaska Native households, zero Pacific Islander households, and 42.7 percent of Hispanic households. In the low-income category, Asian and American Indian/Alaska Native households had a disproportionately greater need.

Moderate Income (80-100% AMI)

An estimated 19.1 percent of moderate-income households in the city had at least one housing problem, compared with 18.1 percent of White households, 34.3 percent of Black/African American households, 36.4 percent of Asian households, zero American Indian/Alaska Native households, zero Pacific Islander households, and 13.7 percent of Hispanic households. In the moderate-income category, Black/African American and Asian households had a disproportionately greater need.

Summary

Across all income categories, Asian and American Indian/Alaska Native households, which make up a small percentage of households in the city, are the most likely to experience a disproportionate number of housing problems. Extremely low- and moderate-income Black/African American households, which also make up a small percentage of households in the city, are more likely to experience a disproportionate number of problems. This is not to say that households of other racial/ethnic groups do not suffer from housing problems, however, the remaining racial/ethnic household groups do not suffer disproportionately from housing problems, per HUD's definition.

NA-20 Disproportionately Greater Need: Severe Housing Problems – 91.205 (b)(2)

Assess the need of any racial or ethnic group that has disproportionately greater need in comparison to the needs of that category of need as a whole.

Introduction

The 2012-2016 CHAS data constructed from data collected by the US Census Bureau for HUD shows housing problems by income and race/ethnicity. The severe housing problems include incomplete kitchen or plumbing facilities, cost burdened over 50 percent, and severe overcrowding (more than 1.5 persons per room). The tables below delineates the distribution of severe housing problems by race/ethnicity for each of four lower income groups, 0 to 30 percent of the area median income, 30 to 50 percent of the area median income, 50 to 80 percent of the area median income, and 80 to 100 percent of the area median income. The discussion following the tables identifies disproportionately greater need within each income group for particular racial or ethnic group.

0%-30% of Area Median Income

Severe Housing Problems*	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	3,555	1,260	640
White	2,120	490	505
Black / African American	390	169	4
Asian	64	10	50
American Indian, Alaska Native	29	0	0
Pacific Islander	0	0	0
Hispanic	880	590	80

Table 17 – Severe Housing Problems 0 - 30% AMI

Data 2012-2016 CHAS
Source:

*The four severe housing problems are:

1. Lacks complete kitchen facilities,
2. Lacks complete plumbing facilities,
3. More than 1.5 persons per room,
4. Cost Burden over 50%

30%-50% of Area Median Income

Severe Housing Problems*	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	1,760	3,650	0
White	1,265	1,970	0
Black / African American	110	450	0
Asian	90	60	0
American Indian, Alaska Native	4	0	0
Pacific Islander	0	0	0
Hispanic	260	1,125	0

Table 18 – Severe Housing Problems 30 - 50% AMI

Data 2012-2016 CHAS

Source:

*The four severe housing problems are:

1. Lacks complete kitchen facilities, 2. Lacks complete plumbing facilities, 3. More than 1.5 persons per room, 4. Cost Burden over 50%

50%-80% of Area Median Income

Severe Housing Problems*	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	1,155	6,650	0
White	695	4,235	0
Black / African American	35	580	0
Asian	95	100	0
American Indian, Alaska Native	0	55	0
Pacific Islander	0	0	0
Hispanic	255	1,590	0

Table 19 – Severe Housing Problems 50 - 80% AMI

Data 2012-2016 CHAS

Source:

*The four severe housing problems are:

1. Lacks complete kitchen facilities, 2. Lacks complete plumbing facilities, 3. More than 1.5 persons per room,
4. Cost Burden over 50%

80%-100% of Area Median Income

Severe Housing Problems*	Has one or more of four housing problems	Has none of the four housing problems	Household has no/negative income, but none of the other housing problems
Jurisdiction as a whole	255	4,210	0
White	160	2,745	0
Black / African American	0	480	0
Asian	20	35	0
American Indian, Alaska Native	0	65	0
Pacific Islander	0	0	0
Hispanic	65	845	0

Table 20 – Severe Housing Problems 80 - 100% AMI

Data 2012-2016 CHAS

Source:

*The four severe housing problems are:

1. Lacks complete kitchen facilities, 2. Lacks complete plumbing facilities, 3. More than 1.5 persons per room,
4. Cost Burden over 50%

Discussion

Extremely Low Income (0-30% AMI)

An estimated 65.2 percent of all extremely low-income households in the city had at least one severe housing problem, compared with 68.0 percent of White households, 69.3 percent of Black/African American households, 51.6 percent of Asian households, 100 percent American Indian/Alaska Native households, zero Pacific Islander households, and 56.8 percent of Hispanic households. In the extremely low-income category, American Indian/Alaska Native households had a disproportionately greater need related to severe housing problems.

Very Low Income (30-50% AMI)

An estimated 32.5 percent of very low-income households had at least one severe housing problem, compared with 39.1 percent of White households, 19.6 percent Black/African American households, 60.0 percent of Asian households, 100 percent American Indian/Alaska Native households, zero Pacific Islander households, and 18.8 percent of Hispanic households. In the very low-income category, Asian and American Indian/Alaska Native households had a disproportionately greater need related to severe housing problems.

Low Income (50-80% AMI)

An estimated 14.8 percent of low-income households had at least one severe housing problem, compared with 14.1 percent of White households, 5.7 percent of Black/African American households, 48.7 percent of Asian households, zero American Indian/Alaska Native households, zero Pacific Islander households, and 13.8 percent of Hispanic households. Asian households were the only low-income racial group that experienced a disproportionately greater need related to severe housing problems.

Moderate Income

An estimated 5.7 percent of moderate-income households had at least one severe housing problem, compared with 5.5 percent of White households, zero Black/African American households, 36.4 percent Asian households, zero American Indian/Alaska Native households, zero Pacific Islander households, and 7.1 percent of Hispanic households. Asian households were the only moderate-income racial group that experienced a disproportionately greater need related to severe housing problems.

Summary

Across all income categories, Asian and American Indian/Alaska Native households, while a small percentage of total households in the city, are the most likely to experience a disproportionate number of severe housing problems. This is not to say that households of other racial/ethnic groups do not suffer from severe housing problems, however, the remaining racial/ethnic household groups do not suffer disproportionately from severe housing problems, per HUD's definition.

NA-25 Disproportionately Greater Need: Housing Cost Burdens – 91.205 (b)(2)

Assess the need of any racial or ethnic group that has disproportionately greater need in comparison to the needs of that category of need as a whole.

Introduction:

The 2012-2016 CHAS data was used to compare housing cost burden across racial/ethnic groups. Cost burdened (30 to 50% of household income going to housing expenses), extreme cost burdened (more than 50% of household income going to housing expenses), and no cost burdened (less than 30% of household income going to housing expenses) were compared by racial/ethnic group to the City as a whole.

Housing Cost Burden

Housing Cost Burden	<=30%	30-50%	>50%	No / negative income (not computed)
Jurisdiction as a whole	29,510	6,384	5,824	719
White	20,730	4,015	3,895	505
Black / African American	1,940	690	475	4
Asian	315	135	190	90
American Indian, Alaska Native	165	45	29	0
Pacific Islander	10	0	0	0
Hispanic	6,120	1,425	1,060	120

Table 21 – Greater Need: Housing Cost Burdens AMI

Data Source: 2012-2016 CHAS

Discussion:

Abilene is a primarily white population with pockets of diversity. When it comes to housing cost burden, some racial/ethnic groups experience cost burden at higher rates than others. The data shows a disproportionate need for Asians and Black / African Americans in the 30-50% housing cost burdened group. Approximately 35% of Asian households experience extreme cost burden compared to other racial/ethnic groups in Abilene. While the populations of American Indian and Pacific Islanders are small in Abilene, these racial groups experience disproportionate cost burden in the 0-30% AMI.

NA-30 Disproportionately Greater Need: Discussion – 91.205(b)(2)

Are there any income categories in which a racial or ethnic group has disproportionately greater need than the needs of that income category as a whole?

From the CHAS data presented in the previous sections, there is little identifiable disproportionately greater need indicated between racial/ethnic groups in Abilene other than the lowest and the highest income groups for a relatively small Asian, American Indian, and Pacific Islander populations. The total Asian, American Indian, and Pacific Islander populations comprise 2.6% of the total population of Abilene. However, the impact of the disproportionately greater need is small. Between the three major racial/ethnic groups, White, Hispanic, and African American, which comprise more than 95% of the population of Abilene, the CHAS data shows more housing problems exist for very low- and low-income Hispanic and African American households.

The data shows that African Americans in the 0 – 30% and 30 – 50% AMI income category show disproportionately greater need relative to housing problems. All racial / ethnicity groups experience a high percentage of cost burden in the 0 – 30% AMI income, but Black / African Americans, American Indians, Asians, and Pacific Islanders experience cost burden at disproportionate rates.

If they have needs not identified above, what are those needs?

Needs are identified above.

Are any of those racial or ethnic groups located in specific areas or neighborhoods in your community?

Maps included in the market analysis show census tracts with the concentration of the city's Hispanic and African American populations. There is a high level of minority populations, especially Hispanic and African Americans in the northwest part of the city. Neighborhoods with a majority minority groups include Sears Park, Cobb Park, North College, and South Treadway.

NA-35 Public Housing – 91.205(b)

Introduction

The Abilene Housing Authority (AHA) continues to manage 213 public housing units at four separate sites. The average length of stay for public housing residents is three years. The residents include 49 elderly persons and 24 families with persons with disabilities in public housing. The largest racial/ethnic groups among public housing residents are Whites at 99 residents and African-Americans at 98 residents. Hispanics account for 43 residents in public housing. All units are targeted to low-income households, though the public housing units typically serve household with much lower incomes, currently below 30% of the area median income. The AHA manages 1,726 Section 8 Vouchers.

Totals in Use

Program Type									
	Certificate	Mod-Rehab	Public Housing	Vouchers					
				Total	Project - based	Tenant - based	Special Purpose Voucher		
							Veterans Affairs Supportive Housing	Family Unification Program	Disabled *
# of unit vouchers in use	0	0	205	1,459	0	1,459	132	0	43

Table 22 - Public Housing by Program Type

*includes Non-Elderly Disabled, Mainstream One-Year, Mainstream Five-year, and Nursing Home Transition

Data Source: PIC (PIH Information Center)

Characteristics of Residents

Program Type								
	Certificate	Mod-Rehab	Public Housing	Vouchers				
				Total	Project - based	Tenant - based	Special Purpose Voucher	
							Veterans Affairs Supportive Housing	Family Unification Program
Average Annual Income	0	0	15,606	12,435	0	12,435	13,316	0
Average length of stay	0	0	3	2	0	2	0	0
Average Household size	0	0	3	2	0	2	1	0
# Homeless at admission	0	0	0	0	0	0	0	0
# of Elderly Program Participants (>62)	0	0	49	436	0	436	48	0
# of Disabled Families	0	0	24	875	0	875	79	0
# of Families requesting accessibility features	0	0	0	0	0	0	0	0
# of HIV/AIDS program participants	0	0	0	0	0	0	0	0
# of DV victims	0	0	0	0	0	0	0	0

Table 23 – Characteristics of Public Housing Residents by Program Type

Data Source: PIC (PIH Information Center)

Race of Residents

Program Type									
Race	Certificate	Mod-Rehab	Public Housing	Vouchers					
				Total	Project - based	Tenant - based	Special Purpose Voucher		
							Veterans Affairs Supportive Housing	Family Unification Program	Disabled *
White	0	0	99	956	0	956	81	0	0
Black/African American	0	0	98	441	0	441	29	0	0
Asian	0	0	3	4	0	4	1	0	0
American Indian/Alaska Native	0	0	3	30	0	30	3	0	0
Pacific Islander	0	0	2	4	0	4	1	0	0
Other	0	0	0	19	0	19	0	0	0
*includes Non-Elderly Disabled, Mainstream One-Year, Mainstream Five-year, and Nursing Home Transition									

Table 24 – Race of Public Housing Residents by Program Type

Data Source: PIC (PIH Information Center)

Ethnicity of Residents

Program Type									
Ethnicity	Certificate	Mod-Rehab	Public Housing	Vouchers					
				Total	Project - based	Tenant - based	Special Purpose Voucher		
							Veterans Affairs Supportive Housing	Family Unification Program	Disabled *
Hispanic	0	0	43	332	0	332	9	0	0
Not Hispanic	0	0	162	1,125	0	1,125	105	0	0
*includes Non-Elderly Disabled, Mainstream One-Year, Mainstream Five-year, and Nursing Home Transition									

Table 25 – Ethnicity of Public Housing Residents by Program Type

Data Source: PIC (PIH Information Center)

Section 504 Needs Assessment: Describe the needs of public housing tenants and applicants on the waiting list for accessible units:

As with families with disabilities in privately owned housing, public housing residents with disabilities need housing units that provide easy access to the unit and all rooms within the unit; are free of obstacles that would prevent access to bath and kitchen facilities, and are designed in a way that allows those with disabilities access to cooking and food preparation surfaces. All public housing developments operated by the Abilene Housing Authority provide accessible units within its complexes and the AHA is willing to make reasonable accommodations when requested.

Most immediate needs of residents of Public Housing and Housing Choice voucher holders

According to the 2020-2024 PHA Plan, 789 families were on the waiting list for public housing and 2,652 families are on the waiting list for Section 8 vouchers. Of the 789 families on waiting list for public housing, 89% were Extremely Low Income families, 93% were families with children, 75% were White Non-Hispanic, 15% were African-American, and 38% were for one-bedroom units. Out of 2,652 families on waiting list for the housing choice voucher, 83% were Extremely Low Income (0-30% AMI) families, 51% were families with children, 33% were White Non-Hispanic, 20% were Hispanic and 44% were African-American applicants.

How do these needs compare to the housing needs of the population at large?

The housing needs on the public housing and Section 8 waiting lists are indicative of the general needs for affordable housing in the overall city. A higher percentage of cost burdened households were noted under Extremely Low Income households. A disproportionate need was indicated within African-American families in cost burdened data, and a higher percentage of African-American families are on the waiting list compared to their percentage of the population.

Discussion

The Abilene Housing Authority (AHA) continues to manage 213 public housing units at four separate sites. The average annual income of their public housing residents was about \$15,606. According to the PHA Plan, 789 families were on the waiting list for public housing and 2,652 families were on the waiting list for Section 8 vouchers.

NA-40 Homeless Needs Assessment – 91.205(c)

Introduction:

The information in this section provides an estimate of homeless individuals and families within several categories. These numbers are taken from the 2020 Point-in-Time survey conducted by West Texas Homeless Network. The information collected is derived from individuals in homeless situations and persons who are at risk in becoming homeless. The survey collects homelessness information such as age, gender, education, employment, reasons for homelessness, duration, night-time residence, family type, special needs, etc.

Homeless Needs Assessment

Population	Estimate the # of persons experiencing homelessness on a given night		Estimate the # experiencing homelessness each year	Estimate the # becoming homeless each year	Estimate the # exiting homelessness each year	Estimate the # of days persons experience homelessness
	Sheltered	Unsheltered				
Persons in Households with Adult(s) and Child(ren)	5	0	0	0	0	0
Persons in Households with Only Children	0	0	0	0	0	0
Persons in Households with Only Adults	37	74	0	0	0	0
Chronically Homeless Individuals	7	11	0	0	0	0
Chronically Homeless Families	0	0	0	0	0	0
Veterans	6	6	0	0	0	0
Unaccompanied Child	0	0	0	0	0	0
Persons with HIV	1	1	0	0	0	0

Table 26 - Homeless Needs Assessment

Data Source Comments: 2020 Point-in-Time Count; West Texas Homeless Network

Indicate if the homeless population Has No Rural Homeless
is:

If data is not available for the categories "number of persons becoming and exiting homelessness each year," and "number of days that persons experience homelessness," describe these categories for each homeless population type (including chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth):

Based on the results of the 2020 Homeless Point-in-Time count conducted by West Texas Homeless Network:

- Out of 42 respondents of the question on night-time residence, 18 (43%) responded as “street or sidewalk,” 7 (17%) responded as “vehicle,” 6 (14%) responded as “outdoor encampment,” and six individuals responded as “abandoned building.”
- Out of 103 responses, 73 (71%) responded that they are currently homeless
- Out of 81 responses, 30 (37%) responded that it is their first time becoming homeless, 27 (54%) reported fewer than four episodes of homelessness in the past three years, 21 (42%) reported four or more episodes of homelessness.
- Out of 116 respondents, 105 (90%) were households without children, 2 (1.7%) were households with children, 3 (2.6%) were children under the age of 18, 7 (6%) were unaccompanied youth households (none under the age of 18), and 12 were veterans.
- Out of 116 responses, 69 (59%) identified as male, 42 (36%) identified as female, and 5 (4%) were unknown.
- Out of 247 respondents, 37 (15%) responded that unemployment was their reason for homelessness. Other reported causes of homelessness included family/personal issues 32 (13%), unable to pay rent or mortgage 31 (12.5%), and addiction 22 (9%). Note, respondents could select multiple answers.

Nature and Extent of Homelessness: (Optional)

Race:	Sheltered:	Unsheltered (optional)
White	39	58
Black or African American	6	14
Asian	0	1
American Indian or Alaska Native	0	3
Pacific Islander	0	0
Ethnicity:	Sheltered:	Unsheltered (optional)
Hispanic	12	15
Not Hispanic	38	65

Data Source Comments: 2020 Point-In-Time Count, West Texas Homeless Network

Estimate the number and type of families in need of housing assistance for families with children and the families of veterans.

Based on the results of the 2020 Homeless Point-in-Time count conducted by West Texas Homeless Network, of the 116 respondents surveyed in the count, 12 (10%) responded as veterans. The median length of service was reported to be five years. None of the veteran respondents indicated they had families that were also homeless.

Describe the Nature and Extent of Homelessness by Racial and Ethnic Group.

Based on the results of the 2020 Homeless Point-in-Time count conducted by West Texas Homeless Network, of the 116 respondents, 97 (83%) were White, 20 (17%) were African American, 27 (23%) were Hispanic. Three respondents (2.5%) were American Indian. One respondent identified as Asian.

Describe the Nature and Extent of Unsheltered and Sheltered Homelessness.

Based on the results of the 2020 Homeless Point-in-Time count conducted by West Texas Homeless Network:

- Out of 116 respondents, 105 (90%) were households without children, 2 (1.7%) were households with children, 3 (2.6%) were children under the age of 18, 7 (6%) were unaccompanied youth households (none under the age of 18), and 12 were veterans.
- Out of 61 respondents, 32 (52%) reported serious mental illness, 12 (20%) reported substance use disorder, 15 (25%) reported domestic violence, and two responded as having HIV/AIDS. There are no households with only children (unaccompanied youth).

Discussion:

According to the 2020 Homeless Point-in-Time count conducted by West Texas Homeless Network, 36% responded as sheltered, 37% responded that it is their first time becoming homeless, 10% responded as veterans, 90% were households with no children, 52% reported having serious mental illness, and 20% reported having a substance use disorder. Most frequent reasons for homelessness were domestic violence, unemployment, and inability to pay rent or mortgage.

NA-45 Non-Homeless Special Needs Assessment - 91.205 (b,d)

Introduction:

Non-homeless special needs populations include the elderly, frail elderly, persons with physical and developmental disabilities, substance abusers, persons with mental illness, and persons living with HIV/AIDS. These families and individuals are living either with families, in group facilities, or independently. They have a variety of needs, many of which are being met without public assistance. In some cases, where parents are caring for disabled children, the future of their independence is at risk.

Describe the characteristics of special needs populations in your community:

These populations have a broad spectrum of characteristics, similar to the population at large, but a distinguishing factor for them is an increased risk of homelessness due to the fragile nature of their existence, some relying heavily on others for their care, others living on fixed incomes and vulnerable to hardships caused by sudden demands on their resources. Alcohol and drug abuse are defined as excessive and impairing use of alcohol or other drugs. The National Institute of Alcohol Abuse and Alcoholism estimated the number of adult men with a drinking problem at 7.6% of the total population and that of adult women at 4.1%. These percentages, when applied to Abilene, yield a total population of alcohol abuser at 7,255 (4,827 male, 2,428 female) persons, using 2013-2017 American Community Survey population figures.

Approximately 13% of the population in Abilene is 65 years and over. The senior population has more than doubled since 2010 when the population of 65 years and over was 6.1% of the total population. Many seniors live on fixed income and rely on social security and disability along with other supportive services to make ends meet each month. Additionally, many seniors may not have the mobility or tools to properly maintain their homes and may also need special adaptations to their homes, like an ADA-complaint shower or wheelchair ramp. The City of Abilene and other local community organizations offer programs to help seniors and low-income individuals with housing repairs if they qualify, but general awareness around programs is low.

Persons with physical or developmental disabilities often require special facilities and care. Persons with developmental disabilities sometimes lack the capacity to care for themselves and rely on a caretaker to see to their daily needs. More often than not the caretaker is a parent or grandparent. If the child outlives the parent who provides their care all their lives, other arrangements must be made for their continued care. This group can include all ages, races, and ethnicities.

What are the housing and supportive service needs of these populations and how are these needs determined?

Housing and supportive service needs of these populations include:

- Group housing,

- Physical rehabilitation and medical care,
- New job training skills,
- Extensive medical care and treatment,
- Rehabilitation programs,
- Counseling/ support groups to deal with mental health and/or substance use disorders,
- Addressing unemployment and the resulting loss of income/ insurance coverage due to inability to perform job functions,
- Medical care/prescription medications, straining their already limited income,
- Special transportation needs due to medical and physical condition,
- Mobility assistance in normal daily activities,
- Assistance in meal preparation, housekeeping and shopping, and
- Physical rehabilitative care due to injury/falls. These needs were compiled through consultation with service providers.

Discuss the size and characteristics of the population with HIV/AIDS and their families within the Eligible Metropolitan Statistical Area:

According to the 2019 Texas DSHS HIV Surveillance report, 12 individuals were diagnosed with HIV in Taylor County in 2018, a rate of 8.7 per 100,000 population. This number is a much lower rate than the Texas state average (15.7 per 100,000). Statewide, males average higher rates than females, Black or African American persons average higher rates than other races/ethnicities, and the age group with the highest rate of HIV diagnosis are aged 25-29.

Discussion:

Non-homeless special needs populations encompass a wide variety of persons and households and cannot be easily categorized except in very general terms. Many are coping well with their situations with the need for public assistance. Some have needs that can only be met with help from outside their family. Some family members are on the verge of homelessness themselves and struggle from day to day. Some live independently, while others depend on family or caregivers to help them on a daily basis. Needs for these populations are as varied as the populations are themselves and depend on individual situations.

NA-50 Non-Housing Community Development Needs – 91.215 (f)

Describe the jurisdiction's need for Public Facilities:

The Public Facility Needs identified in the city through the Consolidated Planning process included childcare centers, youth centers, and health facilities.

How were these needs determined?

The City conducted a survey of residents and service providers asking their input into the ranking process for the variety of uses of CDBG and HOME funds. The survey was available online and distributed at community focus group sessions, Consolidated Plan forums, and through community organizations. While the survey was not a statistically reliable instrument for prioritizing, it was a useful tool to include community concerns and preferences into consideration. A total of 232 survey responses were received. Staff took the results of the survey and the comments received in the focus group sessions and forums and completed the ranking process.

Describe the jurisdiction's need for Public Improvements:

The Public Improvement Needs identified in the city through the Consolidated Planning process included the need for maintenance, enhancement and expansion of streets, especially removal of potholes and alleyway repairs, ADA accessible sidewalks, drainage, water and sewer connections.

How were these needs determined?

The City conducted a survey of residents and service providers asking their input into the ranking process for the variety of uses of CDBG funds. The survey was available online and was distributed at community focus group sessions, Consolidated Plan forums, and through community organizations. While the survey was not a statistically reliable instrument for prioritizing, it was a useful tool to include community concerns and preferences into consideration. A total of 232 survey responses were received. Staff took the results of the survey and the comments received in the focus group sessions and forums and completed the ranking process.

Describe the jurisdiction's need for Public Services:

The following Public Service Needs were identified in Abilene:

Improve the quality of programs and facilities for health and safety, information, transportation and recreation services

- Support the expansion of comprehensive affordable health/dental, substance abuse, and mental health services
- Provide and expand social and recreational services and facilities including but not limited to, youth, seniors, and individuals with disabilities
- Expand neighborhood crime prevention strategies, law enforcement services, code enforcement, and domestic violence/child abuse services
- Support maintenance, enhancement, and expansion of affordable quality childcare
- Support maintenance, enhancement, and expansion of transportation services

How were these needs determined?

In evaluating public services, the City conducted a survey of residents and service providers asking their input into the ranking process for the variety of uses of CDBG funds. The survey was available online and a paper copy was distributed at community focus group sessions, Consolidated Plan forums, and through community organizations. While the survey was not a statistically reliable instrument for prioritizing, it was a useful tool to include community concerns and preferences into consideration. A total of 232 survey responses were received. Staff took the results of the survey and the comments received in the focus group sessions and forums and completed the ranking process.

Housing Market Analysis

MA-05 Overview

Housing Market Analysis Overview:

The local housing market affects the availability and affordability of housing. In Abilene, the housing market has slowly rebounded from the foreclosure crisis of the last decade. With that recovery, housing prices have increased, but are still affordable for most of the population with historically low mortgage interest rates found in the current market. The following analysis looks at a variety of data from the American Community Survey, the U.S. Census, the Abilene Housing Authority, and homeless service providers to present a picture of the local market.

MA-10 Number of Housing Units – 91.210(a)&(b)(2)

Introduction

The housing stock in Abilene is weighted heavily toward single-family housing, with 69% of households residing in single-family detached structures, while 8.5 percent reside in structures with two or more units. Approximately 55% of households are homeowners, with nearly 80% of owner households living in housing units with two or three bedrooms. With over 11,900 multifamily units serving over 17,000 renter households, the data suggest that about 9,700 renter households reside in single-family structures, either attached or detached. The use of single-family structures for rental housing does address some of the need for larger housing units for renter households. The data suggests the need for rental units with multiple bedrooms for households with two or more individuals, such as families with children.

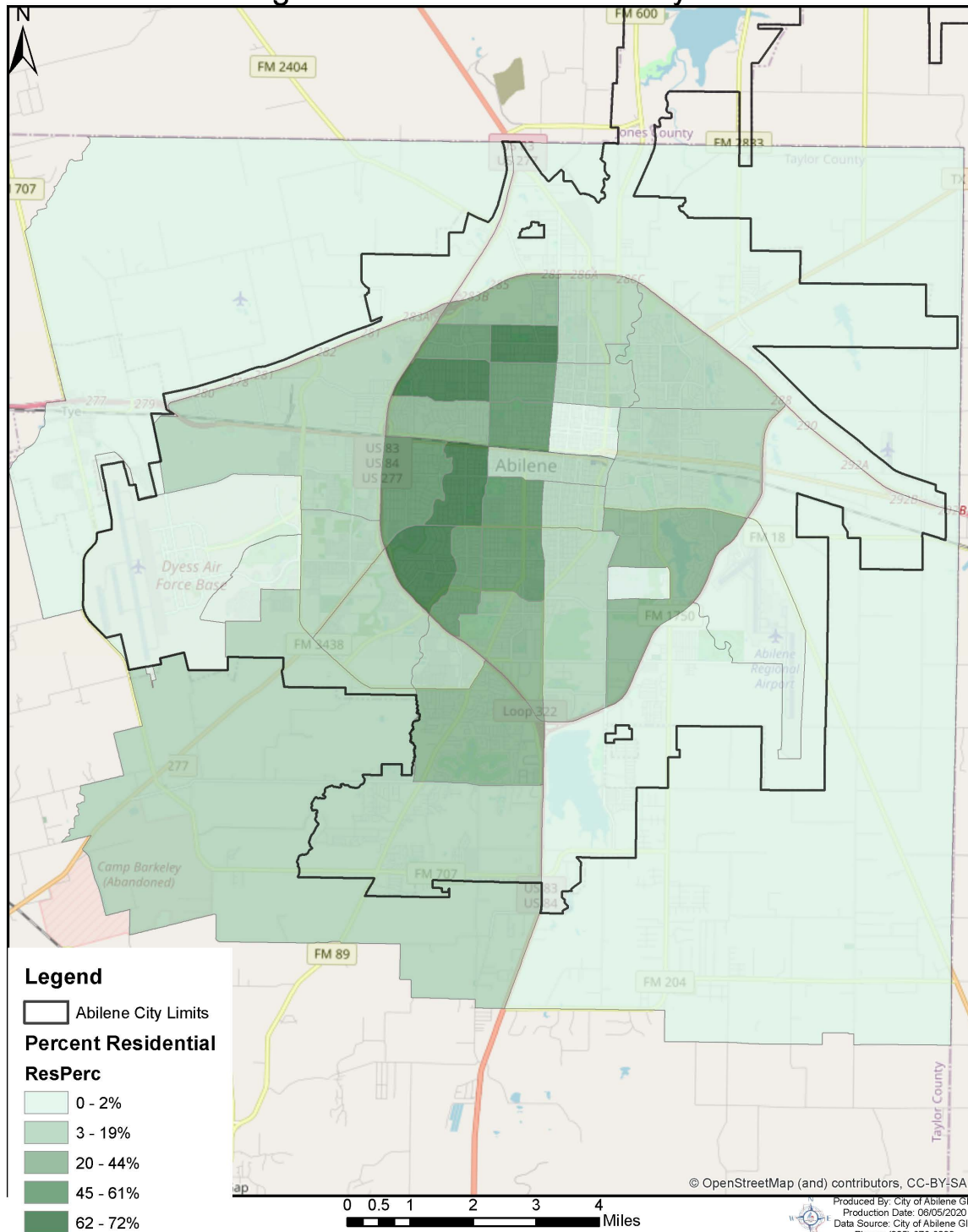
All residential properties by number of units

Property Type	Number	%
1-unit detached structure	33,691	69.1%
1-unit, attached structure	1,443	3.0%
2-4 units	4,147	8.5%
5-19 units	5,564	11.4%
20 or more units	2,194	4.5%
Mobile Home, boat, RV, van, etc.	1,700	3.5%
Total	48,739	100%

Table 27 – Residential Properties by Unit Number

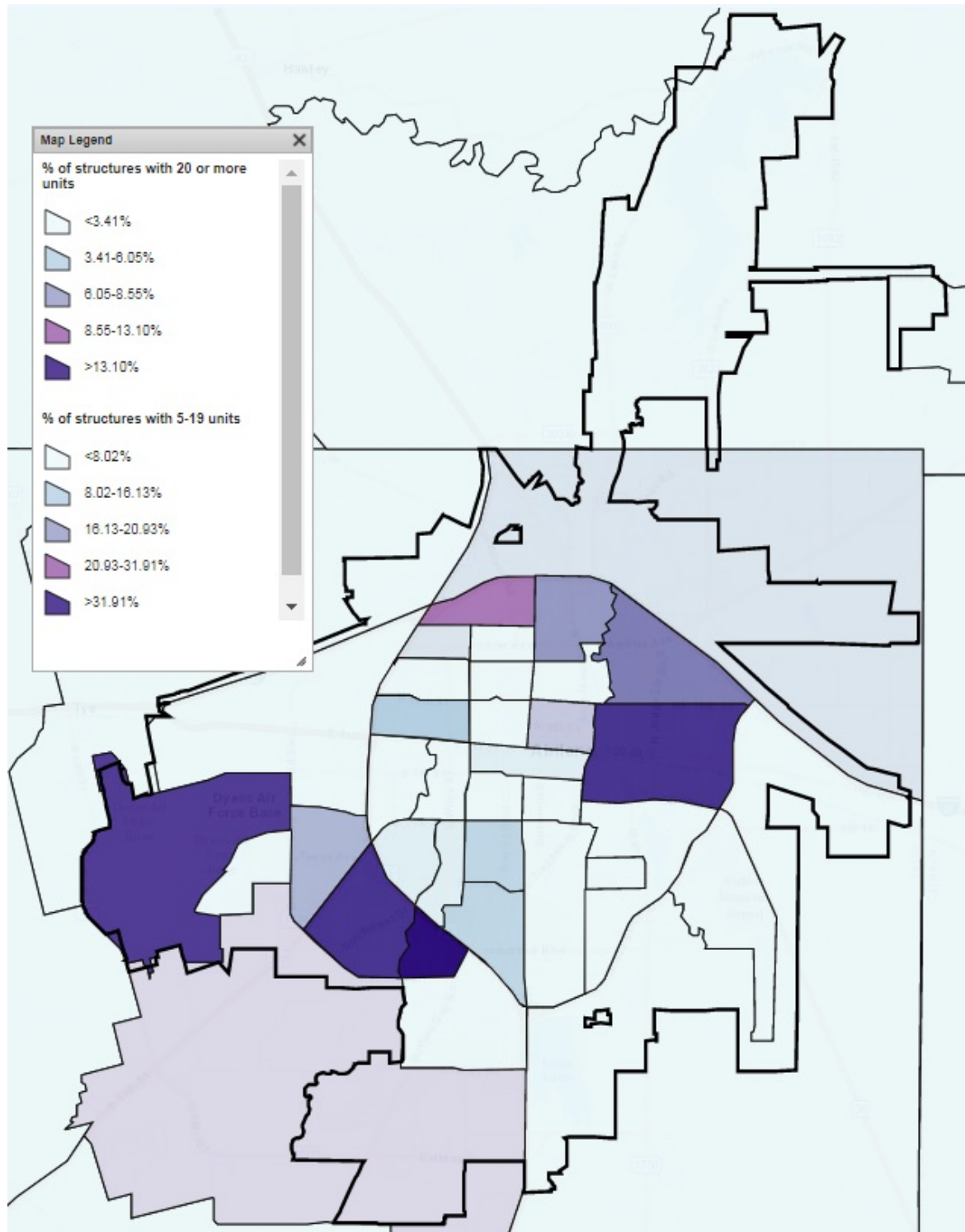
Data Source: American Community Survey, 2013-2017 5-Year Estimates

Percentage of Residential Land: City of Abilene



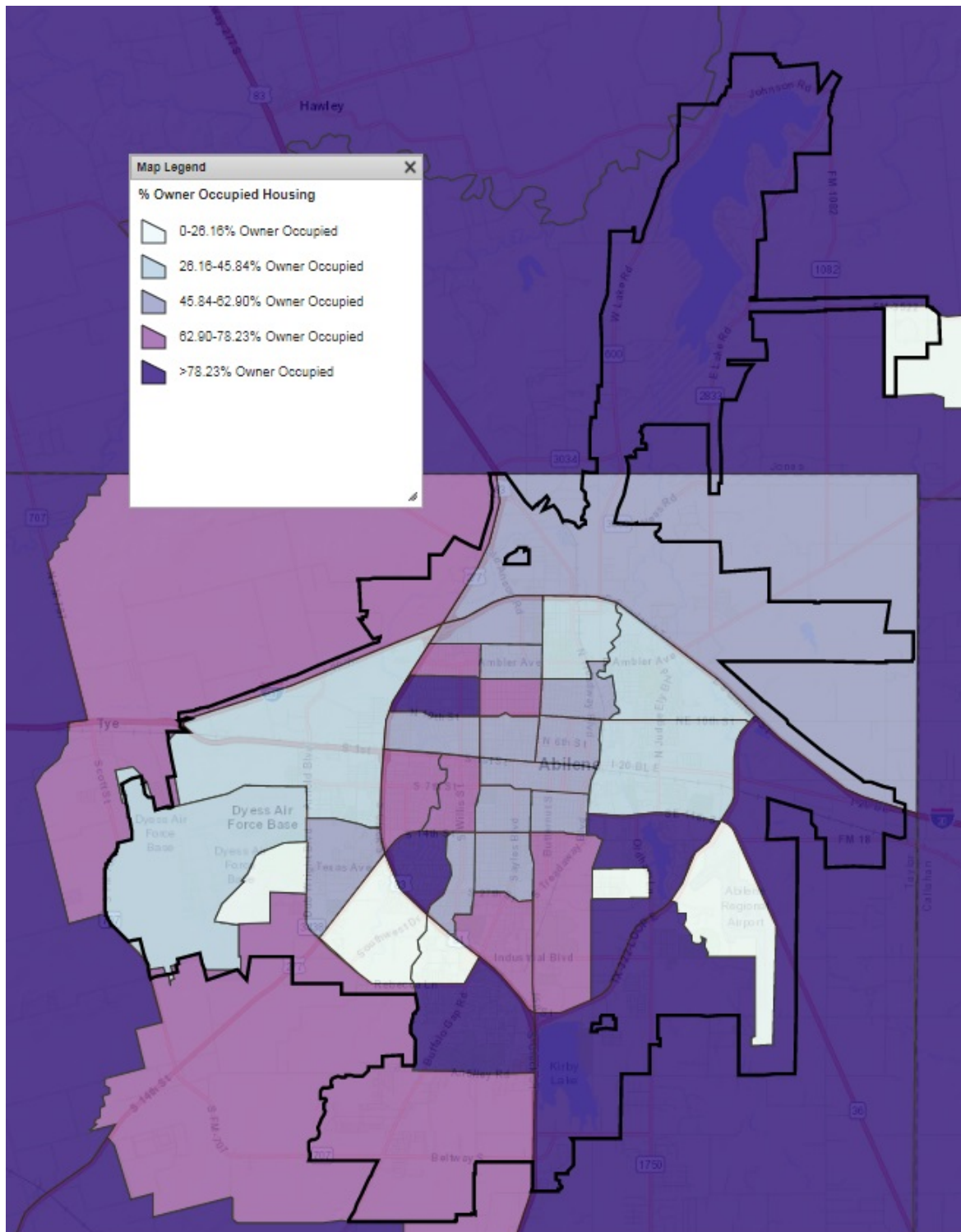
Percent Single-Family Units

Map Source: City of Abilene



Percent Multifamily Housing 5 or More Units

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.



Percent Owner-Occupied Units

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.

Unit Size by Tenure

	Owners		Renters	
	Number	%	Number	%
No bedroom	111	0.5%	624	3.2%
1 bedroom	363	1.6%	4,495	23.4%
2 or 3 bedrooms	18,357	79.6%	12,605	65.5%
4 or more bedrooms	4,220	18.3%	1,512	7.9%
Total	23,051	100%	19,236	100%

Table 28 – Unit Size by Tenure

Data Source: 2013-2017 ACS

Describe the number and targeting (income level/type of family served) of units assisted with federal, state, and local programs.

The Abilene Housing Authority (AHA) continues to manage 213 public housing units at four separate sites. The AHA has three sites that are multi-family, and one site that is an elderly/disabled site. The sites are as follows:

- Earl Williams Complex 4398 North 7th St. – 75 units that consists of 1, 2, 3, and 4 bedroom units. One main office and community center combined.
- Riviera Complex 3001 North 6th St. -38 units that consists of 2, 3 and 4 bedroom units. One community center and laundry facility combined.
- Vogel Complex 2100 Vogel and 2250 Vogel – 72 units that consists of 1, 2, 3, and 4 bedroom units. One maintenance building.
- Robert Deegan Complex 3402 Rebecca Lane – 28 units that consists of 1 bedroom units for elderly/disabled. One community center and maintenance building combined.

All units are targeted to low-income households, defined as households with incomes between 21% and 60% of the area median income. However, the current occupancy of public housing units reveals that APH developments typically serve household with much lower incomes, below 30% of the area median income. The AHA manages 1,726 Section 8 Vouchers.

According to HUD's 2012 Low Income Housing Tax Credit (LIHTC) database, the City had over 1,200 units funded by the program. Of those over 1,100 were targeted to low-income groups.

Provide an assessment of units expected to be lost from the affordable housing inventory for any reason, such as expiration of Section 8 contracts.

The HUD multi-family housing database indicates that there are 281 subsidized housing units in Abilene. Of that total, 37 units are in a community with a loan maturity date of 2036, 189 units are in a community with a loan maturity date of 2043, with the remaining 55 units in a community with a loan maturity date of 2044. This suggests that there is little risk of loss of affordable housing units from the inventory in the near future.

Does the availability of housing units meet the needs of the population?

Seventy-two percent of all households in Abilene reside in single-family homes. While this is often considered ideal in terms of raising a family, the growing senior population may require a different type of housing than single-family. In the coming years, the growing senior population may put more market pressure on smaller apartment units, particularly efficiencies and one-bedroom units, which could serve a large senior or elderly population, as they look to downsize from the single-family home in which they raised their families. Additionally, seniors have unique housing needs as they age, such as the need for ADA-complaint housing and wheelchair ramps. Future development of units designed with retirees in mind and active senior apartment communities may take on a larger presence in the housing market.

Describe the need for specific types of housing:

As shown in the Units by Tenure data, the vast majority of owner households reside in homes with two or more bedrooms (98%). By comparison, renters also utilize similar sized unit with multiple bedrooms at 73 percent. However, twice as many homeowners (18.3%) reside in households with four or more bedrooms compared to renter households (7.9%). While many renter households contain single or couple households with no children, a number of larger renter households are overcrowded in smaller rental units, less than three bedrooms. There is a potential need for more apartment developments with larger units, particularly three or more bedrooms.

Discussion

The largest sector of housing units in Abilene are in single-family structures (72%). About a quarter of renter households, (23.4%) live in one-bedroom units. As the demographics of the city and state start reflecting the aging of the baby boom generation, the housing market will need to adapt to provide new housing opportunities for those seeking to downsize from their family home to smaller units, some of which might be in senior communities where residents can participate in a variety of community activities, including meals, exercise, shopping, and entertainment. Additionally, seniors may need specialized housing to meet their health needs as they age, such as wheelchair ramps and ADA-complaint showers. The housing stock also needs additional supplies of larger rental units, some of which may come from the baby boomers moving to smaller units. Data supports the need for larger rental units for households as approximately 73% of renters reside in a two or more bedroom unit. There is a modest inventory of HUD insured rental units in Abilene (281 units) with maturity dates in 2036, 2043, and 2044, suggesting little risk of loss of affordable housing units in the near future.

MA-15 Housing Market Analysis: Cost of Housing - 91.210(a)

Introduction

Housing costs are a major portion of any households' monthly budget. In 2010, the median home value in Abilene was \$88,400. By 2017, the median value increased by 20.8 percent to \$106,800. Rental costs had similar, though somewhat lower, increases rising 12.5 percent from \$723 in 2010 to \$814 in 2017. In Abilene, 66 percent of renter households paid less than \$1,000 per month in rent. Just over seven percent of the rental housing stock was affordable to households earning less than 30 percent of the area median income. There were no homes priced in a range that would be affordable for a household earning less than 30 percent of the area median income.

Cost of Housing

	Base Year: 2010	Most Recent Year: 2017	% Change
Median Home Value	\$88,400	\$106,800	20.8%
Median Contract Rent	\$723	\$814	12.5%

Table 29 – Cost of Housing

Data Source: American Community Survey, 2013-2017 5-Year Estimates

Rent Paid	Number	%
Less than \$500	1,800	10.0%
\$500-999	10,100	56.3%
\$1,000-1,499	4,531	25.2%
\$1,500-1,999	1,067	5.9%
\$2,000 or more	454	2.5%
Total	17,952	100.0%

Table 30 - Rent Paid

Data Source: American Community Survey, 2013-2017 5-Year Estimates

Median Contract Rent

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.

Housing Affordability

% Units affordable to Households earning	Renter	Owner
30% HAMFI	740	No data
50% HAMFI	2745	10,545
80% HAMFI	6690	5,625
100% HAMFI	No data	1,945
Total	10,175	18,115

Table 31 – Housing Affordability

Data Source: 2012-2016 CHAS

Monthly Rent

Monthly Rent (\$)	Efficiency (no bedroom)	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom
Fair Market Rent	598	621	822	1,064	1,367
High HOME Rent	598	621	822	1,030	1,1129
Low HOME Rent	551	590	708	818	912

Table 32 – Monthly Rent

Data Source: HUD FMR and HOME Rents, 2019

Is there sufficient housing for households at all income levels?

The housing stock for the lowest income households are very limited with about seven percent of housing units available for renters earning 30% HAMFI ([HUD Area Median Family Income](#)). Housing for sale at a price point affordable for low income earners is low or unavailable and what may be available is likely uninhabitable or needs extensive repairs.

With this limited housing stock, many households are forced to spend more of their income on housing expenses, moving up to higher priced rental housing. This creates a cost burden for those households, requiring that they spend more than 30 percent of their household income on housing expenses. In many cases it creates a severe cost burden, requiring more than 50 percent of their income for housing. In some cases, households are forced to double-up with other families, sharing housing units that were designed for only one household.

How is affordability of housing likely to change considering changes to home values and/or rents?

With a 21% increase in median home value, homeownership is becoming less affordable, especially for those individuals and families earning very low incomes or who may be living off fixed incomes like social security and/or disability. With an improving economy, pressure on homeownership is likely to increase as the housing market recovers from the mortgage foreclosure situation of the recent past and home prices return to pre-2008 levels and grow even more. On the other hand, mortgage interest rates are at historic lows, which make home purchases more affordable than would have been possible in 2000 when rates were higher. The lower interest rates are, to some extent, responsible for the rise in home prices since 2000 as an individual household is able to afford a higher home price with the lower interest rate. Rents, however, rose at a slightly slower pace at 12.5 percent between 2010 and 2017. Rents are less affordable than in 2010 and the demand for rental housing is most likely higher than in 2010 with former homeowners who lost their homes to foreclosure looking for rental housing instead of looking to buy. The COVID-19 pandemic has had an impact on the economy and housing market starting in March 2020 and its long-term effects are currently unknown, but the local economy is likely to be sluggish over the next 12 months. The smaller supply of available houses for sale have increased the average sales price of homes in spring and summer 2020. Some housing experts predict that there may be a rise in foreclosures in the next 12-18 months.

How do HOME rents / Fair Market Rent compare to Area Median Rent? How might this impact your strategy to produce or preserve affordable housing?

High HOME rents are relatively close to Fair Market Rents and all HOME rents as shown for 2019. These data suggest that the development of new rental housing units may increase the area median rent, while possibly remaining within the fair market rents for the area.

Discussion

Competing factors in the housing market, rising prices and historically low mortgage interest rates, have kept homeownership affordability somewhat constant over the past decade. The mortgage market, however, created a situation through "liar" loans (where lenders do not verify an applicant's income. Also known as "no-doc loans.") and adjustable rate mortgage products where large numbers of homeowners lost their homes to foreclosure. This resulted in a bubble in the supply of homes on the market and a dip in home prices, but many were unable to take advantage of the market conditions because of a tightening of mortgage requirements and the inability of many to qualify for mortgage under the more stringent rules. Rents, on the other hand, increased by 12.5% since 2010, putting pressure on lower income households looking for rental opportunities.

MA-20 Housing Market Analysis: Condition of Housing – 91.210(a)

Introduction

The condition of housing units highly correlates to the income of the household residing within those housing units. In Abilene, 81.9% of owner-occupied housing units and 54.5% of renter-occupied housing units have no housing problems reported. Four conditions are represented as housing problems, including lack of complete kitchen facilities, lack of complete plumbing facilities, more than one person per room, and cost burden (paying more than 30% of household income on housing expenses). The data show that 17.5% of owner households and 41.7% of renter households have one housing problem or condition. Presumably, this one housing problem is most likely either cost burden or substandard housing, with the later more likely for renter housing than for owner housing. Approximately 66% of owner-occupied housing and 57% of renter-occupied housing were built prior to 1980, making those units potential sources of lead-based paint contamination. While not all will have lead-based paint, the age of the units suggests that at one time lead-based paint may have been used on the unit and provides a potential hazard, particularly for households with children present. Abilene has 4,355 units, both owned or rented, built before 1980 with children present in the household. This accounts for 21% of the houses built prior to 1980 that may contain lead-based paint and provide a potential hazard to young children. It is reasonable to assume that a large number of these households are lower income households due to the fact that older housing stock is often filtered down through the income categories to the lowest income households.

Definitions

Substandard condition is defined as a combination of incomplete kitchen or plumbing facilities, missing windows or exterior doors, severely compromised foundations, outdated electrical infrastructure, holes in floors or walls, and holes in roof or severely compromised roofing materials preventing closure from weather penetration. Many units with a combination that includes all these conditions may be unfit for human occupation. Some may be candidates for rehabilitation, others may not be. Substandard condition suitable for rehabilitation are units where the home is determined to be less than 60 percent deteriorated or the cost of the combination of needed repairs of all conditions does not exceed the estimated after-rehabilitation value of the house.

Condition of Units

Condition of Units	Owner-Occupied		Renter-Occupied	
	Number	%	Number	%
With one selected Condition	4,040	17.5%	8,028	41.7%
With two selected Conditions	134	0.6%	632	3.3%
With three selected Conditions	0	0.0%	97	0.5%
With four selected Conditions	0	0.0%	0	0.0%
No selected Conditions	18,877	81.9%	10,479	54.5%
Total	23,051	100%	19,236	100%

Table 33 - Condition of Units

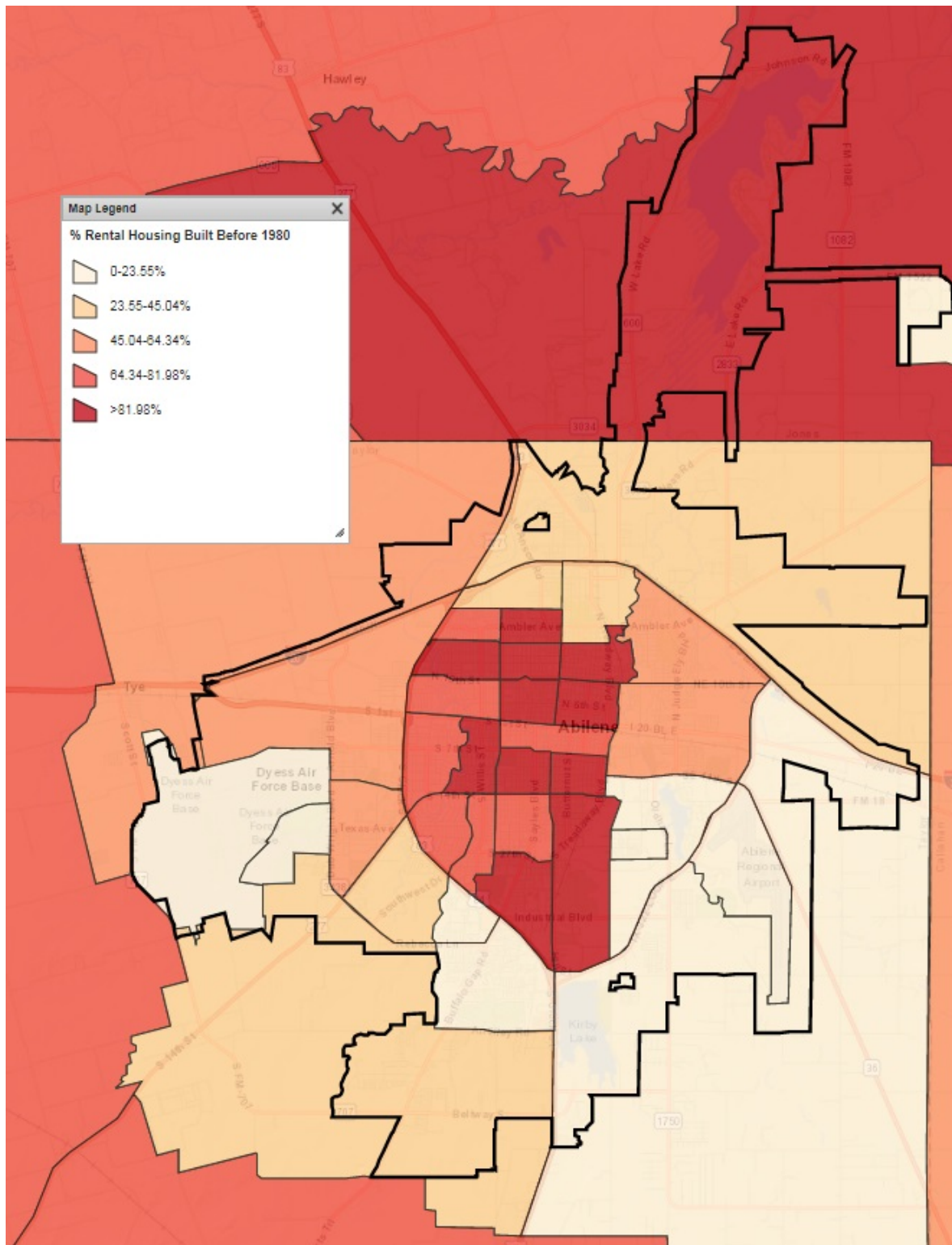
Data Source: 2013-2017 American Community Survey, 5-Year Estimates

Year Unit Built

Year Unit Built	Owner-Occupied		Renter-Occupied	
	Number	%	Number	%
2000 or later	3,028	13.1%	2,807	14.6%
1980-1999	4,170	20.4%	5,460	28.4%
1940-1979	13,438	58.3%	9,882	51.3%
Before 1940	1,875	8.1%	1,087	5.7%
Total	23,051	100%	19,236	100%

Table 34 – Year Unit Built

Data Source: 2013-2017 American Community Survey, 5-Year Estimates



Percent Pre-1980 Rental Units

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.

Risk of Lead-Based Paint Hazard

Risk of Lead-Based Paint Hazard	Owner-Occupied		Renter-Occupied	
	Number	%	Number	%
Total Number of Units Built Before 1980	15,270	67.09%	10,905	55.38%
Housing Units build before 1980 with children present	2,020	8.88%	2,335	11.86%

Table 35 – Risk of Lead-Based Paint

Data Source: 2013-2017 American Community Survey, 5-Year Estimates

Vacant Units

	Suitable for Rehabilitation	Not Suitable for Rehabilitation	Total
Vacant Units	ND	ND	ND
Abandoned Vacant Units	ND	ND	ND
REO Properties ¹	ND	ND	ND
Abandoned REO Properties	ND	ND	ND

Table 38 – Vacant Units

Vacant Units in Abilene

According to the 2013-2017 ACS data, there were 48,739 housing units in Abilene. Of these, 22,492 (46.1% of total) were owner-occupied, 20,260 (41.7% of total) were renter-occupied, and 6,980 (14.3% of total) are reported to be vacant. Of those housing units that are vacant: 1,263 are for rent; 1,339 are rented, but not occupied; 0 are for-sale only; 753 are sold but not occupied; 175 are for migrant workers, seasonal, recreational, or occasional use; and 3,445 represent “all other vacant.”

At several focus group meetings, community members expressed a concern for the high number of vacant units in low-income neighborhoods. Vacant units can not only bring down the market value of housing around them, but may lead to squatting, unsafe environment due to decaying building structures, and increase crime rates. A few community members pondered whether the City or local developers could buy and fix up the houses and resell to low-income community members.

Need for Owner and Rental Rehabilitation

¹ Real Estate Owned (REO) Properties are owned by a lender, such as a bank, and has not successfully been sold at a foreclosure auction.

Over 66% of the owner-occupied housing stock and 57% of the renter-occupied housing was built prior to 1980, placing the age of that housing at more than 30 years old. As the housing stock ages, water infiltration and many other factors can cause rapid deterioration of housing units, particularly where the residents do not or cannot provide needed maintenance. In some areas of Abilene, the housing stock may exceed 50 years of age and the median income of the residents of those areas may be less than 50% of the area median income. In these situations, it is likely that housing conditions generally throughout these areas are poor. Additionally, much of the older homes in Abilene were built in floodways, which require regular maintenance and repairs to fix water damage.

Estimated Number of Housing Units Occupied by Low or Moderate Income Families with LBP Hazards

The data shows that the number of housing units in Abilene built prior to 1980, and potentially where lead-based paint hazards might be found, includes 66% of all owner and 57% of rental housing. Almost nine percent of owner and 11.86% rental housing units built prior to 1980 were occupied by families with children present, a total of over 4,355 housing units. As housing units and neighborhoods age, they typically fall through the income classes from middle- or moderate-income households to lower income households. Neighborhoods that were once middle class become home to lower income groups as they age. Typically, with some exceptions, the oldest neighborhoods found are where the poorest residents are found. As a result, it is reasonable to assume that most of the 4,355 units in Abilene built prior to 1980 and occupied by families with children are likely occupied by low- or moderate-income families.

Discussion

There is an extensive need for rehabilitation programs in Abilene targeting the improvement of the City's oldest housing stock. These programs, which are currently ongoing throughout the City of Abilene with the City's CDBG and HOME funding, provide owners of owner-occupied, single-family housing to facilitate needed repairs which have not been affected by current or previous owners. These repairs include structural and cosmetic repairs both inside the unit and on the exterior and testing for and remediation of lead-based paint hazards in older housing units.

MA-25 Public and Assisted Housing – 91.210(b)

Introduction

Abilene Housing Authority manages an inventory of 213 public housing units in four developments. All units are targeted to low-income households, though the public housing units typically serve household with much lower incomes, currently below 30% of the area median income. [Inspection scores for the housing developments with 95 overall score.](#)

Totals Number of Units

Program Type								
	Certificate	Mod-Rehab	Public Housing	Vouchers				
				Total	Project -based	Tenant -based	Special Purpose Voucher	
							Veterans Affairs Supportive Housing	Family Unification Program Disabled *
# of units vouchers available			213	1,726			185	0 150
# of accessible units								
*includes Non-Elderly Disabled, Mainstream One-Year, Mainstream Five-year, and Nursing Home Transition								

Table 36 – Total Number of Units by Program Type

Data Source: PIC (PIH Information Center)

Describe the supply of public housing developments:

Describe the number and physical condition of public housing units in the jurisdiction, including those that are participating in an approved Public Housing Agency Plan:

According to Abilene Housing Authority, the agency currently manages 213 public housing units. These units are well maintained and are in very good condition. These homes are located in subdivisions throughout the City. These units will provide affordable housing and homeownership opportunities for eligible housing authority residents and potentially other low to moderate-income residents in the community.

Public Housing Condition

Public Housing Development	Average Inspection Score
Public housing	92

Table 37 - Public Housing Condition

Describe the restoration and revitalization needs of public housing units in the jurisdiction:

Public housing units in Abilene are managed and maintained by the Abilene Housing Authority. These homes are located in subdivisions throughout the City. These units will provide affordable housing and homeownership opportunities for eligible housing authority residents and potentially other low to moderate-income residents in the community.

The City continues to take the following steps concerning all government funded housing rehabilitation of public housing units and encourages the same on private housing projects.

- Inform all owners, occupants and landlords of lead-based paint hazards and provide information on methods for reducing risk of exposure in pre-1978 homes.
- Provide testing for any households whose children have been shown to have elevated blood lead levels. Require the family be moved to a post 1978 unit, or unit that has passed this test.
- Require inspections for lead at the same time other inspections or evaluations are conducted on City sponsored housing.
- ONS staff made Safe Work Practices training available to local contractors, CHDO personnel, staff and maintenance personnel. However, the Texas Department of State Health Services (TDSHS) now requires contractors to obtain their own 'LEAD Contractor/Supervisor' license, in order to conduct lead abatement jobs and to supervise lead workers.
- The City of Abilene ONS and the AHA have fully implemented HUD's Lead-Safe Housing Rule as required by the Office of Healthy Homes and Lead Hazard Control.
- Non-routine public housing improvements are conducted periodically to repair and install improvements such as refrigerators, ranges, AC guards, water heaters, state-mandated smoke detector installs, plumbing, sidewalks, and concrete ramps, etc.

Describe the public housing agency's strategy for improving the living environment of low- and moderate-income families residing in public housing:

Abilene Housing Authority constantly works to keep public housing units in a state of good repair. Units are upgraded as needed to maintain marketability in the Abilene housing market.

Discussion:

Abilene Housing Authority manages an inventory of 213 public housing units in four developments and 1,726 Section 8 vouchers. Abilene Housing Authority constantly works to keep public housing units in a state of good repair.

MA-30 Homeless Facilities and Services – 91.210(c)

Introduction

Abilene has a variety of community organizations that provide emergency, transitional, permanent supportive housing beds and rapid rehousing for families, adults, and veterans. Abilene has approximately 250 beds for those who may need shelter typically on a first-come-first-served-basis.

Facilities and Housing Targeted to Homeless Households

	Emergency Shelter Beds		Transitional Housing Beds	Permanent Supportive Housing Beds	
	Year Round Beds (Current & New)	Voucher / Seasonal / Overflow Beds	Current & New	Current & New	Under Development
Households with Adult(s) and Child(ren)	21	0	58	14	0
Households with Only Adults	147	0	0	7	0
Chronically Homeless Households	0	0	0	0	0
Veterans	0	0	0	0	0
Unaccompanied Youth	0	0	6	0	0

Table 38 - Facilities and Housing Targeted to Homeless Households

Data Source Comments:

Describe mainstream services, such as health, mental health, and employment services to the extent those services are used to complement services targeted to homeless persons

The data used for this analysis was derived from the West Texas Homeless Network survey conducted in conjunction with the Balance of State Point in Time Homeless Survey taken January 2020.

Services in place including but not limited to:

Rental/Mortgage/Utility Assistance

- AIDS Resources of Rural Texas
- Aspermont Small Business Development Center
- Central Texas Opportunities
- Community Action Program, Inc.
- First Baptist Church
- Episcopal Church of the Heavenly Rest
- Shackelford County Resource Center
- Taylor County Veterans Services Office
- The Salvation Army
- Christian Service Center of Abilene
- Christ Community Resource Center
- Abilene Baptist Social Ministries
- Methodist Service Center

Rental Assistance

- AHA
- Sweetwater Public Housing Authority
- Stamford Public Housing Authority

Outreach to Homeless on the Streets:

Love & Care Ministries - conducts outreach through the Mobile Medical Unit which provides access to medical and dental services at different sites.

Baptist Children's and Family Services (Our House) - provides street outreach to homeless youth. These unaccompanied youth receive food, shelter, clothing, tutoring, and counseling.

City Light Community Ministries - as part of the West Texas Homeless Network, City Light Community Ministries is an outreach program of the First Baptist Church, assisting homeless with various services.

Breakfast on Beech Street - provides outreach services to street homeless and low-income persons by providing food.

Drop-In Centers are operated by The Salvation Army and Love & Care Ministries to help homeless people learn about and access available services. Drop-In Centers offer a range of basic services, including food, showers, laundry, and clothing.

Outreach to Other Homeless:

The Drop-In Centers operated by The Salvation Army and Love & Care Ministries also provide outreach and services to homeless families.

With the addition of the 2-1-1 system across Texas, outreach to other homeless individuals has become easier. Anyone in need can use any phone to dial 2-1-1 for assistance and be connected immediately to Abilene's A Call For Help Community Resource Center.

List and describe services and facilities that meet the needs of homeless persons, particularly chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth. If the services and facilities are listed on screen SP-40 Institutional Delivery Structure or screen MA-35 Special Needs Facilities and Services, describe how these facilities and services specifically address the needs of these populations.

Several local organizations such as social service agencies, charitable groups and religious organizations provide emergency/transitional housing and/or supportive services to the homeless and at-risk persons including abused women and children and those living with substance use disorders. The West Texas Homeless Network will continue to expand the [Homeless Management Information System \(HMIS\)](#) in order to provide up-to-date information on services. Supportive services in the city are including but not limited to:

Life Skills Training

- BCFS
- The Salvation Army
- Faith Works
- Abilene Hope Haven, Inc.
- ARCADA

Mental Health and Counseling Services

- MHMR
- Noah Project
- The Salvation Army
- Medical Care Mission

Homeless Youth

- Abilene Independent School District Homeless Liaison
- Harmony Family Services
- [Henrick Home for Children](#)
- New Horizons The Audrey Grace House
- Our House

Family Services

- [Hendrick Home for Children](#)
- Methodist Children's Home & Services
- New Horizons: Family Connections
- Presbyterian Children's Home & Services

Medical Care

- Taylor County Veteran Services Office
- Presbyterian Medical Care Mission
- Abilene/Taylor County Public Health District
- Medical Assistance for Area Citizens (MAAC)
- Shackelford County Community Resource Center

Employment Assistance

- West Texas Council of Government Career Centers
- Goodwill Industries
- Abilene Hope Haven
- Noah Project
- [Workforce Solutions of West Central Texas](#)

AIDS/HIV Services

- Abilene/Taylor County Public Health District
- Big Country AIDS Resource
- AIDS Resource of Rural Texas

Transportation

- CityLink

- Classic Cab
- Veteran's Administration Medical Transportation

West Texas Legal Services

- Legal Advocacy Program
- Disability In Action
- Veterans Services

MA-35 Special Needs Facilities and Services – 91.210(d)

Introduction

Special needs populations in Abilene include the elderly; frail elderly; persons with mental, physical, or developmental disabilities; persons with HIV/AIDS; and persons with substance abuse problems. Considering the non-homeless special needs population, many in these populations are currently having their housing and service needs met without or with limited public assistance. Circumstances, however, are subject to change and the more the community prepares for future needs, the better it will be able to meet those needs when they occur.

Including the elderly, frail elderly, persons with disabilities (mental, physical, developmental), persons with alcohol or other drug addictions, persons with HIV/AIDS and their families, public housing residents and any other categories the jurisdiction may specify, and describe their supportive housing needs

The supportive housing needs of special needs populations in Abilene vary according to the population. In coming years, a large majority of the “Baby Boomers” will be retiring from employment and will likely live on fixed incomes. Additionally, as individuals age, they are more likely to develop age-related health conditions that could lead to a decline in overall health and mobility requiring specialized housing. These needs may include nursing care facilities targeted to lower income households who cannot afford private nursing home care. Permanent supportive housing options for persons with mental, physical, and developmental disabilities may also become a pressing issue as persons with disabilities, who were previously cared for by parents lose those caregivers to death or incapacity. With healthcare systems enabling persons with disabilities to live longer, many are now outliving their caregivers; thus, increasing the demand for group housing that provides the care this population needs.

Describe programs for ensuring that persons returning from mental and physical health institutions receive appropriate supportive housing

In a community the size of Abilene, there is constant communication between supportive service and housing providers. The West Texas Homeless Network has facilitated a more formal collaboration between service providers. The monthly Network meetings provide the forum for discussing obstacles and learning about new services. In addition, the local 2-1-1 Call for Help through United Way also meets quarterly with all agencies listed in their service to discuss needs. Case management remains the most effective way to coordinate services for homeless individuals and families and is the primary method used to move homeless individuals through the system.

For homeless persons entering the system, the 2-1-1 Texas A Call for Help Community Resource Center and the Homeless Management Information System (HMIS) can offer information and referral to case management and other supportive services. Most services are provided on a first-come, first-serve basis with the majority of programs having an application process and eligibility requirement.

Discharge Planning Policy

The Texas Balance of State Continuum of Care states basic provisions of a discharge policy include:

- Discharge from institutions ([e.g.](#), medical facilities, criminal justice system, etc.) into homelessness is prohibited.
- Discharge planning begins at entry into the institution, and appropriate planning processes are created and monitored.
- Access to mainstream service systems (establishing eligibility while still in the institution is necessary for reducing recidivism and homelessness).

The West Texas Homeless Network met with city/county government, hospitals, Department of Human Services, the Justice System, and law enforcement agencies to develop a team approach to discharge planning in the West Central Texas area. This involved a four-step strategy of identifying the scope of the problem, identifying priorities, locating resources, and implementing institutional change.

The Network's focus is to continue to identify the scope and nature of the problem. The following activities are conducted:

- Survey shelter providers to see what public institutions are releasing clients/inmates to the area shelters
- Identify public institutions that should be providing housing as part of discharge planning
- Have shelters keep record for a month on where shelter residents resided prior to entering the shelter
- Recruit participation in the Network from public institutions in the Networks' Continuum of Care service area including Abilene and the surrounding 13 counties.

Specify the activities that the jurisdiction plans to undertake during the next year to address the housing and supportive services needs identified in accordance with 91.215(e) with respect to persons who are not homeless but have other special needs. Link to one-year goals. 91.315(e)

The City funds owner-occupied housing rehabilitation through direct loans and grants to low- and moderate-income homeowners for the rehabilitation of single-family residential structures. The City also funds a critical repair program in an attempt to maintain housing stock, so that non-homeless persons with special needs can continue to reside in their own homes. As homeowners age, they are often unable to continue to provide the maintenance needed to keep the home habitable. The City's programs work with those homeowners to address pressing issues that arise, such as roof leaks or plumbing failures, and more extensive rehabilitation needed to bring a home completely up to current building code.

For entitlement/consortia grantees: Specify the activities that the jurisdiction plans to undertake during the next year to address the housing and supportive services needs identified in accordance with 91.215(e) with respect to persons who are not homeless but have other special needs. Link to one-year goals. (91.220(2))

The City of Abilene funds the Adult Protective Services Partners Inc. (APSP) program that serves the elderly and persons with disabilities age 18 and older that are at risk of abuse, neglect or exploitation who have open cases with Adult Protective Services of the Texas Department of Family and Protective Services. The project activities may be supplemented by the State Adult Protective Services and APSP resources and/or contributions from clients served. This project is geared towards urgent needs and providing repairs to improve health and safety/security standards of the low and extremely low-income homeowner. The City operates housing rehabilitation and critical repair programs that provide assistance to low income, elderly, and special needs populations.

MA-40 Barriers to Affordable Housing – 91.210(e)

Negative Effects of Public Policies on Affordable Housing and Residential Investment

The following barriers to affordable housing resulting from public policies of the City of Abilene are identified through the Consolidated Plan process:

Several barriers continued to negatively affect affordable housing: long waiting lists for public housing and independent living facilities for seniors, inability of residents to come up with rent deposits and utility deposits, due to local groups not having adequate funding because of low paying wages, the COVID-19 pandemic, and the economy. Housing affordability is also impacted by local factors such as the availability of land for new construction, conditions of current available units, the income of residents, the supply of housing, and housing costs. Affordable housing in Abilene is deterred by insufficient funds for down payment, lack of credit, and poor credit. In addition, the long-term affordability of a home, such as the required monthly principal, interest, taxes, and insurance payments, are often too high compared with available income for a low-income household. Furthermore, the availability of homes for sale in the price range and size for the low- to moderate-income family is limited. The Abilene Association of Realtors reported that the median sales price during April 2020 for a home was \$176,900. The price is up 6.7% compared to April 2019. The housing inventory was down 12.1% in April 2020 compared to April 2019, but the smaller supply is likely due to COVID-19. Interestingly, the number of closed sales in April 2020 increased 9.5% compared to the previous year with homes only staying on the market for 2.6 months compared to three months indicating that there still may be a demand for housing.

The U.S. Department of Housing and Urban Development (HUD) describes a household experiencing a cost burden as having gross housing costs that are more than 30% of gross income. A household that experiences a severe cost burden is when gross housing costs are more than 50% of gross income. The cost of home ownership can affect the level of property maintenance, the ability of the household to pay property taxes and ultimately the household's ability to retain its home. Likewise, high rents (and prohibitive security deposits) can make it difficult for renters to afford units. With almost half of the Abilene households under the median income, the cost of ownership or renting also becomes a burden.

These burdens are caused by:

- Insufficient funds for down payment - Private lending institutions typically require home purchasers to provide 10 to 20 percent of a home's value as a down payment. Many low-income households are already rent burdened, paying as high as 40 to 50% of their income for housing. Such high costs for current shelter preclude these low-income households from accumulating the funds for a down payment.
- High existing debt of prospective purchasers - Many low-income households also are saddled with excessively high existing debt for such items as credit accounts, car payments, and medical expenses that prevent obtaining private lender financing.

- Need for property repairs - The homes most affordable to low-income households tend to be located in neighborhoods where property has been poorly maintained and requires repair. Therefore, low-income purchasers often confront the prospect of obtaining a home that will require further financial investment for property improvements. Money for such improvements is frequently unavailable to low-income buyers and private lenders often are unwilling to lend the necessary funds for acquisition and repairs. Complicating the situation further is the reality that such affordable housing is often located in neighborhoods where money invested in property improvements does not necessarily translate into a corresponding increase in the value of the property.
- Lack of credit - Many low-income homebuyers have no credit record because they pay most of their expenses in cash.
- Poor credit - A very common barrier to home ownership is a blemished credit record. Unfavorable credit information can stay on a credit record for up to seven years and bankruptcy records stay on the report for 10 years. Additionally, due to the COVID-19 pandemic, many lenders have increased their minimum credit score qualifications from 580 for FHA loans to the mid-600s.
- Available funding - A common barrier to affordable housing is available funding to the jurisdiction. When Federal funding to the jurisdiction is threatened, the availability of affordable housing for low-income persons is threatened, as well.
- Unemployment – According to the Bureau of Labor Statistics, the Abilene December 2019 workforce unemployment rate is 2.8%, which has remained steady since August 2019. However, due to the COVID-19 pandemic, unemployment ~~rose~~ has risen to 9.0% in April 2020. As unemployment rises, more people may face housing insecurity. As of August 2020, unemployment has decreased to 4.9%. However, the uncertainty of the pandemic may cause the unemployment rate to continue to fluctuate over the coming months.
- Low number of living-wage jobs available.
- Housing inventory – There is a severe deficiency of rental units available for those living on very low incomes who can only afford a monthly gross rent of \$500. Most of the available rental units in that category are one-bedroom or smaller units, which would not be optimal for families of more than two people. See attachment for comparison of existing housing inventory to household by price/rent afforded.

The City in partnership with non-profit organizations plans to undertake several activities to address barriers to affordable housing.

Public Policies

Public Policies - The City's zoning ordinance, development code and public policies were examined to reveal any current ordinances or policies that create barriers to affordable housing. Abilene's land development codes and zoning regulations address affordable housing and the provision of making allowances through the code to allow the construction of a variety of types of housing including single family and multifamily housing. Development regulations provide for the consideration of variances to

development barriers that affect the feasibility of producing housing within the jurisdictions. Regulations allow unrelated persons to reside in a single family structure by right without specific use or conditional use permits and has adequate provisions for group homes and special needs populations.

Affordable Housing –In 2018, the Abilene City Council adopted an infill development programs called the “Abilene Neighborhood Empowerment Zone,” which offers economic incentives to promote and encourage new and private residential and business development. The program is intended to increase the rehabilitation and construction of affordable and market rate housing options within the Zone by offering developers and builders incentives, such as permit fee waivers.

Residential Investment – The City’s Policies do not provide incentives for Residential Investment other than what is offered through the Abilene Neighborhood Empowerment Zone program.

MA-45 Non-Housing Community Development Assets – 91.215 (f)

Introduction

Housing preferences are fulfilled by a household's ability to meet the financial needs of owning or renting their desired housing unit. The economic health of a community has a large impact on that ability through the job market, business activity, and the household's relative place in the economy determined by their level of education and employment status. The data below provide a look at where jobs and economic activity in Abilene provide employment opportunities and some descriptive consideration of education and employment levels. [Note that the most recent data available for this report is from 2013 to 2017. In March 2020, the United States was impacted by the global COVID-19 pandemic that had major impacts on the local, national, and global economic markets. Unemployment increased significantly across the country, including in Abilene. In February 2020, the unemployment rate in Abilene was 3.0% and it tripled to 9.0% in April 2020. As of August/July 2020, the unemployment rate was 45.9%. Individuals most effected by the pandemic were likely low wage earners in the retail and hospitality and entertainment industries. The long-term economic effects of the pandemic are still yet to be determined.](#)

Economic Development Market Analysis

Business Activity

Business by Sector	Number of Workers	Number of Jobs	Share of Workers %	Share of Jobs %	Jobs less workers %
Agriculture, Mining, Oil & Gas Extraction	2,074	1,359	3.9	3.0	-0.91
Arts, Entertainment, Accommodations	5,881	6,160	11.0	13.64	2.60
Construction	3,501	2,828	6.6	6.3	-0.3
Education and Health Care Services	15,319	12,029	28.4	26.67	-1.84
Finance, Insurance, and Real Estate	3,586	3,305	6.7	7.3	0.6
Information	689	893	1.3	2.0	0.70
Manufacturing	2,485	2,237	4.7	5.0	-0.31
Other Services	3,137	1,663	5.9	3.74	-2.20
Professional, Scientific, Management Services	2,981	2,362	5.6	5.2	-0.4
Public Administration	3,630	3,013	7.0	6.7	-0.3
Retail Trade	7,278	6,248	13.7	13.84	-0.1
Transportation and Warehousing	2,201	1,078	4.1	2.4	-1.71
Wholesale Trade	1,181	1,992	2.2	4.4	2.21
Total	53,943	45,167	--	--	--

Table 39 - Business Activity

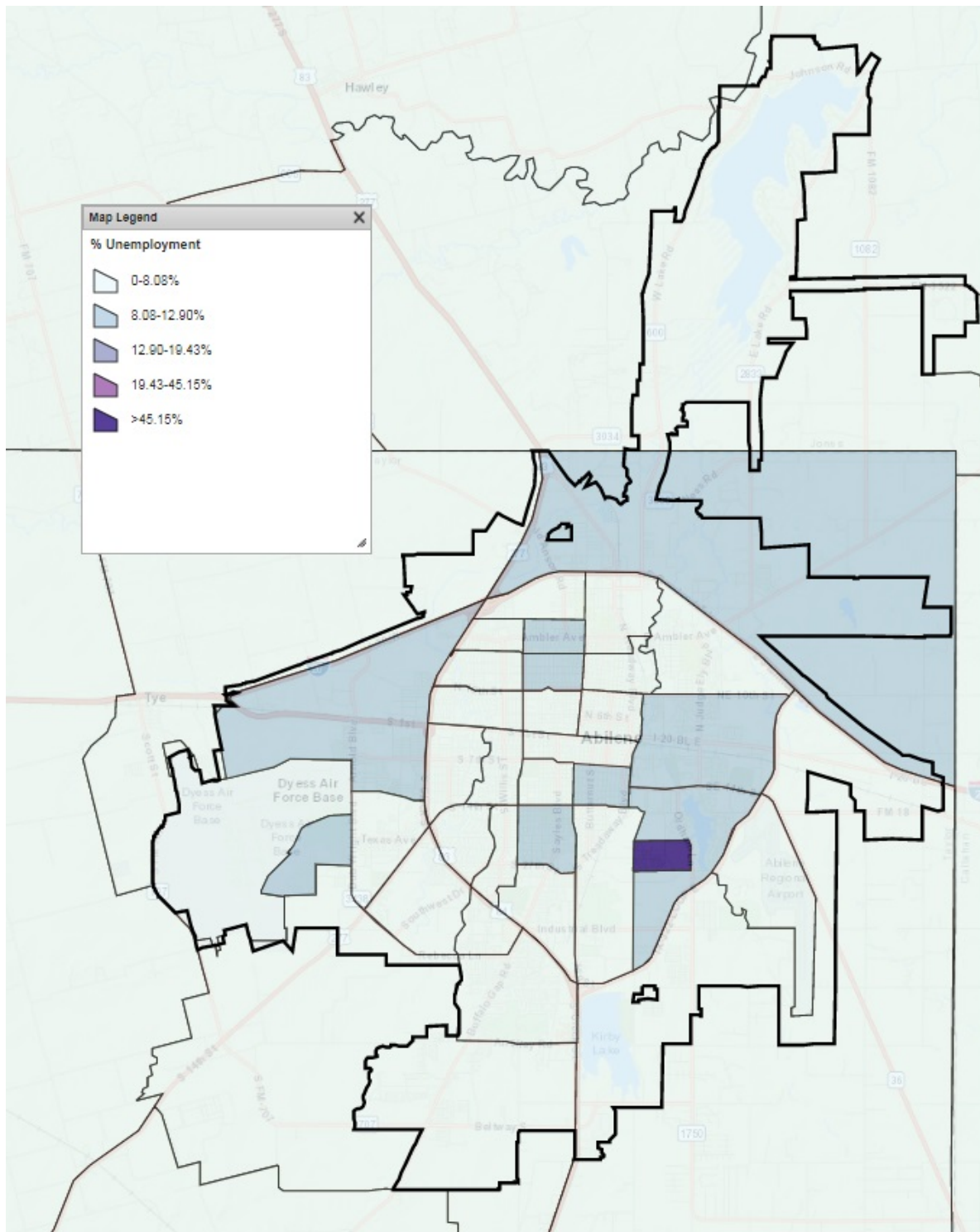
Data 2013-2017 ACS 2013 Longitudinal Employer-Household Dynamics (Jobs)
Source:

Labor Force

Total Population in the Civilian Labor Force	59,438
Civilian Employed Population 16 years and over	56,703
Unemployment Rate	4.6
Unemployment Rate for Ages 16-24	9.7
Unemployment Rate for Ages 25-65	3.5

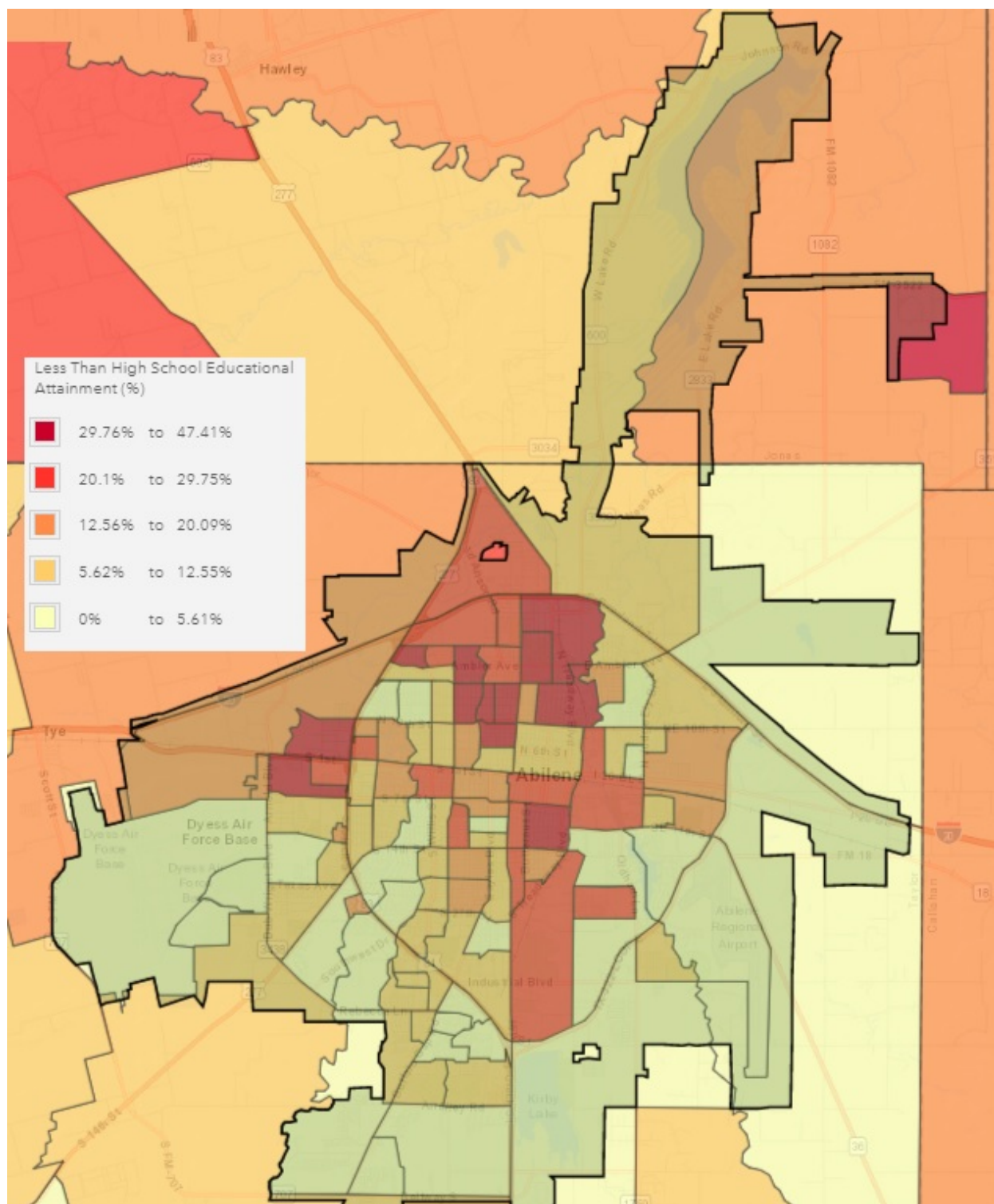
Table 40 - Labor Force

Data Source: 2013-2017 ACS



Unemployment Rate

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.



Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.

Occupations by Sector	Number of People
Management, business and financial	10,778
Farming, fisheries and forestry occupations	119
Service	7,300
Sales and office	12,486
Construction, extraction, maintenance and repair	5,889
Production, transportation and material moving	5,779

Table 41 – Occupations by Sector

Data Source: 2013-2017 ACS

Travel Time

Travel Time	Number	Percentage
< 30 Minutes	48,524	90.7%
30-59 Minutes	3,159	5.9%
60 or More Minutes	1,817	3.4%
Total	53,500	100%

Table 42 - Travel Time

Data Source: 2013-2017 ACS

Education:

Educational Attainment by Employment Status (Population 16 and Older)

Educational Attainment	In Labor Force		Not in Labor Force
	Civilian Employed	Unemployed	
Less than high school graduate	4,009	224	4,040
High school graduate (includes equivalency)	11,109	459	6,925
Some college or Associate's degree	13,776	607	4,568
Bachelor's degree or higher	9,986	208	1,816

Table 43 - Educational Attainment by Employment Status

Data Source: 2013-2017 ACS

Educational Attainment by Age

	Age				
	18–24 yrs	25–34 yrs	35–44 yrs	45–65 yrs	65+ yrs
Less than 9th grade	272	278	688	1,735	1,701
9th to 12th grade, no diploma	2,221	2,026	1,227	2,095	1,428
High school graduate, GED, or alternative	6,333	6,131	4,670	7,882	4,616
Some college, no degree	8,487	5,875	3,485	5,984	3,048
Associate's degree	879	1,550	1,222	1,792	751
Bachelor's degree	1,420	3,106	1,777	3,841	2,374
Graduate or professional degree	71	1,034	898	1,899	1,572

Table 44 - Educational Attainment by Age

Data Source: 2013-2017 ACS

Educational Attainment – Median Earnings in the Past 12 Months

Educational Attainment	Median Earnings in the Past 12 Months
Less than high school graduate	\$17,254
High school graduate (includes equivalency)	\$25,767
Some college or Associate's degree	\$31,151
Bachelor's degree	\$42,311
Graduate or professional degree	\$61,662

Table 45 – Median Earnings in the Past 12 Months

Data Source: 2013-2017 ACS

Based on the Business Activity table above, what are the major employment sectors within your jurisdiction?

The most active business sector in Abilene, in terms of the number of workers in the various industries, is education and health care services with 28% share of workers. Retail Trade is comprised of 13.715% of all workers. That sector is followed by arts, entertainment, and accommodations with 11% of workers. Finance, insurance, and real estate services had 6.7% share of workers, followed by the construction sector with a 6.6% share.

Describe the workforce and infrastructure needs of the business community:

According to the 2015–2020 Comprehensive Economic Development Strategy (<http://www.wctcog.org/currentforms/CEDS15.pdf>) for the West Central Texas Economic Development District, the workforce and infrastructure needs of the business community include:

- A decreasing population with outmigration of the younger workforce to other regions due to the supply of high-paying jobs in Abilene
- The need for financial support and investment for small businesses and start-ups from the SBCA and DCOA and other organizations
- The need for new markets within and outside of Abilene to purchase local products
- The need to expand renewable energy businesses and wind farms in the area and supply workforce training in this emerging field
- Expansion and rehabilitation of current wastewater treatment facilities and sewer lines to accommodate future business needs
- Additional water infrastructure to support increased business needs which includes water plants, water mains and water lines to emergent areas and the identification of additional water resources to capitalize on future growth
- Expansion of high-speed broadband internet and voice over IP services with specific infrastructure requirements to respond to business needs and emergency service response
- The need to provide parents, especially commuting parents in the workforce with localized expanded-hour, affordable childcare options for birth to school-age children throughout the year
- The need to provide parents in the workforce with afterschool and summer care for children which provides tutorial, mentoring and skill development

The research conducted during the citizen participation process also echoed many of the needs identified in the Comprehensive Economic Development Strategy. During the Citizen Participation process, many organization and community leaders identified the importance of living wage jobs in Abilene. Almost one-third of jobs available in Abilene are in the education and health care industries, which are often higher wage jobs, but not always. Approximately 25% of the population are employed in the retail, arts, entertainment, and food services industries, which are often minimum wage or near minimum wage jobs. To encourage new jobs and industries offering higher wages, Abilene may need to invest in some of its infrastructure, such as improving water and sewer systems, high-speed broadband internet access, and transportation access. In addition to investment in infrastructure, access to affordable childcare is critical for working parents, especially outside of the traditional 9 to 5 business hours.

In 2018, the Abilene City Council approved the Abilene Neighborhood Empowerment Zone program, which offers economic incentives to promote and encourage new and private business development.

Describe any major changes that may have an economic impact, such as planned local or regional public or private sector investments or initiatives that have affected or may affect

job and business growth opportunities during the planning period. Describe any needs for workforce development, business support or infrastructure these changes may create.

The Development Corporation of Abilene (DCOA) is committed to creating a healthy economic climate for our community and is leading the effort to recruit new industries to the city of Abilene. The Abilene Industrial Foundation (AIF) and local City officials, business leaders, and volunteers will continue to play a supporting role in continuing to develop public/private sector investments and community improvement projects.

The Abilene Industrial Foundation (AIF) is an agency of the Abilene Chamber of Commerce and is responsible for site selection assistance, marketing, and existing business retention/expansion, and is a source of comprehensive information for expanding the relocating business. Through the recent realignment of the organizations, AIF will continue its effort to revitalize the central business district in Abilene.

In 1982, Abilene became the first city in Texas to create a downtown reinvestment zone as allowed by the state legislature. Through Downtown Programs, the governing board of this zone (commonly referred to as Tax Increment Financing – TIF) has distributed more than \$10.4 million to a wide range of projects such as building rehabilitation, business expansion, and beautification projects.

Since 1990, the DCOA has provided incentives to 60 private sector enterprises, four state entities and one federal facility. Currently, the DCOA is a Type A corporation, which the Development Corporation Act provides resources to promote the creation of new and expanded industry and manufacturing activity within the city of Abilene and its vicinity using a ½ cent sales tax. Eligible projects include, but are not limited to, job training classes and career centers, land, buildings, equipment, facilities, improvements, and expenditures that are for the creation and retention of primary jobs, infrastructure assistance to retail or commercial projects, and business-related sewer utilities and site improvements. The City of Abilene's Department of Economic Development (EDD) provides staff support to the DCOA Board of Directors, negotiates incentives with expanding Abilene businesses and prospective businesses, and monitors contracts between the DCOA and businesses for compliance. The EDD accomplishes its mission through a comprehensive economic development program and through a contractual relationship with the DCOA.

The Military Affairs Committee (MAC) is part of the Abilene Chamber of Commerce. The mission is to maintain and expand the military presence in the Abilene community, as well as continue the strong relationship with our military community. MAC is instrumental in ensuring Dyess Air Force Base remains a premier large aircraft installation, explores opportunities to expand missions and modernize base infrastructure, and supports our more than 5,000 military and civilian employees, as well as their 8,000 family members and retirees.

How do the skills and education of the current workforce correspond to employment opportunities in the jurisdiction?

The most active business sectors in Abilene, in terms of the number of workers in the various industries, is education and health care services, which were followed by retail trade. Education and health care services typically have stringent education and skill requirements for the most visible portion of the workforce, the educators, doctors, and nurses. The sector also has a large support staff with lower education and skill requirements, including maintenance workers, drivers, and many other job classifications. Abilene has a relatively well educated workforce, with over four times as many residents over the age of 16 having a college degree or at least some college as those not having finished high school. These sectors are followed by arts, entertainment, and accommodations, finance, insurance, and real estate services.

Describe any current workforce training initiatives, including those supported by Workforce Investment Boards, community colleges and other organizations. Describe how these efforts will support the jurisdiction's Consolidated Plan.

Abilene's three private universities, one junior college, one technical college, and branch of a state university dedicated to higher level technology degrees and the School of Pharmacy continue to draw students from all over the United States and the world.

In conjunction with the Abilene Chamber of Commerce, the Abilene Industrial Foundation, the Chamber of Commerce Military Affairs Council, and the Texas Tech University Small Business Development Center, the ~~Economic Development~~City of Abilene Department administers sales tax funding (through the Development Corporation of Abilene, Inc.) for the purpose of job training, job creation and job retention in Abilene. This structured partnership, Develop Abilene, closes the recruitment gap by sharing information and bringing together the resources to strengthen businesses, build a better economic base and create jobs for Abilene residents.

~~Abilene Christian University, It is through strong community partnerships and the desire to diversify Abilene industry and jobs that the City of Abilene Economic Development Department and DCOA was able to recruit The Texas Tech University School of Pharmacy and develop the Life Sciences Accelerator for medically-based biotech research near the Hendrick Hospital and Health Systems campus. Hardin-Simmons University and Texas Tech University~~ School of Nursing and School of Public Health are providing degrees and programs for students interested in careers in the health care field. Adding to the diversification of jobs, the ~~Economic Development Department~~City of Abilene and the DCOA have been successful at recruiting wind turbine energy companies. One is a manufacturing and maintenance company, and the other is a regional facility for blade manufacturing and maintenance.

Workforce development through education and training is a critical need for economic development in Abilene. The following educational institutions and training initiatives are available in Abilene:

The City of Abilene contracts with the Texas Tech University Small Business Development Center (SBDC) to provide quality service and assistance to business owners and potential entrepreneurs. The SBDC provides business counseling, technical assistance, training workshops and business plan development for small businesses. The SBDC aims to promote growth, expansion, innovation, increased productivity and improved management for small business. Workshops range from obtaining Historically Under-Utilized Business (HUB) certification to enable contracts with State and Federal agencies to Internet businesses.

Through various programs and services, self-sufficiency efforts improve the quality of life for the citizens of Abilene. Available through the Abilene Housing Authority, Family Self-Sufficiency Assistance includes help with incidental and/or unanticipated expenses that threaten a family's progress toward self-sufficiency (e.g. school, job training and counseling). Families must agree to maintain employment and/or enroll in continuing education or training programs.

FaithWorks is a local [faith-based](#) agency that trains the under/unemployed in new life skills, job training and internships. [Students learn skills such as, computer skills, nutrition, financial literacy, and networking, among many other life and career skills.](#)

The City of Abilene will continue its strong support of maintenance, enhancement and expansion of quality childcare and transportation services [through the city.](#)

Does your jurisdiction participate in a Comprehensive Economic Development Strategy (CEDS)? Yes

If so, what economic development initiatives are you undertaking that may be coordinated with the Consolidated Plan? If not, describe other local/regional plans or initiatives that impact economic growth.

The City of Abilene participated in the development of the Comprehensive Economic Development Strategy (<http://www.wctcog.org/currentforms/CEDS15.pdf>) prepared by the West Central Texas Economic Development District. The goals and economic development initiatives include:

- Create a Regional Economic Innovation Hub that provides virtual regional and county data, provides technical assistance in data interpretation, and provides infrastructure necessary to affect positive economic development.
- To mentor, counsel and assist local and new businesses, and particularly small and mid-size businesses, through the expansion of financial assistance and advisory services.
- Support funding for improved infrastructure in needed areas to attract new business and meet growth needs of existing business.
- Encourage development of safe and affordable housing throughout the region which is consistent with local real estate demographics and patterns.
- Secure current communication technologies to the region.

- Develop and secure resources to overcome historic barriers to employment in the region.

These goals can be supported through the Consolidated Plan through funding opportunities in support of housing for low- and moderate-income households, educational and job training initiatives, business development, and infrastructure improvements, where those efforts fit within the regulatory framework of the CDBG and HOME programs.

Discussion

The City of Abilene has been working to expand economic and employment opportunities in the region. Jobs training programs operated by various educational institutions in the city help to create a workforce tailored to meet the workforce needs of businesses in the area. ~~The City of Abilene in partnership with Abilene Independent School District (AISD), Wylie ISD, and CISCO College is providing vocational training to high school juniors and seniors in various fields such as welding, HVAC, electrical, and industrial maintenance.~~ The Comprehensive Economic Development Strategy provides a regional framework for economic development initiatives for the coming years.

MA-50 Needs and Market Analysis Discussion

Are there areas where households with multiple housing problems are concentrated? (include a definition of "concentration")

The census tracts that are identified as eligible for CDBG area benefit (median income below 80 percent of the area median income) include some of the oldest neighborhoods in the city. The houses in these neighborhoods are often in poor condition and many are in need of extensive rehabilitation or removal. These neighborhoods are also where the lowest income households in the city live, in housing stock that is in poor condition, and, therefore, offered at lower rents or sales prices. Despite the lower rents or purchase price, the lower income households pay a large portion of their income on housing expenses. Related to housing problems, "concentration" would mean that a neighborhood shows more housing problems than the citywide average.

Are there any areas in the jurisdiction where racial or ethnic minorities or low-income families are concentrated? (include a definition of "concentration")

Related to racial or ethnic minorities or low-income families, "concentration" would mean that a neighborhood shows more percentage of racial or ethnic minorities or low-income families than the citywide average. As of the 2012-2017 American Community Survey data, Hispanics comprised about 26.8% and African Americans comprised about 10% of the population of Abilene. There is some concentration of the Hispanic and African American populations in census tracts in the central parts of the city, with the percentage of Hispanics at 70% and African Americans at 30% of the total population. Most of the tracts are within the CDBG area benefit tracts (where median incomes of the tracts are below 80% of the area median income). These areas also show high rates of poverty, with poverty rates above 60% of the population of the tracts. Maps of poverty rates and concentrations of Hispanics and African Americans are included below.

What are the characteristics of the market in these areas/neighborhoods?

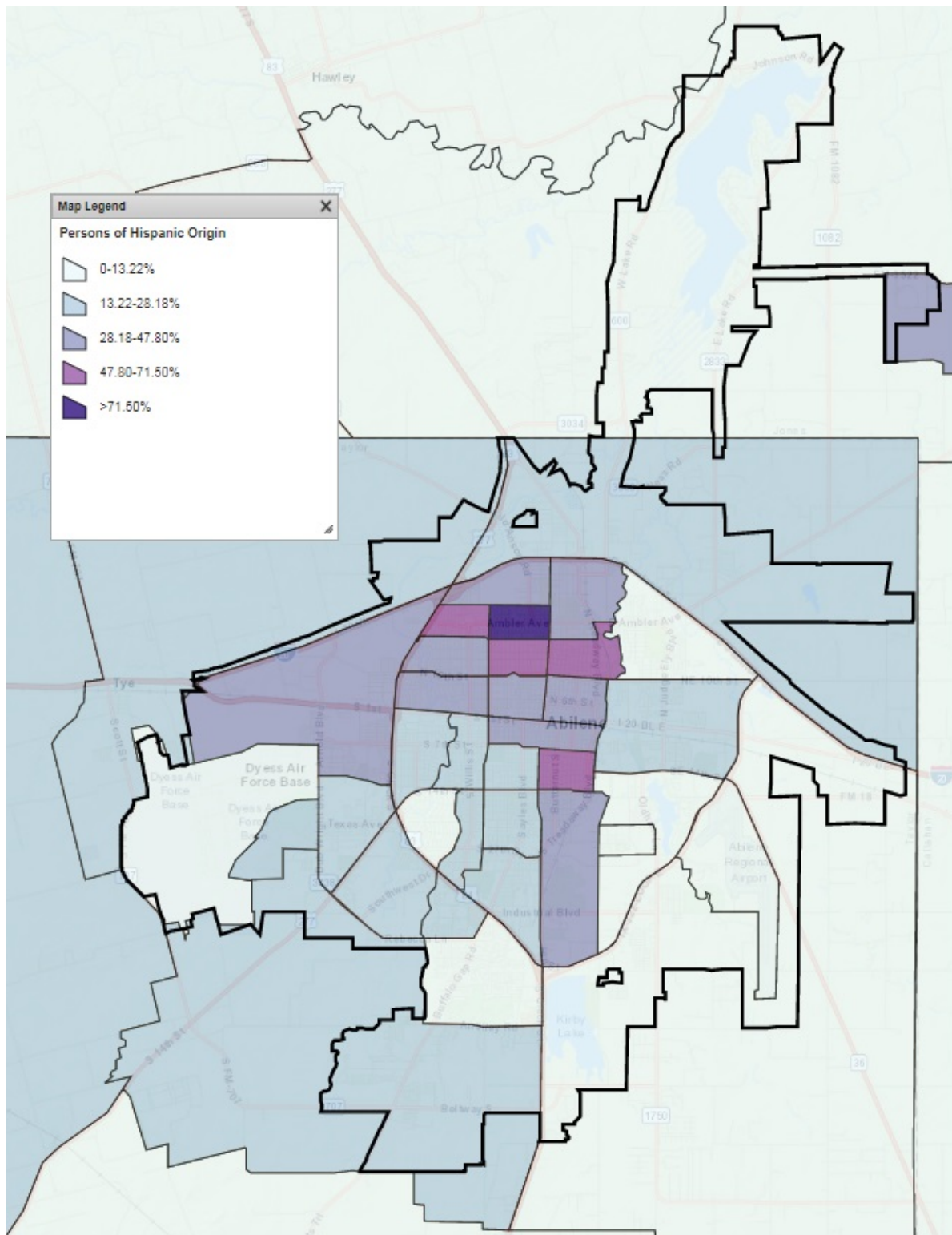
These neighborhoods, as mentioned above, contain much of the poorest housing stock in the city. As a result, the housing market contains much of the lowest cost housing as well. Code enforcement officials worked extensively in these areas in an attempt to maintain the integrity of the community in past years. The City funds an owner-occupied housing rehabilitation program through direct loans and grants to low- and moderate-income homeowners for the rehabilitation of single-family residential structures. Rehabilitation and critical repair programs are conducted by City to improve housing conditions in these areas.

Are there any community assets in these areas/neighborhoods?

These areas do have community assets, including community and senior centers, parks, and other public facilities. Much of the public housing operated by Abilene Housing Authority is also located within these neighborhoods.

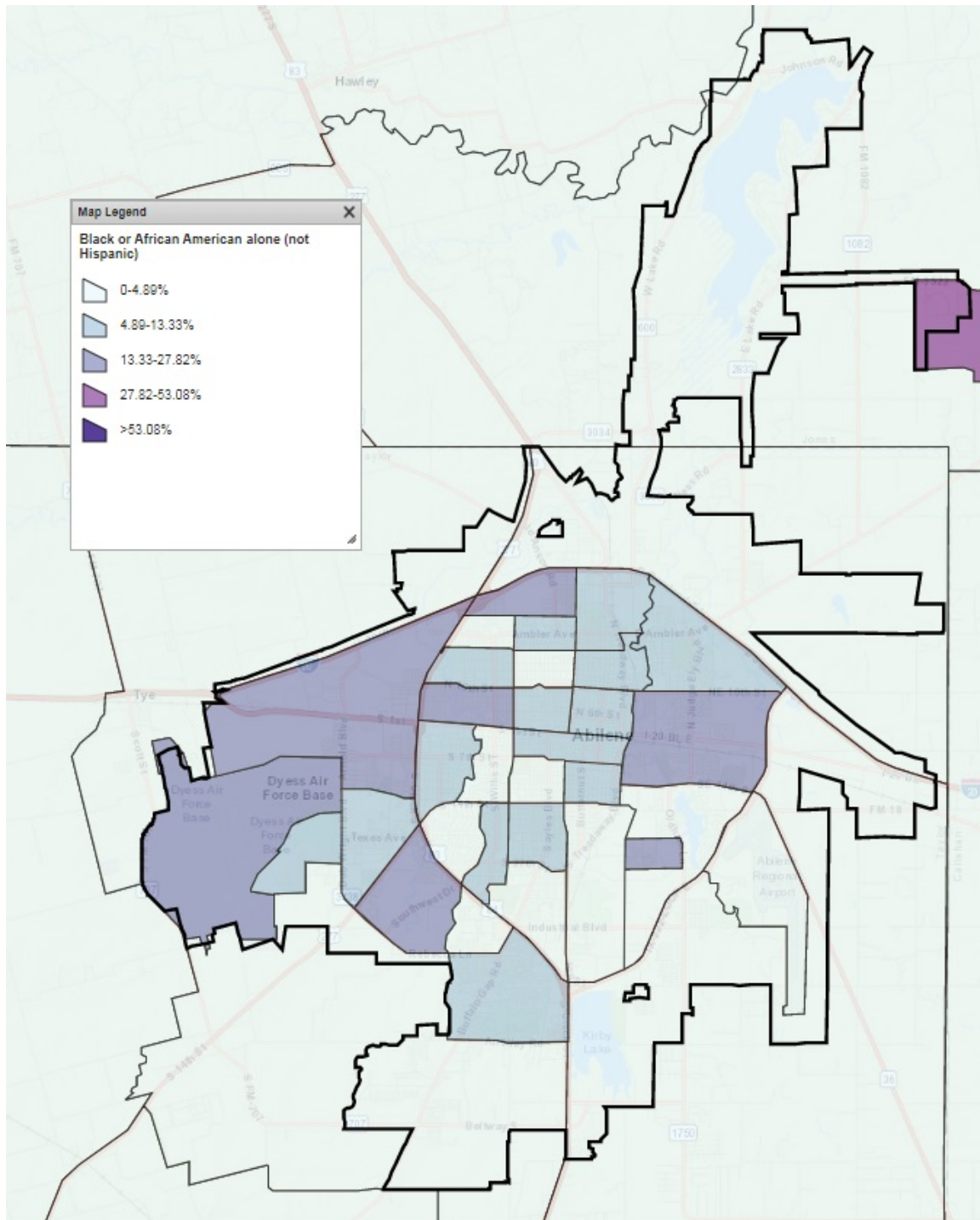
Are there other strategic opportunities in any of these areas?

In neighborhoods where many homes have been removed, there may be opportunities for development of new housing units. In areas where Brownfield issues are not a concern, private and non-profit developers can find appropriate redevelopment sites to provide homes for a range of household incomes, including lower- and upper-income households. These efforts would aid in sustainability efforts, bringing more people into the neighborhoods and improving the housing stock available in the market.



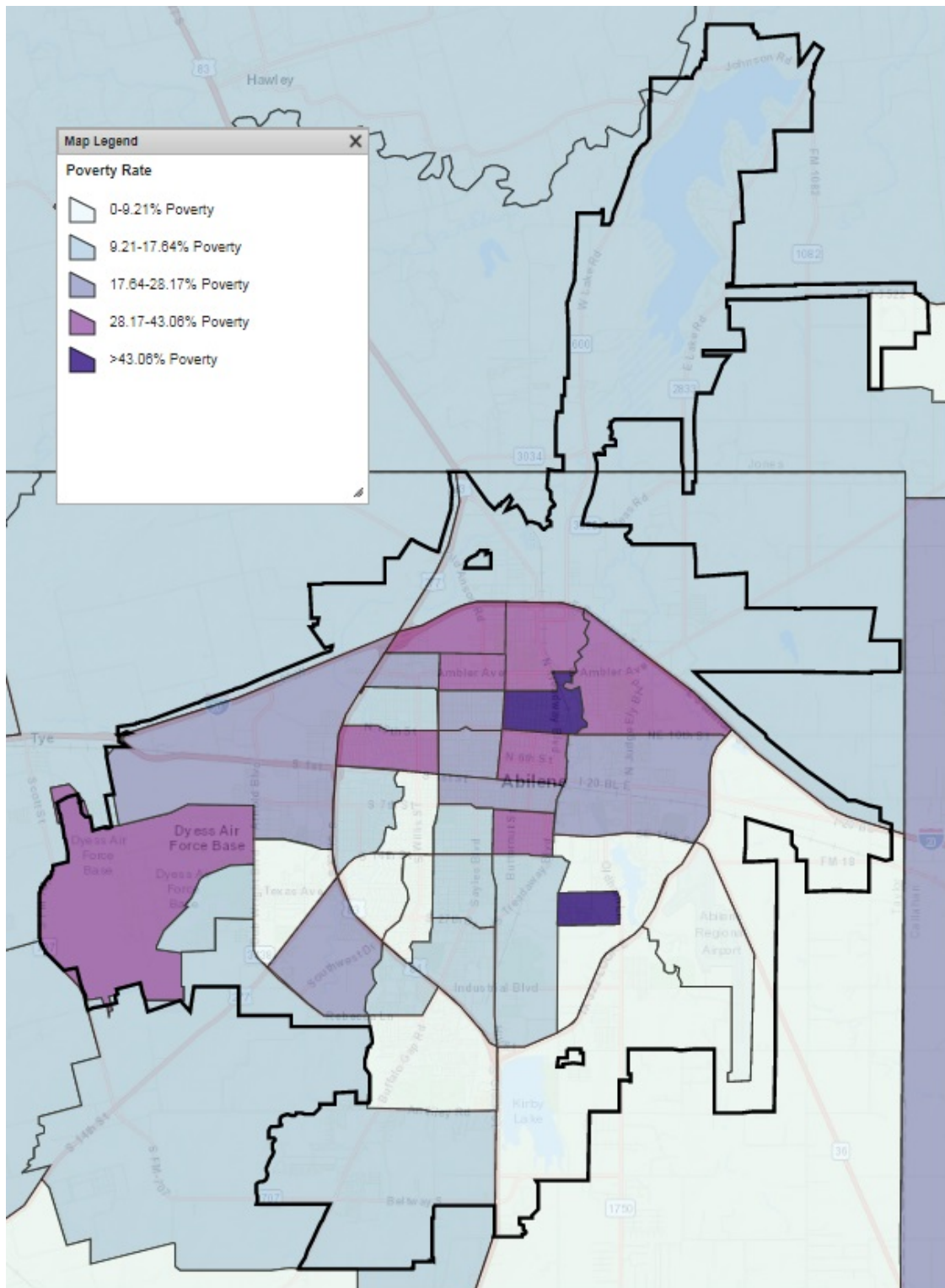
Percent Hispanic

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.



Percent African American

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.



Poverty Rate

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.

MA-60 Broadband Needs of Housing Occupied by Low and Moderate Income Households

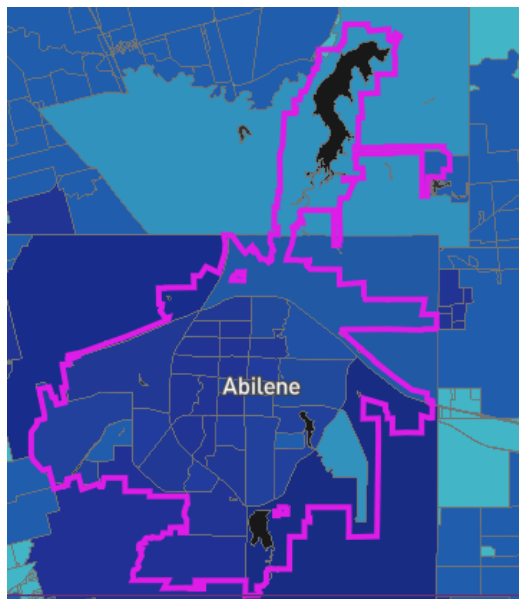
Describe the need for broadband wiring and connections for households, including low- and moderate-income households and neighborhoods.

One hundred percent of Abilene's geography has access to Broadband Internet, with 75.0% of households having an internet subscription, a slightly higher number than the Taylor County average (74.9%). The average home download speed in Abilene is 15 Mbps, nearly double the state average (6.35 Mbps.) However, both of those Broadband figures are low when compared to the Dallas/Ft. Worth Metroplex, for instance, which averages 125 Mbps, indicating that service providers in Abilene could improve in this area. Higher speed internet is a major draw for many businesses looking to expand into new geographic regions.

According to Broadband Now², small households with 1-2 individuals need download speeds of at least 25 Mbps. For larger households of four or more or individuals looking to work from home, speeds of at least 100 Mbps are ideal.

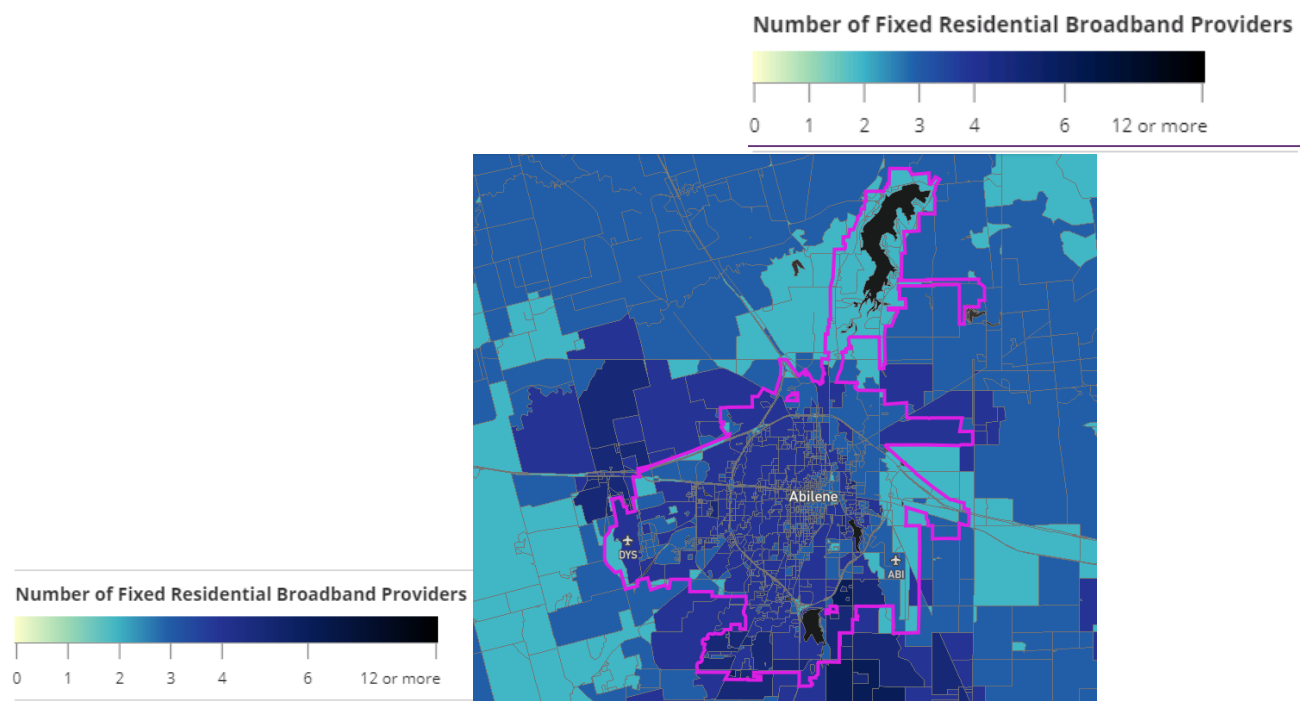
Describe the need for increased competition by having more than one broadband Internet service provider serve the jurisdiction.

Abilene has ~~231711~~ internet providers, including three mobile LTE companies and ~~138~~ offering wired or wireless residential broadband. including six Fiber providers, three Cable Internet providers, seven DSL providers, four Fixed Wireless providers and two Satellite providers. Abilene has an average download



² FCC coverage data is tallied up twice a year and only made public six or more months later. The availability shown here may not be complete.

speed of 15 Mbps and a maximum download speed of 100 Mbps. The average cost of internet in Abilene is \$30.81 per month.



MA-65 Hazard Mitigation

Describe the jurisdiction’s increased natural hazard risks associated with climate change.

The goal of Hazard Mitigation is to minimize or eliminate the risk to human life and property from known hazards. Hazards can include floods, tornadoes, wildfires, winter storms, and other major disasters. Mitigation planning will involve identifying and analyzing potential hazards that are affecting residents and to recommend possible actions to reduce their long-term impact. Abilene, Tx is considered one of the more vulnerable locations when it comes to climate hazards. Mega-droughts can trigger abrupt changes to regional ecosystems and the water cycle, which will reduce the availability of water resources and add an extreme risk of fires.

Describe the vulnerability to these risks of housing occupied by low- and moderate-income households based on an analysis of data, findings, and methods.

Low- and moderate-income families are more vulnerable when it comes to these changes, due to their inability to recover and rebuild, after such devastation.

The actual Hazard Mitigation plan for Abilene, Texas – Taylor County, can be found by visiting that ‘West Central Texas Council of Governments’ website at: www.wctcog.org/hazard_index.php

Strategic Plan

SP-05 Overview

Strategic Plan Overview

The Strategic Plan expounds the goals, objectives, strategies, and performance measures the City of Abilene intends to undertake in meeting the priority needs of the community and to guide the distribution of the Community Development Block Grant ([CDBG](#)) and [HOME Investment Partnerships Program](#) (HOME) funding for the next five years. The priorities listed were determined through consultation with industry and business interest, service providers, and the general public, and consideration of a community needs survey that was conducted in the development of the Consolidated Plan. Some of the activities included will be targeted to individual households who qualify for the programs according to their income status (individual benefit) and toward particular areas within the City where the median incomes of the census tracts involved are below 80 percent of the area median income (area benefit). The City's goals and objectives are summarized in Section SP-45.

SP-10 Geographic Priorities – 91.215 (a)(1)

Geographic Area

Table 46 - Geographic Priority Areas

1	Area Name:	City of Abilene City Limits
	Area Type:	Local Target area
	Other Target Area Description:	
	HUD Approval Date:	
	% of Low/ Mod:	38.2%
	Revital Type:	Comprehensive
	Other Revital Description:	
	Identify the neighborhood boundaries for this target area.	City of Abilene, Texas City Limits
	Include specific housing and commercial characteristics of this target area.	City of Abilene, Texas City Limits
	How did your consultation and citizen participation process help you to identify this neighborhood as a target area?	City of Abilene, Texas City Limits
	Identify the needs in this target area.	The City of Abilene does not intend to target funds on a geographic basis, but rather on the basis of need over the planning period. In consultation with City staff, service providers, and community groups, no particular areas were identified as needing a high level of investment.
	What are the opportunities for improvement in this target area?	The City of Abilene does not intend to target funds on a geographic basis, but rather on the basis of need over the planning period. In consultation with City staff, service providers, and community groups, no particular areas were identified as needing a high level of investment.
	Are there barriers to improvement in this target area?	The City of Abilene does not intend to target funds on a geographic basis, but rather on the basis of need over the planning period. In consultation with City staff, service providers, and community groups, no particular areas were identified as needing a high level of investment.

General Allocation Priorities

Describe the basis for allocating investments geographically within the jurisdiction (or within the EMSA for HOPWA)

Investments will be allocated according to responses to programmatic opportunities and client response to funding availability. Rehab programs may be targeted to the CDBG Eligible Areas or as individual benefit to low-income households. Public services, likewise, may be offered in low-income areas or generally to all qualified residents.

SP-25 Priority Needs - 91.215(a)(2)

Priority Needs

Table 47 – Priority Needs Summary

1	Priority Need Name	HOUSING NEEDS
	Priority Level	High
	Population	Low Moderate Large Families Families with Children Elderly Single Parents Individuals with a Disability
	Geographic Areas Affected	City of Abilene
	Associated Goals	Affordable Housing

	Description	Goal: Low- to moderate-income citizens will have access to safe, decent and affordable housing Objectives: Maintain, rehabilitate and improve existing single-family housing units, including emergency repairs; Increase the availability, financial accessibility and support for affordable home ownership opportunities; Increase the availability, financial accessibility and support of affordable and subsidized rental units; Support the expansion of education and enforcement of safety codes and/or services to improve conditions of housing through demolition through the removal of slum/blight; Increase the availability, financial accessibility and support for handicap accessible/disabled, senior housing; Increase the availability and awareness of programs that help homeowners modify their units for accessibility; Educate renters and landlords on all aspects of fair housing practices to include, but not limited to, property maintenance and environmental hazards; Support the expansion and awareness of the Empowerment Zone program to revitalize low-income neighborhoods; Support infrastructure expansion of transitional housing and emergency shelters.
	Basis for Relative Priority	Priorities were determined through an evaluation of the community survey and public participation process.
	2	
	Priority Need Name	COMMUNITY SERVICES (Public Services)
	Priority Level	High
	Population	Low Moderate Large Families Families with Children Elderly Single Parents Persons with Mental Illness Persons with Substance Use Issues Persons with a Disability Homeless

	Geographic Areas Affected	City of Abilene
	Associated Goals	
	Description	Goal: Improve the quality of and access to programs and facilities for health and safety, information, transportation and recreation services Objectives: Support the expansion of comprehensive affordable health/dental, substance abuse, and mental health services; Provide and expand social and recreational services and facilities including but not limited to, youth, seniors and individuals with disabilities; Support maintenance, enhancement and expansion of quality childcare; Support maintenance, enhancement, and expansion of transportation services; Increase awareness about available services in the community; Increase capacity and access to case management.
	Basis for Relative Priority	Priorities were determined through an evaluation of the community survey and public participation process.
3	Priority Need Name	ECONOMIC DEVELOPMENT
	Priority Level	High
	Population	Low Moderate Large Families Families with Children Elderly
	Geographic Areas Affected	
	Associated Goals	

	Description	Goal: Enhance the economic well-beingwell-being of all citizens through education and training, employment opportunities, and business development Objectives: Support maintenance, enhancement and expansion of technical assistance to small businesses; Support the development of a micro loan/grant program for small business development; Support the development of job skills training for youth, workforce development and job creation; Support financial literacy programs.
	Basis for Relative Priority	Priorities were determined through an evaluation of the community survey and public participation process.
4	Priority Need Name	PUBLIC IMPROVEMENTS AND PUBLIC INFRASTRUCTURE
	Priority Level	High
	Population	Low Moderate Large Families Families with Children Elderly Persons with a Disability
	Geographic Areas Affected	City of Abilene
	Associated Goals	Community Facilities and Infrastructure
	Description	Goal: Enhance the quality and use of the physical environment of Abilene Objectives: Provide and maintain adequate public and community facilities, recreational facilities and infrastructure especially in low- to moderate-income (LMI) areas, including green spaces; Provide and maintain adequate transportation facilities and enhance pedestrian, bike, and traffic safety; Support the expansion of ADA compliant sidewalks; Support maintenance, enhancement and expansion of streets, sidewalks, drainage, water and sewer connections.

	Basis for Relative Priority	Priorities were determined through an evaluation of the community survey and public participation process.
5	Priority Need Name	HOMELESS NEEDS and SERVICES
	Priority Level	High
	Population	Extremely Low Low Large Families Families with Children Elderly Rural Chronic Homelessness Individuals Families with Children Mentally Ill Chronic Substance Abuse Veterans Persons with HIV/AIDS Victims of Domestic Violence Unaccompanied Youth
	Geographic Areas Affected	City of Abilene
	Associated Goals	
	Description	Goal: Prevent and Reduce Homelessness Objectives: Support mental health/supportive services; Support homeless prevention and emergency assistance services; Support the expansion of beds for domestic violence shelters Provide and maintain homeless facilities, transitional housing facilities, emergency housing, domestic violence shelters, unaccompanied youth and ex-offenders; Enhance referral services; Increase community awareness of current programs and services; Increase awareness of HUD funding programs available to local nonprofit organizations

	Basis for Relative Priority	Priorities were determined through an evaluation of the community survey and public participation process.
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Narrative (Optional)

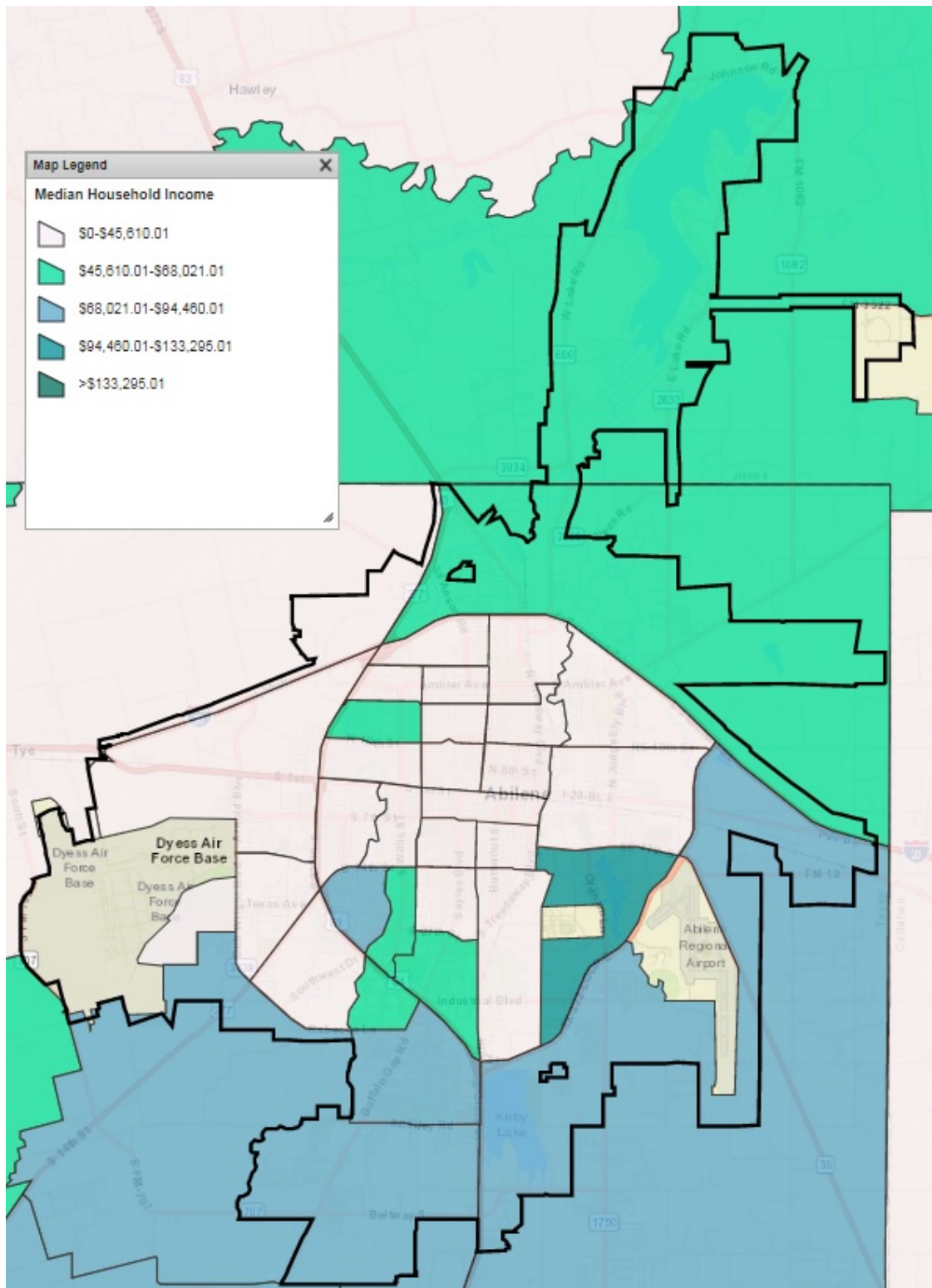
SP-30 Influence of Market Conditions – 91.215 (b)

Influence of Market Conditions

Affordable Housing Type	Market Characteristics that will influence the use of funds available for housing type
Tenant Based Rental Assistance (TBRA)	The use of tenant-based rental assistance and Section 8 vouchers are dependent on rental property owners' willingness to rent their units to TBRA and Section 8 Voucher clients. In many communities, landlords are reluctant to rent to these clients due to the reputation they have that the clients do not take care of the property as well as other renters do. Other market conditions that could influence the use of TBRA and Section 8 Vouchers have to do with rents being asked for rental property. If rents are too high, the rental assistance or FMR might not be enough to allow clients to lease the units, even if the landlord was willing.
TBRA for Non-Homeless Special Needs	Added to the description of TBRA market characteristics above, non-homeless special needs clients may also encounter housing units that do not meet their accessibility needs. Most housing in any community has not had accessibility improvements that allow persons with mobility issues ease of access. While landlords are obligated to make reasonable accommodations for such renters, many need more accommodations than typical landlords would consider reasonable.
New Unit Production	The production of new housing units is influenced by several market conditions, including the cost of land, the cost of construction, and prevailing interest rates. While mortgage interest rates are currently at historic lows, the COVID-19 pandemic has affected the housing market. The inventory, especially for affordable housing, may be low and mortgage lenders have increased their minimum qualifications so some individuals may not qualify for a loan. Due to the changes in lending, even some well qualified buyers are finding it difficult to navigate the new mortgage processes that have been instituted. The resulting delays in securing loans can burden housing developers and restrict their activities.
Rehabilitation	Rehabilitation activities can be influenced by the cost of materials and labor. In City of Abilene, these costs are relatively low in comparison to other areas of the country. The efficiency of rehabilitation is dependent on the after rehabilitation value of the home. If the market value of the home does not support the extent of rehabilitation required, market financing may not be feasible without substantial equity investment by the owner or through grant funding being used to repair the home.

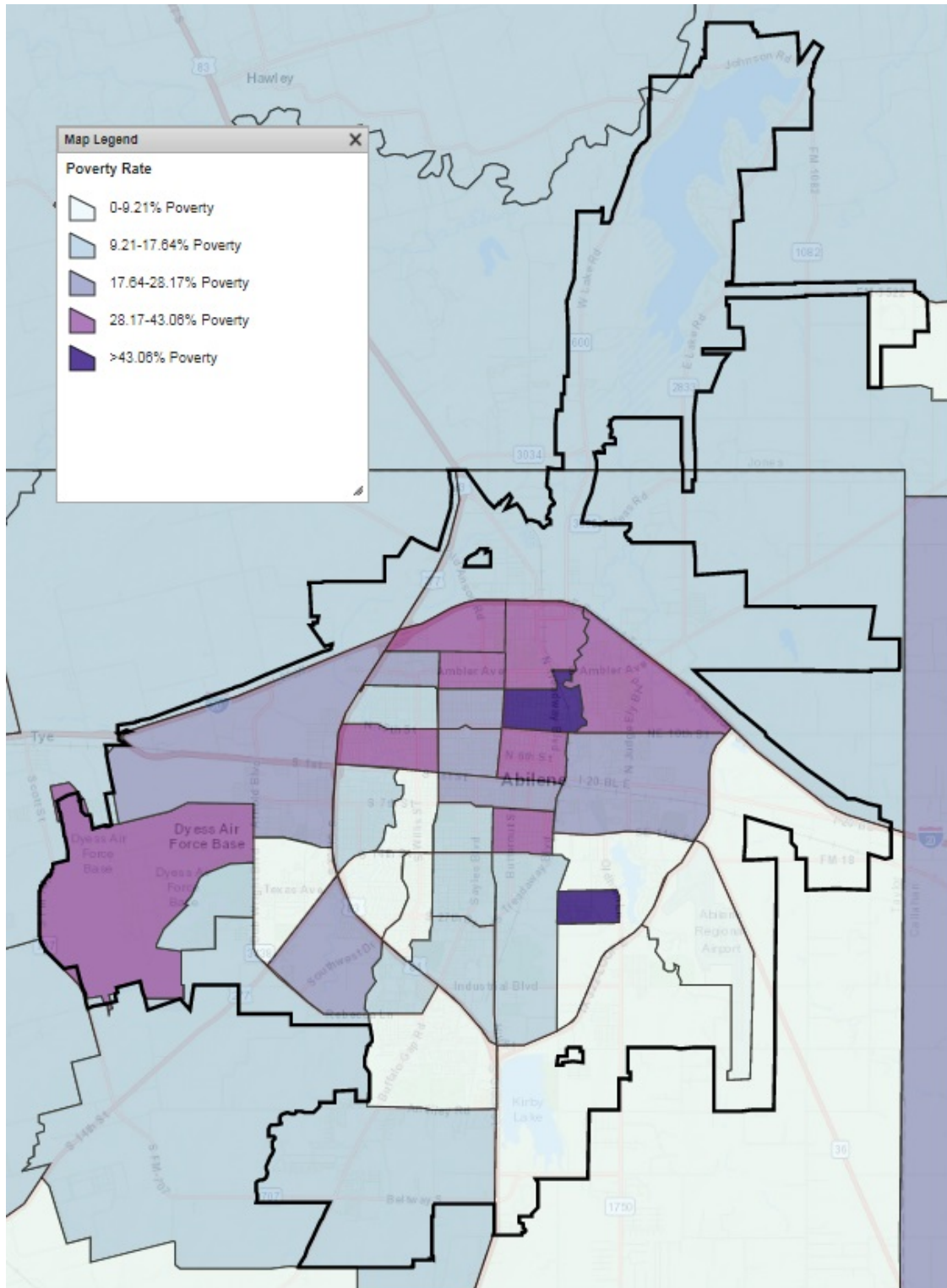
Affordable Housing Type	Market Characteristics that will influence the use of funds available for housing type
Acquisition, including preservation	Acquisition, including preservation, can be influenced by the market value of the structure. With home purchases by private individuals, the historic low interest rates off-set increases in the market value of the housing stock. Monthly housing costs of higher priced homes at lower interest rates approximate the monthly housing costs of lower priced homes at higher interest rates. In the case of a City or non-profit organization buying housing stock for rehabilitation and resale or for preservation, the costs of purchasing a home outright at higher prices can reduce the number of homes that can be purchased or reduce the funds available for rehabilitation activities.

Table 48 – Influence of Market Conditions



Median Household Income

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps.



Percent of Population Below Poverty Level

Map Sources: US Department of Housing and Urban Development, Affirmatively Furthering Fair Housing Mapping Tool, Release November 2017. Available at <https://egis.hud.gov/affht/> ; CPD Maps

SP-35 Anticipated Resources - 91.215(a)(4), 91.220(c)(1,2)

Introduction

The City of Abilene receives funding for the Community Development Block Grant Program and HOME Investment Partnership Program. This program will bring \$6,593,675 into the City through CDBG and HOME Entitlement funds with an additional \$100,000 in HOME Program Income to support affordable housing and promote economic development during the five-year period. During the first-year the City will receive \$1,318,735 in CDBG and HOME Entitlement funds with an additional \$20,000 in HOME Program Income. The City anticipates reprogramming and an additional \$891,155 of prior year CDBG funds and \$426,372 of prior year HOME program funds for use in this Annual Plan year.

Anticipated Resources

Program	Source of Funds	Uses of Funds	Expected Amount Available Year 1				Expected Amount Available Remainder of ConPlan \$	Narrative Description
			Annual Allocation: \$	Program Income: \$	Prior Year Resources: \$	Total: \$		
CDBG	Public - Federal	Acquisition Admin and Planning Economic Development Housing Public Improvements Public Services	870,932	0	891,155	1,762,087	3,483,728	Expected amount for remainder of Con Plan equals the Year 1 Annual Allocation times four.

Program	Source of Funds	Uses of Funds	Expected Amount Available Year 1				Expected Amount Available Remainder of ConPlan \$	Narrative Description
			Annual Allocation: \$	Program Income: \$	Prior Year Resources: \$	Total: \$		
HOME	Public - Federal	Acquisition Homebuyer Assistance Homeowner Rehab Multifamily Rental New Construction Multifamily Rental Rehab New Construction for Ownership TBRA	447,803	20,000	426,372	894,175	1,791,212	Expected amount for remainder of Con Plan equals the Year 1 Annual Allocation plus the Year 1 Program Income times four.
CDBG-CV	Public – Federal	COVID-19 relief and assistance for the community and businesses	1,168,870	0	0	1,168,870		Expected amount is for FY2020.

Table 49 - Anticipated Resources

Explain how federal funds will leverage those additional resources (private, state and local funds), including a description of how matching requirements will be satisfied

Federal funds will be leveraged through the ability of service organizations to raise program funds through outside sources, other loan sources needed for housing development activities, and the City's General Fund, where appropriate.

The City's HOME match liability is accomplished in its entirety through the CHDO, Habitat for Humanity. For each HOME-assisted construction of affordable housing unit match is satisfied by volunteer hours, sweat equity, in-kind labor and materials and with discounted Present Day Value of yield foregone on the 0% interest financing.

If appropriate, describe publicly owned land or property located within the jurisdiction that may be used to address the needs identified in the plan

None currently identified. The City will continue to evaluate opportunities to use public lands for future development.

Discussion

The City has programmed approximately \$4,354,660 for the projects under the CDBG program and \$2,239,015 for the projects under the HOME Program for the FY 2020-2024 program years. These funds will be used to operate a range of private and public services as described later in the Annual Plan. [Additionally, the city has been allocated \\$1,168,870 for COVID-19 assistance and relief through CDBG-CV funding.](#)

SP-40 Institutional Delivery Structure – 91.215(k)

Explain the institutional structure through which the jurisdiction will carry out its consolidated plan including private industry, non-profit organizations, and public institutions.

Responsible Entity	Responsible Entity Type	Role	Geographic Area Served
ABILENE	Government	Economic Development Homelessness Non-homeless special needs Ownership Planning neighborhood improvements public facilities public services	Jurisdiction
ABILENE HOUSING AUTHORITY	PHA	Public Housing Rental	
WEST CENTRAL TEXAS COUNCIL OF GOVERNMENTS	Regional organization	Economic Development Planning neighborhood improvements	
ABILENE HABITAT FOR HUMANITY	Non-profit organizations	Ownership	
DAY NURSERY OF ABILENE	Non-profit organizations	Economic Development Community Services	
ABILENE - TAYLOR COUNTY PUBLIC HEALTH DISTRICT	Regional organization	Homelessness public services	
ABILENE HOPE HAVEN	Non-profit organization	Homelessness	
WEST TEXAS HOMELESS NETWORK		Homelessness	
THE SALVATION ARMY	Non-profit organization	Homelessness	
NOAH PROJECT	Non-profit organization	Homelessness	

Table 50 - Institutional Delivery Structure

Assess of Strengths and Gaps in the Institutional Delivery System

The institutional delivery system in Abilene is well coordinated and spans a range of community needs. The City has many years of experience managing and implementing the programs addressed in the Consolidated Plan, as well as working with outside agencies that fill some of the needs as outlined in the Consolidated Plan.

Availability of services targeted to homeless persons and persons with HIV and mainstream services

Homelessness Prevention Services	Available in the Community	Targeted to Homeless	Targeted to People with HIV
Homelessness Prevention Services			
Counseling/Advocacy	X	X	X
Legal Assistance	X	X	
Mortgage Assistance	X	X	
Rental Assistance	X	X	
Utilities Assistance	X	X	
Street Outreach Services			
Law Enforcement	X	X	
Mobile Clinics	X	X	
Other Street Outreach Services	X	X	
Supportive Services			
Alcohol & Drug Abuse	X	X	
Child Care	X	X	
Education	X	X	
Employment and Employment Training	X	X	
Healthcare	X	X	X
HIV/AIDS	X	X	X
Life Skills	X	X	
Mental Health Counseling	X	X	
Transportation	X	X	
Other			

Table 51 - Homeless Prevention Services Summary

Describe how the service delivery system including, but not limited to, the services listed above meet the needs of homeless persons (particularly chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth)

The services targeted to homeless persons and persons with HIV/AIDS and mainstream services are made available through the coordination of services provided by the array of non-profit service providers that constitute the West Texas Homeless Network. These organizations partner with each other, the City, and mainstream service providers to provide a wide ranging response to the service needs of homeless persons and persons with HIV/AIDS, particularly chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth.

Describe the strengths and gaps of the service delivery system for special needs population and persons experiencing homelessness, including, but not limited to, the services listed above

The City's CDBG and HOME funds continue to be used to help meet the demand for decent, safe and affordable housing, homelessness, and other special needs. The City G.V. Daniels Recreation/Senior Center located in the Carver Neighborhood is working to provide access and training to citizens and youth to improve/update their technology skills and to improve employment opportunities. Additionally, the Office of Neighborhood Services (under the Planning and Development Services Department) which administers the CDBG and HOME programs will be involved in a number of activities. Activities will include continued participation in the Continuum of Care Plan. Continued involvement with organized targeted neighborhood organizations, and active collaboration with entities such as the United Way, West Texas Homeless Network, Connecting Caring Communities (CCC), Baptist Children and Family Services (BCFS), Disabilities in Action, Hope Haven Too, Habitat for Humanity, FaithWorks and the Abilene Housing Authority (AHA) to help identify and meet the under-served needs in the areas of housing, employment and training opportunities, homelessness, and special needs.

The West Texas Homeless Network has identified the following gaps in the service area:

- Limited Mainstream Resources – many chronically homeless individuals do not stay in the area long enough to determine eligibility for services;
- Limited staff and lack the financial resources and capacity to construct and manage permanent supportive housing projects;
- Lack of permanent supportive housing in the area and the lengthy waiting list;
- Limited access to medical and dental care;
- —The City of Abilene does not receive Emergency Shelter Grant funds; however, believes that the needs of the homeless will be addressed with Continuum of Care funding, through the Abilene Hope Haven projects, Salvation Army HPRR program and West Texas Homeless Network member agencies. Assistance for veterans is also available through the AHA HUD-VASH Program and a collaborative program with the Big Spring VAMC.

Provide a summary of the strategy for overcoming gaps in the institutional structure and service delivery system for carrying out a strategy to address priority needs

The City of Abilene will implement the Consolidated Plan by using the Planning and Development Services Department, Neighborhoods Initiatives Division (as part of the Office of Neighborhood Services) as the lead agency. The strength of the system is that we have an experienced team of staff members as well as an in-house Housing Rehabilitation Coordinator. Staff will manage and work closely with non-profit and for profit organizations in carrying out the Strategic Plan activities. Various initiatives within the strategy include:

1. Work with non-profit organizations to address community needs and provide support to federal and non-federal funding initiatives.
2. Work with private industry to address important issues that hamper housing and community development efforts.
3. Identify opportunities to create private/public partnerships for project finance and development to leverage federal funds.

SP-45 Goals Summary – 91.215(a)(4)

Goals Summary Information

Sort Order	Goal Name	Start Year	End Year	Category	Geographic Area	Needs Addressed	Funding	Goal Outcome Indicator
1	Safe, Decent, Affordable Housing	2020	2024	Affordable Housing		Housing Needs	CDBG: 550,000 HOME: 442,162	Homeowner Housing Added: 15 Household Housing Unit Homeowner Housing Rehabilitated: 245 Household Housing Unit, including 20 Single-Family Units for Rehab Direct Financial Assistance to Homebuyers: 25 Households Assisted
2	Prevent and reduce homeless	2020	2024	Homeless		Homeless Needs	CDBG: \$128,427	Homeless Person Overnight Shelter: 500 Persons Assisted

Sort Order	Goal Name	Start Year	End Year	Category	Geographic Area	Needs Addressed	Funding	Goal Outcome Indicator
3	Increase access to community services and physical infrastructure	2020	2024	Community services Public Improvements and infrastructure Economic Development		Community Services Public Improvement	CDBG: \$211,000	Public service activities other than Low/Moderate Income Housing Benefits: 22,500 Persons Assisted

Table 52 – Goals Summary

Goal Descriptions

1	Goal Name	Safe, Decent, Affordable Housing
	Goal Description	Goal: Low- to Moderate-income citizens will have access to safe, decent, and affordable housing There is a greater need for affordable houses and rental units than supply in Abilene. Additionally, the supply of affordable housing, especially in LMI neighborhoods, is often not decent or safe for families. Many homes need minor or major structural, electrical, or plumbing repairs to make them safe. The City of Abilene has prioritizing CDBG and HOME funding for its Single Family Rehab/Reconstruction and Critical/Limited Repair programs to help low- to moderate-income individuals and families make critical repairs to their homes. The City also funds a First-Time Homebuyers program to help low- to moderate-income individuals to purchase their first home. The City will continue to partner with community organizations, such as Habitat for Humanity and the Abilene Housing Authority, to provide safe, decent, and affordable housing for low- to moderate-income individuals and families.

2	Goal Name	Prevent and reduce homeless
	Goal Description	Goal: Prevent and reduce homeless While Abilene has achieved a functional end to veteran (discharge other than dishonorable, with some level of active duty service) and chronic (verifiable disabling condition and a consecutive year of homelessness or length of homelessness totaling 12 months over four separate instance over the last three years) homelessness, homelessness is still very much an issue in Abilene. The City will continue to work with its community partners to enhance the number of emergency, transitional, and permanent supportive housing beds available for individuals, families with children, victims of domestic violence, and veterans. The City will continue to prioritize funding for capital infrastructure projects for community organizations who work with the homeless population to prevent and reduce homeless. The source of funds will be CDBG.
3	Goal Name	Increase access to community services and physical infrastructure
	Goal Description	Goal: Improve the quality and access to programs and facilities for health and safety, information, transportation, and recreation services and enhance the quality and use to the physical infrastructure of Abilene The City of Abilene will continue to help fund community organizations that provide programs related to health and safety, information, transportation, recreation service, workforce development training, childcare and more. The City has prioritized CDBG funds to help low- to moderate-income individuals without dental insurance to access free dental care.

Estimate the number of extremely low-income, low-income, and moderate-income families to whom the jurisdiction will provide affordable housing as defined by HOME 91.315(b)(2)

The City plans to provide HOME funding for housing rehabilitation, first-time homebuyer assistance with down payment and closing cost assistance to provide affordable owner-occupied housing, and CHDO funding for new construction. Eligible applicants are low and moderate-income at 80% or below the median income citywide. A total of 60 households will be assisted through the HOME funding goals over five years. These include 20 single-family units of rehabilitation/reconstruction and first-time homebuyer assistance for closing costs and downpayment to 25 low-moderate income households, and CHDO funds for new construction for 15 low-moderate income households over the five year period.

SP-50 Public Housing Accessibility and Involvement – 91.215(c)

Need to Increase the Number of Accessible Units (if Required by a Section 504 Voluntary Compliance Agreement)

The AHA continues to manage 213 public housing units at four separate sites. The AHA has three sites that are multi-family, and one site that is an elderly/disabled site. The sites are as follows:

- Earl Williams Complex 4398 North 7th St. – 75 units that consist of 1, 2, 3, and 4 bedroom units. One main office and community center combined.
- Riviera Complex 3001 North 6th St. - 38 units that consist of 2, 3, and 4 bedroom units. One community center and laundry facility combined.
- Vogel Complex 2100 Vogel and 2250 Vogel – 72 units that consist of 1, 2, 3, and 4 bedroom units. One maintenance building.
- Robert Deegan Complex 3402 Rebecca Lane – 28 units that consist of 1 bedroom units for elderly/disabled. One community center and maintenance building combined.

During the 2014/2015 program year the AHA received a “High Performer” performance rating.

- Public Housing Rating of High Performer 4th consecutive year
- 95 overall score
- Physical Site score 92 out of 100 (only get one overall number)
- Section 8 (HCV) Program received High Performer Rating 7th consecutive year.

Activities to Increase Resident Involvements

The AHA works to provide various opportunities for tenant involvement. The AHA has an active Resident Advisory board consisting of Public Housing participants. This Board works directly with AHA management and the AHA resident initiative coordinator to help resolve issues, bring up needs for the capital fund improvement dollars, and work to help set new or revise old policies. The AHA resident coordinator works directly with many of the community agencies to attain programs and benefits for the residents.

- Work Force Center that provides job search, job skills, short term training and supportive assistance to residents seeking work.
- Food Bank for Food pantry resources.
- Abilene Independent School System –partnering with lunch programs, Head Start registration, and truancy prevention.
- Taylor County Extension and WIC for health and nutrition needs

- Abilene Taylor County Public Health Department for the Expanded Primary Health Care (E.P.H.C) and Medical Assistance for Area Citizens (MAAC) by providing satellite site for applications and referrals.
- PRC (Prevention Resource Center) for Alcohol, Drug, Tobacco, and self-esteem issues.
- New Horizon for family counseling
- House of Faith Abilene provides on-site activities for Public Housing children at the Riviera and Earl Williams sites.
- Boys and Girls Club program that expands productive, recreational opportunities for its youth and enables the AHA to provide preventive services for the youth.
- Habitat for Humanity Presentations for Tenants interested in home ownership.
- Member of the Advisory Board for the development of the TTU Federally Qualified Health Clinic.
- Annual Father's Day Initiative – Event to invite fathers to be involved with their children through a cookout, games, and Community resource tables.
- Money-Follows-the Person (MFP) Program – designed to assist families move from Nursing Homes back into a community of their choice with supportive services. AHA set-aside five Public Housing units and five Housing Choice Vouchers for this program.

Is the public housing agency designated as troubled under 24 CFR part 902?

No

Plan to remove the 'troubled' designation

Not applicable

SP-55 Barriers to affordable housing – 91.215(h)

Barriers to Affordable Housing

The following barriers to affordable housing resulting from public policies of the City of Abilene are identified through the Consolidated Plan process:

Several barriers continued to negatively affect affordable housing: long waiting lists, inability of residents to come up with rent deposits and utility deposits, due to local groups not having adequate funding because of the sluggish economy and lack of philanthropy due to the economy. Additionally, due to the COVID-19 pandemic in 2020, many families may be faced with unemployment and reduced hours and paychecks. Housing affordability is also impacted by local factors such as the availability of land for new construction, the income of residents, the supply of housing, and housing costs. Affordable housing in Abilene is deterred by insufficient funds for down payment, lack of credit, and poor credit. Due to the COVID-19 pandemic, many mortgage lenders have increased their minimum qualifications requirements for new loans. In addition, the long-term affordability of a home, such as the required monthly principal, interest, taxes, and insurance payments, are often too high compared with available income for a low-income household. Furthermore, the availability of homes for sale in the price range and size for the low- to moderate-income family is limited. The Abilene Association of Realtors reported that the median sales price during April 2020 for a home was \$176,900. The price is up 6.7% compared to April 2019. The housing inventory was down 12.1% in April 2020 compared to April 2019, but the smaller supply is likely due to COVID-19. Interestingly, the number of closed sales in April 2020 increased 9.5% compared to the previous year with homes only staying on the market for 2.6 months compared to three months indicating that there still may be a demand for housing.

The U.S. Department of Housing and Urban Development (HUD) describes a household experiencing a cost burden as having gross housing costs that are more than 30% of gross income. A household that experiences a severe cost burden is when gross housing costs are more than 50% of gross income. The cost of home ownership can affect the level of property maintenance, the ability of the household to pay property taxes and ultimately the household's ability to retain its home. Likewise, high rents (and prohibitive security deposits) can make it difficult for renters to afford units. With almost half of the Abilene households under the median income, the cost of ownership or renting also becomes a burden.

Strategy to Remove or Ameliorate the Barriers to Affordable Housing

Remedial actions

Compared to nearby communities, Abilene's policies are reasonable. Furthermore, the development regulation process runs smoothly. City staff is available to assist developers and answer any questions. In the past, the City has provided regulatory incentives for affordable housing on a case-by-case basis. The Planning Division has developed incentives, in the form of relaxed regulations and Capital Improvements Program funding for infill development on empty plots of land in currently developed neighborhoods. Infill development is generally less expensive than new-neighborhood construction.

Thus, infill development incentives will most likely result in a greater supply of affordable housing. In the past years, the City has set aside and awarded CIP funds to encourage infill development and will continue to do so as CIP funds are available. Much work remains to increase affordable housing opportunities. As a result, the City will continue to re-evaluate all development fees, regulations and program policies and procedures to determine whether any further revisions may be appropriate to enhance affordable housing for low-income City residents. As specific projects are proposed, the City will review the project for its compliance with existing local laws and regulations. If a local law or regulation should prove to have a negative impact on a proposed affordable housing program or project, such law or regulation would be reviewed to determine its viability.

Barriers to Affordable Housing

- Insufficient funds for down payment - Private lending institutions typically require home purchasers to provide 10 to 20 percent of a home's value as a down payment. Many low-income households are already rent burdened, paying as high as 40 to 50% of their income for housing. Such high costs for current shelter preclude these low-income households from accumulating the funds for a down payment.
- High existing debt of prospective purchasers - Many low-income households also are saddled with excessively high existing debt for such items as credit accounts, car payments, and medical expenses that prevent obtaining private lender financing.
- Need for property repairs - The homes most affordable to low-income households tend to be located in neighborhoods where property has been poorly maintained and requires repair. Therefore, low-income purchasers often confront the prospect of obtaining a home that will require further financial investment for property improvements. Money for such improvements is frequently unavailable to low-income buyers and private lenders often are unwilling to lend the necessary funds for acquisition and repairs. Complicating the situation further is the reality that such affordable housing is often located in neighborhoods where money invested in property improvements does not necessarily translate into a corresponding increase in the value of the property.
- Lack of credit - Many low-income homebuyers have no credit record because they pay most of their expenses in cash.
- Poor credit - A very common barrier to home ownership is a blemished credit record. Unfavorable credit information can stay on a credit record for up to seven years and bankruptcy records stay on the report for 10 years. Additionally, due to the COVID-19 pandemic many mortgage lenders have increased their minimum qualification requirements of credit scores. For example, a person with a credit score of 580 can typically qualify for an FHA loan, but many lenders are now requiring a minimum score of 650.
- Available funding - A common barrier to affordable housing is available funding to the jurisdiction. When Federal funding to the jurisdiction is threatened, the availability of affordable housing for low-income persons is threatened, as well.
- Unemployment – According to the Bureau of Labor Statistics, the Abilene December 2019 workforce unemployment rate is 2.8%, which has remained steady since August 2019. However,

due to the COVID-19 pandemic, unemployment ~~has risen~~rose to ~~9~~14.0% in April 2020. As unemployment rises, more people may face housing insecurity. While unemployment declined to 4.9% in August 2020, many individuals and businesses face uncertainty due to the pandemic.

- Low number of living-wage jobs available.
- Housing inventory – There is a severe deficiency of rental units available for those living on very low incomes who can only afford a monthly gross rent of \$500. Most of the available rental units in that category are one-bedroom or smaller units, which would not be optimal for families of more than two people.

SP-60 Homelessness Strategy – 91.215(d)

Reaching out to homeless persons (especially unsheltered persons) and assessing their individual needs

The West Texas Homeless Network (62 persons from an average of 23 different agencies, businesses or organizations) is a multi-county coalition that conducts the Point-In-Time Survey. The survey catalogues homeless characteristics and needs to develop better strategies for assisting people out of homelessness. Each year the sample size has increased, and the quality of data has improved. Communities gain important information through this initiative. The annualized homeless population estimate for Abilene is 501. Even though the process improves each year, these numbers are conservative. The 2020 Point-in-Time Survey effort captured 116 surveys.

Addressing the emergency and transitional housing needs of homeless persons

Several local organizations such as social service agencies, charitable groups and religious organizations provide emergency/transitional housing and/or supportive services to the homeless and at-risk persons including abused women and children and substance abusers. The West Texas Homeless Network will continue to expand the HMIS in order to provide up-to-date information on services. The Network is expanding the distribution of Pocket Pals ([pocket resource guide](#)) to include convenience stores and other public locations.

Services in place:

Rental/Mortgage/Utility Assistance

- AIDS Resources of Rural Texas
- Aspermont Small Business Development Center
- Central Texas Opportunities
- Community Action Program, Inc.
- First Baptist Church
- Episcopal Church of the Heavenly Rest
- Shackelford County Resource Center
- Taylor County Veterans Services Office
- The Salvation Army
- Christian Service Center of Abilene
- Christ Community Resource Center
- Abilene Baptist Social Ministries
- Methodist Service Center
- Baptist Children's and Family Services (Our House)

Rental Assistance

- AHA
- Sweetwater Public Housing Authority
- Stamford Public Housing Authority
- Baptist Children's and Family Services (Our House)
- Abilene Hope Haven
- WCTRF-SSVF

Outreach to Homeless on the Streets:

Love & Care Ministries conducts outreach through the Mobile Medical Unit which provides access to medical and dental services at different sites. Love & Care Ministries also visits homeless persons in their camps and provides approximately 100 sack lunches per day. Additional services at their facility such as providing lunch 4 days a week which is approximately 100-250 meals each day, and assistance obtaining I.D.'s and birth certificates and providing showering facilities.

Supportive Services for Veteran Families (SSVF, part of the West Central Texas Regional Foundation) and Abilene Hope Haven (AHH) both provide housing-focused outreach to individuals and families currently experiencing homelessness in Abilene. They develop relationships with those who are currently experiencing homelessness with the goal of providing a path forward in housing assistance programs. SSVF maintains our community's veteran by-name list and AHH maintains our community's chronic by-name list. A by-name list is an up-to-date list of every person in a specific subpopulation that is currently experiencing homelessness in an area and is a key component to making progress in achieving a functional end to homelessness among targeted populations.

Helping homeless persons (especially chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth) make the transition to permanent housing and independent living, including shortening the period of time that individuals and families experience homelessness, facilitating access for homeless individuals and families to affordable housing units, and preventing individuals and families who were recently homeless from becoming homeless again.

Several local organizations such as social service agencies, charitable groups and religious organizations provide emergency/transitional housing and/or supportive services to the homeless and at-risk persons including abused women and children and substance abusers. The West Texas Homeless Network will continue to expand the HMIS in order to provide up-to-date information on services. The Network is expanding the distribution of Pocket Pals to include convenience stores and other public locations.

Supportive Services in place include:

Life Skills Training:

- The Salvation Army
- Faith Works
- Abilene Hope Haven, Inc.
- ARCADA
- Workforce Center
- Noah Project
- Family Services Center
- Life Skills Education Family Services Center
- Parenting and Life Skills Classes
- Baptist Children's and Family Services (Our House)

Help low-income individuals and families avoid becoming homeless, especially extremely low-income individuals and families who are likely to become homeless after being discharged from a publicly funded institution or system of care, or who are receiving assistance from public and private agencies that address housing, health, social services, employment, education or youth needs

The West Texas Homelessness Network will continue to reach out to homeless individuals and families by making available its information and referral service, and advertising available services through different mediums such as radio and television advertisements, newspapers and flyers. A well-developed referral and case management system will allow almost any agency to immediately assess the needs of homeless persons. The City will collaborate with homeless agencies that provide services to the homeless and persons that are subject to becoming homeless, such as recently released institutionalized persons.

Homeless Services

Our House provides street outreach to homeless youth. This program improves their safety and maximizes their potential to take advantage of existing opportunities and resources. The staff delivers a range of services directly or through collaboration with other agencies, specifically those working to protect and treat young people. These unaccompanied youth receive food, shelter, clothing, tutoring and counseling. [Christian Community Development Corporation \(CCDC\)](#) and BCFS [Health and Human Services](#) assisted approximately 200 young people in 2009. Just People, Inc. provides outreach services to street homeless and persons residing in emergency shelter and transitional housing and offers personal and employment services to adults, people in recovery, and ex-offenders.

City Light Community Ministries:

As part of the West Texas Homeless Network, City Light Community Ministries is an outreach program of the First Baptist Church, assisting homeless with the following:

- Financial support such as prescriptions and transportation service
- Lunches on M-W-F
- Shower facility and laundry M-W-F. Breakfast at 8:30 AM and Sunday church service at 9AM
- Extended lodging at Salvation Army when funds are available
- Spiritual guidance and referral services

City Light hopes to continue offering the above services to the homeless clients as long as funds are available and hopes to continue supporting other agency providers with the goal of alleviating the plight of the homeless in the community. They also partner with the Christian Women's Job Corps and Connecting Caring Communities.

Breakfast on Beech Street:

Breakfast on Beech Street provides outreach services to street homeless and low-income persons by providing them with breakfast and a sack lunch five days a week. Operated [next to the former out-of](#) First Christian Church [at 1420 N. 3rd Street](#), BoBS also provides spiritual guidance and program information on available services.

These facilities and programs address housing and service needs of homeless individuals and families by offering beds and a variety of much needed services. Contained within this group of programs are emergency shelters, counseling and education programs, and services for persons with Special Needs.

Mental Health and Counseling Services

- MHMR
- Noah Project
- The Salvation Army
- Medical Care Mission
- ARCADA
- Life Renovation Counseling
- Acadia Abilene Hospital Advocates of Abilene
- [Advocates of Abilene](#)
- Mental Health [America of Abilene](#) ~~sociation~~

Homeless Youth

- Abilene Independent School District Homeless Liaison
- Harmony Family Services
- New Horizons The Audrey Grace House
- Our House
- [Hendrick Home for Children](#)

Family Services

- Methodist Children's Home & Services
- New Horizons: Family Connections
- Presbyterian Children's Home & Services
- [Hendrick Home for Children](#)

Medical Care

- Taylor County Veteran Services Office
- Presbyterian Medical Care Mission
- Abilene/Taylor County Public Health District
- Medical Assistance for Area Citizens (MAAC)
- Shackelford County Community Resource Center
- Texas Tech University Health Sciences School of Nursing
- Area Agency on Aging
- Hendrick Health Clinic
- Love & Care Ministries Medical and Dental Van
- AIDS Resource of Rural Texas (ARRT)
- Substance Abuse Treatment and Aftercare
- The Salvation Army (Abilene – inpatient treatment)
- Abilene Regional Counsel on Alcohol and Drug Abuse (ARCADA)

Alcohol and Drug Abuse Center (Abilene – information & referral only)

- Serenity Foundation (Abilene – halfway house)
- 180 House (Abilene – three-quarter house)
- Jubilee House (Abilene – halfway house)
- Big Country AIDS Resources
- Prevention Resource Center
- AIDS Resource of Rural Texas
- Outreach Screening Assessment, and Referral Program (OSCAR)
- Youth Prevention Universal (YPU)
- Youth Prevention/Intervention (YPI)
- Acadia Healthcare

Employment Assistance

- West Texas Council of Government Career Centers
- Goodwill Industries
- Abilene Hope Haven

- Noah Project
- Faith Works
- Veterans Administration
- Workforce Solutions of West Central Texas Center
- Betty Hardwick Center – MHMR
- Supportive Employment
- Senior Service American, Inc.

Child Care

- Day Nursery of Abilene
- Boys & Girls Club of Abilene
- City of Abilene Recreation Division
- Alliance for Women and Children
- Child Care Provider Organization
- Texas Workforce Center (for selected programs)
- Early Head Start
- Kids Campus
- Glo Day Care

HIV/AIDS Services

- Abilene/Taylor County Public Health District (Abilene – HIV clinic)
- Big Country AIDS Resources
- AIDS Resource of Rural Texas

Transportation

- CityLink
- Classic Cab
- Veteran's Administration Medical Transportation
- Legal Services
- Noah Project

West Texas Legal Services

- Legal Advocacy Program
- Not Without US!
- Veterans Services
- Disabled Veterans Commission
- Local Veterans Employment Representatives Program (LVERS)

- Recovery and Employment Assistance Lifelines (RealLifelines)
- Texas Military Family Access Project/T.R.I.A.D.
- Texas Veterans Leadership Program

Discharge Planning

Discharge Planning Policy

The West Texas Homeless Network met with city/county government, hospitals, Department of Human Services, [members of the Criminal Justice System](#), and law enforcement agencies to develop a team approach to discharge planning in the West Central Texas area. This involved a four-step strategy of identifying the scope of the problem, identifying priorities, locating resources, and implementing institutional change.

The Network's focus is to continue to identify the scope and nature of the problem. The following activities are conducted:

- Survey shelter providers to see what public institutions are releasing clients/inmates to the area shelters.
- Identify public institutions that should be providing housing as part of discharge planning.
- Have shelters keep a record for a month on where shelter residents resided prior to entering the shelter.
- Recruit participation in the Network from public institutions in the Networks' Continuum of Care service area including Abilene and the surrounding 13 counties.

SP-65 Lead based paint Hazards – 91.215(i)

Actions to address LBP hazards and increase access to housing without LBP hazards

Over 70% of the houses in Abilene were built prior to 1978. The City continues to incorporate lead-based paint evaluation and reduction in its regular housing inspections and housing program review process. It is standard procedure to address lead based paint hazards through Lead Safe Work Practices and abatement as required by HUD and EPA on homes rehabilitated by the City of Abilene Planning and Development Services Department programs and CHDOs. The City will take the following steps on all private housing projects and the Housing Authority will continue to take the following steps on all government funded housing rehabilitation of public housing units.

- Inform all owners, occupants and landlords of lead-based paint hazards and provide information on methods for reducing risk of exposure in pre-1978 homes.
- Provide testing and abatement for any households whose children have been shown to have elevated blood lead levels. Require the family be moved to a post-1978 unit, or unit that has passed this test.
- Require inspections for lead at the same time other inspections or evaluations are conducted on City sponsored housing.
- The ONS partnered with the West Texas General Contractors Association to host six of the State required “Safe Work Practices” certification classes for workers and contractors.

How are the actions listed above related to the extent of lead poisoning and hazards?

In all HUD funded programs, notify persons living in or purchasing houses built before 1978 of the hazards associated with lead paint and encourage parents with children below the age of 6 to have their children tested, to seek safe housing and medical treatment immediately. Investigate availability and practicality of low cost encasement, encapsulation and other related products. Abilene will continue to test homes constructed prior to 1978, receiving federal assistance, for lead-based paint in compliance with 24 CFR part 35, at the time households seek assistance from the City.

Data provided by local Epidemiologist with Public Health Preparedness of the Abilene-Taylor County Public Health District submitted the data collected from their lab for 2020. There were no blood lead content labs completed by the Abilene-Taylor County Public Health District. The lab work from local physician’s labs are sent directly to the State, therefore the local Public Health District does not have access to those records.

How are the actions listed above integrated into housing policies and procedures?

The City of Abilene currently performs visual inspections of housing units included in their housing programs. Where defective paint is observed, surfaces are prepped and repainted, following abatement guidelines provided by HUD. All rehabilitation and down-payment assistance programs include

provisions requiring that all painted surfaces be in good condition. The ONS has purchased HUD certified lead testing equipment and requires soil samples and residue swabs post referral.

SP-70 Anti-Poverty Strategy – 91.215(j)

Jurisdiction Goals, Programs and Policies for reducing the number of Poverty-Level Families

The lowest income households are generally those threatened with homelessness and persons in public or assisted housing who are dependent upon public subsidies to maintain their own residences. In all, this segment of the population has the highest incidence of poverty. The City's focus on reducing the number of poverty level families will continue to consist of promoting self-sufficiency and innovative economic development strategies. The City of Abilene ~~Economic Development Department~~ will continue to support and promote economic expansion in a number of ways that enhance opportunities for low- and moderate-income residents. Many local organizations, such as Workforce Solutions and FaithWorks among others, help low- and moderate-income residents with career and life skills so they can secure and maintain employment and reach self-sufficiency. The Economic Development Department continues to be pro-active in retaining and seeking businesses that will bring salaries above the local average in order to raise the level of income for all Abilenians. The DCOA targets market shortages in the area, which benefit the unemployed/ underemployed, and opens up entry-level opportunities and other higher paying jobs as well.

How are the Jurisdiction poverty reducing goals, programs, and policies coordinated with this affordable housing plan?

Given the City's limited financial resources, poverty level in the city is a challenging issue to address. Because a majority of factors affecting a family's poverty-level status are typically beyond the control of City policies, the extent to which the proposed strategies will reduce and/or assist in reducing the number of poverty-level families is difficult to gauge. In the future, the City of Abilene will continue to work with the community to address deficiencies and attempt to measure the impact of federal grant programs in reducing and/or preventing poverty.

SP-80 Monitoring – 91.230

Describe the standards and procedures that the jurisdiction will use to monitor activities carried out in furtherance of the plan and will use to ensure long-term compliance with requirements of the programs involved, including minority business outreach and the comprehensive planning requirements

Compliance and monitoring of both the CDBG and HOME programs is the responsibility of the [Neighborhood Initiatives Division of the Planning and Development Services Department Office of Neighborhood Services](#). Staff reviews projects proposed by the City and eligible organizations for compliance with national objectives, the Consolidated Plan, local eligibility requirements and City Council Guidelines. Monthly reports are collected for most programs to serve as an ongoing monitoring mechanism. Ongoing compliance and monitoring activities include the following:

- Projects proposed by eligible organizations will be reviewed by staff for compliance with eligibility requirements, national objectives, Consolidated Plan and City Council guidelines.
- An environmental review record will be prepared. The records will contain all assessments, findings and pertinent information.
- Monitoring through monthly, quarterly or annual reporting will be conducted on all programs offered through the City and through contractors and subrecipients.
- Staff will monitor to ensure that Federal labor standards, bidding and contract requirements are met.
- Prior to issuing reimbursement for any goods or services, the City will verify that the goods or services have been provided according to specific program requirements.
- An annual monitoring risk assessment and on-site visit, as applicable, will be conducted for contractors, subrecipients and City services.
- An annual performance report identifying performance toward planned goals will be prepared [in the Consolidated Annual Performance and Evaluation Report \(CAPER\) for HUD](#).

Expected Resources

AP-15 Expected Resources – 91.220(c)(1,2)

Introduction

The City of Abilene receives funding for the Community Development Block Grant Program and HOME Investment Partnership Program. This program will bring \$6,593,675 into the City through CDBG and HOME Entitlement funds with an additional \$100,000 in HOME Program Income to support affordable housing and promote economic development during the five-year period. During the first-year the City will receive \$1,318,735 in CDBG and HOME Entitlement funds with additional \$20,000 in HOME Program Income. The City anticipates reprogramming and additional \$891,155 of prior year CDBG funds and \$426,372 of prior year HOME program funds for use in this Annual Plan year.

Anticipated Resources

Program	Source of Funds	Uses of Funds	Expected Amount Available Year 1				Expected Amount Available Remainder of ConPlan \$	Narrative Description
			Annual Allocation: \$	Program Income: \$	Prior Year Resources: \$	Total: \$		
CDBG	public - federal	Acquisition Admin and Planning Economic Development Housing Public Improvements Public Services	870,932	0	891,155	1,762,087	3,483,728	Expected amount for remainder of Con Plan equals the Year 1 Annual Allocation times four.

Program	Source of Funds	Uses of Funds	Expected Amount Available Year 1				Expected Amount Available Remainder of ConPlan \$	Narrative Description
			Annual Allocation: \$	Program Income: \$	Prior Year Resources: \$	Total: \$		
HOME	public - federal	Acquisition Homebuyer assistance Homeowner rehab Multifamily rental new construction Multifamily rental rehab New construction for ownership TBRA	447,803	20,000	426,372	894,175	1,791,212	Expected amount for remainder of Con Plan equals the Year 1 Annual Allocation plus the Year 1 Program Income times four.
CDBG-CV	Public – Federal	COVID-19 relief and assistance for the community and businesses	1,168,870	0	0	1,168,870		Expected amount is for FY2020.

Table 53 - Expected Resources – Priority Table

Explain how federal funds will leverage those additional resources (private, state and local funds), including a description of how matching requirements will be satisfied

Federal funds will be leveraged through the ability of service organizations to raise program funds through outside sources, other loan sources needed for housing development activities, and the City's General Fund, where appropriate.

The City's HOME match liability is accomplished in its entirety through the CHDO, Habitat for Humanity. For each HOME-assisted construction of affordable housing unit match is satisfied by volunteer hours, sweat equity, in-kind labor and materials and with discounted Present Day Value of yield foregone on the 0% interest financing.

If appropriate, describe publicly owned land or property located within the jurisdiction that may be used to address the needs identified in the plan

None currently identified. The City will continue to evaluate opportunities to use public lands for future development.

Discussion

The City has programmed approximately \$4,354,660 for the projects under the CDBG program and \$2,239,015 for the projects under the HOME Program for the FY 2020-2024 program years. These funds will be used to operate a range of private and public services as described later in the Annual Plan. [Additionally, the City is expected to receive \\$1,168,870 for COVID-19 assistance and relief through the CDBG-CV funding allocations.](#)

Annual Goals and Objectives

AP-20 Annual Goals and Objectives

Goals Summary Information

Sort Order	Goal Name	Start Year	End Year	Category	Geographic Area	Needs Addressed	Funding	Goal Outcome Indicator
1	Safe, Decent, Affordable Housing	2020	2024	Affordable Housing		Housing Needs	CDBG: 550,000 HOME: 442,162 CDBG-CV: \$628,265	Homeowner Housing Rehabilitated: 49 Household Housing Unit Direct Financial Assistance to Homebuyers: 5 Households Assisted Neighborhood Revitalization: 45 Households Assisted
2	Prevent and reduce homeless	2020	2024	Homeless		Homeless Needs	CDBG: \$128,427	Homeless Person Overnight Shelter: 500 Persons Assisted

Sort Order	Goal Name	Start Year	End Year	Category	Geographic Area	Needs Addressed	Funding	Goal Outcome Indicator
3	Increase access to community services and physical infrastructure	2020	2024	Community services Public Improvements and infrastructure Economic Development		Community Services Public Improvement	CDBG: \$211,000	Public service activities other than Low/Moderate Income Housing Benefits: 22,500 Persons Assisted

Table 54 – Goals Summary

Goal Descriptions

1	Goal Name	Safe, Decent, Affordable Housing
	Goal Description	Goal: Low- to Moderate-income citizens will have access to safe, decent, and affordable housing There is a greater need for affordable <u>single-family homes</u> and rental units than current supply in Abilene. Additionally, the supply of affordable housing, especially in LMI neighborhoods, is often not decent or safe for families. Many homes need minor or major structural, electrical, or plumbing repairs to make them safe. The City of Abilene has prioritizing CDBG and HOME funding for its Single Family Rehab/Reconstruction and Critical/Limited Repair programs to help low- to moderate-income individuals and families make critical repairs to their homes. The City also funds a First-Time Homebuyers program to help low- to moderate-income individuals to purchase their first home. The City will continue to partner with community organizations, such as Habitat for Humanity and the Abilene Housing Authority, to provide safe, decent, and affordable housing for low- to moderate-income individuals and families.

2	Goal Name	Prevent and reduce homeless
	Goal Description	Goal: Prevent and reduce homeless While Abilene has reduced homeless to almost zero in its community, homeless is still very much an issue in Abilene. The City will continue to work with its community partners to enhance the number of emergency, transitional, and permanent supportive housing beds available for individuals, families with children, victims of domestic violence, and veterans. The City will continue to prioritize funding for capital infrastructure projects for community organizations who work with the homeless population to prevent and reduce homeless. The source of funds will be CDBG.
3	Goal Name	Increase access to community services and physical infrastructure
	Goal Description	Goal: Improve the quality and access to programs and facilities for health and safety, information, transportation, and recreation services and enhance the quality and use to the physical infrastructure of Abilene The City of Abilene will continue to help fund community organizations that provide programs related to health and safety, information, transportation, recreation service, workforce development training, childcare and more. The City has prioritized CDBG funds to help low- to moderate-income individuals without dental insurance to access free dental care. .

Projects

AP-35 Projects – 91.220(d)

Introduction

The following projects were developed by staff with consultation from non-profit service providers and community input through priorities established with involvement of the community survey.

Projects

#	Project Name
1	Abilene-Taylor County Public Health District
2	City of Abilene – Condemnation Demolition
3	Meals on Wheels Plus, Inc.
4	The Salvation Army
5	Noah Project, Inc.
6	Abilene Habitat for Humanity
7	Abilene Hope Haven
8	City of Abilene - Administration
9	City of Abilene - Housing Programs
10	United Way
11	Community Foundation of Abilene

Table 55 – Project Information

Describe the reasons for allocation priorities and any obstacles to addressing underserved needs

The projects listed above were selected from the total of project proposals received in accordance with their consistency with the priorities established through the Consolidated Plan forums and community survey process. These projects meet needs enumerated in the Needs Assessment and prioritization process to the extent that funding was available. Organizational competencies were also considered when selecting one project over another, leaning toward those organizations with long-standing histories of successful project management.

AP-38 Project Summary
Project Summary Information

1	Project Name	Abilene-Taylor County Public Health District
	Target Area	
	Goals Supported	
	Needs Addressed	COMMUNITY SERVICES
	Funding	CDBG: \$130,000
	Description	Abilene-Taylor County Public Health District will offer dental services to Abilene residents who do not have dental insurance or the means to pay for dental care. Due to an initial visit being required to establish a treatment plan and need, most clients will have to least two visits.
	Target Date	7/1/2020 9/30/2021
	Estimate the number and type of families that will benefit from the proposed activities	
	Location Description	
2	Planned Activities	CDBG funds will assist LMI Abilene residents in obtaining necessary dental services to improve their overall health and well-being. The provision of oral healthcare services will include i) preventative care: exams, e-rays, prophylaxis treatments and extractions; 2) restorative care; 3) patient education and wellness counseling. This program will increase client self-esteem and their ability to maintain employment, and reduction of heart disease.
	Project Name	City of Abilene – Condemnation Demolition
	Target Area	
	Goals Supported	Affordable and Safe Housing
	Needs Addressed	HOUSING
	Funding	CDBG: \$80,000

	Description	The City of Abilene continues to identify uninhabitable vacant dilapidated commercial and residential structures located with Low-to-Moderate Income (LMI) neighborhoods. Dilapidated structures have a negative effect on public safety, health, and community well-being. Uninhabitable vacant structures are a negative effecting neighborhood as they constitute slum and blight influences. This funding requested is to provide for demolitions and removal of commercial and residential structure. Increased funding is needed to more effectively address dilapidated structures and improve neighborhoods.
	Target Date	<u>7/1/2020</u> 9/30/2021
	Estimate the number and type of families that will benefit from the proposed activities	
	Location Description	
	Planned Activities	The City will identify and remove dilapidated commercial and residential structures in Low-to-Moderate neighborhoods that are uninhabitable and vacant.
3	Project Name	Meals on Wheels Plus, Inc.
	Target Area	
	Goals Supported	
	Needs Addressed	COMMUNITY SERVICES
	Funding	CDBG: \$81,000
	Description	Meals on Wheels is a non-profit program that prepares and delivers a free noon meal each weekday to low-income, at-risk elderly and other eligible adults who need this service. With constant use of the air conditioners there is a need to replace both the air conditioners and exhaust fans. This includes six air conditioning units, two large exhaust fans and an ice machine that are past their useful life and need to be replaced.
	Target Date	<u>7/1/2020</u> 9/30/2021
	Estimate the number and type of families that will benefit from the proposed activities	

	Location Description	
	Planned Activities	The City of Abilene is providing funding to replace the air conditioners and exhausts for Meals on Wheels.
4	Project Name	The Salvation Army
	Target Area	
	Goals Supported	Homelessness
	Needs Addressed	HOMELESSNESS
	Funding	CDBG: \$49,950
	Description	The Salvation Army has been in the community since 1900, helping those that are fragile and in need. The parking lot has holes, cracking concrete and asphalt, and other hazards that need to be repaired. The request is to repair the parking lot around the facility, so that guests, on-site residents, and staff will not be injured.
	Target Date	7/1/2020 9/30/2021
	Estimate the number and type of families that will benefit from the proposed activities	
	Location Description	
	Planned Activities	The City of Abilene is providing funding to repair The Salvation Army's parking lot around its facility.
5	Project Name	Noah Project, Inc.
	Target Area	
	Goals Supported	Affordable Housing Homelessness
	Needs Addressed	HOUSING NEEDS HOMELESSNESS
	Funding	CDBG: \$9,477
	Description	Noah Project seeks to install a new storage shed on its property, this will increase available storage space for large items, such as furniture and a lawn mower. Additional secure storage, will have the flexibility to move furniture or store larger equipment that we use to maintain maintenance and landscaping needs.

	Target Date	7/1/2020 9/30/2021
	Estimate the number and type of families that will benefit from the proposed activities	
	Location Description	
	Planned Activities	
6	Project Name	Abilene Habitat for Humanity
	Target Area	
	Goals Supported	Affordable Housing
	Needs Addressed	HOUSING NEEDS
	Funding	CDBG: \$67,170
	Description	Funding requested to build 3 homes, in low-mod neighborhoods providing safe, decent, and affordable housing.
	Target Date	7/1/2020 9/30/2021
	Estimate the number and type of families that will benefit from the proposed activities	3 families
	Location Description	
	Planned Activities	The funding will be used to help build 3 new homes in LMI neighborhoods for in-come eligible families.
7	Project Name	Abilene Hope Haven
	Target Area	
	Goals Supported	Homeless Needs
	Needs Addressed	HOMELESSNESS
	Funding	CDBG: \$69,000
	Description	Request to for plumbing, re-piping and mapping of plumbing system for more sustainable, efficient and costly matters to ensure building sustainability and cost-efficiency long-term.
	Target Date	7/1/2020 9/30/2021

	Estimate the number and type of families that will benefit from the proposed activities	
	Location Description	
	Planned Activities	
8	Project Name	Neighborhood Initiatives Admin HOME
	Target Area	
	Goals Supported	
	Needs Addressed	HOUSING NEEDS COMMUNITY SERVICES (Public Services) ECONOMIC DEVELOPMENT COMMUNITY AND PUBLIC FACILITIES PUBLIC IMPROVEMENTS AND PUBLIC INFRASTRUCTURE
	Funding	CDBG: \$294,850 HOME: \$44,780
	Description	Supports staff costs of the HOME Administrative costs incurred by the Planning & Dev Dept, Neighborhood Services Division which oversees HOME program delivery for the Single-Family Rehabilitation and First Time Homebuyer programs.
	Target Date	<u>9/30/2021</u>
	Estimate the number and type of families that will benefit from the proposed activities	
	Location Description	
	Planned Activities	CDBG Housing Administration, CDBG Planning & Development Administration, HOME General Administration and HOME Housing Rehab Administration
9	Project Name	Housing Programs – City of Abilene
	Target Area	
	Goals Supported	Affordable Housing
	Needs Addressed	HOUSING NEEDS

	Funding	CDBG: \$470,000 HOME: \$374,992
	Description	Limited Critical/Limited Repair: CDBG \$245,000. City program will assist 49 LMI owner-occupied homeowners in the 0-50% income category within the City Limits of Abilene to receive assistance with home repairs that effect safety, security and health. Neighborhood Revitalization Program: CDBG: \$225,000. The City will help fund neighborhood revitalization projects in LMI neighborhoods. Single Family Rehab & Reconstruction: HOME \$349,992 is for Single Family Rehab/Reconstruction City program will assist 4 LMI homeowners in the 0-80% income category to bring units up to code or replace them on same footprint. First Time Homebuyer: HOME \$25,000. City will assist 5 LMI (not to exceed 80% income level) with assistance to first time homebuyers to purchase an affordable unit within Abilene City Limits.
	Estimate the number and type of families that will benefit from the proposed activities	First Time Homebuyer – 5 households Single-Family Rehab/Recon Program – 4 households Critical Limited Repair – 49 households Neighborhood Revitalization – 45 households
	Location Description	
	Planned Activities	CDBG Housing Administration, CDBG Planning & Development Administration, HOME General Administration and HOME Housing Rehab Administration
	10	
	<u>Project Name</u>	<u>United Way</u>
	<u>Target Area</u>	
	<u>Goals Supported</u>	<u>COVID-19 Assistance</u>
	<u>Needs Addressed</u>	<u>HOUSING NEEDS</u>
	<u>Funding</u>	<u>CDBG-CV: \$628,265</u>
	<u>Description</u>	<u>City of Abilene residents have experienced significant financial hardship due to social distancing restrictions imposed in response to the COVID-19 public health emergency. The goal of the subsistence payments program would be to provide low-moderate income, qualifying households that have lost employment income as result of the pandemic, short term (no more than 6 months) rental, mortgage and or/utility assistance.</u>

	<u>Estimate the number and type of families that will benefit from the proposed activities</u>	
	<u>Location Description</u>	
	<u>Planned Activities</u>	<u>Rental and mortgage assistance</u>
<u>11</u>	<u>Project Name</u>	<u>Community Foundation of Abilene</u>
	<u>Target Area</u>	
	<u>Goals Supported</u>	<u>COVID-19 Assistance</u>
	<u>Needs Addressed</u>	<u>ECONOMIC DEVELOPMENT NEEDS</u>
	<u>Funding</u>	<u>CDBG-CV: \$540,605</u>
	<u>Description</u>	<u>The City of Abilene has recognized the need to provide financial assistance to small businesses, defined as having 50 or fewer employees, who have had a reduction in revenue as a result of COVID-19. Financial assistance will be given in the form of a grant to retain jobs for the City of Abilene.</u>
	<u>Estimate the number and type of families that will benefit from the proposed activities</u>	
	<u>Location Description</u>	
	<u>Planned Activities</u>	<u>Business relief and assistance</u>

AP-50 Geographic Distribution – 91.220(f)

Description of the geographic areas of the entitlement (including areas of low-income and minority concentration) where assistance will be directed

Much of the funding from the CDBG program is available for use in any of the CDBG neighborhoods or citywide, depending on the specifics of the designated activities. Some funding is also available according to individual benefit rather than area benefit. Therefore, it is difficult to provide reasonable projections of the distribution of funds by target area. The numbers below are strictly estimates based on experience.

Geographic Distribution

Target Area	Percentage of Funds

Table 56 - Geographic Distribution

Rationale for the priorities for allocating investments geographically

The proposed allocation of funds is based on federal funding requirements for each formula-allocated grant. Areas of low to moderate-income concentration and certain areas of high minority concentration are targeted. Areas of low homeownership and deteriorating housing conditions were also considered in the targeting process.

Discussion

The distribution of funds by target area is projected to be primarily citywide due to use of funds for administrative, non-profit support, and individual benefit-oriented programmatic uses of the funds. The remaining funds are estimated to be spread through smaller CDBG-eligible areas.

Affordable Housing

AP-55 Affordable Housing – 91.220(g)

Introduction

The City plans to provide Critical Housing Repairs, Rehabilitation, and Reconstruction to improve the habitability of owner occupied housing. Eligible applicants are low and moderate-income at 80% or below the median income citywide. Five programs will be funded in the 2020 program year.

Upon completion, 3 new affordable homes will be constructed, and 5 households will be assisted with homeownership opportunities. Additional outcome indicators include 94 low- to moderate-income (LMI) households assisted with improved access to housing and housing support services through these programs.

One Year Goals for the Number of Households to be Supported
Homeless
Non-Homeless
Special-Needs
Total

Table 57 - One Year Goals for Affordable Housing by Support Requirement

One Year Goals for the Number of Households Supported Through
Rental Assistance
The Production of New Units
Rehab of Existing Units
Acquisition of Existing Units
Total

Table 58 - One Year Goals for Affordable Housing by Support Type

Discussion

Five programs, funded in the 2020 program year, will improve availability and access to affordable housing for individuals and families through direct housing related repairs and rehabilitation and/or the creation of new housing units. Client income, race, ethnicity and household head information will be maintained.

- Community Housing Development Organization (CHDO) – Habitat for Humanity – 3 single family homebuyer housing units. Homebuyers will be income qualified within the 50%-80% income category.
- City of Abilene Neighborhood Services – First-Time Homebuyer Program – 5 homeowners. This program assists with closing costs and down payment assistance for families with income up to 80% MFI.
- City of Abilene Neighborhood Services – Critical/Limited Repair - 49 owner occupied home repairs. This program assists only those families in the 0-50% income category with urgent/critical home repairs (i.e., gas leaks, busted sewer, water leaks).
- City of Abilene Neighborhood Services – Single-Family Rehab & Reconstruction – 4 homeowner units. These units will be completely brought up to building code by addressing all deficient systems (roof, electrical, plumbing, both gas and water). Reconstruction will remove the current unit and replace on footprint.
- City of Abilene - Neighborhood Revitalization – 45 households.

AP-60 Public Housing – 91.220(h)

Introduction

The AHA continues to manage 213 public housing units at four separate sites. The AHA has three sites that are multi-family, and one site that is an elderly/disabled site.

Actions planned during the next year to address the needs to public housing

The AHA continues to manage 213 public housing units at four separate sites. AHA also administers the HCV program (1,459 vouchers) for 20 counties in West Central Texas. AHA was recognized as a “High Performer” agency for the past four years. The Housing Choice Voucher (HCV) Program was recognized as a “High Performer” program for the seventh consecutive year and the Public Housing (LRPH) Program was recognized as a “High Performer” program for the fourth consecutive year.

Community Impact

AHA constantly seeks ways to positively impact the community in which it serves. Through its Housing Choice Voucher (HCV) program AHA works with 260+ landlords and AHA's subsidies enable them to generate income and pay property tax. The AHA Public Housing program works with vendors and contractors, many of which are locally owned. AHA's federal funds contribute to the local business economy through the business we conduct.

Assisting More Families: AHA has continued to increase the number of HUD-VASH vouchers serviced. This program provides housing to low-income homeless veterans. The AHA housed the HUD-VASH program to attain the highest level since inception.

Home Ownership: AHA continues to evaluate the need to provide an HCV Homeownership Program to the community. Federal Budget cuts are making this venture difficult.

Tenant Involvement: The AHA works to provide various opportunities for tenant involvement. The Resident Advisory Council (RAC) is in place; the Resident Advisory Board (RAB) is still active and providing valuable input during AHA's Annual Planning process.

On the Housing Choice Voucher (HCV) program, landlords and tenants are active participants on the Advisory Committee (designed to provide landlords and tenants with a forum to provide input into how to improve the HCV Program). The RAB works directly with AHA management and the AHA Resident Services Coordinator to help resolve issues, bring up needs for the capital fund improvement dollars, and work to help set new or revise old policies. The AHA Resident Services Coordinator works directly with many of the community agencies to attain programs and benefits for the residents, i.e., the Food Bank, the Abilene Independent School System, and Big Brothers/Big Sisters. The Big Brothers/Big Sisters program expands productive, recreational opportunities for its youth and enables the AHA to provide preventive services for the youth.

Actions to encourage public housing residents to become more involved in management and participate in homeownership

The AHA works to provide various opportunities for tenant involvement. The AHA has an active Resident Advisory board consisting of Public Housing participants. This Board works directly with AHA management and the AHA resident initiative coordinator to help resolve issues, bring up needs for the capital fund improvement dollars, and work to help set new or revise old policies. The AHA resident coordinator works directly with many of the community agencies to attain programs and benefits for the residents.

- Work Force Center that provides job search, job skills, short term training and supportive assistance to residents seeking work.
- Food bank for food pantry resources.
- Abilene Independent School System –partnering with lunch programs, Head Start registration, and truancy prevention.
- Taylor County Extension and WIC for health and nutrition needs
- Abilene Taylor County Public Health Department for the Expanded Primary Health Care (E.P.H.C) and Medical Assistance for Area Citizens (MAAC) by providing satellite site for applications and referrals.
- PRC (Prevention Resource Center) for Alcohol, Drug, Tobacco, and self-esteem issues.
- New Horizon for family counseling
- House of Faith Abilene provides on-site activities for Public Housing children at the Riviera and Earl Williams sites.
- Boys and Girls Club program that expands productive, recreational opportunities for its youth and enables the AHA to provide preventive services for the youth.
- Habitat for Humanity Presentations for Tenants interested in home ownership.
- Member of the Advisory Board for the development of the TTU Federally Qualified Health Clinic.
- Annual Father’s Day Initiative – Event to invite fathers to be involved with their children through a cookout, games, and Community resource tables.
- Money-Follows-the Person (MFP) Program – designed to assist families move from Nursing Homes back into a community of their choice with supportive services. AHA set-aside five Public Housing units and five Housing Choice Vouchers for this program.

If the PHA is designated as troubled, describe the manner in which financial assistance will be provided or other assistance

Not applicable

Discussion

AP-65 Homeless and Other Special Needs Activities – 91.220(i)

Introduction

Describe the jurisdictions one-year goals and actions for reducing and ending homelessness including

Reaching out to homeless persons (especially unsheltered persons) and assessing their individual needs

The West Texas Homeless Network is designated as the lead organization that provides outreach to the homeless populations and conducts research and surveys to determine their needs. The West Texas Homeless Network (62 persons from an average of 23 different agencies, businesses or organizations) is a multi-county coalition that conducts the Point-In-Time Survey. The survey catalogues homeless characteristics and needs to develop better strategies for assisting people out of homelessness. Each year the sample size has increased, and the quality of data has improved. Communities gain important information through this initiative. The annualized homeless population estimate for Abilene is 501. Even though the process improves each year, these numbers are conservative. The 2020 Point-in-Time Survey effort captured 116 surveys. During the Point-in-Time Survey individual bags of personal hygiene products, socks and healthy snacks are distributed.

The Network is expanding the distribution of Pocket Pals to include convenience stores and other public locations.

Addressing the emergency shelter and transitional housing needs of homeless persons

Several local organizations such as social service agencies, charitable groups and religious organizations provide emergency/transitional housing and/or supportive services to the homeless and at-risk persons including abused women and children and substance abusers. The West Texas Homeless Network will continue to expand the HMIS in order to provide up-to-date information on services. The Network is expanding the distribution of Pocket Pals ([pocket resource guide](#)) to include convenience stores and other public locations.

Services in place:

Rental/Mortgage/Utility Assistance

- AIDS Resources of Rural Texas
- Aspermont Small Business Development Center
- Central Texas Opportunities
- Rolling Plains Management Corporation
- First Baptist Church

- Episcopal Church of the Heavenly Rest
- Shackelford County Resource Center
- Taylor County Veterans Services Office
- The Salvation Army
- Christian Service Center of Abilene
- Christ Community Resource Center
- Abilene Baptist Social Ministries
- Methodist Service Center
- Baptist Children's and Family Services (Our House)

Rental Assistance

- AHA
- Sweetwater Public Housing Authority
- Stamford Public Housing Authority
- Baptist Children's and Family Services (Our House)
- Abilene Hope Haven
- WCTRF-SSVF

Outreach to Homeless on the Streets:

Love & Care Ministries conducts outreach through the Mobile Medical Unit which provides access to medical and dental services at different sites. Love & Care Ministries also visits homeless persons in their camps and provides approximately 100 sack lunches per day. Additional services at their facility such as providing lunch 4 days a week which is approximately 100-250 meals each day, and assistance obtaining I.D.'s and birth certificates and providing showering facilities.

Supportive Services for Veteran Families (SSVF, part of the West Central Texas Regional Foundation) and Abilene Hope Haven (AHH) both provide housing-focused outreach to individuals and families currently experiencing homelessness in Abilene. They develop relationships with those who are currently experiencing homelessness with the goal of providing a path forward in housing assistance programs. SSVF maintains our community's veteran by-name list and AHH maintains our community's chronic by-name list. A by-name list is an up-to-date list of every person in a specific subpopulation that is currently experiencing homelessness in an area, and is a key component to making progress in achieving a functional end to homelessness among targeted populations.

Helping homeless persons (especially chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth) make the transition to permanent housing and independent living, including shortening the period of time that individuals and families experience homelessness, facilitating access for homeless individuals and families to affordable housing units, and preventing individuals and families who were recently homeless from becoming homeless again

Several local organizations such as social service agencies, charitable groups and religious organizations provide emergency/transitional housing and/or supportive services to the homeless and at-risk persons including abused women and children and substance abusers. The West Texas Homeless Network will continue to expand the Homeless Management Information System (HMIS) in order to provide up-to-date information on services. The Network is expanding the distribution of Pocket Pals to include convenience stores and other public locations.

Supportive services in the city including but not limited to are the following:

- Life Skills Training
- The Salvation Army
- Faith Works
- Abilene Hope Haven, Inc.
- ARCADA
- Workforce Center
- BCFS Transition Center
- Mental Health and Counseling Services
- MHMR
- Noah Project
- The Salvation Army
- Medical Care Mission

Homeless Youth

- Abilene Independent School District Homeless Liaison
- Harmony Family Services
- New Horizons The Audrey Grace House
- Our House
- [Hendrick Home for Children](#)

Family Services

- Methodist Children's Home & Services
- New Horizons: Family Connections
- Presbyterian Children's Home & Services
- [Hendrick Home for Children](#)

Child Care

- Day Nursery of Abilene
- Boys & Girls Club of Abilene
- City of Abilene Recreation Division

Helping low-income individuals and families avoid becoming homeless, especially extremely

low-income individuals and families and those who are: being discharged from publicly funded institutions and systems of care (such as health care facilities, mental health facilities, foster care and other youth facilities, and corrections programs and institutions); or, receiving assistance from public or private agencies that address housing, health, social services, employment, education, or youth needs

The West Texas Homelessness Network will continue to reach out to homeless individuals and families by making available its information and referral service, and advertising available services through different mediums such as radio and television advertisements, newspapers and flyers. A well-developed referral and case management system will allow almost any agency to immediately assess the needs of homeless persons. The City will collaborate with homeless agencies that provide services to the homeless and persons that are subject to becoming homeless, such as recently released institutionalized persons.

Discharge Planning Policy

The West Texas Homeless Network met with city/county government, hospitals, Department of Human Services, the Justice System, and law enforcement agencies to develop a team approach to discharge planning in the West Central Texas area. This involved a four-step strategy of identifying the scope of the problem, identifying priorities, locating resources, and implementing institutional change.

The Network's focus is to continue to identify the scope and nature of the problem. The following activities are conducted:

- Survey shelter providers to see what public institutions are releasing clients/inmates to the area shelters.
- Identify public institutions that should be providing housing as part of discharge planning.
- Have shelters keep a record for a month on where shelter residents resided prior to entering the shelter.
- Recruit participation in the Network from public institutions in the Networks' Continuum of Care service area including Abilene and the surrounding 13 counties.

Discussion

AP-75 Barriers to affordable housing – 91.220(j)

Introduction:

Barriers to Affordable Housing

The following barriers to affordable housing are identified in Abilene through the Consolidated Plan process:

- Insufficient funds for down payment - Private lending institutions typically require home purchasers to provide 10 to 20 percent of a home's value as a down payment. Many low-income households are already rent burdened, paying as high as 40 to 50% of their income for housing. Such high costs for current shelter preclude these low-income households from accumulating the funds for a down payment.
- High existing debt of prospective purchasers - Many low-income households also are saddled with excessively high existing debt for such items as credit accounts, car payments, and medical expenses that prevent obtaining private lender financing.
- Need for property repairs - The homes most affordable to low-income households tend to be located in neighborhoods where property has been poorly maintained and requires repair. Therefore, low-income purchasers often confront the prospect of obtaining a home that will require further financial investment for property improvements. Money for such improvements is frequently unavailable to low-income buyers and private lenders often are unwilling to lend the necessary funds for acquisition and repairs. Complicating the situation further is the reality that such affordable housing is often located in neighborhoods where money invested in property improvements does not necessarily translate into a corresponding increase in the value of the property.
- Lack of credit - Many low-income homebuyers have no credit record because they pay most of their expenses in cash.
- Poor credit - A very common barrier to home ownership is a blemished credit record. Unfavorable credit information can stay on a credit record for up to seven years and bankruptcy records stay on the report for 10 years. Additionally, due to the COVID-19 pandemic many mortgage lenders have increased their minimum qualification requirements of credit scores. For example, a person with a credit score of 580 can typically qualify for an FHA loan, but many lenders are now requiring a minimum score of 650.
- Available funding - A common barrier to affordable housing is available funding to the jurisdiction. When Federal funding to the jurisdiction is threatened, the availability of affordable housing for low-income persons is threatened, as well.
- Unemployment – According to the Bureau of Labor Statistics, the Abilene December 2019 workforce unemployment rate is 2.8%, which has remained steady since August 2019. However, due to the COVID-19 pandemic, unemployment ~~has risen~~rose to 9.4.0% in April 2020. As unemployment rises, more people may face housing insecurity.
- Low number of living-wage jobs available.

- Housing inventory – There is a severe deficiency of rental units available for those living on very low incomes who can only afford a monthly gross rent of \$500. Most of the available rental units in that category are one-bedroom or smaller units, which would not be optimal for families of more than two people.

Actions it planned to remove or ameliorate the negative effects of public policies that serve as barriers to affordable housing such as land use controls, tax policies affecting land, zoning ordinances, building codes, fees and charges, growth limitations, and policies affecting the return on residential investment

Compared to nearby communities, Abilene's policies are reasonable. Furthermore, the development regulation process runs smoothly. City staff is available to assist developers and answer any questions. In the past, the City has provided regulatory incentives for affordable housing on a case-by-case basis. The Planning Division has developed incentives, in the form of relaxed regulations and Capital Improvements Program funding for infill development on empty plots of land in currently developed neighborhoods. Infill development is generally less expensive than new-neighborhood construction. Thus, infill development incentives will most likely result in a greater supply of affordable housing. In the past years, the City has set aside and awarded CIP funds to encourage infill development and will continue to do so as CIP funds are available. Much work remains to increase affordable housing opportunities. As a result, the City will continue to re-evaluate all development fees, regulations and program policies and procedures to determine whether any further revisions may be appropriate to enhance affordable housing for low-income City residents. As specific projects are proposed, the City will review the project for its compliance with existing local laws and regulations. If a local law or regulation should prove to have a negative impact on a proposed affordable housing program or project, such law or regulation would be reviewed to determine its viability.

Discussion:

AP-85 Other Actions – 91.220(k)

Introduction:

Actions planned to address obstacles to meeting underserved needs

Several local organizations such as social service agencies, charitable groups and religious organizations provide emergency/transitional housing and/or supportive services to the homeless and at-risk persons including abused women and children and substance abusers. The City of Abilene and the West Texas Homeless Network is involved in the development and activities of the local Continuum of Care System.

Actions planned to foster and maintain affordable housing

Four programs, funded in the 2020 program year, will improve availability and access to affordable housing for individuals and families through direct housing related repairs and rehabilitation and/or the creation of new housing units. Client income, race, ethnicity and household head information will be maintained.

- Community Housing Development Organization (CHDO) – Habitat for Humanity – 3 single family homebuyer housing units. Homebuyers will be income qualified within the 50%-80% income category.
- City of Abilene Neighborhood Services – First-Time Homebuyer Program – 5 homeowners. This program assists with closing costs and down payment assistance for families with income up to 80% MFI.
- City of Abilene Neighborhood Services – Critical/Limited Repair - 49 owner occupied home repairs. This program assists only those families in the 0-50% income category with urgent/critical home repairs (i.e., gas leaks, busted sewer, water leaks).
- City of Abilene Neighborhood Services – Single-Family Rehab & Reconstruction – 4 homeowner units. These units will be completely brought up to building code by addressing all deficient systems (roof, electrical, plumbing, both gas and water). Reconstruction will remove the current unit and replace on footprint.

Actions planned to reduce lead-based paint hazards

Over 70% of the houses in Abilene were built prior to 1978. The City continues to incorporate lead-based paint evaluation and reduction in its regular housing inspections and housing program review process. It is standard procedure to address lead based paint hazards through Lead Safe Work Practices and abatement as required by HUD and EPA on homes rehabilitated by the City of Abilene Planning and Development Services Department programs and CHDOs. The City will take the following steps on all private housing projects and the Housing Authority will continue to take the following steps on all government funded housing rehabilitation of public housing units.

- Inform all owners, occupants and landlords of lead-based paint hazards and provide information

on methods for reducing risk of exposure in pre-1978 homes.

- Provide testing and abatement for any households whose children have been shown to have elevated blood lead levels. Require the family be moved to a post-1978 unit, or unit that has passed this test.
- Require inspections for lead at the same time other inspections or evaluations are conducted on City sponsored housing.
- The ONS partnered with the West Texas General Contractors Association to host six of the State required “Safe Work Practices” certification classes for workers and contractors.

Actions planned to reduce the number of poverty-level families

The lowest income households are generally those threatened with homelessness and persons in public or assisted housing who are dependent upon public subsidies to maintain their own residences. In all, this segment of the population has the highest incidence of poverty. The City’s focus on reducing the number of poverty level families will continue to consist of promoting self-sufficiency and innovative economic development strategies. The City of Abilene ~~Economic Development Department~~ will continue to promote economic expansion in a number of ways that enhance opportunities for low- and moderate-income residents. The ~~Economic Development Department~~ City of Abilene continues to be pro-active in retaining and seeking businesses that will bring salaries above the local average in order to raise the level of income for all Abilenians. It targets market shortages in the area, which benefit the unemployed/ underemployed, and opens up entry-level opportunities.

Actions planned to develop institutional structure

The City of Abilene will implement the Consolidated Plan by using the Planning and Development Services Department, Neighborhoods Initiatives Division (as part of the Office of Neighborhood Services) as the lead agency. The strength of the institutional structure is that we have an experienced team of staff members as well as an in-house Housing Rehabilitation Coordinator. Staff will manage and work closely with non-profit and for profit organizations in carrying out the Annual Action Plan activities. Various initiatives within the strategy include:

1. Work with non-profit organizations to address community needs and provide support to federal and non-federal funding initiatives.
2. Work with private industry to address important issues that hamper housing and community development efforts.
3. Identify opportunities to create private/public partnerships for project finance and development to leverage federal funds.

Actions planned to enhance coordination between public and private housing and social service agencies

The City’s CDBG and HOME funds continue to be used to help meet the demand for decent, safe and affordable housing, homelessness, and other special needs. The City and G.V. Daniels Recreation/Senior

Center located in the Carver Neighborhood is working to provide access and training to citizens and youth to improve/update their technology skills and to improve employment opportunities. Additionally, the Office of Neighborhood Services (under the Planning and Development Services Department) which administers the CDBG and HOME programs will be involved in a number of activities. Activities will include continued participation in the Continuum of Care Plan. Continued involvement with organized targeted neighborhood organizations, and active collaboration with entities such as the United Way, West Texas Homeless Network, Connecting Caring Communities (CCC), Baptist Children and Family Services (BCFS), Disability in Action, Neighborhoods in Progress (NIP), Hope Haven Too, Habitat for Humanity, FaithWorks and the Abilene Housing Authority (AHA) to help identify and meet the under-served needs in the areas of housing, employment and training opportunities, homelessness, and special needs.

The services targeted to homeless persons and persons with HIV/AIDS and mainstream services are made available through the coordination of services provided by the array of non-profit service providers that constitute the West Texas Homeless network. These organizations partner with each other, the City, and mainstream service providers to provide a wide ranging response to the service needs of homeless persons and persons with HIV/AIDS, particularly chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth

Discussion:

Program Specific Requirements

AP-90 Program Specific Requirements – 91.220(l)(1,2,4)

Introduction:

Community Development Block Grant Program (CDBG)

Reference 24 CFR 91.220(l)(1)

Projects planned with all CDBG funds expected to be available during the year are identified in the Projects Table. The following identifies program income that is available for use that is included in projects to be carried out.

1. The total amount of program income that will have been received before the start of the next program year and that has not yet been reprogrammed	0
2. The amount of proceeds from section 108 loan guarantees that will be used during the year to address the priority needs and specific objectives identified in the grantee's strategic plan.	0
3. The amount of surplus funds from urban renewal settlements	0
4. The amount of any grant funds returned to the line of credit for which the planned use has not been included in a prior statement or plan	0
5. The amount of income from float-funded activities	0
Total Program Income:	0

Other CDBG Requirements

1. The amount of urgent need activities	0
2. The estimated percentage of CDBG funds that will be used for activities that benefit persons of low and moderate income. Overall Benefit - A consecutive period of one, two or three years may be used to determine that a minimum overall benefit of 70% of CDBG funds is used to benefit persons of low and moderate income. Specify the years covered that include this Annual Action Plan.	100.00%

HOME Investment Partnership Program (HOME)
Reference 24 CFR 91.220(l)(2)

1. A description of other forms of investment being used beyond those identified in Section 92.205 is as follows:

Not applicable.

2. A description of the guidelines that will be used for resale or recapture of HOME funds when used for homebuyer activities as required in 92.254, is as follows:

A description of the guidelines that will be used for recapture of HOME funds when used for homebuyer activities as required in 24 CFR 92.254, is as follows:

The City of Abilene utilizes HOME funds to provide direct assistance through the city's First-Time Homebuyer Program, including all homebuyers participating in the CHDO's homebuyer program. The First-Time Homebuyer program will use recapture provisions. Based on the amount of direct HOME subsidy (\$5,000 maximum), the program sets up a 5-year affordability period and provides a deferred payment forgivable loan (DPL) at a 0% interest rate.

Under "Recapture" if the home is sold prior to the end of the affordability period, the homeowner may sell to any willing buyer at any price; a portion of the net proceeds from the sale, if any, will be returned to the City to be used for other eligible HOME activities. The portion of net proceeds returned to the City is only the direct homebuyer subsidy and equal to the amount of HOME funds invested in the property, less the amount forgiven to that point. The amount forgiven will be based on 1/60th per month for each full month that the property has been occupied as the principal residence.

Any funds remaining after the distribution of net proceeds to all lien holders, including the City, will be returned to the homeowner. In the event of a sale, short sale and/or foreclosure, the amount subject to recapture will be limited to the 'net sales proceeds' available at the time of such occurrence. Net sales proceeds are the sales price minus superior loan repayments, not including HOME and any closing costs. Additional information regarding recapture provisions are detailed in the City's written affordable housing policies and procedures. In cases of non-compliance (rental, that is not used as the primary residence), 100% of the HOME funds will be recaptured. Recapture provisions are enforced with a lien and promissory note for a minimum of 5 years.

If there are insufficient funds remaining from the sale of the property recapture will be based on the ratio of the HOME subsidy to the total of the homeowner's investment plus the HOME subsidy. If the City recaptures less than or none of the recapture amount due, the City will maintain data that provides the amount of the sale and the distribution of the funds. This will document that:

1. There were no net proceeds, or;
2. The amount of the net proceeds was insufficient to cover the full amount due.

3. A description of the guidelines for resale and/or recapture that ensures the affordability of units acquired with HOME funds? See 24 CFR 92.254(a)(4) are as follows:

Federal assistance will be provided in the form of a 0% interest, deferred payment loan (DPL) and will be secured by a HOME Written Agreement, fully executed and dated by all applicable parties, a Promissory Note and Deed of Trust. The Deed of Trust is recorded in the Real Property Records of Taylor County ~~and~~ Jones County.

4. Plans for using HOME funds to refinance existing debt secured by multifamily housing that is rehabilitated with HOME funds along with a description of the refinancing guidelines required that will be used under 24 CFR 92.206(b), are as follows:

The City does not intend to use HOME funds to refinance existing debt secured by multifamily housing that is being rehabilitated with HOME funds. In addition, the funds will not be used to refinance multifamily loans made or insured by any federal program. The City is aware that HOME funds cannot be used to refinance multifamily loans made or insured by any federal program, including CDBG.

All applicants for CDBG and HOME assisted programs/projects are required to meet the prevailing HUD income guidelines. The City's selection procedure for all programs is first come, first serve with one exception. That exception is limited to the Single Family Rehab Program. After screening for basic eligibility if there are multiple applicants at the same time, staff will evaluate address location. Service will be first to those located in a Council-specified neighborhood (Carver, Sears, North Sayles, Butternut/Chestnut, Holiday Hills and Alameda) prior to assisting those homeowners in other areas of Abilene.

Program information is provided at the City's website at www.abilenetx.gov/ONS , Texas 2-1-1 Call for Help hotline and through multi-media sources i.e., Facebook, Twitter and City News Releases.

Attachments

Appendix – Alternate/Local Data Sources

Exhibit A: City of Abilene Household Income Distribution by Housing Tenure

	Owners		Renters		Total	
	#	%	#	%	#	%
Less than \$5,000	221	1.0%	1,420	7.0%	1,641	3.8%
\$5,000 to \$9,999	176	0.8%	964	4.8%	1,140	2.7%
\$10,000 to \$14,999	1,392	6.2%	1,565	7.7%	2,957	6.9%
\$15,000 to \$19,999	575	2.6%	644	3.2%	1,219	2.9%
\$20,000 to \$24,999	1,345	6.0%	1,521	7.5%	2,866	6.7%
\$25,000 to \$34,999	1,849	8.2%	3,711	18.3%	5,560	13.0%
\$35,000 to \$49,999	4,003	17.8%	3,668	18.1%	7,671	17.9%
\$50,000 to \$74,999	3,380	15.0%	3,259	16.1%	6,639	15.5%
\$75,000 to \$99,999	3,622	16.1%	1,406	6.9%	5,028	11.8%
\$100,000 to \$149,999	3,317	14.7%	1,733	8.6%	5,050	11.8%
\$150,000 or more	2,612	11.6%	369	1.8%	2,981	7.0%
Total	22,492	100%	20,260	100%	42,752	100%
2018 Median household income	\$ 59,667		\$ 36,071		\$ 46,383	

Source: U.S. Census Bureau, 2018 American Community Survey 1-Year Estimates, Financial Characteristics

Exhibit B: Comparison of Existing (2018) City of Abilene Housing Inventory to Households by Price / Rent Afforded

	Supply of Existing Units	Number of Households Able to Afford Units	Existing Surplus (Deficit) of Units
Home Value			
< \$50,000	2,911	1,789	1,122
\$50,000 – \$99,999	6,136	1,920	4,216
\$100,000 – \$149,999	5,326	1,849	3,477
\$150,000 – \$199,999	3,371	4,003	(632)
\$200,000 – \$299,999	3,306	7,002	(3,696)
\$300,000 – \$499,999	1,269	3,317	(2,048)
\$500,000+	1,73	2,612	(2,439)
Monthly Gross Rent			
Less than \$500	1,150	4,593	(3,443)
\$500 – \$999	10,423	5,232	5,191
\$1,000 – \$1,499	6,090	3,668	2,422
\$1,500 – \$1,999	1,004	3,259	(2,255)
\$2,000 – \$2,499	109	1,406	(1,297)
\$2,500 – \$2,999	0	1,733	(1,733)
\$3,000+	230	369	(139)

Source: U.S. Census Bureau, 2018 American Community Survey 1-Year Estimates, Financial Characteristics

Source: U.S. Census Bureau, 2018 American Community Survey 1-Year Estimates, Selected Housing Characteristics.

Notes from the Gethsemane Temple Community Group Meeting

Top Housing Needs

- There are many, many abandoned homes throughout Abilene – especially in the northern half of the city. With some renovation, they would be great starter homes for families.
- Many homes are abandoned or in really bad shape, but it is difficult to know who owns the property and get them to keep up the homes or property. There aren't any regulations to enforce upkeep.
- Home financing relies a lot on credit scores. Creditors and the financing process are cumbersome; language can be a challenge, too, especially for refugees.
- Apartment rents are unbelievably high. A 3-bedroom apartment may rent for \$750 to \$1,000 per month, and rents are rising!
- Some people do not maintain their homes and property. Many homes are falling down but not being taken down.
- Home ownership is going down, and more people are needing or choosing to rent.
- There is plenty of land that could be used for home-building but no efficient way to get it into people's hands.
- Many landlords do a good job. A few don't, but most are very responsive.
- There has always been an ongoing need for help paying utility bills. A lot of people do not know to sign up for a utility contract that would provide lower, more stable rates. There is a need to educate people about this.

Homelessness

- It is a serious problem.
- AISD "has 1,200 homeless kids," but the number includes kids living with relatives or other situations other than a nuclear family in their own house or apartment. There are still a couple hundred truly homeless kids in the AISD system, though.
- The Hendrick Home for Children has historically provided good resources for kids from families facing serious difficulties. The old one was torn down a year or two ago.
- Love and Caring Ministries does a lot of work with the homeless. They are a center for services locally.
- Churches also reach out to the homeless and provide a lot of help. Some people don't want help, though.
- The biggest homeless need is to break the cycle of poverty.

How do we motivate people to help themselves and/or engage available community services?

- Treat people well and try to help people get over any stigma issues related to asking for help.

- Communicate opportunities to people, show them where they can be (i.e., goals), and help them develop a clear path how to get there.
- Counselors, social workers, and navigators would help.
- Financial literacy education – formal and informal – would be helpful.
- We need to figure out some way to change the culture. It all comes down to education; education drives hope.

Other comments

- There are lots of single parent homes. If you are a single parent household needing childcare, you might as well stay home because the amount you'll make will go to childcare.
- Childcare – especially for lower income households – is a huge problem.
- Childcare subsidies are available, but (1) navigating the system is difficult, (2) a lot of people who could use the help are not aware of it or how to get it, (3) even if you have the subsidy, childcare center openings are few.
- Childcare for kids with developmental disabilities or other personal challenges is really limited.
- More Early Childhood Education / Head Start services are needed.
- Advocacy (or lack of it) is a huge void for childcare and housing-related issues.
- Healthcare – pediatric care and broad-based mental health is needed.

Transportation and access to care

- There wasn't a bus stop that was close to some people with chronic illnesses. There is a need for more stops throughout the city.
- There is a need for expansion of Medicaid rides to healthcare appointments. The service exists, but it is underused.
- Bus stop shelters are a huge need! Enlist businesses and churches to sponsor them being built.

Magic wand question responses

- More street lights
- Broad-based neighborhood renewal.
- Housing maintenance and renovations.
- Improved drainage system; some areas flood when it rains.
- Qualifying for City of Abilene (or other funders') resources is difficult because the income window of those who qualify is small – it is easy to "make too much" to no longer qualify.
- The overall process of getting things done by the City or others needs to be simplified.
- Potholes – especially on the north side – are a big problem.
- The See-Click-Fix app works pretty well!
- "My magic wand response is to have businesspeople share their success with employees and use the money to bring up the whole neighborhood."

Notes from Alameda Community Center Community Group Meeting

Strengths:

- People in Abilene are easy to work with and are friendly
- Small town feel and a short commute in and around town
- Great business experience
- Great place to get involved

Top Housing Needs:

- There is a need for more affordable housing for both homeowners and renters.
- Some landlords don't maintain their properties. Codes are not being enforced.
- Many renters don't complain to landlords in fear of retaliation and possible eviction. Since there is always demand for renters (i.e., college students, military), there is always someone willing to move into the apartment.
- Larger apartment complexes with dedicated property management/landlords are generally better maintained than smaller rental units who likely have a landlord who owns one or two rental units and don't live in Abilene. It seems that parents or grandparents might die and pass the home to a child who rents it out but lives elsewhere.
- There is a formal process for complaints, but most people don't know where to go.
- Residents who live in public housing are required to have regular check-ups so the quality of housing is better and the residents also know who to contact for repairs and/or complaints.
- Abilene has a high number of abandon houses, especially in the Alameda neighborhood. The neighborhood used to primarily military housing, but since has transitioned to more of a low income neighborhood.
- A few years ago, Alameda had a robust neighborhood association, but recent elections yielded an inactive leadership committee. More representation or help from the City may help revitalize the once active neighborhood association.
- There seems to be more programs for utility assistance vs. rental or mortgage assistance programs. The City has programs along with many churches and non-profit organizations.
- There are several programs in the city that help with home maintenance projects, like building a wheelchair ramp or repairing a roof. These programs include: Boots on the Ground, Texas Ramp Project, and Dyess We Care.
- Habitat for Humanity offers a weatherization program for homeowners. It's best utilized for cold weather vs. hot weather. Not everyone in town is aware of the program.

Awareness of Services and Programs

- Almost everyone pays a water bill. That could be a good way to communicate with people in Abilene. Radio is about mode of communication that is widely utilized in the area.
- Most people are aware of 211, but it can be intimidating because the automated menu offers too many options.
- There is an education and access gap in the community. Not everyone has a computer and/or internet or a car.

- Neighborhood associations are usually a great place to obtain information and resources, especially around housing issues.

Homelessness

- There is more episodic homelessness vs. chronic homelessness. A lot of families experience homelessness on and off.
- There is a possibly of a spike in homelessness in the elderly population due to insufficient health insurance and retirement savings to cover the costs of long-term care such as a nursing home.
- There appears to be a high number of homeless individuals who are experiencing mental health and/or substance use disorders.
- Veteran programs are doing an amazing job at keeping veterans off the streets and in homes or transitional housing.
- There is generally enough half-houses in Abilene for most of the general population although there are not enough options for drug addicted women.
- The Salvation Army has enough space for the entire homeless population, but they have a lot of rules that not everyone wants or can follow. Additionally, there are not spaces for families (aka a couple with kids).

Other community needs

- There is a growing traffic problem.
- Too many potholes!
- Transportation can be limited for some populations. Not everyone can afford a car. Those without reliable transportation have limited housing options.
- Childcare can be an issue for some people.

Magic Wand/Extra CDBG Money Uses

- Revitalize vacant houses in lower income neighborhoods
- Very focused project – repair a few homes as a case study. A lot of people and organizations have money in Abilene that could be used to continue this project if it's successful.
- Community policing – have local police be more involved in neighborhoods again

Notes from Rose Park Community Center Community Group Meeting

Housing Needs

- More quality and affordable housing for seniors
- Programs to help seniors age in place at home (i.e., add wheelchair ramps, fix roofs if needed, etc.)

Other Community Needs

- Abilene Public Library charges non-residents a \$10 fee for library cards

- Road conditions – potholes, alleyways

Notes from Cobb Park Community Center Community Group Meeting

Housing Needs

- More affordable housing
- More landlords that accept Section 8 vouchers
- More accessible units for individuals with disabilities. The inventory is very limited, especially for those who qualify for public housing assistance
- More awareness of programs that help seniors with home repairs

Other Community Needs

- Improved community center facilities
- Meal programs for isolated seniors
- Improved access to public transportation

Leticia, James, and all others,

We have gone through the list of questions, feedback, and edits, and have made changes per your recommendations. All items that have been "striked through" have been updated in the report. We have provided additional clarification and notes next to some of the questions in track changes. All changes made in the report document are completed in track changes. Two items are outstanding as of now. We are awaiting response from AHA. However, we feel that these items should not hold back funding. They are highlighted in yellow in this document. Please note that page numbers may have shifted slightly due to edits and changes to the document. Please let us know if you have any additional questions or feedback.

Cheers,

Katelyn-Redline Edits

Page numbers are from the document.

~~Page 12 - Two public hearings were held on August 11, 2020. Is that correct?~~ Yes, two additional public hearings were held on August 11th per the request of the City.

~~Page 12 - "CDBD-CV"~~

~~1) I'm guessing this should be "CDBG-CV"~~

~~2) This is the first time this acronym is used. Please include a definition.~~

~~Page 68 - "meet their health needs as the age..." should be "they" instead of "the"~~

~~Page 72 - "renters earning 30% HAMF." Guessing from the chart above that this should be "HAMFI". Also, this page is the first use of this acronym. Good place for defining it.~~

~~Page 73 - "especially those earning very low incomes or may be living of fixed incomes..." should be "maybe" and "off".~~ "May be" is a verb in this sentence and therefore is correct in use. Fixed "off" and corrected the sentence for ease of the reader.

~~Page 73 - What is a "liar" loan? Please add a definition.~~

~~Page 77 - Table 38 - "REO Properties" - please add the definition of the acronym.~~

~~Page 78 - "The data shows that the" data is plural so should be "show" as used in the rest of the document.~~

Page 78 - "a total of over 4,355 housing units." - strike "over" since the number is exactly 4,355.

Page 78 - "most of the 4,335 units in Abilene built prior to 1980..." should be 4,355.

Page 79 - "Inspection scores for the housing developments with 95 overall score." I'm not sure what this means. The chart after this statement doesn't reference a score, and the chart on the next page shows the average inspection score is 92.

Page 80 - Top of page (before chart) - the 213 public housing units will "provide affordable housing and homeownership opportunities...". I don't know what that means. The units managed by the AHA aren't available for sale, so how do they provide homeownership opportunities? Removed the language around homeownership as it is confusing in the context it was originally written. However, AHA administers the Family Self-Sufficiency (FSS) Program, which helps Housing Choice Voucher to improve their lives through improving their credit, going back to school, and becoming homeowners. While the AHA does not sell homes, it does help educate and support clients to explore homeownership.

Page 80 - The same assertion is made after the chart. If clarifying the paragraph above the chart, be sure to do the same with the paragraph after the chart.

Page 80 - "government funded housing rehabilitation of public housing" - sounds redundant. Yes, but needs to be taken in the whole context of the sentence, which also addresses private housing projects. Private developers may also receive government grants and/or money through government-funded housing voucher programs, like Section 8.

Page 80 - before this page, the transition date for lead-based paint concerns was 1980. From this point forward, the date is 1978. Why aren't we using the same transition date throughout the document? This is a great question! HUD looks at pre-1978 houses as that is when the federal government banned consumer uses of lead-based paint and any legal disclosures and education will state 1978. However, when looking at the data, the US Census Bureau (who administers the American Community Survey, our data source in this instance), they only provide data in select time periods (i.e., 1980-1999, 2000 or later). In this case, we are limited by our data source and thus must "round" to the nearest time period. Further, in the "% Pre-1980 Rental Units," HUD used the same data range.

Page 84 - First use of HMIS, but not defined until page 87. Please put the definition with the first use of the acronym.

Page 85 - Why isn't Hendrick Home for Children included for either Homeless Youth services or Family Services?

Page 85 – Why isn't Workforce Solutions included for Employment Assistance?

Page 88 – "Discharge from institutions into homelessness" – please define what counts as an institution in this context.

Page 91 – "Unemployment" – should be 9.0% in April 2020.

https://www.bls.gov/eag/eag.tx_abilene_msa.htm Additionally, added August 2020 unemployment rate too.

Page 93 – "As of July 2020, the unemployment rate was 5.9%." – should be 6.0%

https://www.bls.gov/eag/eag.tx_abilene_msa.htm Updated to August. Please note that the (p) in front of the most recent number means it is preliminary. The August rate could fluctuate slightly just as the July number did.

Page 93 – What is the "Job less workers %" column representing? We have extended out the decimal places in all the % columns. This should clarify your question. "Job less workers %" is the percent of jobs available minus the share of workers indicating is there is a surplus or deficient in jobs in that business sector. For example, in the "Education and health care services," there are 12,029 (26.6%) jobs available and 15,319 (28.4%) of workers. Thus, there are more workers than jobs available making the job market for that sector very competitive.

Page 98 – Looks like what is being referenced here are numbers for the Civilian labor force (excluding Dyess AFB, City of Abilene, Taylor County, etc.). If that is the case, please specify that. If the list is all-inclusive, where do these employers fall as a percent of employment? Yes, this is Civilian population only calculated by the US Census Bureau.

Page 99 – Just like the first attempt, why are we including as "facts" the data from a 2010 survey done by the WCTCOG with 92 respondents covering the entire region as current concerns for the City of Abilene? For example, according to this "plan", our business community needs "expansion and rehabilitation of current wastewater treatment facility" and "additional water treatment" facilities in order to grow. Apparently, we also don't have adequate VOIP service or emergency service response. Later in this section, HUD asks if the City participates in the Comprehensive Economic Development Strategy, which is why the report was used to help populate these sections of the report. The report used was the 2015-2020 report, which coincides with the most recent Consolidated Plan. We have removed language from the CEDS report from this question section. However, as you're very much aware, expansion and rehabilitation of wastewater treatment facilities is critical for new infrastructure development. While a businessowner may not identify this as an issue, a developer looking to build new office or industrial space may, which could hinder ultimately hinder economic development in the city and surrounding areas.

Page 99 – In this list of “needs” based on the WCTCOG survey, the first bullet can actually either be a positive or a negative for Abilene (the subject area the report should be focused on). Does this mean that because of the availability of high-paying jobs in Abilene that young people from the COG region are migrating to Abilene (a positive for the City). Or, does it mean that there aren’t enough high-paying jobs in Abilene and young people from the entire region (including Abilene) are moving away from the region to pursue better job opportunities (obviously a negative for the City)? We have removed this bullet point in this question section. However, you are correct. Both cases are happening. Abilene has higher paying wages for those in the surrounding area and other cities, like Dallas and Austin have higher paying wages than Abilene. It’s a double-edged sword. Recent college graduates, whether they are originally from Abilene or from away, are likely being attracted to higher paying jobs elsewhere. If more higher paying jobs were available in Abilene, more recent college graduates from the local universities and colleges may consider staying in Abilene.

Page 99 – The obvious disconnect between the author of this document and reality is summed up in the sentence, “To encourage new jobs and industries offering higher wages, Abilene may need to invest in some of its infrastructure, such as improving water and sewer systems, high-speed broadband internet access, and transportation access.” I have yet to hear of a business deciding not to move to Abilene because they think we need to rehabilitate our wastewater reclamation facility that was described as “state of the art” when we discussed possible changes to the Industrial Waste ordinance related to Hauled Liquid Waste. We removed “water and sewer systems” from the sentence. As previously stated above, while a businessowner may not identify “water and sewer systems” as a reason not to move to Abilene, a water and sewer system that can handle new office and industrial buildings is important to economic development. A commercial developer may identify this as a barrier if the systems cannot adequately handle the waste due to increased demands on the system.

Page 100 – What is the “City of Abilene’s Department of Economic Development (EDD)” and who is the head of that department? It’s not talking about the DCOA because the document describes how it “monitors contracts between the DCOA and businesses for compliance.” We corrected this paragraph.

I’m not going to list every occurrence, but the document continues to make reference to the EDD several additional times.

Page 101 – talks about the success of the “Life Sciences Accelerator”. Since that had to be sold to HSU due to a lack of use, this paragraph probably needs to be rewritten.

Page 102 - The paragraph that starts with "Faithworks" addresses job training and internships. The next sentence should be its own paragraph since it transitions to childcare and transportation services of the City of Abilene.

Page 102 - "The City of Abilene in partnership with Abilene ISD, Wylie ISD, and Cisco College is providing vocational training to high school juniors and seniors..." How? I know the DCOA is (or at least was) helping fund the cost of these CTE classes at Cisco. How is the City of Abilene providing for that training? Confirmed with ONS. No additional information about this program was available and to limit confusion, we removed it.

Page 109 - "Abilene has 17 Internet providers including six Fiber providers, three Cable Internet providers, seven DSL providers, four Fixed Wireless providers, and two Satellite providers." Where did these numbers come from? I'd love to see the list of these 17 companies that provide Internet service in Abilene identified by the type of connection they use. We have updated with the newest information. Please see this website for the list: <https://broadbandnow.com/Texas/Abilene>. Note: FCC coverage data is tallied up twice a year and only made public six or more months later.

Page 109 - When the data gets fixed, be sure to fix the map that accompanies this paragraph.

Page 110 - The link to the WCTCOG Hazard Mitigation Plan goes to a page that has a link for the 2006-2011 plan and another for the 2012-2017 plan. Do we actually have a current plan? Based on the text in the 2012-2017 plan, if we don't have a current plan, then we aren't eligible for mitigation grant funding (44 CFR 201.6(d)(3)). This was the information we were provided. Please discuss this with WCTCOG and/or the City.

Page 113 - "within the EMSA for HOPWA" - what do these mean? This is the HUD question language. We cannot change it. Abilene does not receive HOPWA (Housing Opportunities for Persons with AIDS) funding. EMSA = eligible metropolitan statistical area.

Page 128 - "Asses of Strengths" - sounds like it should be "Assessment" We doubled checked IDIS (HUD data entry platform for the Consolidated Plan). "Assess of Strengths and Gaps in the Institutional Delivery System" is the correct titled.

Page 129 - last bullet in the list starts with a discussion of medical and dental care, then transitions to housing (Hope Haven, HPRR, HUD, etc.). Probably should have two separate bullets.

Pages 129 and 136 both mention "lengthy" or "long" waiting lists. However, I don't remember seeing any data that states what that means. How "long" is the waiting list (size and average time spent waiting on the list)? Confirming wait list time with AHA now.

Will update when AHA responds.

Page 138 - "unemployment has risen to 4.0% in April 2020" - as stated earlier, this should be 9.0%.

Pages 139 and 140 mention "Pocket Pals" - please define/describe what these are. These are pocket resource guides of local services. You can see a sample here: https://wthn.communityos.org/cms/system/files/Pocket%20Resource%20Guide%20w%20map_09.16.2019_0.pdf

Page 140 - first use of WCTRF-SSVF - please define the acronym when it is first used. It's defined on page 139 already. It's the Supportive Services for Veteran Families (SSVF) administered by the West Central Texas Regional Foundation (WCTRF). The paragraph further describes the program.

Page 141 - "CCDC and BCFS assisted approximately 200 young people in 2009."
-1) What is CCDC?
-2) Is that the most recent date we have data for? Yes, unfortunately, it's the most recent data we were given.

Page 142 - Breakfast on Beech Street - "Operated out of First Christian Church," - nope - FCS sold their building to FBC in May 2019.

Page 142 - bullet list
-1) "Advocates of Abilene" - what is this?
-2) "Mental Health Associates" - I'm guessing this is "Mental Health America of Abilene" (formerly known as Mental Health Associates - <https://abilenemha.org>) Yes, you are correct. Some of these providers have either merged with others (Advocates of Abilene) or undergone a name change. Thank you for the correction.

Pages 145 and 174 - "the Justice System" - is this the District Attorney's office? If so, why not specify that? If not, what is this referring to? The Justice System is referenced as a whole, so this includes the courts, representatives from the detention center, parole officers, etc.

Page 146 - in reference to lead poisoning hazards, "lab work from local physician's labs are sent directly to the State, therefore the local Public Health District does not have access to those records." Why would we not have access to lead poisoning hazard data? I cannot answer this question for you. This was the information we were provided by the local Public Health Department when we made the data request.

Page 148 - "The DCOA targets market shortages in the area...and opens up entry-level opportunities." I've never really thought of the DCOA as trying to bring "entry-level" jobs (my translation = lower-paying jobs), but higher-paying jobs.

Page 148 - last paragraph

- 1) "in the city is challenging issue" -> "in the city is a challenging issue"
- 2) "Because majority of" -> "Because a majority of"
- 3) "In future, the City" -> "In the future, the City"

Page 149 - "Neighborhood Initiatives Division" - shouldn't this be the "Office of Neighborhood Services"?

Page 149 - "CAPER" - please add the definition for this acronym.

Page 154 - correct grammar/wording "There is a greater need for affordable houses and rental units than supply in Abilene".

Page 157ff - AP38 Project Summary Information - most of these have completion dates that have passed. I'd like to know the status of them. Were they completed on time or delayed due to COVID-19? If delayed, what is the new, target completion date? These were target dates for funding. Funding was delayed. We will need to ask Abilene's HUD rep for new target dates.

Page 166 - "Five programs will be funded in the 2020 program year." Aren't we already in the 2021 program/fiscal year? CDBG/HOME grants work on the October 1 federal grant cycle. Federal grant year 2020 starts on October 1.

Page 167 - "MFI" - should this be "HAMFI" to be consistent with other uses in the document? ONS uses this terminology in their programing (i.e., first-time homebuyer program). MFI is "median family income." Since we are directly referencing ONS programs, we should use ONS terminology.

Page 168 - "LRPH" - please add the definition for the acronym. This is what the AHA Public Housing program and office is called. I have put in a request to AHA to define LRPH to see if it's an acronym for something.

Pages 171 and 172 - Since this is the consolidated plan for Abilene, why are the following entities listed as providing assistance in Abilene? Do they actually work with people in Abilene or are they just being included because they are nearby? Aspermont SBDC, Rolling Plains Management Corp, Shackelford County Resource Center, Sweetwater Public Housing Authority, Stamford Public Housing Authority. This is a great question! Often times, the homeless population, especially the chronically homeless, are a transient population. They

will move between areas of established services. Additionally, individuals on the brink of homelessness may go to another city to seek employment opportunities. If they fail to obtain employment, they may become homeless in that new city. Additionally, the West Texas Homeless Network is a network of organizations dedicated to sharing resources and helping each other reduce homelessness in West Texas.

~~Page 181 - #3 - "recorded in the Real Property Records of Taylor County" - shouldn't this include the option of recording in Jones County for that part of the City?~~

~~Page 184 - "Supply of Existing Units" chart - \$500,000+ has "1,73". I'm guessing that should be simply "173".~~

~~Page 184 - The chart shows a surplus of 1,122 housing units < \$50,000, 4,216 units \$50K to < \$100K, and 3,477 units from \$100K to < \$150K. This seems to contradict earlier statements about there being a shortage of units (and a lengthy waiting list). Are these unrelated statistics? If so, it shows the value of having an explanation with the earlier statements.~~ Thank you for the feedback on this table. We have deleted this table from the Consolidated Plan as HUD does not require it. We have included this table in the Analysis of Impediments with further narrative. The lengthy waiting period and shortage of units is more related to public housing and housing that accepts housing vouchers. Not all landlords accept housing vouchers. This table is describing the number of households able to afford (either own or rent) a house/apartment based on their annual household income. If you look at monthly gross rent "less than \$500," you can see that there are 4,593 households in Abilene that can afford a monthly rent of less than \$500. However, there are only 1,150 available units in that price range. That leaves 3,443 people who are likely cost-burden (spending more than 30% of their income on housing). This is a projection that Crescendo developed to help show affordability and housing inventory for our clients. If you have any follow-up questions, please let us know.

WEST CENTRAL TEXAS COUNCIL OF GOVERNMENTS REGIONAL HAZARD MITIGATION PLAN UPDATE

Planning Participants for Planning Area 1: Taylor County, City of Abilene, Town of Buffalo Gap, Town of Lawn, Town of Merkel, Town of Trent, City of Tuscola, City of Tye, and WCTCOG



***Maintaining a Safe, Secure and Sustainable
Community***

DRAFT: MAY 2018



For more information, visit our website at:

www.wctcog.org

Written comments should be forwarded to:

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BACKGROUND

West Central Texas Council of Governments (WCTCOG) is a public entity made up of associated cities, counties and special governmental districts serving the 19 counties of Brown, Callahan, Coleman, Comanche, Eastland, Fisher, Haskell, Jones, Kent, Knox, Mitchell, Nolan, Runnels, Scurry, Shackelford, Stephens, Stonewall, Taylor and Throckmorton in a rural area encompassing 18,000 square miles. The WCTCOG addresses several issues such as regional and municipal planning, economic and community development, hazard mitigation and emergency planning, water use, pollution control, 9-1-1 services, law enforcement training, community programs, including senior citizens, persons with disabilities and veterans.

The WCTCOG is committed to creating a disaster-resistant area in West Central Texas. In 2004, the WCTCOG facilitated development of a Hazard Mitigation Action Plan (HMAP) approved by the Federal Emergency Management Agency (FEMA) entitled, “Developing Risk-Adverse Strategies for a More Disaster-Resistant Region.” Then in 2012, information about the planning area and hazard events were updated and incorporated into their HMAP Update titled, “Hazard Mitigation Plan Update: Protecting the Region Against All Hazards.” These plans were formed with technical assistance provided by WCTCOG and H2O Partners, Inc.

Consistent with this vision, WCTCOG took the lead in sponsoring the development of a comprehensive Regional Hazard Mitigation Plan Update (“Plan Update”) for the participating counties, cities, and towns. The Disaster Mitigation Act requires that hazard mitigation plans be reviewed and revised every five years to maintain eligibility for Hazard Mitigation Assistance (HMA) grant funding. Since FEMA originally approved the WCTCOG HMAP in 2006, and then approved an update in 2012, the WCTCOG began the process of developing a HMAP Update in order to maintain eligibility for grant funding within that five-year window. The WCTCOG selected the consultant team of H2O Partners, Inc. to write and develop the Regional HMAP Update 2018, hereinafter titled: “WCTCOG Regional Hazard Mitigation Plan Update 2018: Maintaining a Safe, Secure and Sustainable Community” (Plan or Plan Update).

Although 19 counties are part of the WCTCOG, only 18 counties decided to participate within the plan update; Eastland County and cities within their county decline to participate in this plan update. The participating 18 counties have been split into 6 Planning Areas, according to their location. Table 1-1 lists all of the participating jurisdictions within the WCTCOG, and the Planning Area they are located within.

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Table 1-1. Participating Jurisdictions by Planning Area

Planning Area 1	Planning Area 4
WCTCOG	Haskell County
Taylor County	City of Haskell
City of Abilene	City of O'Brien
Town of Buffalo Gap	Town of Rochester
Town of Lawn	Town of Rule
Town of Merkel	City of Weinert
Town of Trent	Kent County
City of Tuscola	City of Jayton
City of Tye	Knox County
Planning Area 2	City of Benjamin
Callahan County	City of Goree
City of Baird	City of Knox City
City of Clyde	City of Munday
Town of Cross Plains	Stonewall County
Town of Putnam	Town of Aspermont
Jones County	Throckmorton County
City of Anson	Town of Throckmorton
City of Hamlin	Town of Woodson
City of Hawley	Planning Area 5
City of Lueders	Comanche County
City of Samford	City of Comanche
Shackelford County	City of De Leon
City of Albany	Town of Gustine
City of Moran	Stephens County
Planning Area 3	City of Breckenridge
Fisher County	Planning Area 6
City of Roby	Brown County
City of Rotan	City of Bangs
Mitchell County	City of Blanket
City of Colorado City	City of Early
Town of Loraine	Coleman County
City of Westbrook	City of Coleman
Nolan County	City of Novice
City of Blackwell	Town of Santa Anna
City of Roscoe	Runnels County
City of Sweetwater	Town of Ballinger
Scurry County	City of Miles
City of Snyder	City of Winters

The WCTCOG Regional Hazard Mitigation Plan Update 2018 was developed as six separate plans, one for each Planning Area. This Plan Update was developed specifically for Planning Area 1, and is a multi-jurisdictional Plan. The participating jurisdictions include Taylor County, the City of Abilene, the Town of Buffalo Gap, the

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Town of Lawn, the Town of Merkel, the Town of Trent, the City of Tuscola, the City of Tye, and the WCTCOG. These jurisdictions provided valuable input into the planning process.

Taylor County is located in west central Texas, in the Rolling Plains vegetation region. Abilene is the largest city and county seat and is located 151 miles west of Fort Worth.

Taylor County is bordered by Jones County to the north, Shackelford County to the northeast, Callahan County to the east, Coleman County to the southeast, Runnels County to the south, Nolan County to the west and Mitchell County to the northwest. Transportation needs are met by U.S. Highway 83/84 and 227, Interstate 20, State Highway 36, and an airport. The Missouri Pacific Railroad serves cities such as Merkel, Tye, and Abilene. Other railroads serving the county are the Atchison, Topeka and Santa Fe and the Burlington Northern.

Texas is prone to extremely heavy rains and flooding with half of the world record rainfall rates (48 hours or less).¹ While flooding is a well-known risk, Planning Area 1 is susceptible to a wide range of natural hazards, including but not limited to extreme heat, drought, hail, and winter storms. These life-threatening hazards can destroy property, disrupt the economy, and lower the overall quality of life for individuals.

While it is impossible to prevent an event from occurring, the effect from many hazards to people and property can be lessened. This concept is known as hazard mitigation, which is defined by the Federal Emergency Management Agency (FEMA) as *sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects*.² Communities participate in hazard mitigation by developing hazard mitigation plans. The Texas Division of Emergency Management (TDEM) is required to review the plan and FEMA has the authority to review and approve hazard mitigation plans through the Disaster Mitigation Act of 2000.

Hazard mitigation activities are an investment in a community's safety and sustainability. It is widely accepted that the most effective hazard mitigation measures are implemented at the local government level, where decisions on the regulation and control of development are ultimately made. A comprehensive review to a hazard mitigation plan addresses hazard vulnerability that exist today and in the foreseeable future. Therefore, it is essential that a plan identify projected patterns of how future development will increase or decrease a community's overall hazard vulnerability.

SCOPE

The focus of the Plan Update is to identify activities to mitigate hazards classified as "high" or "moderate" risk, as determined through a detailed hazard risk assessment conducted for Planning Area 1 and the participating jurisdictions. The hazard classification enables the participating County and jurisdictions to prioritize mitigation actions based on hazards which can present the greatest risk to lives and property in the geographic scope.

¹ http://floodsafety.com/texas/regional_info/regional_info/austin_zone.htm

² <http://www.fema.gov/hazard-mitigation-planning-resources>

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Throughout the plan “Planning Area 1” refers to the entire planning area including the unincorporated area of Taylor County, the political border of the cities of Abilene, including WCTCOG, Tuscola, and Tye, and the towns of Buffalo Gap, Lawn, Merkel, and Trent.

PURPOSE

The Plan Update was prepared by WCTCOG, Taylor County, participating jurisdictions, and H2O Partners, Inc. The purpose of the Plan Update is to protect people and structures and to minimize the costs of disaster response and recovery. The goal of the Plan Update is to minimize or eliminate long-term risks to human life and property from known hazards by identifying and implementing cost-effective hazard mitigation actions. The planning process is an opportunity for Taylor County, the participating jurisdictions, stakeholders, and the general public to evaluate and develop successful hazard mitigation actions to reduce future risk of loss of life and damage to property resulting from a disaster in Planning Area 1.

The Mission Statement of the Plan Update is, *“Maintaining a secure and sustainable future through the revision and development of targeted hazard mitigation actions to protect life and property.”*

Taylor County, participating jurisdictions, and planning participants identified twelve natural hazards to be addressed by the Plan Update. The specific goals of the Plan Update are to:

- Minimize disruption to participating jurisdictions within Planning Area 1 following a disaster;
- Streamline disaster recovery by articulating actions to be taken before a disaster strikes to reduce or eliminate future damage;
- Demonstrate a firm local commitment to hazard mitigation principles;
- Serve as a basis for future funding that may become available through grant and technical assistance programs offered by the State or Federal government. The Plan will enable participating jurisdictions within Planning Area 1 to take advantage of rapidly developing mitigation grant opportunities as they arise; and
- Ensure that participating jurisdictions within Planning Area 1 maintain eligibility for the full range of future Federal disaster relief.

AUTHORITY



The Plan is tailored specifically for Taylor County, participating jurisdictions, and plan participants including Planning Team members, stakeholders, and the general public who participated in the Plan Update development process. The Plan complies with all requirements promulgated by the Texas

Division of Emergency Management (TDEM) and all applicable provisions of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, Section 104 of the Disaster Mitigation Act of 2000 (DMA 2000) (P.L. 106-390), and the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004 (P.L. 108-264), which amended the National Flood Insurance Act (NFIA) of 1968 (42 U.S.C. 4001, et al). Additionally, the Plan complies with the Interim Final Rules for the Hazard Mitigation Planning and Hazard Mitigation Grant Program (44 CFR, Part 201), which specify the criteria for approval of mitigation plans required in Section 322 of the DMA 2000 and standards found in FEMA’s “Local Mitigation Plan Review Guide” (October 2011), and the “Local

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Mitigation Planning Handbook” (March 2013). Additionally, the Plan is developed in accordance with FEMA’s Community Rating System (CRS) Floodplain Management Plan standards and policies.

SUMMARY OF SECTIONS

Sections 1 and 2 of the Plan Update outline the Plan’s purpose and development, including how Planning Team members, stakeholders, and members of the general public were involved in the planning process. Section 3 profiles the Planning Area’s population and economy.

Sections 4 through 16 present a hazard overview and information on individual natural hazards in the planning area. The hazards generally appear in order of priority based on potential losses to life and property, and other community concerns. For each hazard, the Plan Update presents a description of the hazard, a list of historical hazard events, and the results of the vulnerability and risk assessment process.

Section 17 presents hazard mitigation goals and objectives. Section 18 gives an analysis for the previous actions and Section 19 presents hazard mitigation actions for Taylor County and the participating jurisdictions. Section 20 identifies Plan maintenance mechanisms.

The list of planning team members and stakeholders is located in Appendix A. Public survey results are analyzed and presented in Appendix B. Appendix C contains a detailed list of critical facilities for the area, and Appendix D is dam locations. Appendix E contains information regarding workshops and meeting documentation. Capability Assessment results for participating jurisdictions within Planning Area 1 are located in Appendix F.³

³ Information contained in some of these appendices are exempt from public release under the Freedom of Information Act (FOIA).

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PLAN PREPARATION AND DEVELOPMENT

Hazard mitigation planning involves coordination with various constituents and stakeholders to develop a more disaster-resistant community. Section 2 provides an overview of the planning process including the identification of key steps and a detailed description of how stakeholders and the public were involved.

OVERVIEW OF THE PLAN

The West Central Texas Council of Governments hired H2O Partners, Inc. (Consultant Team), to provide technical support and oversee the development of the Regional Hazard Mitigation Plan Update 2018. The Consultant Team used the FEMA “Local Mitigation Plan Review Guide” (October 1, 2011), and the “Local Mitigation Planning Handbook” (March 2013) to develop the Plan Update. The overall planning process is shown in Figure 2-1 below.

Figure 2-1. Mitigation Planning Process

WCTCOG, participating jurisdictions within the Planning Areas, and the Consultant Team met in January 2017 to begin organizing resources, identify Planning Team members, and conduct a Capability Assessment.

PLANNING TEAM

Key members of H2O Partners, Inc. developed the Plan Update in conjunction with the Planning Team. The Planning Team was established using a direct representation model. Some of the responsibilities of the Planning Team included: completing Capability Assessment surveys, providing input regarding the identification of hazards, identifying mitigation goals, and developing mitigation strategies. An Executive Planning Team consisting of key personnel from each of the participating jurisdictions within Planning Area 1, shown in Table 2-1, was formed to coordinate planning efforts and request input and participation in the planning process. Table 2-2 reflects the Advisory Planning Team, consisting of additional representatives from area organizations and departments from the participating jurisdictions within Planning Area 1 that participated throughout the planning process.

Table 2-1. Executive Planning Team

ORGANIZATION / DEPARTMENT	TITLE
WCTCOG	Hazard Mitigation Project Director
WCTCOG	Executive Director
Taylor County	Emergency Management Coordinator
Taylor County	Judge

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ORGANIZATION / DEPARTMENT	TITLE
Taylor County	Admin to County Clerk
City of Abilene	Emergency Management Coordinator
City of Abilene	Deputy Emergency Management Coordinator
City of Abilene	Mayor
City of Abilene	City Secretary
Town of Buffalo Gap	City Secretary
Town of Buffalo Gap	EMC – Fire Chief
Town of Buffalo Gap	EMC
Town of Lawn	City Secretary
Town of Lawn	Mayor
Town of Merkel	City Manager
Town of Merkel	City Secretary
Town of Trent	Emergency Management Coordinator
Town of Trent	City Secretary
Town of Trent	Mayor
City of Tuscola	Emergency Management Coordinator
City of Tuscola	City Secretary
City of Tye	City Secretary
City of Tye	Mayor
City of Tye	Police Chief

Table 2-2. Advisory Planning Team

ORGANIZATION / DEPARTMENT	TITLE
WCTCOG	9-1-1 Director
Taylor County	Treasurer
Taylor County	County Clerk
Taylor County, Precinct 1	Commissioner

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ORGANIZATION / DEPARTMENT	TITLE
Taylor County, Precinct 2	Commissioner
Taylor County, Precinct 4	Commissioner
Taylor County, LEPC	Chairman
Taylor County, LEPC	Treasurer
City of Abilene	City Manager
City of Abilene	Stormwater Administrator
City of Abilene	City Intern
City of Abilene	Deputy Fire Chief
City of Abilene, HDR Engineering	Project Manager
City of Abilene, Public Works	Engineer Tech
City of Abilene, Public Works	Director of Public Works
City of Abilene	Traffic Engineer
City of Abilene	Director of Community Services
City of Abilene	Solid Waste Manager
City of Abilene	Council Member
City of Abilene	Council Member
City of Abilene	Council Member
City of Abilene	Council Member
City of Abilene	Council Member
City of Abilene	Council Member
Town of Buffalo Gap	Mayor
Town of Buffalo Gap	Council Member
Town of Buffalo Gap	Council Member
Town of Buffalo Gap	Council Member
Town of Buffalo Gap	Council Member
Town of Buffalo Gap	Council Member
Town of Lawn	Council Member

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ORGANIZATION / DEPARTMENT	TITLE
Town of Lawn	Council Member
Town of Lawn	Council Member
Town of Lawn	Council Member
Town of Lawn	Council Member
Town of Merkel	Mayor
Town of Merkel	Council Member
Town of Merkel	Council Member
Town of Merkel	Council Member
Town of Merkel	Council Member
Town of Merkel	Council Member
Town of Trent	Council Member
Town of Trent	Council Member
Town of Trent	Council Member
Town of Trent	Council Member
Town of Trent	Council Member
City of Tuscola, Jim Ned Volunteer Fire Dept.	Fire Chief
City of Tuscola	Mayor Pro-Tem
City of Tuscola	Council Member
City of Tuscola	Council Member
City of Tuscola	Council Member
City of Tuscola	Council Member
City of Tye	Code Officer
City of Tye	Council Member
City of Tye	Council Member
City of Tye	Council Member
City of Tye	Council Member
City of Tye	Council Member

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ORGANIZATION / DEPARTMENT	TITLE
City of Tye	Council Member

Additionally, a Stakeholder Group was invited to participate in the planning process via e-mail. The Consultant Team, Planning Teams, and Stakeholder Group coordinated to identify mitigation goals, and develop mitigation strategies and actions for the Plan Update. Appendix A provides a complete listing of all participating Planning Team members and stakeholders from Planning Area 1 by organization and title.

Based on results of completed Capability Assessment, participating jurisdictions within Planning Area 1 described methods for achieving future hazard mitigation measures by expanding existing capabilities. For example, several of the jurisdictions do not have a community wildfire protection plan in place. Other options for improving capabilities include the following:

- Establishing Planning Team members with the authority to monitor the Plan and identify grant funding opportunities for expanding staff.
- Identifying opportunities for cross-training or increasing the technical expertise of staff by attending free training available through FEMA and the Texas Division of Emergency Management (TDEM) by monitoring classes and availability through preparingtexas.org.
- Reviewing current floodplain ordinances for opportunities to increase resiliency such as modifying permitting or building codes.
- Developing ordinances that will require all new developments to conform to the highest mitigation standards.

Sample hazard mitigation actions developed with similar hazard risk were shared at the meetings. These important discussions resulted in development of multiple mitigation actions that are included in the Plan Update to further mitigate risk from natural hazards in the future.

The Planning Team developed hazard mitigation actions for mitigating risk from all of the hazards including potential flooding, hail, and extreme heat. The actions include but are not limited to drainage improvement projects, hardening critical facilities and installing generators, and educating citizens to practice hazard mitigation techniques.

PLANNING PROCESS

The process used to prepare the Plan Update followed the four major steps included at Figure 2-1. After the Planning Team was organized, a capability assessment was developed and distributed at the Kick-Off Workshop. Hazards were identified and assessed, and results associated with each of the hazards were provided at the Risk Assessment Workshop. Based on Planning Area 1's identified vulnerabilities, specific mitigation strategies were discussed and developed at the Mitigation Strategy Workshop. Finally, Plan maintenance and implementation procedures were developed and are included in Section 20. Participation of Planning Team members, stakeholders, and the public at each of the workshops is documented in Appendix E.

At the Plan development workshops held throughout the planning process described herein, the following factors were taken into consideration:

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- The nature and magnitude of risks currently affecting the community;
- Hazard mitigation goals to address current and expected conditions;
- Whether current resources will be sufficient for implementing the Plan Update;
- Implementation problems, such as technical, political, legal, and coordination issues that may hinder development;
- Anticipated outcomes; and
- How participating jurisdictions within Planning Area 1, agencies, and partners will participate in implementing the Plan Update.

KICKOFF WORKSHOP

The Kickoff Workshop was held at the West Central Texas Council of Governments office in Abilene on June 12, 2017. The initial workshop informed participating officials and key department personnel about how the planning process pertained to their distinct roles and responsibilities and engaged stakeholder groups including, but not limited to Abilene Chamber of Commerce, Middle Clear Fork SWCD, West Central Texas MWD, and surrounding universities and Independent School Districts. In addition to the kickoff presentation, participants received the following information:

- Project overview regarding the planning process;
- Public survey access information;
- Hazard Ranking form; and
- Capability Assessment survey for completion.

A risk ranking exercise was conducted at the Kickoff Workshop to get input from the Planning Team and stakeholders pertaining to various risks from a list of natural hazards affecting the planning area. Participants ranked hazards high to low in terms of perceived level of risk, frequency of occurrence, and potential impact.

HAZARD IDENTIFICATION

At the Kickoff Workshop, and through e-mail and phone correspondence, the Planning Team conducted preliminary hazard identification. The Planning Team in coordination with the Consultant Team reviewed and considered a full range of natural hazards. Once identified, the teams narrowed the list to significant hazards by reviewing hazards affecting the area as a whole, the 2013 State of Texas Hazard Mitigation Plan Update, and initial study results from reputable sources such as federal and state agencies. Based on this initial analysis, the teams identified a total of twelve natural hazards which pose a significant threat to the planning area.

RISK ASSESSMENT

An initial risk assessment for participating jurisdictions within Planning Area 1 was completed in September 2017 and results were presented to Planning Team members at the Risk Assessment Workshop held on September 12, 2017. At the workshop, the characteristics and consequences of each hazard were evaluated to determine the extent to which the planning area would be affected in terms of potential danger to property and citizens.

Property and crop damages were estimated by gathering data from the National Center for Environmental Information (NCEI) and National Oceanic and Atmospheric Administration (NOAA). The assessment also

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examined the impact of various hazards on the built environment, including general building stock, critical facilities, lifelines, and infrastructure. The resulting risk assessment profiled hazard events, provided information on previous occurrences, estimated probability of future events, and detailed the spatial extent and magnitude of impact on people and property. Each participant at the Risk Assessment Workshop was provided a risk ranking sheet that asked participants to rank hazards in terms of the probability or frequency of occurrence, extent of spatial impact, and the magnitude of impact. The results of the ranking sheets identified unique perspectives on varied risks throughout the planning area.

The assessments were also used to set priorities for hazard mitigation actions based on potential loss of lives and dollar losses. A hazard profile and vulnerability analysis for each of the hazards can be found in Sections 4 through 16.

MITIGATION REVIEW AND DEVELOPMENT

Developing the Mitigation Strategy for the Plan involved identifying mitigation goals and new mitigation actions. A Mitigation Workshop was held at the West Central Texas Council of Governments office in Abilene on November 15, 2017. In addition to the Planning Team, stakeholder groups were invited to attend the workshop. Regarding hazard mitigation actions, workshop participants emphasized the desire for flood and wildfire projects. Additionally, the participating jurisdictions were proactive in identifying mitigation actions to lessen the risk of all the identified hazards included in the Plan Update.

An inclusive and structured process was used to develop and prioritize new hazard mitigation actions for the Plan Update. The prioritization method was based on FEMA's STAPLE+E criteria and included social, technical, administrative, political, legal, economic, and environmental considerations. As a result, each Planning Team Member assigned an overall priority to each hazard mitigation action. The overall priority of each action is reflected in the hazard mitigation actions found in Section 19.

Planning Team Members then developed action plans identifying proposed actions, costs and benefits, the responsible organization(s), effects on new and existing buildings, implementation schedules, priorities, and potential funding sources.

Specifically, the process involved:

- Listing optional hazard mitigation actions based on information collected from previous plan reviews, studies, and interviews with federal, state, and local officials. Workshop participants reviewed the optional mitigation actions and selected actions that were most applicable to their area of responsibility, cost-effective in reducing risk, easily implemented, and likely to receive institutional and community support.
- Workshop participants inventoried federal and state funding sources that could assist in implementing the proposed hazard mitigation actions. Information was collected, including the program name, authority, purpose of the program, types of assistance and eligible projects, conditions on funding, types of hazards covered, matching requirements, application deadlines, and a point of contact.
- Planning Team Members considered the benefits that would result from implementing the hazard mitigation actions compared to the cost of those projects. Although detailed cost-benefit analyses

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were beyond the scope of the Plan Update, Planning Team Members utilized economic evaluation as a determining factor between hazard mitigation actions.

- Planning Team Members then selected and prioritized mitigation actions.

Hazard mitigation actions identified in the process were made available to the Planning Team for review. The draft Plan Update was made available to the general public for review on the WCTCOG's website, along with the participating jurisdictions' websites, with the chance to comment via sending an email.

REVIEW AND INCORPORATION OF EXISTING PLANS

REVIEW

Background information utilized during the planning process included various studies, plans, reports, and technical information from sources such as FEMA, the United States Army Corps of Engineers (USACE), the U.S. Fire Administration, National Oceanic and Atmospheric Administration (NOAA), the Texas Water Development Board (TWDB), the Texas Commission on Environmental Quality (TCEQ), the Texas State Data Center, Texas Forest Service, the Texas Division of Emergency Management (TDEM), and local hazard assessments and plans. Section 4 and the hazard-specific sections of the Plan (Sections 5-16) summarize the relevant background information.

Specific background documents, including those from FEMA, provided information on hazard risk, hazard mitigation actions currently being implemented, and potential mitigation actions. Previous hazard events, occurrences, and descriptions were identified through NOAA's National Centers for Environmental Information (NCEI). Results of past hazard events were found through searching the NCEI. The USACE studies were reviewed for their assessment of risk and potential projects in the region. State Data Center documents were used to obtain population projections. The State Demographer webpages were reviewed for population and other projections and included in Section 3 of the Plan. Information from the Texas Forest Service was used to appropriately rank the wildfire hazard, and to help identify potential grant opportunities. Materials from FEMA and TDEM were reviewed for guidance on Plan Update development requirements.

INCORPORATION OF EXISTING PLANS INTO THE HMAP PROCESS

A Capability Assessment was completed by key departments from the participating jurisdictions within Planning Area 1 which provided information pertaining to existing plans, policies, ordinances and regulations to be integrated into the goals and objectives of the Plan Update. The relevant information was included in a master Capability Assessment, Appendix F.

Existing projects and studies were utilized as a starting point for discussing hazard mitigation actions among Planning and Consultant Team members. For example, the City of Abilene has reviewed their Master Drainage Plan in order to incorporate projects that would enhance their drainage system. Additionally, policies and ordinances were reviewed by several of the participating jurisdictions. These jurisdictions have included actions to develop and implement routine fire hydrant maintenance, burn ban ordinance, and fire prevention regulations. Other plans were reviewed, such as Emergency Operations Plans and Capital Improvement Plans, to identify any additional mitigation actions. Finally, the 2013 State of Texas Mitigation Plan Update, developed by TDEM, was discussed in the initial planning meeting in order to develop a specific group of hazards to

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address in the planning effort. The 2013 State Plan Update was also used as a guidance document, along with FEMA materials, in the development of the Regional Hazard Mitigation Action Plan Update.

INCORPORATION OF THE HMAP INTO OTHER PLANNING MECHANISMS

Planning Team members will integrate implementation of the Plan Update with other planning mechanisms for Planning Area 1, such as the Emergency Operations Plan. Existing plans for participating jurisdictions will be reviewed and incorporated into the Plan Update, as appropriate. This section discusses how the Plan will be implemented by the participating jurisdictions within Planning Area 1. It also addresses how the Plan will be evaluated and improved over time, and how the public will continue to be involved in the hazard mitigation planning process.

Participating jurisdictions within Planning Area 1 will be responsible for implementing hazard mitigation actions contained in Section 19. Each hazard mitigation action has been assigned to a specific County and City department that is responsible for tracking and implementing the action.

A funding source has been listed for each identified hazard mitigation action and may be utilized to implement the action. An implementation time period has also been assigned to each hazard mitigation action as an incentive and to determine whether actions are implemented on a timely basis.

Participating jurisdictions within Planning Area 1 will integrate hazard mitigation actions contained in the Plan Update with existing planning mechanisms such as Storm Water Management Plans and ordinances, Emergency Operations or Management Plans, Evacuation Plans, and other local and area planning efforts. Planning Area 1 will work closely with area organizations to coordinate implementation of hazard mitigation actions that benefit the planning area in terms of financial and economic impact.

Upon formal adoption of the Plan Update, Planning Team members from the participating jurisdictions will review existing plans along with building codes to guide development and ensure that hazard mitigation actions are implemented. Each of the jurisdictions will be responsible for coordinating periodic review of the Plan Update with members of the Advisory Planning Team to ensure integration of hazard mitigation strategies into these planning mechanisms and codes. The Planning Team will also conduct periodic reviews of various existing planning mechanisms and analyze the need for any amendments or updates in light of the approved Plan Update. Participating jurisdictions within Planning Area 1 will ensure that future long-term planning objectives will contribute to the goals of the Plan to reduce the long-term risk to life and property from moderate and high risk hazards. Within one year of formal adoption of the Plan, existing planning mechanisms will be reviewed and analyzed as they pertain to the Plan Update.

Planning Team members will review and revise, as necessary, the long-range goals and objectives in its strategic plan and budgets to ensure that they are consistent with the Plan Update.

Furthermore, Planning Area 1 will work with neighboring jurisdictions to advance the goals of the Plan Update as it applies to ongoing, long-range planning goals and actions for mitigating risk to natural hazards throughout the planning area.

Table 2-3 identifies types of planning mechanisms and examples of methods for incorporating the Plan into other planning efforts.

Table 2-3. Examples of Methods of Incorporation

Planning Mechanism	Incorporation of Plan
Annual Budget Review	Various departments and key personnel that participated in the planning process for Planning Area 1 will review the Plan and mitigation actions therein when conducting their annual budget review. Allowances will be made in accordance with grant applications sought, and mitigation actions that will be undertaken, according to the implementation schedule of the specific action.
Capital Improvement Plans	Participating jurisdictions within Planning Area 1 have a Capital Improvement Plan (CIP) in place. Prior to any revisions to the CIP, County and City departments will review the risk assessment and mitigation strategy sections of the HMAP, as limiting public spending in hazardous zones is one of the most effective long-term mitigation actions available to local governments.
Comprehensive Plans	Participating jurisdictions within Planning Area 1 have a Long-term Comprehensive Development Plan in place. Since comprehensive plans involve developing a unified vision for a community, the mitigation vision and goals of the Plan Update will be reviewed in the development or revision of a Comprehensive Plan.
Floodplain Management Plans	Floodplain management plans include preventative and corrective actions to address the flood hazard. Therefore, the actions for flooding, and information found in Section 12 of this Plan discussing the people and property at risk to flood, will be reviewed and revised when participating jurisdictions within Planning Area 1 update their management plans or develop new plans.
Grant Applications	The Plan will be evaluated by participating jurisdictions within Planning Area 1 when grant funding is sought for mitigation projects. If a project is not in the Plan Update, an amendment may be necessary to include the action in the Plan.
Regulatory Plans	Currently, participating jurisdictions within Planning Area 1 have regulatory plans in place, such as Emergency Management Plans, Continuity of Operations Plans, Economic Development, and Evacuation Plans. The Plan Update will be consulted when County and City

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Planning Mechanism	Incorporation of Plan
	departments review or revise their current regulatory planning mechanisms, or in the development of regulatory plans that are not currently in place.

Appendix F provides an overview of Planning Team members' existing planning and regulatory capabilities to support implementation of mitigation strategy objectives. Appendix F also provides further analysis of how each intends to incorporate hazard mitigation actions into existing plans, policies, and the annual budget review as it pertains to prioritizing grant applications for funding and implementation of identified hazard mitigation projects.

It should be noted for the purposes of the Plan Update that the HMAP has been used as a reference when reviewing and updating all plans and ordinances for the entire planning area, including all participating jurisdictions. The Emergency Management Plan developed independently by Taylor County, City of Abilene, Town of Merkel, Town of Trent, City of Tuscola, and City of Tye are updated every 5 years and incorporates goals, objectives and actions identified in the mitigation plan.

PLAN REVIEW AND PLAN UPDATE

As with the development of Plan Update, WCTCOG and participating jurisdictions will oversee the review and update process for relevance and to necessary make adjustments. At the beginning of each fiscal year, Planning Team Members will meet to evaluate the Plan and review other planning mechanisms to ensure consistency with long-range planning efforts. In addition, planning participants will also meet twice a year, by conference call or presentation, to re-evaluate prioritization of the hazard mitigation actions.

TIMELINE FOR IMPLEMENTING MITIGATION ACTIONS

Both the Executive Planning Team (Table A-1, Appendix A) and the Advisory Planning Team (Table A-2, Appendix A) will engage in discussions regarding a timeframe for how and when to implement each hazard mitigation action. Considerations include when the action will be started, how existing planning mechanisms' timelines affect implementation, and when the action should be fully implemented. Timeframes may be general, and there will be short, medium, and long-term goals for implementation based on prioritization of each action, as identified on individual Hazard Mitigation Action worksheets included in the Plan Update for Planning Area 1.

Both the Executive and Advisory Planning Team will evaluate and prioritize the most suitable hazard mitigation actions for the community to implement. The timeline for implementation of actions will partially be directed by participating jurisdictions' comprehensive planning process, budgetary constraints, and community needs. Planning Area 1 participating jurisdictions are committed to addressing and implementing hazard mitigation actions that may be aligned with and integrated into the Plan Update.

Overall, the Planning Team is in agreement that goals and actions of the Plan Update shall be aligned with the timeframe for implementation of hazard mitigation actions with respect to annual review and updates of existing plans and policies.

PUBLIC AND STAKEHOLDER INVOLVEMENT

An important component of hazard mitigation planning is public participation and stakeholder involvement. Input from individual citizens and the community as a whole provides the Planning Team with a greater understanding of local concerns and increases the likelihood of successfully implemented hazard mitigation actions. If citizens and stakeholders, such as local businesses, non-profits, hospitals, and schools are involved, they are more likely to gain a greater appreciation of the risks that hazards may present in their community and take steps to reduce or mitigate their impact.

The public was involved in the development of WCTCOG Regional Hazard Mitigation Plan Update 2018 at different stages prior to official Plan approval and adoption. Public input was sought using three methods: (1) open public meetings; (2) survey instruments; and (3) making the draft Plan Update available for public review at WCTCOG's and participating jurisdictions' websites.

The draft Plan Update was made available to the general public for review and comment on the WCTCOG and participating jurisdictions' websites. The public was notified at the public meetings that the draft Plan Update would be available for review. No feedback was received on the draft Plan Update, although it was given on the public survey, and all relevant information was incorporated into the Plan Update. Public input was utilized to assist in identifying hazards that were of most concern to the citizens of the WCTCOG and what actions they felt should be included and prioritized.

The Plan Update will be advertised and posted on the WCTCOG and participating jurisdictions' websites upon approval from FEMA, and a copy will be kept at the WCTCOG office building.

STAKEHOLDER INVOLVEMENT

Stakeholder involvement is essential to hazard mitigation planning since a wide range of stakeholders can provide input on specific topics and from various points of view. Throughout the planning process, members of community groups, local businesses, neighboring jurisdictions, schools, and hospitals were invited to participate in development of the Plan Update. The Stakeholder Group (Table A-3 in Appendix A, and Table 2-4, below), included a broad range of representatives from both the public and private sector and served as a key component in WCTCOG's outreach efforts for development of the Plan Update. Documentation of stakeholder meetings is found in Appendix E. A list of organizations invited to attend via e-mail is found in Table 2-4.

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Table 2-4. Stakeholder Working Group

AGENCY	TITLE	PARTICIPATED
Abilene Chamber of Commerce	President / CEO	
Abilene Christian University	Administrator – Chancellor’s Office	
Abilene ISD	President of Board of Trustees	
Abilene ISD	Superintendent	
Abilene MPO	Executive Director	X
Abilene MPO	Transportation Planner	X
Brown County	Emergency Management Coordinator	X
Callahan County	Judge	X
Coleman County	Emergency Management Coordinator	
Comanche County	Emergency Management Coordinator	
Fisher County	Judge	
Generations Home Health	Emergency Preparedness	X
Hardin-Simmons University	President	
Haskell County	Judge	X
HDR Engineering Firm	North Texas Water Resources Program Manager	
Jim Ned CISD	Superintendent	
Jones County	Emergency Management Coordinator	X
Kent County	Judge/EMC	
Knox County	Judge/EMC	X
McMurry University	President	
Merkel ISD	Superintendent	
Middle Clear Fork SWCD	Chairman of the Board of Directors	
Mitchell County	Judge/EMC	
Nolan County	Judge	
Runnels County	Judge/EMC	X
Scurry County	Judge	

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AGENCY	TITLE	PARTICIPATED
Shackelford County	Sheriff/EMC	
Stephens County	Judge	
Stonewall County	Judge/EMC	X
Taylor County Sheriff	Sheriff	
Taylor County Sheriff	Taylor County Rural Fire	
Throckmorton County	Judge	
Trent ISD	Superintendent	
United Way of Abilene	211 Program Director	
West Central Texas MWD	GIS Specialist	
West Central Texas MWD	President – Albany	
Wylie ISD	Superintendent	

Stakeholders and participants from neighboring communities that attended the Planning Team and public meetings played a key role in the planning process. For example, wildfire was one of the major concerns to stakeholders, so several participating jurisdictions included an action to partner with the Texas Forest Service to conduct a public education program on fire risks and wildland fire mitigation. An additional action to implement a fuels reduction program to reduce the spread of wildfires was included.

PUBLIC MEETINGS

A series of public meetings were held throughout the WCTCOG planning area to collect public and stakeholder input, holding meetings in each of the six planning areas within the WCTCOG. Topics of discussion included the purpose of hazard mitigation, discussion of the planning process, and types of natural hazards. Each participating jurisdiction within the Planning Area released information regarding the public meetings in their area to increase public participation in the Plan development process, through posting on their website, on social media sources including Facebook and Twitter, through the local media, and/or posting the information on bulletin boards in public facilities. A sampling of these notices can be found in Appendix E, along with the documentation on the public meetings. Representatives from area neighborhood associations and area residents were invited to participate.

Public meetings for Planning Area 1 were held on the following dates and locations:

- June 12, 2017, West Central Texas Council of Governments Building
- September 12, 2017, West Central Texas Council of Governments Building
- November 15, 2017, West Central Texas Council of Governments Building

PUBLIC PARTICIPATION SURVEY

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In addition to public meetings, the Planning and Consultant Teams developed a public survey designed to solicit public input during the planning process from citizens and stakeholders and to obtain data regarding the identification of any potential hazard mitigation actions or problem areas. The survey was promoted by local officials and a link to the survey was posted on participating jurisdictions' websites. A total of 55 surveys were completed online. The survey results are analyzed in Appendix B. Planning Area 1 reviewed the input from the surveys and decided which information to incorporate into the Plan as hazard mitigation actions. For example, many citizens mentioned concerns about tornadoes and suggested improving the emergency notification system and/or sirens. In response, several actions were added to the Plan to enhance an area-wide telephone Emergency Notification System ("Reverse 911"), and to acquire and distribute NOAA weather radios to improve early warning.

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OVERVIEW

The West Central Texas Council of Governments (WCTCOG) was established by the Texas Legislature in October of 1966. The purpose of the WCTCOG is: “to encourage and assist local units of governments to join and cooperate with one another to improve the health, safety, and general welfare of their citizens and to plan for the future development of the area embraced by the communities within the area; to assist member units in solving current problems and completing capital improvements; and to establish regional coordination and communication to help eliminate monetary waste from duplication and misapplication.”

The 18 participating counties that are part of the WCTCOG have been split into 6 Planning Areas, according to their location. Table 3-1 lists all of the participating jurisdictions within the WCTCOG, and the Planning Area they are located within. This section profiles the participating jurisdictions within Planning Area 1.

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Table 3-1. Participating Jurisdictions by Planning Area

Planning Area 1	Planning Area 4
WCTCOG	Haskell County
Taylor County	City of Haskell
City of Abilene	City of O'Brien
Town of Buffalo Gap	Town of Rochester
Town of Lawn	Town of Rule
Town of Merkel	City of Weinert
Town of Trent	Kent County
City of Tuscola	City of Jayton
City of Tye	Knox County
Planning Area 2	City of Benjamin
Callahan County	City of Goree
City of Baird	City of Knox City
City of Clyde	City of Munday
Town of Cross Plains	Stonewall County
Town of Putnam	Town of Aspermont
Jones County	Throckmorton County
City of Anson	Town of Throckmorton
City of Hamlin	Town of Woodson
City of Hawley	Planning Area 5
City of Lueders	Comanche County
City of Samford	City of Comanche
Shackelford County	City of De Leon
City of Albany	Town of Gustine
City of Moran	Stephens County
Planning Area 3	City of Breckenridge
Fisher County	Planning Area 6
City of Roby	Brown County
City of Rotan	City of Bangs
Mitchell County	City of Blanket
City of Colorado City	City of Early
Town of Loraine	Coleman County
City of Westbrook	City of Coleman
Nolan County	City of Novice
City of Blackwell	Town of Santa Anna
City of Roscoe	Runnels County
City of Sweetwater	Town of Ballinger
Scurry County	City of Miles
City of Snyder	City of Winters

TAYLOR COUNTY

Taylor County was established in 1858 by the Texas legislature from land formerly assigned to Bexar and Travis counties and was named for Alamo Edward Taylor, George Taylor, and James Taylor, three brothers who died at the Battle of the Alamo. Taylor County was attached to Travis and Bexar counties for judicial and

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administrative purposes until 1873, when these responsibilities were assigned to Eastland County. The area remained largely unsettled, but as more people moved into the area, the county was organized in 1878 and Buffalo Gap became the seat of government.

Settlement accelerated when the Texas and Pacific Railway built through the area in the early 1880s. Buffalo Gap was bypassed by the railroad, which was routed instead to pass through the northern part of the county to the site of a new town, to be called Abilene. In 1881 the railroad connected the area to national markets and encouraged immigration. After an election held in 1883, Abilene became the county seat.

Taylor County is traversed from east to west by the Callahan Divide, a line of hills separating the Brazos River and the Colorado River watersheds. Lake Abilene, Kirby Lake, Lytle Lake, and Fort Phantom Hill Reservoir provide water and recreation.

Figure 3-1 shows the general location of Taylor County, along with the Cities that are located within the County.

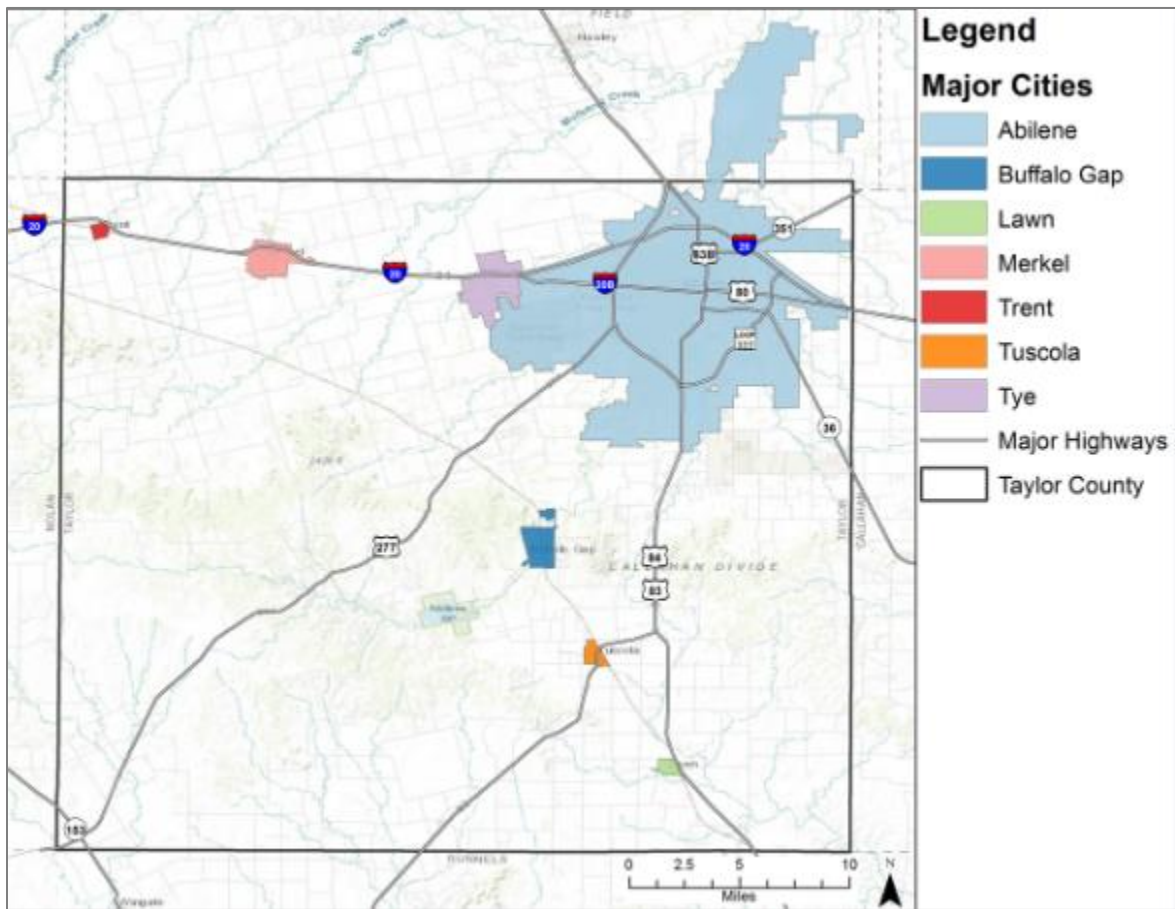
Figure 3-1. Location of Taylor County



Figure 3-2 shows Planning Area 1, including the participating jurisdictions that are covered in the risk assessment analysis of the Plan.

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Figure 3-2. Planning Area 1



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Provided in Table 3-2 below is a listing of the jurisdictions in Planning Area 1 that participated in the WCTCOG Regional Hazard Mitigation Plan Update 2018.

Table 3-2. Planning Area 1 Participating Jurisdictions

PARTICIPATING JURISDICTIONS
Taylor County
City of Abilene
Town of Buffalo Gap
Town of Lawn
Town of Merkel
Town of Trent
City of Tuscola
City of Tye
WCTCOG

POPULATION AND DEMOGRAPHICS

In the official Census population count, as of April 1, 2010, Taylor County has a population of 131,506 residents. By July 2015, the number was estimated at 134,435, and by July 2016, the population was estimated at 135,234. Table 3-3 provides the population distribution by jurisdiction within Taylor County based on the 2010 Census information.¹

Between official U.S. Census population counts, the estimate uses a formula based on new residential building permits and household size. It is simply an estimate and there are many variables involved in achieving an accurate estimation of people living in a given area at a given time. For planning purposes, the WCTCOG population is the number of employees; therefore the percentage, number of elderly and populations below the poverty level are not applicable.

Table 3-3. Population Distribution by Jurisdiction

JURISDICTION	TOTAL 2010 POPULATION	PERCENTAGE	ESTIMATED VULNERABLE OR SENSITIVE POPULATIONS	
			Elderly (Over 65)	Below Poverty Level
City of Abilene	117,063	89.02%	14,660	21,342
Town of Buffalo Gap	464	0.35%	93	61

¹ Source: <https://www.census.gov/quickfacts/fact/table/taylorcountytexas,US/PST040216>

SECTION 3: PLANNING AREA PROFILE

JURISDICTION	TOTAL 2010 POPULATION	PERCENTAGE	ESTIMATED VULNERABLE OR SENSITIVE POPULATIONS	
			Elderly (Over 65)	Below Poverty Level
Town of Lawn	314	0.24%	52	49
Town of Merkel	2,590	1.97%	405	371
Town of Trent	337	0.26%	64	56
City of Tuscola	742	0.56%	119	81
City of Tye	1,242	0.94%	142	166
Unincorporated Taylor County	8,754	6.66%	1,819	518
WCTCOG	37	-	-	-
TAYLOR COUNTY TOTAL	131,506	100%	17,354	22,653

POPULATION GROWTH

The official 2010 Taylor County population is 131,506. Overall, Taylor County experienced an increase in population between 1980 and 2010 by 18.5%, or an increase by 20,574. The Town of Lawn and the City of Tye experienced a decrease in their population from 1980 to 2010, while the rest of the jurisdictions experienced a population growth. Between 2000 and 2010, the Town of Lawn and the Town of Merkel experienced a decrease in population, while the rest of the jurisdictions, and the County as a whole experienced a population growth. Table 3-4 provides historic growth rates in Taylor County.

Table 3-4. Population for Taylor County, 1980-2010

JURISDICTIONS	1980	1990	2000	2010	POP CHANGE 1980-2010	PERCENT OF CHANGE	POP CHANGE 2000-2010	PERCENT OF CHANGE
City of Abilene	98,315	106,707	115,930	117,063	18,748	19.1%	1,133	0.7%
Town of Buffalo Gap	387	499	463	464	77	19.9%	1	0.2%
Town of Lawn	390	358	353	314	-76	-19.5%	-39	-11.0%
Town of Merkel	2,493	2,469	2,637	2,590	97	3.9%	-47	-1.8%
Town of Trent	313	319	318	337	24	7.7%	19	6.0%
City of Tuscola	660	620	714	742	82	12.4%	28	3.9%
City of Tye	1,394	1,088	1,158	1,242	-152	-10.9%	84	7.3%
Unincorporated Taylor County	6,980	7,595	4,982	8,754	1,774	25.4%	3,767	75.6%
COUNTY TOTAL	110,932	119,655	126,555	131,506	20,574	18.5%	4,951	3.9%

FUTURE DEVELOPMENT

To better understand how future growth and development in the Planning Area might affect hazard vulnerability, it is useful to consider population growth, occupied and vacant land, the potential for future development in hazard areas, and current planning and growth management efforts. This section includes an analysis of the projected population change and economic impacts.

Population projections from 2010 to 2040 are listed in Table 3-5, as provided by the Office of the State Demographer, Texas State Data Center, and the Institute for Demographic and Socioeconomic Research. Population projections are based on a 0.5 scenario growth rate, which is 50 percent of the population growth rate that occurred during 2000-2010. This information is only available at the County level; however, the population projection shows an increase in population density for the County, which would mean overall growth for the County.

Table 3-5. Planning Area 1 Population Projections

County	LAND AREA (SQ MI)	2010		2020		2030		2040	
		Population							
		Total Number	Density (Land Area, SQ MI)	Total Number	Density (Land Area, SQ MI)	Total Number	Density (Land Area, SQ MI)	Total Number	Density (Land Area, SQ MI)
Taylor	919	131,506	143.1	140,047	152.4	145,736	158.6	149,857	163.1

ECONOMIC IMPACT

Building and maintaining infrastructure depends on the economy, and therefore, protecting infrastructure from risk due to natural hazards in the planning area is important to the participating jurisdictions within Planning Area 1. Whether it's expanding culverts under a road that washes out during flash flooding, shuttering a fire station, or flood-proofing a wastewater facility, infrastructure must be mitigated from natural hazards in order to continue providing essential utility and emergency response services in a fast-growing planning area.

Major employers in the area are critical to the health of the economy, as well as effective transportation connectivity.

In response to the downturn in the economy due to the downturn in the oil industry in the 1980's, the City of Abilene understands the necessity to establish a workforce that will be able to withstand future economic difficulties. Diversification of the local economy is the key to attaining a safeguard against negative economic impacts, and the city has evolved to support an array of economic activities. The City of Abilene has also established itself as a regional center for high quality health care. Additionally, with Dyess Air Force Base, the city has a strong tie to Federal employment opportunities. A strong, positive relationship exists between the base and the city and this has provided additional economic stability to the area.

EXISTING AND FUTURE LAND USE AND DEVELOPMENT TRENDS

The City of Abilene has a comprehensive plan in place. The comprehensive plan establishes a coordinated set of policies to guide Abilene's physical development over the next ten to fifteen years. As a decision-making guide, the plan ensures that future public and private investment decisions are consistent with the long-range vision of what citizens want Abilene to become. The plan also outlines implementation strategies for reaching stated objectives and is meant to be a dynamic document that should evolve and respond to changing conditions. Abilene's comprehensive plan includes the following elements: land use and development; neighborhoods; community appearance; community facilities and services; natural environment and resources; and economic base. The city developed a set of guiding principles to set new standards for future growth, redevelopment, and public infrastructure investments. The guiding principles form the key components of the Land Use and Development Plan and policies that, along with other elements of the Comprehensive Plan, outline a vision for the physical development of the City of Abilene.

SECTION 4: RISK OVERVIEW

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Overview of Hazard Analysis.....	4

HAZARD DESCRIPTION

Section 4 is the first phase of the Risk Assessment, providing background information for the hazard identification process and descriptions for the hazards identified. The Risk Assessment continues with Sections 5 through 16, which include hazard descriptions and vulnerability assessments.

Upon a review of the full range of natural hazards suggested under FEMA planning guidance, Planning Area 1 identified twelve natural hazards that are addressed in the Hazard Mitigation Plan Update. Of the hazards identified, eleven natural hazards and one quasi-technological¹ hazard (dam failure) were identified as significant, as shown in Table 4-1. The hazards were identified through input from Planning Team members and a review of the current 2013 State of Texas Hazard Mitigation Plan Update (State Plan Update). Readily available online information from reputable sources such as federal and state agencies were also evaluated and utilized to supplement information as needed.

In general, there are three main categories of hazards: atmospheric, hydrologic, and technological. Atmospheric hazards are events or incidents associated with weather generated phenomenon. Atmospheric hazards that have been identified as significant for the Planning Area include extreme heat, hail, lightning, thunderstorm wind, tornado, and winter storm (Table 4-1).

Hydrologic hazards are events or incidents associated with water related damage and account for over 75 percent of Federal disaster declarations in the United States. Hydrologic hazards identified as significant for the planning area include flood and drought.

Technological hazards refer to the origins of incidents that can arise from human activities, such as the construction and maintenance of dams. They are distinct from natural hazards primarily because they originate from human activity. The risks presented by natural hazards may be increased or decreased as a result of human activity, however they are not inherently human-induced. Therefore, dam failure is classified as a quasi-technological hazard and referred to as “technological,” in Table 4-1 for purposes of description.

¹ While dam failure is generally considered a quasi-technological hazard, it is profiled in the Plan as a natural hazard, i.e. a breach caused by extensive rainfall or flooding.

SECTION 4: RISK OVERVIEW

For the Risk Assessment, the earthquake, expansive soils, and wildfire hazards are considered “other,” since these hazards are not considered atmospheric, hydrologic, nor technological.

Table 4-1. Hazard Descriptions

HAZARD	DESCRIPTION
ATMOSPHERIC	
Extreme Heat	Extreme heat is the condition whereby temperatures hover ten degrees or more above the average high temperature in a region for an extended period of time.
Hail	Hailstorms are a potentially damaging outgrowth of severe thunderstorms. Early in the developmental stages of a hailstorm, ice crystals form within a low-pressure front due to the rapid rising of warm air into the upper atmosphere and subsequent cooling of the air mass.
Lightning	Lightning is a sudden electrostatic discharge that occurs during an electrical storm. This discharge occurs between electrically charged regions of a cloud, between two clouds, or between a cloud and the ground.
Thunderstorm Wind	A thunderstorm occurs when an observer hears thunder. Radar observers use the intensity of the radar echo to distinguish between rain showers and thunderstorms. Lightning detection networks routinely track cloud-to-ground flashes, and therefore thunderstorms.
Tornado	A tornado is a violently rotating column of air that has contact with the ground and is often visible as a funnel cloud. Its vortex rotates cyclonically with wind speeds ranging from as low as 40 mph to as high as 300 mph. The destruction caused by tornadoes ranges from light to catastrophic, depending on the location, intensity, size, and duration of the storm.
Winter Storm	Severe winter storms may include snow, sleet, freezing rain, or a mix of these wintry forms of precipitation. Blizzards, the most dangerous of all winter storms, combine low temperatures, heavy snowfall, and winds of at least 35 miles per hour, reducing visibility to only a few yards. Ice storms occur when moisture falls and freezes immediately upon impact on trees, power lines, communication towers, structures, roads, and other hard surfaces. Winter storms and ice storms can down trees, cause widespread power outages, damage property, and cause fatalities and injuries to human life.
HYDROLOGIC	
Drought	A prolonged period of less than normal precipitation such that the lack of water causes a serious hydrologic imbalance. Common effects of drought include crop failure, water supply shortages, and fish and wildlife mortality.

SECTION 4: RISK OVERVIEW

HAZARD	DESCRIPTION
Flood	The accumulation of water within a body of water, which results in the overflow of excess water onto adjacent lands, usually floodplains. The floodplain is the land adjoining the channel of a river, stream, ocean, lake, or other watercourse or water body that is susceptible to flooding. Most floods fall into the following three categories: riverine flooding, coastal flooding, and shallow flooding.
OTHER	
Earthquake	An earthquake is the sudden, rapid, shaking of the earth, caused by the breaking and shifting of subterranean rock as it releases strain that has accumulated over a long time. Initial mild shaking may strengthen and become extremely violent within seconds.
Expansive Soils	Expansive soils are soils and soft rock that tend to swell or shrink due to changes in moisture content. Changes in soil volume present a hazard primarily to structures built on top of expansive soils.
Wildfire	A wildfire is an uncontrolled fire burning in an area of vegetative fuels such as grasslands, brush, or woodlands. Heavier fuels with high continuity, steep slopes, high temperatures, low humidity, low rainfall, and high winds all work to increase the risk for people and property located within wildfire hazard areas or along the urban/wildland interface. Wildfires are part of the natural management of forest ecosystems, but most are caused by human factors.
TECHNOLOGICAL	
Dam Failure	Dam failure is the collapse, breach, or other failure of a dam structure resulting in downstream flooding. In the event of a dam failure, the energy of the water stored behind even a small dam is capable of causing loss of life and severe property damage if development exists downstream of the dam.

Hazards that weren't considered significant and were not included in the Plan are located in Table 4-2, along with the evaluation process used for determining the significance of each of these hazards. Hazards not identified for inclusion at this time may be addressed during future evaluations and updates.

Table 4-2. Other Hazards Deferred

HAZARD CONSIDERED	REASON FOR DETERMINATION
Coastal Erosion	The planning area is not located on the coast, therefore coastal erosion does not pose a risk.

HAZARD CONSIDERED	REASON FOR DETERMINATION
Hurricane	The planning area is not located within 200 miles of the coast; therefore, hurricanes do not pose a risk. Any remnants of a hurricane or tropical storm system would only include thunderstorm winds and rainfall and would be covered under flood or thunderstorm wind mitigation measures.
Land Subsidence	There are no historical occurrences of land subsidence for the planning area and it is located in an area where occurrences are considered rare. There is no history of impact to critical structures, systems, populations or other community assets or vital services as a result of land subsidence and none is expected in the future.

NATURAL HAZARDS AND CLIMATE CHANGE

Climate change is defined as a long-term hazard which can increase or decrease the risk of other weather hazards. It directly endangers property due to sea level rise and biological organisms due to habitat destruction.

Global climate change is expected to exacerbate the risks of certain types of natural hazards impacted through rising sea levels, warmer ocean temperatures, higher humidity, the possibility of stronger storms, and an increase in wind and flood damages due to storm surges. While sea level rise is a natural phenomenon and has been occurring for several thousand years, the general scientific consensus is that the rate has increased in the past 200 years, from 0.5 millimeters per year to 2 millimeters per year.

Texas is considered one of the more vulnerable states in the U.S. to both abrupt climate changes and to the impact of gradual climate changes to the natural and built environments. Mega-droughts can trigger abrupt changes to regional ecosystems and the water cycle, drastically increase extreme summer temperature and fire risk, and reduce availability of water resources, as Texas experienced during 2011-2012.

Paleoclimate records also show that the climate over Texas had large changes between periods of frequent mega-droughts and the periods of mild droughts that Texas is currently experiencing. While the cause of these fluctuations is unclear, it would be wise to anticipate that such changes could occur again, and may even be occurring now.

OVERVIEW OF HAZARD ANALYSIS

The methodologies utilized to develop the Risk Assessment are a historical analysis and a statistical approach. Both methodologies provide an estimate of potential impact by using a common, systematic framework for evaluation.

Records retrieved from National Centers for Environmental Information (NCEI) and National Oceanic and Atmospheric Administration (NOAA) were reported for Planning Area 1, including the participating jurisdictions. Remaining records identifying the occurrence of hazard events in the planning area and the maximum recorded magnitude of each event were also evaluated.

SECTION 4: RISK OVERVIEW

The use of geographic information system (GIS) technology to identify and assess risks for Planning Area 1, and evaluate community assets and their vulnerability to the hazards.

The four general parameters that are described for each hazard in the Risk Assessment include frequency of return, approximate annualized losses, a description of general vulnerability, and a statement of the hazard's impact.

Frequency of return was calculated by dividing the number of events in the recorded time period for each hazard by the overall time period that the resource database was recording events. Frequency of return statements are defined in Table 4-3, and impact statements are defined in Table 4-4 below.

Table 4-3. Frequency of Return Statements

PROBABILITY	DESCRIPTION
Highly Likely	Event is probable in the next year.
Likely	Event is probable in the next three years.
Occasional	Event is probable in the next five years.
Unlikely	Event is probable in the next ten years.

Table 4-4. Impact Statements

POTENTIAL SEVERITY	DESCRIPTION
Substantial	Multiple deaths. Complete shutdown of facilities for 30 days or more. More than 50 percent of property destroyed or with major damage.
Major	Injuries and illnesses resulting in permanent disability. Complete shutdown of critical facilities for at least two weeks. More than 25 percent of property destroyed or with major damage.
Minor	Injuries and illnesses do not result in permanent disability. Complete shutdown of critical facilities for more than one week. More than 10 percent of property destroyed or with major damage.
Limited	Injuries and illnesses are treatable with first aid. Shutdown of critical facilities and services for 24 hours or less. Less than 10 percent of property destroyed or with major damage.

Each of the hazard profiles includes a description of a general Vulnerability Assessment. Vulnerability is the total of assets that are subject to damages from a hazard, based on historic recorded damages. Assets in the region were inventoried and defined in hazard zones where appropriate. The total amount of damages, including property and crop damages, for each hazard is divided by the total number of assets (building value

SECTION 4: RISK OVERVIEW

totals) in that community to determine the percentage of damage that each hazard can cause to the community.

To better understand how future growth and development in the Planning Area 1 region might affect hazard vulnerability, it is useful to consider population growth, occupied and vacant land, the potential for future development in hazard areas, and current planning and growth management efforts. Hazard vulnerability for all participating jurisdictions in Planning Area 1 was reviewed based on recent development changes that occurred throughout the planning area. Planning Area 1 has grown slightly between 2010 and 2017 according to the U.S. Census Bureau, therefore there has been no significant factors or development trends with a consequential effect or increase in vulnerability to the population, infrastructure and buildings for hazards.

Once loss estimates and vulnerability were known, an impact statement was applied to relate the potential impact of the hazard on the assets within the area of impact.

SECTION 5: THUNDERSTORM WIND

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HAZARD DESCRIPTION

Thunderstorms create extreme wind events which includes straight line winds. Wind is the horizontal motion of the air past a given point, beginning with differences in air pressures. Pressure that is higher at one place than another sets up a force pushing from the high toward the low pressure; the greater the difference in pressures, the stronger the force. The distance between the area of high pressure and the area of low pressure also determines how fast the moving air is accelerated.

Thunderstorms are created when heat and moisture near the Earth's surface are transported to the upper levels of the atmosphere. By-products of this process are the clouds, precipitation, and wind that become the thunderstorm.

According to the National Weather Service (NWS), a thunderstorm occurs when thunder accompanies rainfall. Radar observers use the intensity of radar echoes to distinguish between rain showers and thunderstorms.



Straight line winds are responsible for most thunderstorm wind damages. One type of straight line wind, the downburst, is a small area of rapidly descending air beneath a thunderstorm. A downburst can cause damage equivalent to a strong tornado and make air travel extremely hazardous.

LOCATION

Thunderstorms wind events can develop in any geographic location, and are considered a common occurrence in Texas. Therefore a thunderstorm wind event could occur at any location within Planning Area 1, including the WCTCOG and all participating jurisdictions, as these storms develop randomly and are not confined to any

SECTION 5: THUNDERSTORM WIND

geographic area within the planning area. It is assumed that the entire Planning Area 1 is uniformly exposed to the threat of thunderstorms winds.

EXTENT

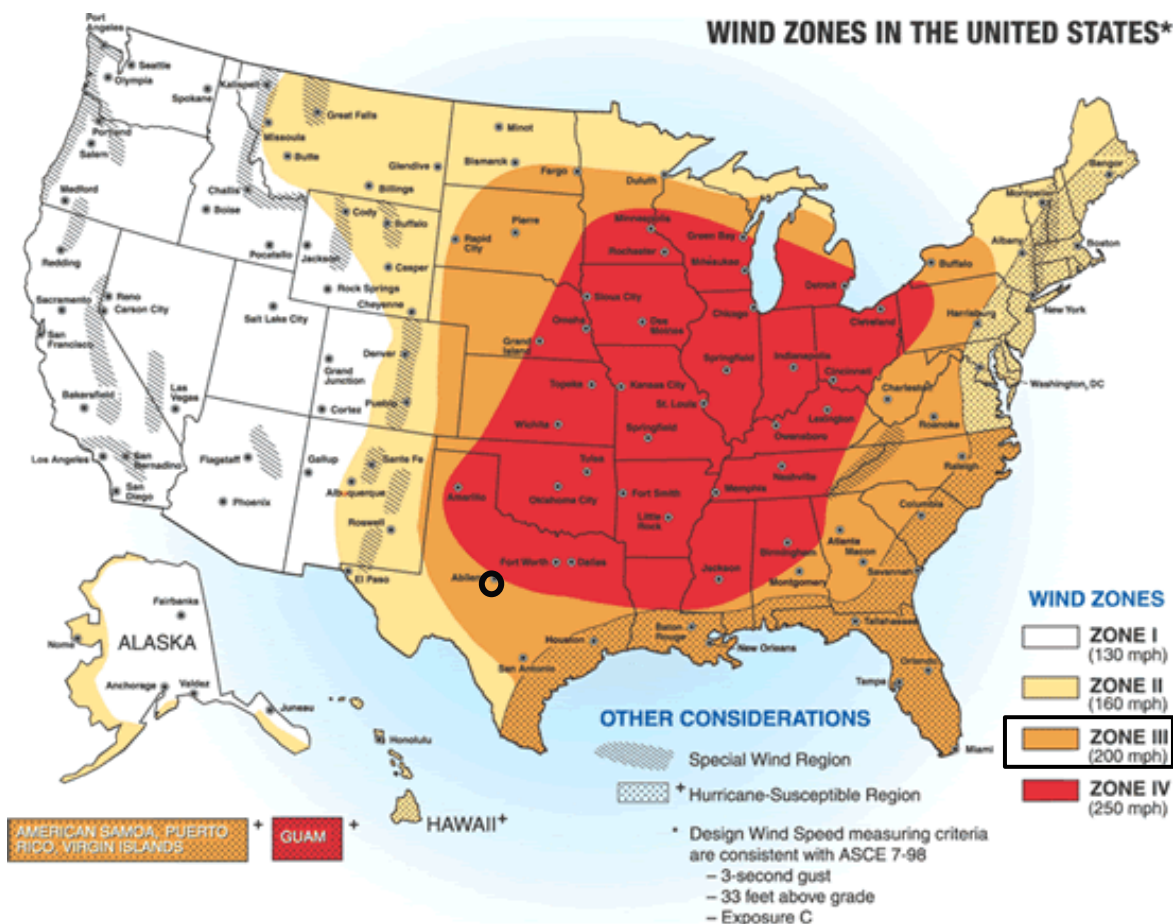
The extent or magnitude of a thunderstorm wind event is measured by the Beaufort Wind Scale. Table 5-1 describes the different intensities of wind in terms of speed and effects, from calm to violent and destructive.

Table 5-1. Beaufort Wind Scale¹

FORCE	WIND (KNOTS)	WMO CLASSIFICATION	APPEARANCE OF WIND EFFECTS
0	Less than 1	Calm	Calm, smoke rises vertically
1	1-3	Light Air	Smoke drift indicates wind direction, still wind vanes
2	4-7	Light Breeze	Wind felt on face, leaves rustle, vanes begin to move
3	8-12	Gentle Breeze	Leaves and small twigs constantly moving, light flags extended
4	13-18	Moderate Breeze	Dust, leaves and loose paper lifted, small tree branches move
5	19-24	Fresh Breeze	Small trees in leaf begin to sway
6	213-31	Strong Breeze	Larger tree branches moving, whistling in wires
7	32-38	Near Gale	Whole trees moving, resistance felt walking against wind
8	39-46	Gale	Whole trees in motion, resistance felt walking against wind
9	412-54	Strong Gale	Slight structural damage occurs, slate blows off roofs
10	513-63	Storm	Seldom experienced on land, trees broken or uprooted, "considerable structural damage"
11	64-72	Violent Storm	If experienced on land, widespread damage
12	73+	Hurricane	Violence and destruction

Figure 5-1 displays the wind zones as derived from NOAA.

¹ Source: World Meteorological Organization

Figure 5-1. Wind Zones in the United States²

On average, the planning area experiences four to five thunderstorm wind events every year. The County is located in Zone III, meaning they can experience winds up to 200 mph. Taylor County, including the WCTCOG and all participating jurisdictions, has experienced a significant wind event or an event with winds in the range of “Force 12” on the Beaufort Wind Scale with winds above 73 knots. This is the most significant event that can be expected in the future for all participating jurisdictions.

HISTORICAL OCCURRENCES

Tables 5-2, 5-3, and 5-4 depict historical occurrences of thunderstorm wind events for Planning Area 1 according to the National Centers for Environmental Information (NCEI) data. From 1955 to 2017, 300 thunderstorm wind events are known to have impacted Planning Area 1, including the WCTCOG and all participating jurisdictions, based upon NCEI records. Table 5-3 presents information on known historical events impacting Planning Area 1 with resulting damages or injuries. It is important to note that high wind events associated with other hazards, such as tornadoes, are not accounted for in this section.

² Planning Area 1 is indicated by the circle.

SECTION 5: THUNDERSTORM WIND

The NCEI is a national data source organized under the National Oceanic and Atmospheric Administration. The NCEI is the largest archive available for climate data; however, it is important to note that the only incidents recorded are those that are reported to the NCEI that have been factored into this risk assessment. In the tables that follow throughout this section, some occurrences seem to appear multiple times in one table. This is due to reports from various locations throughout the planning area. In addition, property damage estimates are not always available. Where an estimate has been provided in a table for losses, the dollar amounts have been altered to indicate the damage in 2018 dollars.

Historical thunderstorm wind data are provided within a City-wide basis per the NCEI database. It should be noted that the WCTCOG facility is located in the City of Abilene. While the WCTCOG has no reported damages due to thunderstorm wind events, the historic events posing a threat to the WCTCOG are reported on a city-wide basis.

Table 5-2. Historical Thunderstorm Wind Events with Reported Damages, 1955-2017

MAXIMUM WIND SPEED RECORDED (MPH)	NUMBER OF REPORTED EVENTS
0-30	45
31-40	1
41-50	30
51-60	144
61-70	52
71-80	3
81-90	0
91-100	0
Unknown	25

Table 5-3. Historical Thunderstorm Wind Events, 1955-2017³

JURISDICTION	DATE	TIME	MAGNITUDE (MPH)	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
Taylor County	8/24/1984	4:00 PM	0	0	1	\$0	\$0
Taylor County	5/11/1990	6:05 PM	0	0	10	\$0	\$0
City of Abilene	5/7/1993	9:15 PM	0	0	0	\$866	\$0
City of Tye	5/11/1994	6:25 PM	61	0	0	\$8,470	\$0

³ Only recorded events with fatalities, injuries or damages are listed. Magnitude is listed when available. Damage values are in 2018 dollars.

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JURISDICTION	DATE	TIME	MAGNITUDE (MPH)	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
City of Abilene	5/26/1994	12:30 AM	0	0	0	\$8,470	\$0
Town of Lawn	5/29/1994	8:15 PM	0	0	0	\$84,696	\$0
City of Abilene	10/20/1994	3:30 PM	0	0	0	\$835,632	\$0
Taylor County	11/4/1994	5:30 PM	0	0	0	\$8,345	\$0
City of Abilene	11/4/1994	5:45 PM	0	0	0	\$8,345	\$0
City of Tye	5/7/1995	5:45 PM	0	0	0	\$49,249	\$0
City of Abilene	5/14/1995	7:00 PM	0	0	0	\$8,208	\$0
City of Abilene	5/14/1995	7:00 PM	0	0	0	\$1,642	\$0
Taylor County	5/14/1995	7:00 PM	52	0	0	\$3,283	\$0
City of Abilene	5/23/1995	6:15 PM	0	0	0	\$3,283	\$0
City of Tye	6/10/1995	6:55 PM	0	0	0	\$32,768	\$0
City of Tye	6/10/1995	7:24 PM	0	0	0	\$40,960	\$0
Taylor County	7/24/1995	5:20 PM	0	0	0	\$16,384	\$0
City of Abilene	7/24/1995	5:12 PM	0	0	0	\$16,384	\$0
City of Abilene	7/24/1995	5:20 PM	0	0	0	\$122,879	\$0
City of Abilene	7/24/1995	5:20 PM	55	0	0	\$819,184	\$0
City of Abilene	5/5/1996	8:08 PM	57	0	0	\$159,549	\$0
Taylor County	5/5/1996	7:25 PM	59	0	0	\$398,873	\$0
City of Abilene	5/5/1996	7:31 PM	68	0	0	\$398,873	\$0
City of Abilene	9/18/1996	3:28 PM	Unknown	0	0	\$79,168	\$0
City of Abilene	9/18/1996	4:15 PM	Unknown	0	0	\$158,336	\$0
City of Abilene	6/11/1997	9:30 PM	65	0	0	\$77,933	\$15,544
Taylor County	6/12/1997	10:54 PM	Unknown	0	0	\$7,793	\$0
Taylor County	6/14/1997	8:00 PM	70	0	0	\$77,933	\$7,772
City of Abilene	6/16/1997	5:02 PM	70	0	0	\$3,117,331	\$155,438
Taylor County	6/16/1997	5:26 PM	Unknown	0	0	\$155,867	\$31,088
City of Abilene	8/6/1997	8:00 PM	Unknown	0	0	\$15,538	\$0

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JURISDICTION	DATE	TIME	MAGNITUDE (MPH)	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
City of Abilene	8/10/1997	6:07 PM	58	0	0	\$1,243,055	\$0
Taylor County	8/10/1997	5:55 PM	61	0	0	\$15,538	\$0
City of Abilene	4/26/1998	2:50 PM	Unknown	0	1	\$3,075	\$0
Town of Buffalo Gap	4/26/1998	2:50 PM	Unknown	0	0	\$3,075	\$0
City of Tuscola	5/15/1998	2:15 AM	Unknown	0	0	\$1,535	\$0
Taylor County	7/12/1998	8:00 PM	Unknown	0	0	\$5,052,197	\$0
City of Abilene	7/12/1998	8:05 PM	Unknown	0	0	\$15,310	\$0
Town of Trent	7/12/1998	6:45 PM	Unknown	0	0	\$3,062	\$0
City of Tye	7/12/1998	7:50 PM	Unknown	0	0	\$1,531	\$0
City of Tye	8/29/1998	5:45 PM	Unknown	0	0	\$3,058	\$0
Town of Merkel	5/31/1999	8:20 PM	Unknown	0	0	\$4,510	\$0
City of Abilene	3/2/2000	2:00 AM	Unknown	0	0	\$1,459	\$0
Taylor County	9/12/2000	7:25 PM	60	0	0	\$7,192	\$0
Taylor County	2/8/2001	11:00 PM	Unknown	0	0	\$711	\$0
City of Abilene	9/20/2001	7:40 PM	Unknown	0	0	\$2,803	\$0
Taylor County	3/29/2002	10:25 PM	Unknown	0	0	\$4,192	\$0
City of Abilene	4/29/2002	9:05 PM	Unknown	0	0	\$5,558	\$0
City of Tuscola	4/29/2002	4:50 PM	Unknown	0	0	\$2,779	\$0
City of Abilene	5/24/2002	7:15 PM	Unknown	0	0	\$12,507	\$0
Town of Merkel	5/24/2002	6:15 PM	Unknown	0	0	\$13,896	\$0
Town of Lawn	7/28/2002	8:15 PM	Unknown	0	0	\$1,387	\$0
City of Tye	7/28/2002	7:55 PM	Unknown	0	0	\$8,324	\$0
City of Abilene	9/18/2002	6:26 PM	Unknown	0	0	\$2,761	\$0
Town of Merkel	4/28/2003	8:00 PM	52	0	0	\$6,797	\$0
City of Abilene	6/11/2003	6:57 PM	61	0	0	\$4,080	\$0
City of Abilene	8/22/2003	2:13 PM	58	0	0	\$13,535	\$0
City of Tye	3/4/2004	11:55 AM	70	0	0	\$79,996	\$0

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JURISDICTION	DATE	TIME	MAGNITUDE (MPH)	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
City of Abilene	7/18/2006	4:53 PM	58	0	0	\$4,911	\$0
City of Abilene	7/18/2006	4:45 PM	60	0	0	\$4,911	\$0
Town of Merkel	4/23/2007	8:39 PM	56	0	0	\$15,715	\$0
Town of Buffalo Gap	4/9/2008	11:45 PM	52	0	0	\$5,815	\$0
Town of Buffalo Gap	5/14/2008	5:31 PM	65	0	0	\$69,201	\$0
Town of Trent	6/8/2009	8:45 PM	56	0	0	\$28,959	\$0
City of Abilene	6/8/2009	8:55 PM	65	0	0	\$115,838	\$0
City of Tye	6/8/2009	8:30 PM	70	0	0	\$69,503	\$0
Taylor County	1/22/2012	11:50 AM	39	0	0	\$220	\$0
Taylor County	6/6/2013	12:30 AM	49	0	0	\$1,070	\$0
Taylor County	12/12/2015	8:35 PM	70	0	2	\$0	\$0
TOTAL LOSSES			Max Extent	0	14	\$13,546,308	\$209,842

Table 5-4. Summary of Historical Thunderstorm Wind Events, 1955-2017

JURISDICTION	NUMBER OF EVENTS	MAGNITUDE	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
Taylor County	146	70	0	13	\$5,749,598	\$38,860
City of Abilene ⁴	109	78	0	1	\$7,261,424	\$170,982
Town of Buffalo Gap	7	65	0	0	\$78,091	\$0
Town of Lawn	5	61	0	0	\$86,083	\$0
Town of Merkel	7	61	0	0	\$40,918	\$0
Town of Trent	5	56	0	0	\$32,021	\$0
City of Tuscola	7	61	0	0	\$4,314	\$0
City of Tye	14	70	0	0	\$293,859	\$0
TOTAL LOSSES	300	(Max Extent)	0	14	\$13,756,150	

⁴ WCTCOG events are reported on a city-wide basis under the City of Abilene. The WCTCOG has not received any damages resulting from thunderstorm wind.

SECTION 5: THUNDERSTORM WIND

Based on the list of historical thunderstorm wind events for Planning Area 1 (listed above), including the WCTCOG and all participating jurisdictions, 93 events have occurred since the 2012 Plan.

SIGNIFICANT EVENTS

July 12, 1998 – Taylor County

Scattered severe thunderstorms raced across the Big Country during the evening of the 12th. The strongest storm moved from Trent to Tye to Abilene in northern Taylor County, where winds up to 100 mph ripped roofs off and downed power poles. Dyess Air Force Base took the brunt of the storm, with damage to buildings and airplanes totaling over 3 million dollars. Winds estimated at 105 mph did extensive damage across Dyess Air Force Base. Several buildings suffered extensive roof damage and 3 airplanes were damaged.

June 16, 1997 – Taylor County/City of Abilene

A wind gust to 52 knots (60 mph) was recorded at the Abilene Municipal Airport at 5:02PM but wind gusts to 70 to 80 mph were reported throughout the City of Abilene. Many trees were uprooted and there was considerable roof damage. Power was lost for several thousand customers.

PROBABILITY OF FUTURE EVENTS

Most thunderstorm winds occur during the months of March, April, May, and September. Based on available records of historic events, there have been 300 events in a 63 year reporting period, which provides a probability of occurrence of four to five events every year. Even though the intensity of thunderstorm wind events is not always damaging for Planning Area 1, the frequency of occurrence for a thunderstorm wind event is highly likely. This means that an event is probable within the next year for the Planning Area 1, including the WCTCOG and all participating jurisdictions.

VULNERABILITY AND IMPACT

Vulnerability is difficult to evaluate since thunderstorm wind events can occur at different strength levels, in random locations, and can create relatively narrow paths of destruction. Due to the randomness of these events, all existing and future structures and facilities in Planning Area 1 could potentially be impacted and remain vulnerable to possible injury and property loss from thunderstorm winds.

Trees, power lines and poles, signage, manufactured housing, radio towers, concrete block walls, storage barns, windows, garbage receptacles, brick facades, and vehicles, unless reinforced, are vulnerable to thunderstorm wind events. More severe damage involves windborne debris; in some instances, patio furniture and other lawn items have been reported to have been blown around by wind and, very commonly, debris from damaged structures in turn have caused damage to other buildings not directly impacted by the event. In numerous instances roofs have been reported as having been torn off of buildings. Portable buildings typically used at commercial properties and schools would be more vulnerable to thunderstorm wind events than typical site built structures and could potentially pose a greater risk for wind-blown debris.

The US Census data indicates a total of 2,865 manufactured homes (approximately 5.0%) located in Planning Area 1, including all participating jurisdictions (Table 5-5). In addition, 60.1% (approximately 34,141 structures) of the residential structures in Planning Area 1 were built before 1980. These structures would typically be built

SECTION 5: THUNDERSTORM WIND

to lower or less stringent construction standards than newer construction and may be more susceptible to damages during significant wind events. While the WCTCOG does not have any manufactured homes or portable buildings, the facility was built prior to 1980 and may be more vulnerable.

Table 5-5. Structures at Greater Risk by Jurisdiction

JURISDICTION	MANUFACTURED HOMES	SFR STRUCTURES BUILT BEFORE 1980
Taylor County ⁵	2,865	34,141
City of Abilene	1,485	30,573
Town of Buffalo Gap	42	141
Town of Lawn	24	108
Town of Merkel	137	963
Town of Trent	22	137
City of Tuscola	39	229
City of Tye	259	265
WCTCOG	0	0

The following critical facilities would be vulnerable to thunderstorm wind events in each participating jurisdiction:

Table 5-6. Critical Facilities at Risk by Jurisdiction

JURISDICTION	CRITICAL FACILITIES
Taylor County	1 Fire Station, 2 Police Stations, 3 Dams (Greenlee, Atkins, and Shotwell Dams), 2 JP8 Fuel Facilities, BNSF Railroad
City of Abilene	4 Government/Municipal Facilities, 11 Fire Stations, 1 Police Station, 2 Hospitals, 1 Ambulance Service, AISD Facilities, WISD Facilities, Mobile Communications Center, Telephone Company, Airport, Gas Utility Facilities, Electric Utility Facilities, 3 Water Treatment Plants, 3 Water Supply Facilities, 3 TV Stations, BNSF Railroad
Town of Buffalo Gap	1 Fire Station, 1 City Hall, 1 County Utility Yard (County Crew), JNBG-ISD
Town of Lawn	2 Fire Stations, 1 City Hall
Town of Merkel	2 Municipal Facilities, 1 Police Station, 2 Fire Stations, 1 City Yard (Public Works Vehicles and Equipment), 1 County Utility Yard (County Crew), 1 Urgent Care Facility, 1 Safe Room/Shelter, 1 Pump Station, 2 Water

⁵ County totals includes all jurisdictions and unincorporated areas within the county.

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JURISDICTION	CRITICAL FACILITIES
	Towers, 1 Waste Water Treatment Facility, State Fire Response Facility, MISD Facilities, 1 Electrical Services Facility, 1 Water Supply Facility
Town of Trent	1 Municipal Facility, Fire Station, Trent ISD Facilities, Burlington North Railroad
City of Tuscola	2 Municipal Facilities, 2 Fire Stations, 2 Water Utility Facilities, JNISD Facilities, 1 Water Treatment Facility
City of Tye	1 Fire Department, 1 Police Department, 2 Government Facilities, 1 Water Tower, 3 Pump Stations, 2 Lift Stations, Public Works Facilities, 1 Energy Plant
WCTCOG	WCTCOG Regional Facility, Law Enforcement Training Facility

A thunderstorm wind event can also result in traffic disruptions, injuries and in rare cases, fatalities. Impact of thunderstorms winds experienced in Planning Area 1 has resulted in fourteen injuries and no fatalities. Impact of thunderstorm wind events experienced in Planning Area 1, including the WCTCOG and all participating jurisdictions, would be “Limited,” with minor quality of life lost, less than 10 percent of properties damaged and critical facilities would be shut down for 24 hours or less. Overall, the average loss estimate (in 2018 dollars) is \$13,756,150 having an approximate annual loss estimate of \$218,352 (Table 5-7).

Table 5-7. Potential Annualized Losses for Planning Area 1

JURISDICTION	PROPERTY & CROP LOSS	ANNUAL LOSS ESTIMATES
Taylor County	\$5,788,458	\$91,880
City of Abilene	\$7,432,406	\$117,975
Town of Buffalo Gap	\$78,091	\$1,240
Town of Lawn	\$86,083	\$1,366
Town of Merkel	\$40,918	\$649
Town of Trent	\$32,021	\$508
City of Tuscola	\$4,314	\$68
City of Tye	\$293,859	\$4,664
WCTCOG	\$0	\$0
Planning Area 1	\$13,756,150	\$218,352

ASSESSMENT OF IMPACTS

Thunderstorm wind events have the potential to pose a significant risk to people and can create dangerous and difficult situations for public health and safety officials. Impacts to the planning area can include:

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- Individuals exposed to the storm can be struck by flying debris, falling limbs, or downed trees causing serious injury or death.
- Structures can be damaged or crushed by falling trees, which can result in physical harm to the occupants.
- Significant debris and downed trees can result in emergency response vehicles being unable to access areas of the community.
- Downed power lines may result in roadways being unsafe for use, which may prevent first responders from answering calls for assistance or rescue.
- During exceptionally heavy wind events, first responders may be prevented from responding to calls, as the winds may reach a speed in which their vehicles and equipment are unsafe to operate.
- Thunderstorm wind events often result in widespread power outages increasing the risk to more vulnerable portions of the population who rely on power for health and/or life safety.
- Extended power outage often results in an increase in structure fires and carbon monoxide poisoning, as individuals attempt to cook or heat their homes with alternate, unsafe cooking or heating devices, such as grills.
- First responders are exposed to downed power lines, unstable and unusual debris, hazardous materials, and generally unsafe conditions.
- Emergency operations and services may be significantly impacted due to damaged facilities and/or loss of communications.
- Critical staff may be unable to report for duty, limiting response capabilities.
- City or county departments may be damaged, delaying response and recovery efforts for the entire community.
- Private sector entities that the County and all participating jurisdictions and their residents rely on, such as utility providers, financial institutions, and medical care providers may not be fully operational and may require assistance from neighboring communities until full services can be restored.
- Economic disruption negatively impacts the programs and services provided by the community due to short and long term loss in revenue.
- Some businesses not directly damaged by thunderstorm wind events may be negatively impacted while roads are cleared and utilities are being restored, further slowing economic recovery.
- Older structures built to less stringent building codes may suffer greater damage as they are typically more vulnerable to thunderstorm winds.
- Large scale wind events can have significant economic impact on the affected area, as it must now fund expenses such as infrastructure repair and restoration, temporary services and facilities, overtime pay for responders, and normal day-to-day operating expenses.
- Businesses that are more reliant on utility infrastructure than others may suffer greater damages without a backup power source.
- A large thunderstorm wind event could impact recreational activities at places, like Lake Abilene and Lake Kirby, placing visitors in imminent danger, potentially requiring emergency services or evacuation.
- Recreational areas and parks may be damaged or inaccessible due to downed trees or debris, causing temporary impacts to area businesses.
- While the WCTCOG has not had any physical or loss of life impacts, it is important to understand that the WCTCOG's resources and personnel are allocated, and financial resources are utilized to respond

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to and recover from thunderstorm winds. This makes the budget smaller and spreads personnel thin and makes it difficult to perform other necessary tasks for the jurisdictions it serves.

The economic and financial impacts of thunderstorm winds on the area will depend entirely on the scale of the event, what is damaged, and how quickly repairs to critical components of the economy can be implemented. The level of preparedness and pre-event planning done by the community, local businesses, and citizens will also contribute to the overall economic and financial conditions in the aftermath of any thunderstorm wind event.

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HAZARD DESCRIPTION

Extreme heat is a prolonged period of excessively high temperatures and exceptionally humid conditions. Extreme heat during the summer months is a common occurrence throughout the State of Texas, and Planning Area 1 is no exception. Planning Area 1, including the WCTCOG and all participating jurisdictions, typically experience extended heat waves. A heat wave is an extended period of extreme heat and is often accompanied by high humidity.



Although heat can damage buildings and facilities, it presents a more significant threat to the safety and welfare of citizens. The major human risks associated with severe summer heat include: heat cramps; sunburn; dehydration; fatigue; heat exhaustion; and even heat stroke. The most vulnerable population to heat casualties are children and the elderly or infirmed who frequently live on low fixed incomes and cannot afford to run air-conditioning on a regular basis. This population is sometimes isolated, with no immediate family or friends to look out for their well-being.

LOCATION

There is no specific geographic scope to the extreme heat hazard. Extreme heat could occur anywhere within Planning Area 1, including the WCTCOG and all participating jurisdictions.

EXTENT

The magnitude or intensity of an extreme heat event is measured according to temperature in relation to the percentage of humidity. According to the National Oceanic Atmospheric Administration (NOAA), this relationship is referred to as the “Heat Index” and is depicted in Figure 6-1. This index measures how hot it feels outside when humidity is combined with high temperatures.

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Figure 6-1. Extent Scale for Extreme Summer Heat¹

Temperatures (°F)		Temperatures (°F)		Temperatures (°F)		Temperatures (°F)	
40	80 - 88: CAUTION	40	90 - 96: EXTREME CAUTION	40	98 - 106: DANGER	40	108 - 110: EXTREME DANGER
45	80 - 88: CAUTION	45	90 - 94: EXTREME CAUTION	45	96 - 104: DANGER	45	106 - 110: EXTREME DANGER
50	80 - 86: CAUTION	50	88 - 94: EXTREME CAUTION	50	96 - 102: DANGER	50	104 - 110: EXTREME DANGER
55	80 - 86: CAUTION	55	88 - 92: EXTREME CAUTION	55	94 - 100: DANGER	55	102 - 110: EXTREME DANGER
60	80 - 84: CAUTION	60	86 - 90: EXTREME CAUTION	60	92 - 98: DANGER	60	100 - 110: EXTREME DANGER
65	80 - 84: CAUTION	65	86 - 90: EXTREME CAUTION	65	92 - 96: DANGER	65	98 - 110: EXTREME DANGER
70	80 - 84: CAUTION	70	86 - 88: EXTREME CAUTION	70	90 - 94: DANGER	70	96 - 110: EXTREME DANGER
75	80 - 82: CAUTION	75	84 - 88: EXTREME CAUTION	75	90 - 94: DANGER	75	96 - 110: EXTREME DANGER
80	80 - 82: CAUTION	80	84 - 86: EXTREME CAUTION	80	88 - 92: DANGER	80	94 - 110: EXTREME DANGER
85	80 - 82: CAUTION	85	84 - 86: EXTREME CAUTION	85	88 - 90: DANGER	85	92 - 110: EXTREME DANGER
90	80: CAUTION	90	82 - 84: EXTREME CAUTION	90	86 - 90: DANGER	90	92 - 110: EXTREME DANGER
95	80: CAUTION	95	82 - 84: EXTREME CAUTION	95	86 - 88: DANGER	95	90 - 110: EXTREME DANGER
100	80: CAUTION	100	82 - 84: EXTREME CAUTION	100	86 - 88: DANGER	100	90 - 110: EXTREME DANGER

Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity

The Extent Scale in Figure 6-1 displays varying categories of caution depending on the relative humidity combined with the temperature. For example, when the temperature is at 88 degrees Fahrenheit (°F) or lower, caution should be exercised if the humidity level is at or above 40 percent.

The shaded zones on the chart indicate varying symptoms or disorders that could occur depending on the magnitude or intensity of the event. “Caution” is the first category of intensity, and it indicates when fatigue due to heat exposure is possible. “Extreme Caution” indicates that sunstroke, muscle cramps, or heat exhaustion are possible, and a “Danger” level means that these symptoms are likely. “Extreme Danger” indicates that heat stroke is likely. The National Weather Service (NWS) initiates alerts based on the Heat Index as shown in Table 6-1.

Table 6-1. Heat Index and Warnings

CATEGORY	HEAT INDEX	POSSIBLE HEAT DISORDERS	WARNING TYPE
Extreme Danger	125°F and higher	Heat stroke or sun stroke likely.	A heat advisory will be issued to warn that the Heat Index may exceed 105°F.
Danger	103 – 124°F	Sunstroke, muscle cramps, and/or heat exhaustion are likely. Heatstroke possible with prolonged exposure and/or physical activity.	

¹ Source: NOAA

SECTION 6: EXTREME HEAT

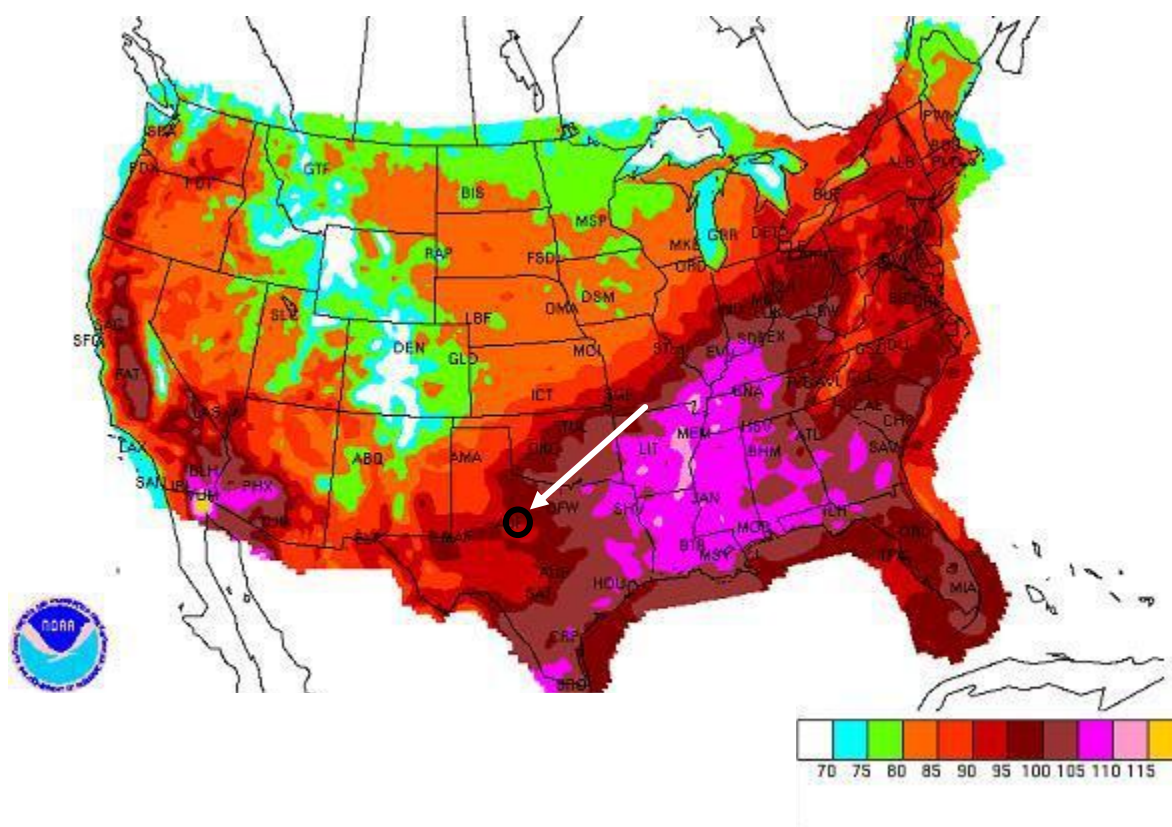
CATEGORY	HEAT INDEX	POSSIBLE HEAT DISORDERS	WARNING TYPE
Extreme Caution	90 – 103°F	Sunstroke, muscle cramps, and/or heat exhaustion possible with prolonged exposure and/or physical activity.	An Excessive Heat Warning is issued if the Heat Index rises above 105°F at least 3 hours during the day or above 80°F at night.
Caution	80 – 90°F	Fatigue is possible with prolonged exposure and/or physical activity.	

The majority (75%) of the planning area lies in the Central Rolling Red Plains Area. The remaining 25% of the county lies in the Edwards Plateau. Altitudes range from 1,672 to 2,410 feet above sea level. Taylor County is traversed from east to west by the Callahan Divide, a line of hills separating the Brazos River and the Colorado River watersheds. Lake Abilene, Kirby Lake, Lytle Lake, and Fort Phantom Hill Reservoir provide water and recreation. The county is semi-arid, with an average rainfall of 23.59 inches. Temperatures range from an average low of 31° F in January to an average high of 96° in July.²

Due to its geography, and its warm, sunny, humid subtropical climate, Planning Area 1, including the WCTCOG and all participating jurisdictions, can expect an extreme heat event each summer. Citizens, especially children and the elderly should exercise caution by staying out of the heat for prolonged periods when a heat advisory or excessive heat warning is issued. Also at risk are those working or remaining outdoors.

Figure 6-2 displays the daily maximum heat index as derived from NOAA based on data compiled from 1838 to 2015. The black circle shows the planning area. The colors red and maroon indicate a daily maximum heat index of 90° to 100°F. Planning Area 1, including the WCTCOG and all participating jurisdictions, could experience extreme heat from 90° to 103°F for the future and should mitigate to an extreme caution level.

² Texas State Historical Association website: <https://tshaonline.org/handbook/online/articles/hct02>

Figure 6-2. Average Daily Maximum Heat Index Days³

HISTORICAL OCCURRENCES

Every summer, the hazard of heat-related illness becomes a significant public health issue throughout much of the United States. Mortality from all causes increases during heat waves, and excessive heat is an important contributing factor to deaths from other causes, particularly among the elderly. Table 6-2 depicts historical occurrences of mortality from heat from 1994 to 2008 from the Texas Department of State Health Services and 2009 through 2017 from the NCEI database.

Table 6-2. Extreme Heat Related Deaths in Texas

YEAR	DEATHS
1994	1
1995	12
1996	10
1997	2

³ Source: NRDC and the black circle indicates Planning Area 1.

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YEAR	DEATHS
1998	66
1999	22
2000	71
2001	20
2002	1
2003	62
2004	53
2005	111
2006	104
2007	43
2008	66
2009	6
2010	4
2011	45
2012	3
2013	2
2014	0
2015	5
2016	6
2017	3

Because the Texas Department of State Health Services reports on total events statewide, previous occurrences for extreme heat are derived from the NCEI database. While there have been no heat related incidents reported for Planning Area 1, including the WCTCOG and all participating jurisdictions, average high temperatures for the planning area through the summer months indicate extreme heat events occur every year throughout the entire planning area.

PROBABILITY OF FUTURE EVENTS

Average high temperatures for the planning area through the summer months indicate a probability of one event or more every year. This frequency supports a highly likely probability of future events.

VULNERABILITY AND IMPACT

There is no defined geographic boundary for extreme heat events. While the entire Planning Area 1, including the WCTCOG and all participating jurisdictions, is exposed to extreme temperatures, existing buildings, infrastructure, and critical facilities are not likely to sustain significant damage from extreme heat events. Therefore, any estimated property losses associated with the extreme heat hazard are anticipated to be minimal across the area.

Extreme temperatures do however present a significant threat to life and safety for the population of the planning area as a whole. Heat casualties for example are typically caused by a lack of adequate air-conditioning or heat exhaustion. The most vulnerable population to heat casualties are the elderly or infirmed who frequently live on low fixed incomes and cannot afford to run air-conditioning on a regular basis. This population is sometimes isolated, with no immediate family or friends to look out for their well-being. Children under 5 cannot seek air conditioning or shelter during extreme heat events and can be left in areas such as vehicles making them especially vulnerable populations.

Those participating in athletic events or physical activity in the planning area are also susceptible as sporting events and practices are often held outside during early fall or late spring when temperatures are at the highest. Another segment of the population at risk are those whose jobs consist of strenuous labor outdoors. Additionally, livestock and crops can become stressed, decreasing in quality or in production, during times of extreme heat.

The WCTCOG employees may be at risk during extreme heat events, particularly those whose jobs consist of outdoor activities such as maintenance. The WCTCOG employs 37 people.

The population over 65 in Planning Area 1 is estimated at 13.9% of the total population and children under the age of 5 are estimated at 7.4%, or an estimated total of 28,753⁴ potentially vulnerable residents in the planning area based on age (Table 6-3).

Table 6-3. Populations at Greatest Risk by Jurisdiction

JURISDICTION	POPULATION 65 AND OLDER	POPULATION UNDER 5
Taylor County	18,762	9,991
City of Abilene	15,476	8,737
Town of Buffalo Gap	88	19
Town of Lawn	56	7
Town of Merkel	434	89
Town of Trent	68	19

⁴ U.S. Census Bureau 2016 data for Planning Area 1.

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JURISDICTION	POPULATION 65 AND OLDER	POPULATION UNDER 5
City of Tuscola	111	77
City of Tye	123	88

Extreme high temperatures can have significant secondary impacts, leading to droughts, water shortages, increased fire danger, and prompt excessive demands for energy. The possibility of rolling blackouts increases with unseasonably high temperatures in what is a normally mild month with low power demands.

Typically, more than 12 hours of warning time would be given before the onset of an extreme heat event. Only minor property damage would result. The potential impact of excessive summer heat is considered “Limited” with minor quality of life lost for Planning Area 1, including WCTCOG and all participating jurisdictions. In terms of vulnerability to structures, the impact from extreme heat would be negligible. It is possible that critical facilities and infrastructure, including the WCTCOG facility, could be shut down for 24 hours if cooling units are running constantly, leading to a temporary power outage. Less than ten percent of residential and commercial property could be damaged if extreme heat events lead to structure fires. Based on historical records over a 22-year period, annualized losses for Planning Area 1 are negligible.

ASSESSMENT OF IMPACTS

The greatest risk from extreme heat is to public health and safety. Potential impacts the community may include:

- Vulnerable populations, particularly the elderly and children under 5, can face serious or life-threatening health problems from exposure to extreme heat including hyperthermia, heat cramps, heat exhaustion, and heat stroke (or sunstroke).
- Response personnel, including utility workers, public works personnel, and any other professions where individuals are required to work outside, are more subject to extreme heat related illnesses since their exposure would typically be greater.
- High energy demand periods can outpace the supply of energy, potentially creating the need for rolling brownouts which would elevate the risk of illness to vulnerable residents.
- Highways and roads may be damaged by excessive heat causing asphalt roads to soften and concrete roads to shift or buckle.
- Vehicles engines and cooling systems typically run harder during extreme heat events resulting in increases in mechanical failures.
- Extreme heat events during times of drought can exacerbate the environmental impacts associated with drought, decreasing water and air quality and further degrading wildlife habitat.
- Extreme heat increases ground-level ozone (smog), increasing the risk of respiratory illnesses.
- Tourism and recreational activities predominant in the Lake Abilene and Lake Kirby areas may be negatively impacted during extreme heat events, reducing seasonal revenue.
- Food suppliers can anticipate an increase in food costs due to increases in production costs and crop and livestock losses.

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- Fisheries may be negatively impacted by extreme heat, suffering damage to fish habitats (either natural or man-made) and a loss of fish and/or other aquatic organisms due to decreased water flows or availability.
- Negatively impacted water suppliers may face increased costs resulting from the transport of water resources or development of supplemental water resources.
- Outdoor activities, such as runners or athletic activities may see an increase in injury or illness during extreme heat events.
- The WCTCOG also has maintenance workers that could be exposed to the heat while doing strenuous work outside potentially causing injury.

The economic and financial impacts of extreme heat on the community will depend on the duration of the event, demand for energy, drought associated with extreme heat, and many other factors. The level of preparedness and the amount of planning done by the jurisdiction, local businesses, and citizens will impact the overall economic and financial conditions before, during, and after an extreme heat event.

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HAZARD DESCRIPTION



Hailstorm events are a potentially damaging outgrowth of severe thunderstorms. During the developmental stages of a hailstorm, ice crystals form within a low pressure front due to the rapid rising of warm air into the upper atmosphere, and the subsequent cooling of the air mass. Frozen droplets gradually accumulate into ice crystals until they fall as precipitation that is round or irregularly shaped masses of ice typically greater than 0.75 inches in diameter. The size of hailstones is a direct result of the size and severity of the storm. High velocity updraft winds are required to keep hail in suspension in thunderclouds. The strength of the updraft is a by-product of heating on the Earth's surface. Higher temperature gradients above Earth's surface result in increased suspension time and hailstone size.

LOCATION

Hailstorms are an extension of severe thunderstorms that could potentially cause severe damage. As a result, they are not confined to any specific geographic location and can vary greatly in size, location, intensity, and duration. Therefore, Planning Area 1, including the WCTCOG and all participating jurisdictions, are equally at risk to the hazard of hail across all areas.

EXTENT

The National Weather Service (NWS) classifies a storm as "severe" if there is hail three-quarters of an inch in diameter (approximately the size of a penny) or greater, based on radar intensity or as seen by observers. The intensity category of a hailstorm depends on hail size and the potential damage it could cause, as depicted in the National Centers for Environmental Information (NCEI) Intensity Scale in Table 7-1.

Table 7-1. Hail Intensity and Magnitude¹

SIZE CODE	INTENSITY CATEGORY	SIZE (Diameter Inches)	DESCRIPTIVE TERM	TYPICAL DAMAGE
H0	Hard Hail	Up to 0.33	Pea	No damage
H1	Potentially Damaging	0.33 – 0.60	Marble	Slight damage to plants and crops
H2	Potentially Damaging	0.60 – 0.80	Dime	Significant damage to plants and crops
H3	Severe	0.80 – 1.20	Nickel	Severe damage to plants and crops
H4	Severe	1.2 – 1.6	Quarter	Widespread glass and auto damage
H5	Destructive	1.6 – 2.0	Half Dollar	Widespread destruction of glass, roofs, and risk of injuries
H6	Destructive	2.0 – 2.4	Ping Pong Ball	Aircraft bodywork dented and brick walls pitted
H7	Very Destructive	2.4 – 3.0	Golf Ball	Severe roof damage and risk of serious injuries
H8	Very Destructive	3.0 – 3.5	Hen Egg	Severe damage to all structures
H9	Super Hailstorms	3.5 – 4.0	Tennis Ball	Extensive structural damage, could cause fatal injuries
H10	Super Hailstorms	4.0 +	Baseball	Extensive structural damage, could cause fatal injuries

The intensity scale in Table 7-1 ranges from H0 to H10, with increments of intensity or damage potential in relation to hail size (distribution and maximum), texture, fall speed, speed of storm translation, and strength of the accompanying wind. Based on available data regarding the previous occurrences for the area, Planning Area 1 may experience hailstorms ranging from an H0 to an H10. The planning area can mitigate a storm from low risk or hard hail to a super hailstorm with baseball size hail that leads to extensive structural damage and could cause fatal injuries.

HISTORICAL OCCURRENCES

Historical evidence shown in Figure 7-1 demonstrates that the planning area is vulnerable to hail events overall, which typically result from severe thunderstorm activity. Historical events with reported damages (2018 dollars), injuries, or fatalities are shown in Table 7-2. A total of 466 reported historical hail events impacted

¹ NCEI Intensity Scale, based on the TORRO Hailstorm Intensity Scale.

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Planning Area 1 between 1955 and 2017 (Summary Table 7-3). These events were reported to NCEI and NOAA databases and may not represent all hail events to have occurred during the past 63 years. Only those events for Planning Area 1 with latitude and longitude available were plotted (Figure 7-1).

Historical hail data for the following are provided within a City-wide basis per the NCEI database. It should be noted that the WCTCOG facility is located in the City of Abilene. While the City of Abilene has experienced 144 hail events, none have directly impacted the WCTCOG facility.

Figure 7-1. Spatial Historical Hail Events, 1955-2017

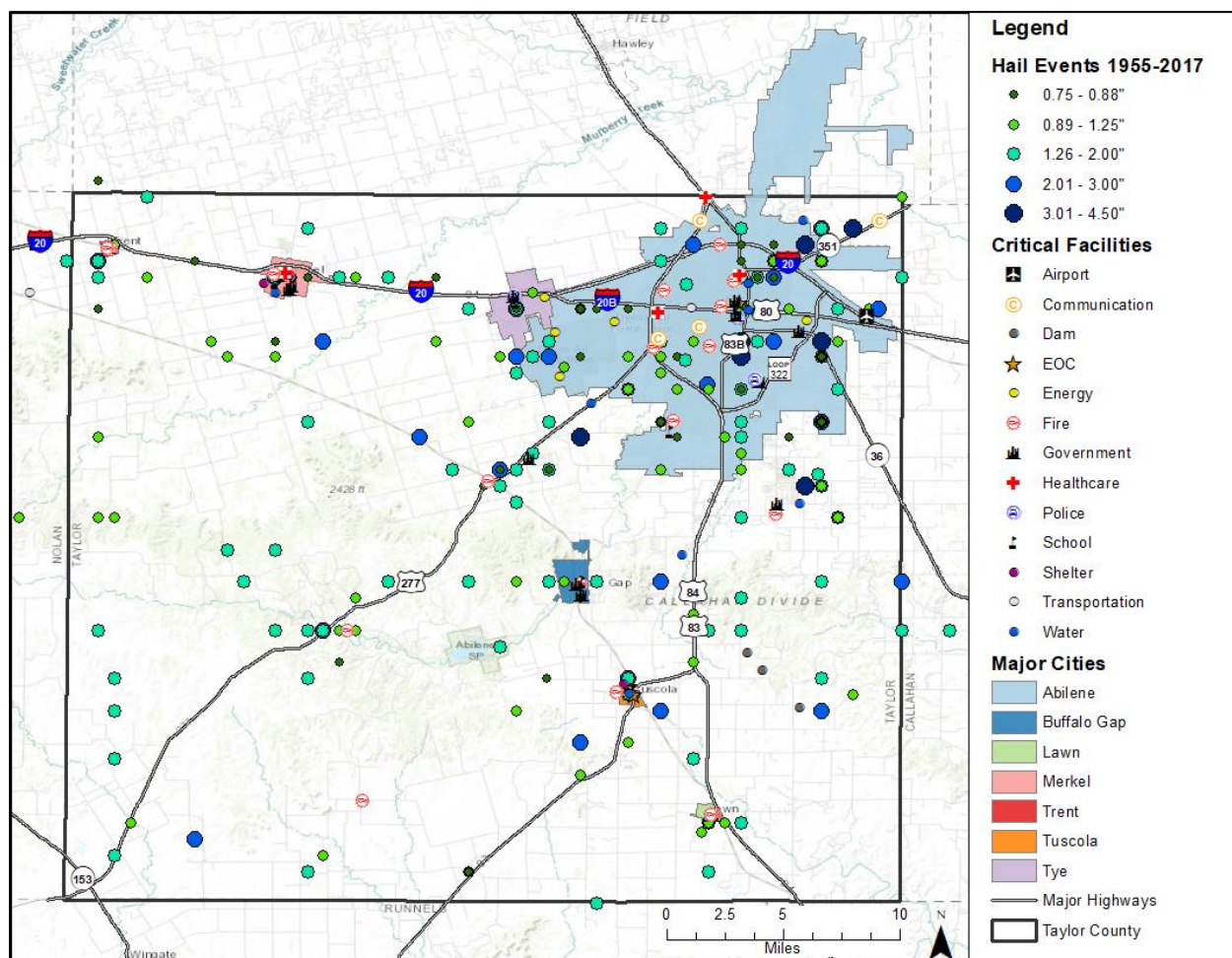


Table 7-2. Historical Hail Events, 1955-2017

JURISDICTION	Date	MAGNITUDE	INJURIES	FATALITIES	PROPERTY DAMAGE	CROP DAMAGE
Taylor County	6/2/1988	2.75	1	0	\$0	\$0
Taylor County	3/27/1993	2.75	0	0	\$870	\$0
City of Abilene	6/7/1996	3	0	0	\$1,594,474	\$0

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JURISDICTION	Date	MAGNITUDE	INJURIES	FATALITIES	PROPERTY DAMAGE	CROP DAMAGE
City of Abilene	5/14/1997	1.75	0	0	\$312,123	\$156,061
Town of Lawn	6/16/1997	1.75	0	0	\$389,666	\$155,867
City of Abilene	5/30/2001	2.75	0	0	\$5,624,178	\$0
Taylor County	6/13/2002	2.75	0	0	\$27,777	\$0
City of Tye	6/13/2002	2.75	5	0	\$208,327	\$0
Taylor County	10/6/2002	1.75	0	0	\$1,378	\$0
Taylor County	5/8/2005	2.75	0	0	\$32,131	\$0
City of Abilene	5/8/2005	1.75	0	0	\$8,997	\$0
City of Abilene	5/8/2005	2.5	0	0	\$64,263	\$0
City of Tuscola	5/8/2005	3	0	0	\$32,131	\$0
Taylor County	5/25/2005	2.5	0	0	\$15,423	\$0
City of Tye	5/31/2005	2.5	0	0	\$32,131	\$0
City of Abilene	4/24/2011	4.5	0	0	\$166,639	\$0
Taylor County	6/12/2014	4.5	12	0	\$419,318,545	\$0
City of Abilene	6/12/2014	4.5	0	0	\$4,193,185	\$0

Table 7-3. Historical Hail Events Summary, 1955-2017

JURISDICTION	NUMBER OF EVENTS	MAGNITUDE	INJURIES	FATALITIES	PROPERTY DAMAGE	CROP DAMAGE
Taylor County	207	4.5 inches	13	0	\$419,396,124	\$0
City of Abilene ²	144	4.5 inches	0	0	\$11,963,859	\$156,061
Town of Buffalo Gap	18	1.75 inches	0	0	\$0	\$0
Town of Lawn	14	1.75 inches	0	0	\$389,666	\$155,867
Town of Merkel	25	2.75 inches	0	0	\$0	\$0
Town of Trent	17	2.75 inches	0	0	\$0	\$0
City of Tuscola	23	2.75 inches	0	0	\$32,131	\$0

² WCTCOG events are reported on a city-wide basis under the City of Abilene.

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City of Tye	18	2.75 inches	5	0	\$240,458	\$0
TOTAL LOSSES	466	(Max Extent)	18	0	\$432,334,166	

Based on the list of historical hail events for Planning Area 1 (listed above), including the WCTCOG and all participating jurisdictions, 89 events have occurred since the 2012 Plan.

SIGNIFICANT EVENTS

May 30, 2001 – Taylor County/Abilene

Baseball size hail cause significant damages to eastern sections of Abilene. The area around Abilene Christian University was the hardest hit, with numerous windows broken at the school. Many vehicles were hard hit as well, with windshields broken out and holes punched through the roofs of convertibles. This same storm also produced golf ball size hail along a path from near Hawley in Jones County south through Abilene to Potosi in eastern Taylor County.

June 12, 2014 – Taylor County/Abilene

A cold front interacted with a very unstable air mass across a large part of West Central Texas to trigger supercell thunderstorms with giant size hail and damaging downburst winds. One of the supercell thunderstorms hit Taylor County and the City of Abilene with hail the size of DVDs, causing some injuries at an outdoor event and widespread damage to vehicles, roofs and windows. It may have been one of the costliest hail storms to ever impact the area. The town of Rochelle was also severely impacted. There were quite a few reports of large hail and damaging winds across the region. Reported damages resulting from this event exceeded \$419 million (2018 dollars) and 12 injuries were recorded.

PROBABILITY OF FUTURE EVENTS

Based on available records of historic events, 466 events in a 63 year reporting period for Planning Area 1 provides a probability of seven to eight events every year. This frequency supports a highly likely probability of future events for Planning Area 1, including the WCTCOG and all participating jurisdictions.

VULNERABILITY AND IMPACT

Damage from hail approaches \$1 billion in the U.S. each year. Much of the damage inflicted by hail is to crops. Even relatively small hail can shred plants to ribbons in a matter of minutes. Vehicles, roofs of buildings and homes, and landscaping are most commonly damaged by hail.

Utility systems on roofs at school districts and critical facilities would be vulnerable. Hail could cause a significant threat to people as they could be struck by hail and falling trees or branches. Outdoor activities such as student activities and events may elevate the risk to students, faculty and residents when a hailstorm strikes with little warning.

Planning Area 1 features multiple mobile or manufactured home parks throughout the planning area including all participating jurisdictions. These parks are typically more vulnerable to hail events than typical site built structures. In addition, manufactured homes are located sporadically throughout the planning area in unincorporated portions of the county as well as within all participating jurisdictions.

SECTION 7: HAIL

The U.S. Census data indicates a total of 2,865 manufactured homes located in Planning Area 1, including all participating jurisdictions (Table 7-4), totaling approximately 5.0% of the residential structures in the planning area. In addition, 60.1% (approximately 34,141 structures) of the single family residential (SFR) structures in Planning Area 1 were built before 1980. These structures would typically be built to lower or less stringent construction standards than newer construction and may be more susceptible to damages during significant hail events. The WCTCOG does not have any manufactured homes or portable buildings and the facility was built in 2007.

Table 7-4. Structures at Greater Risk by Jurisdiction

JURISDICTION	MANUFACTURED HOMES	STRUCTURES BUILT BEFORE 1980
Taylor County ³	2,865	34,141
City of Abilene	1,485	30,573
Town of Buffalo Gap	42	141
Town of Lawn	24	108
Town of Merkel	137	963
Town of Trent	22	137
City of Tuscola	39	229
City of Tye	259	265
WCTCOG	0	0

The following critical facilities would be most vulnerable to hail events in each participating jurisdiction:

Table 7-5. Critical Facilities at Risk by Jurisdiction

JURISDICTION	CRITICAL FACILITIES
Taylor County	1 Fire Station, 2 Police Stations, 3 Dams (Greenlee, Atkins, and Shotwell Dams), 2 JP8 Fuel Facilities, BNSF Railroad
City of Abilene	4 Government/Municipal Facilities, 11 Fire Stations, 1 Police Station, 2 Hospitals, 1 Ambulance Service, AISD Facilities, WISD Facilities, Mobile Communications Center, Telephone Company, Airport, Gas Utility Facilities, Electric Utility Facilities, 3 Water Treatment Plants, 3 Water Supply Facilities, 3 TV Stations, BNSF Railroad
Town of Buffalo Gap	1 Fire Station, 1 City Hall, 1 County Utility Yard (County Crew), JNBG-ISD
Town of Lawn	2 Fire Stations, 1 City Hall

³ County totals includes all incorporated jurisdictions and unincorporated areas.

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JURISDICTION	CRITICAL FACILITIES
Town of Merkel	2 Municipal Facilities, 1 Police Station, 2 Fire Stations, 1 City Yard (Public Works Vehicles and Equipment), 1 County Utility Yard (County Crew), 1 Urgent Care Facility, 1 Safe Room/Shelter, 1 Pump Station, 2 Water Towers, 1 Waste Water Treatment Facility, State Fire Response Facility. MISD Facilities, 1 Electrical Services Facility, 1 Water Supply Facility
Town of Trent	1 Municipal Facility, Fire Station, Trent ISD Facilities, Burlington North Railroad
City of Tuscola	2 Municipal Facilities, 2 Fire Stations, 2 Water Utility Facilities, JNISD Facilities, 1 Water Treatment Facility
City of Tye	1 Fire Department, 1 Police Department, 2 Government Facilities, 1 Water Tower, 3 Pump Stations, 2 Lift Stations, Public Works Facilities, 1 Energy Plant
WCTCOG	WCTCOG Regional Facility, Law Enforcement Training Facility

Hail has been known to cause injury to humans and occasionally has been fatal. Overall, the average loss estimate of property and crops (in 2018 dollars) is \$432,334,166, having an approximate annual loss estimate of \$6,862,447. Based on historic loss and damages, the impact of hail damages on the entire Planning Area 1, including the WCTCOG and all participating jurisdictions, can be considered “Minor” severity of impact meaning injuries and illness do not result in permanent disability, County area facilities shut down for more than one week, and more than ten percent of property destroyed or with major damage.

Table 7-6. Potential Annualized Losses for Planning Area 1

JURISDICTION	PROPERTY & CROP DAMAGE	ANNUAL LOSS ESTIMATE
Taylor County	\$419,396,124	\$6,657,081
City of Abilene	\$12,119,920	\$192,380
Town of Buffalo Gap	\$0	\$0
Town of Lawn	\$545,533	\$8,659
Town of Merkel	\$0	\$0
Town of Trent	\$0	\$0
City of Tuscola	\$32,131	\$510
City of Tye	\$240,458	\$3,817
WCTCOG	\$0	\$0
Planning Area 1	\$432,334,166	\$6,862,447

ASSESSMENT OF IMPACTS

Hail events have the potential to pose a significant risk to people and can create dangerous situations. Impacts to the planning area can include:

- Hail may create hazardous road conditions during and immediately following an event, delaying first responders from providing for or preserving public health and safety.
- Individuals and first responders who are exposed to the storm may be struck by hail, falling branches, or downed trees resulting in injuries or possible fatalities.
- Residential structures can be damaged by falling trees, which can result in physical harm to occupants.
- Large hail events will likely cause extensive roof damage to residential structures along with siding damage and broken windows, creating a spike in insurance claims and a rise in premiums.
- Automobile damage may be extensive depending on the size of the hail and length of the storm.
- Hail events can result in power outages over widespread areas increasing the risk to more vulnerable portions of the population who rely on power for health and/or life safety.
- Extended power outage can result in an increase in structure fires and/or carbon monoxide poisoning, as individuals attempt to cook or heat their home with alternate, unsafe cooking or heating devices, such as grills.
- First responders are exposed to downed power lines, damaged structures, hazardous spills, and debris that often accompany hail events, elevating the risk of injury to first responders and potentially diminishing emergency response capabilities.
- Downed power lines and large debris, such as downed trees, can result in the inability of emergency response vehicles to access areas of the community.
- Hazardous road conditions may prevent critical staff from reporting for duty, limiting response capabilities.
- Economic disruption negatively impacts the programs and services provided by the community due to short and long term loss in revenue.
- Some businesses not directly damaged by the hail event may be negatively impacted while roads are cleared and utilities are being restored, further slowing economic recovery.
- Businesses that are more reliant on utility infrastructure than others may suffer greater damages without a backup power source.
- Hazardous road conditions will likely lead to increases in automobile accidents, further straining emergency response capabilities.
- Depending on the severity and scale of damage caused by large hail events, damage to power transmission and distribution infrastructure can require days or weeks to repair.
- A significant hail event could significantly damage agricultural crops, resulting in extensive economic losses for the community and surrounding area.
- Hail events may injure impact the accessibility of recreational areas and parks due to extended power outages or debris clogged access roads, or kill livestock and wildlife.
- A large hail event could impact the accessibility of recreational areas and parks due to extended power outages or debris clogged access roads.

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- While the building WCTCOG has not been impacted directly it is important to note that the resources are often taxed during hail events and those resources I diverted from normal operations to assist with response and recovery.

The economic and financial impacts of hail will depend entirely on the scale of the event, what is damaged, and how quickly repairs to critical components of the economy can be implemented. The level of preparedness and pre-event planning conducted by the community, local businesses, and citizens will contribute to the overall economic and financial conditions in the aftermath of any hail event.

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HAZARD DESCRIPTION

Drought is a period of time without substantial rainfall that persists from one year to the next. Drought is a normal part of virtually all climatic regions, including areas with high and low average rainfall. Drought is the consequence of anticipated natural precipitation reduction over an extended period of time, usually a season or more in length. Droughts can be classified as meteorological, hydrologic, agricultural, and socioeconomic. Table 8-1 presents definitions for these different types of drought.



Droughts are one of the most complex of all natural hazards as it is difficult to determine their precise beginning or end. In addition, droughts can lead to other hazards such as extreme heat and wildfires. Their impact on wildlife and area farming is enormous, often killing crops, grazing land, edible plants, and even in severe cases, trees. A secondary hazard to drought is wildfire because dying vegetation serves as a prime ignition source. Therefore, a heat wave combined with a drought is a very dangerous situation.

Table 8-1. Drought Classification Definitions¹

METEOROLOGICAL DROUGHT

The degree of dryness or departure of actual precipitation from an expected average or normal amount based on monthly, seasonal, or annual time scales.

¹ Source: Multi-Hazard Identification and Risk Assessment: A Cornerstone of the National Mitigation Strategy, FEMA

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HYDROLOGIC DROUGHT	The effects of precipitation shortfalls on stream flows and reservoir, lake, and groundwater levels.
AGRICULTURAL DROUGHT	Soil moisture deficiencies relative to water demands of plant life, usually crops.
SOCIOECONOMIC DROUGHT	The effect of demands for water exceeding the supply as a result of a weather-related supply shortfall.

LOCATION

Droughts occur regularly throughout Texas and Planning Area 1, and are a normal condition. However, they can vary greatly in their intensity and duration. The Drought Monitor shows the planning area is currently experiencing normal conditions throughout the planning area (Figure 8-1). However, the planning area has experienced abnormally dry to exceptional drought conditions over the last ten years (Figure 8-2). There is no distinct geographic boundary to drought; therefore, it can occur throughout Planning Area 1 equally, including the WCTCOG and all participating jurisdictions.

Figure 8-1. U.S. Drought Monitor, April 2018

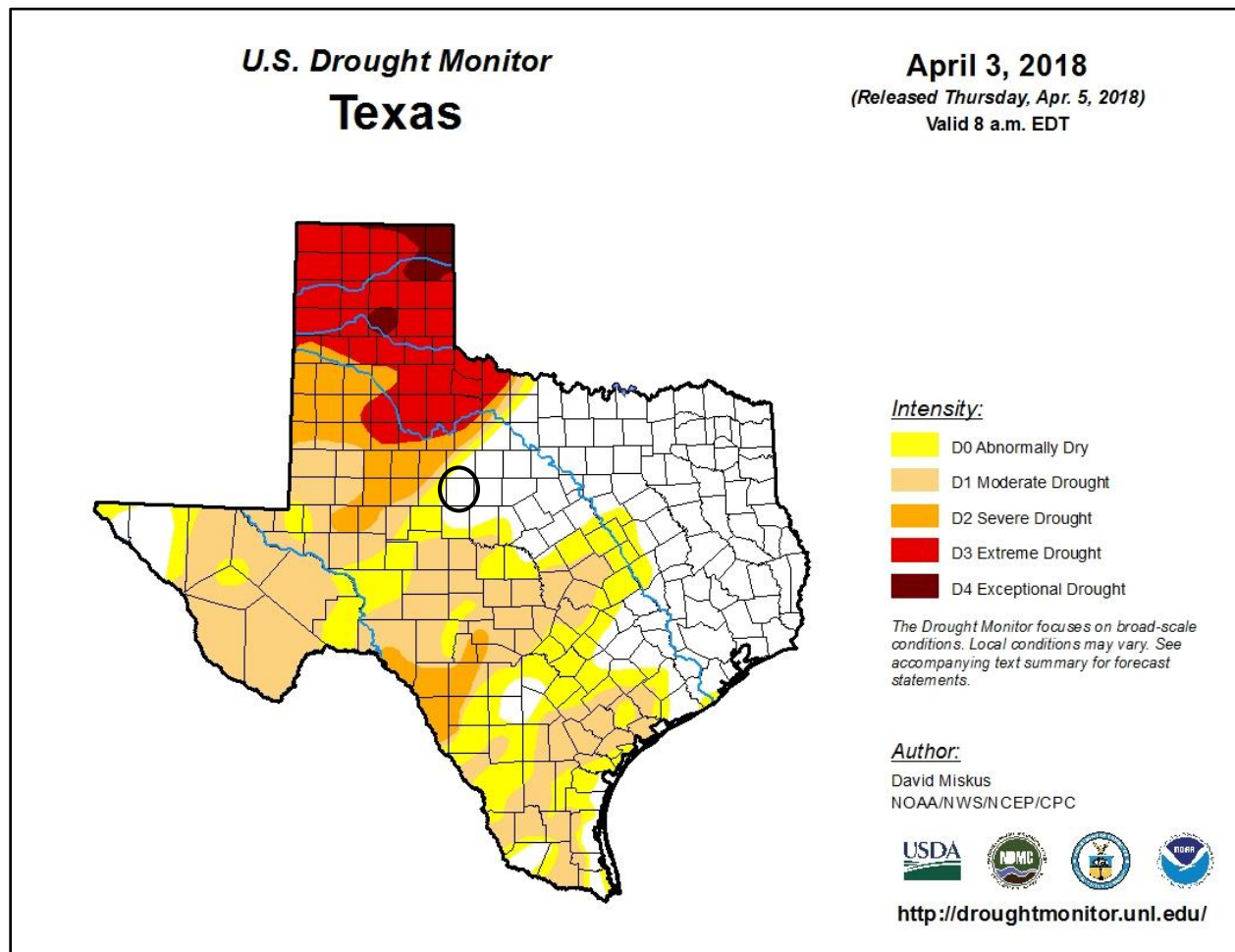
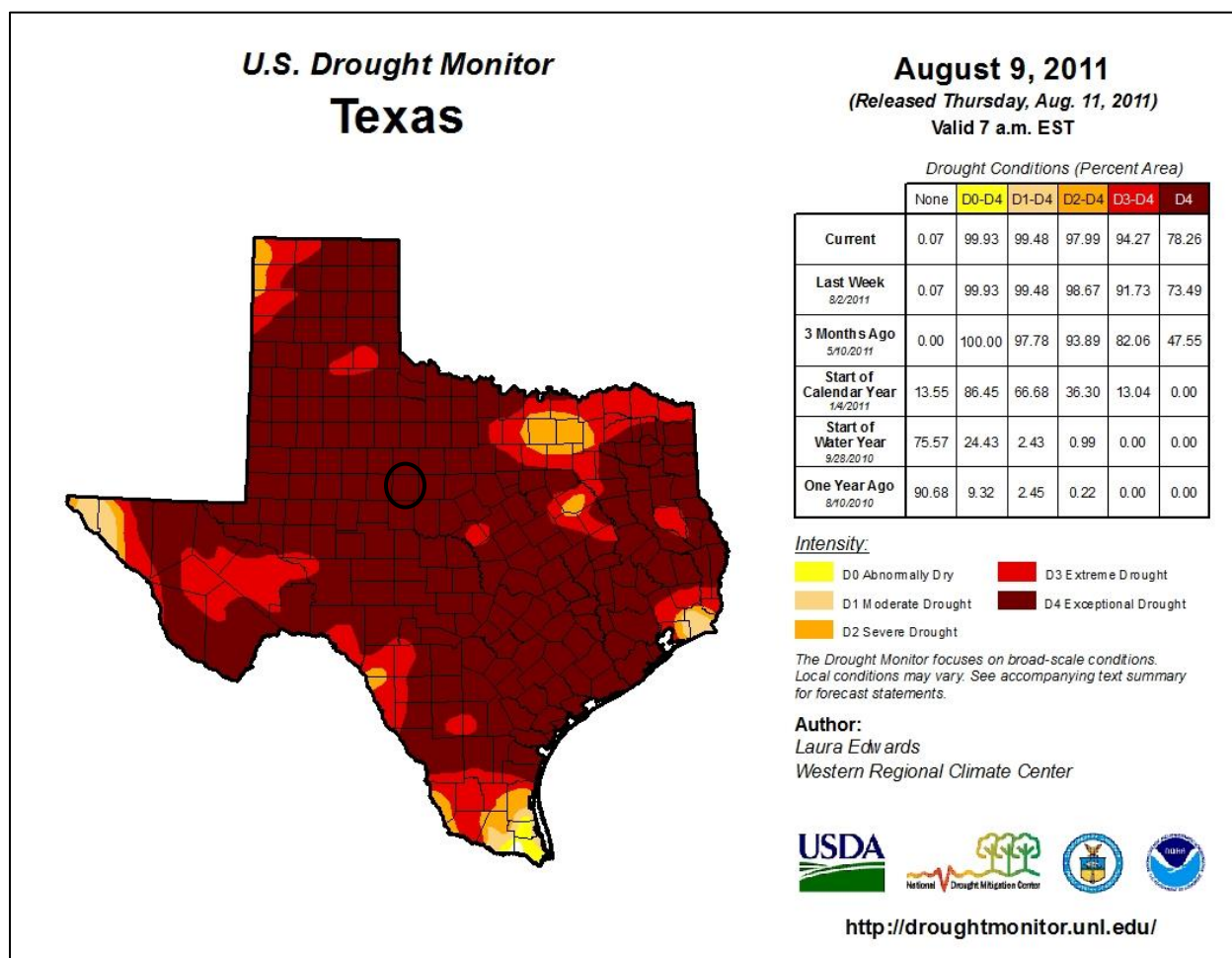


Figure 8-2. U.S. Drought Monitor, August 2011



EXTENT

The Palmer Drought Index is used to measure the extent of drought by measuring the duration and intensity of long-term drought-inducing circulation patterns. Long-term drought is cumulative, with the intensity of drought during the current month dependent upon the current weather patterns plus the cumulative patterns of previous months. The hydrological impacts of drought (e.g., reservoir levels, groundwater levels, etc.) take longer to develop. Table 8-2 depicts magnitude of drought, while Table 8-3 describes the classification descriptions.

Table 8-2. Palmer Drought Index

DROUGHT INDEX	DROUGHT CONDITION CLASSIFICATIONS						
	Extreme	Severe	Moderate	Normal	Moderately Moist	Very Moist	Extremely Moist
Z Index	-2.75 and below	-2.00 to -2.74	-1.25 to -1.99	-1.24 to +.99	+1.00 to +2.49	+2.50 to +3.49	n/a
Meteorological	-4.00 and below	-3.00 to -3.99	-2.00 to -2.99	-1.99 to +1.99	+2.00 to +2.99	+3.00 to +3.99	+4.00 and above
Hydrological	-4.00 and below	-3.00 to -3.99	-2.00 to -2.99	-1.99 to +1.99	+2.00 to +2.99	+3.00 to +3.99	+4.00 and above

Table 8-3. Palmer Drought Category Descriptions²

CATEGORY	DESCRIPTION	POSSIBLE IMPACTS	PALMER DROUGHT INDEX
D0	Abnormally Dry	Going into drought: short-term dryness slowing planting, growth of crops or pastures; fire risk above average. Coming out of drought: some lingering water deficits; pastures or crops not fully recovered.	-1.0 to -1.9
D1	Moderate Drought	Some damage to crops, pastures; fire risk high; streams, reservoirs, or wells low, some water shortages developing or imminent, voluntary water use restrictions requested.	-2.0 to -2.9
D2	Severe Drought	Crop or pasture losses likely; fire risk very high; water shortages common; water restrictions imposed.	-3.0 to -3.9
D3	Extreme Drought	Major crop/pasture losses; extreme fire danger; widespread water shortages or restrictions.	-4.0 to -4.9
D4	Exceptional Drought	Exceptional and widespread crop/pasture losses; exceptional fire risk; shortages of water in reservoirs, streams, and wells, creating water emergencies.	-5.0 or less

² Source: National Drought Mitigation Center

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Drought is monitored nationwide by the National Drought Mitigation Center (NDMC). Indicators are used to describe broad scale drought conditions across the U.S. and correspond to the intensity of drought.

Based on the historical occurrences for drought and the location of Planning Area 1, including the WCTCOG and all participating jurisdictions, the area can anticipate a range of drought from abnormally dry to exceptional, or D0 to D4, based on the Palmer Drought Category.

HISTORICAL OCCURRENCES

Planning Area 1 may typically experience a severe drought. Table 8-4 and 8-5 list historical events that have occurred in the planning area as reported in the National Centers for Environmental Information (NCEI). Historical drought information shows drought activity across a multi-county forecast area for each event, the appropriate percentage of the total property and crop damage reported for the entire forecast area has been allocated to each county impacted by the event. Historical drought data for the WCTCOG and all participating jurisdictions in Planning Area 1 are provided on a county-wide basis per the NCEI database. Historical droughts are defined as 30 days or more for planning purposes.

Table 8-4. Historical Drought Years, 1996-2017

DROUGHT YEAR
1996
1998
2000
2003
2005
2006
2006
2008
2009
2010
2011
2011
2012
2012
2012
2013

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DROUGHT YEAR
2014
2015
18 unique events

Table 8-5. Historical Drought Events, 1996-2017³

JURISDICTION	DATE	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
Taylor County	6/1/1998	0	0	\$0	\$0
Taylor County	8/1/1998	0	0	\$0	\$45,872,846
Taylor County	5/1/2000	0	0	\$0	\$0
Taylor County	8/1/2000	0	0	\$0	\$0
Taylor County	11/1/2006	0	0	\$0	\$0
Taylor County	12/1/2006	0	0	\$0	\$0
Taylor County	1/1/2007	0	0	\$0	\$0
Taylor County	2/1/2009	0	0	\$0	\$0
Taylor County	3/1/2009	0	0	\$0	\$0
Taylor County	4/1/2009	0	0	\$0	\$0
Taylor County	5/1/2009	0	0	\$0	\$0
Taylor County	4/1/2011	0	0	\$0	\$0
Taylor County	6/1/2011	0	0	\$0	\$0
Taylor County	7/1/2011	0	0	\$0	\$0
Taylor County	8/1/2011	0	0	\$0	\$0
Taylor County	9/1/2011	0	0	\$0	\$0
Taylor County	10/1/2011	0	0	\$0	\$0
Taylor County	11/1/2011	0	0	\$0	\$0
Taylor County	12/1/2011	0	0	\$0	\$0
Taylor County	1/1/2012	0	0	\$0	\$0

³ Damages are reported in 2018 dollar values.

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JURISDICTION	DATE	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
Taylor County	3/1/2012	0	0	\$0	\$0
Taylor County	4/1/2012	0	0	\$0	\$0
Taylor County	8/1/2012	0	0	\$0	\$0
Taylor County	9/1/2012	0	0	\$0	\$0
Taylor County	12/1/2012	0	0	\$0	\$0
Taylor County	1/1/2013	0	0	\$0	\$0
Taylor County	2/1/2013	0	0	\$0	\$0
Taylor County	3/1/2013	0	0	\$0	\$0
Taylor County	4/1/2013	0	0	\$0	\$0
Taylor County	5/1/2013	0	0	\$0	\$0
Taylor County	6/1/2013	0	0	\$0	\$0
Taylor County	7/1/2013	0	0	\$0	\$0
Taylor County	8/1/2013	0	0	\$0	\$0
Taylor County	9/1/2013	0	0	\$0	\$0
Taylor County	4/1/2014	0	0	\$0	\$0
Taylor County	5/1/2014	0	0	\$0	\$0
Taylor County	6/1/2014	0	0	\$0	\$0
Taylor County	7/1/2014	0	0	\$0	\$0
Taylor County	8/1/2014	0	0	\$0	\$0
Taylor County	9/1/2014	0	0	\$0	\$0
Taylor County	10/1/2014	0	0	\$0	\$0
Taylor County	2/1/2015	0	0	\$0	\$0
Taylor County	3/3/2015	0	0	\$0	\$0
Taylor County	4/1/2015	0	0	\$0	\$0
TOTALS		0	0	\$0	\$45,872,846

Based on the list of historical drought events for Planning Area 1 (listed above), including the WCTCOG and all participating jurisdictions, 9 events have occurred since the 2012 Plan.

SIGNIFICANT EVENTS

August 1998

The devastating drought of 1998 that began when little or no rain fell during the normally wet spring months continued through the end of summer. The two main crops across the area, wheat and cotton, were both near total losses, with additional losses to the cattle, sheep, and goat industries.

December 2012 - September 2013

In December 2012 the drought continued to intensify mainly north of Interstate 20. The drought continued to expand over portions of the Northern Edwards Plateau and the adjacent Northwest Hill Country. The U.S. Drought Monitor placed most of Taylor County into the severe drought category. By the end of February, the U.S. Drought Monitor placed the north half of Taylor County in the extreme drought category, while the south half was in severe drought. The majority of the planning area moved into the severe drought category by the end of April. The extreme drought conditions continued throughout the summer and fall. Some improvement was recorded for the planning area during the month of August 2013. Conditions continued to improve through September and the drought conditions were lifted for Planning Area 1.

PROBABILITY OF FUTURE EVENTS

Based on available records of historic events, there have been fourteen extended time periods of drought (ranging in length from approximately 30 days to over 300 days) within a 22-year reporting period, which provides a probability of one event every year. This frequency supports a highly likely probability of future events for Planning Area 1, including the WCTCOG and all participating jurisdictions.

VULNERABILITY AND IMPACT

Drought impacts large areas and crosses jurisdictional boundaries. All existing and future buildings, facilities, and populations are exposed to this hazard and could potentially be impacted. However, drought impacts are mostly experienced in water shortages and crop/livestock losses on agricultural lands and typically have no impact on buildings.

In terms of vulnerability, population, agriculture, property, and environment are all vulnerable to drought in Planning Area 1, including all participating jurisdictions. The average person will survive only a few days without water, and this timeframe can be drastically shortened for those people with more fragile health – typically children, the elderly, and the ill. Population over 65 in Planning Area 1 is estimated at 13.9% of the total population, and children under the age of 5 are estimated at 7.4% or an estimated total of 28,753⁴ potentially vulnerable residents in the planning area based on age (Table 8-6).

⁴ US Census Bureau 2016 data for Taylor County

Table 8-6. Populations at Greater Risk by Jurisdiction

JURISDICTION	POPULATION 65 AND OLDER	POPULATION UNDER 5
Taylor County ⁵	18,762	9,991
City of Abilene ⁶	15,476	8,737
Town of Buffalo Gap	88	19
Town of Lawn	56	7
Town of Merkel	434	89
Town of Trent	68	19
City of Tuscola	111	77
City of Tye	123	88

The population is also vulnerable to food shortages when drought conditions exist, and potable water is in short supply. Potable water is used for drinking, sanitation, patient care, sterilization, equipment, heating and cooling systems, and many other essential functions in medical facilities. All residents in Planning Area 1 could be adversely affected by drought conditions, which could limit water supplies and present health threats. During summer drought, or hot and dry conditions, elderly persons, small children, infants and the chronically ill who do not have adequate cooling units in their homes may become more vulnerable to injury and/or death.

Due to the nature and function of the WCTCOG, drought is not considered to pose a risk to employees. Impacts to the WCTCOG facility resulting from drought are considered negligible.

The economic impact of droughts can be significant as they produce a complex web of impacts that spans many sectors of the economy and reach well beyond the area experiencing physical drought. This complexity exists because water is integral to our ability to produce goods and provide services. If droughts extend over a number of years, the direct and indirect economic impact can be significant.

Habitat damage is a vulnerability of the environment during periods of drought for both aquatic and terrestrial species. Fish and wildlife in and near Lake Kirby and Lake Abilene may be negatively impacted by prolonged drought. The environment also becomes vulnerable during periods of extreme or prolonged drought due to land degradation.

Loss estimates were based on 22 years of statistical data from the NCEI. A drought event frequency-impact was then developed to determine an impact profile on agriculture products and estimate potential losses due to

⁵ County totals includes all incorporated jurisdictions and unincorporated areas.

⁶ The WCTCOG facilities are located within the City of Abilene and has no direct damages as a result of drought in the history of the organization.

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drought in the area. Table 8-7 shows annualized exposure for Planning Area 1, including the WCTCOG and all participating jurisdictions.

Table 8-7. Drought Event Damage Totals, 1996-2017

JURISDICTION	PROPERTY & CROP LOSS	ANNUALIZED LOSS ESTIMATES
Taylor County	\$45,872,846	\$2,085,129

Impact of droughts experienced in Planning Area 1, including the WCTCOG and all participating jurisdictions, has resulted in no injuries or fatalities supporting a limited severity of impact meaning injuries and/or illnesses are treatable with first aid, shutdown of facilities and services for 24 hours or less, and less than 10% of property is destroyed or with major damage. Annualized loss over the 22-year reporting period in Planning Area 1, including all participating jurisdictions, is \$2,085,129 annually.

ASSESSMENT OF IMPACTS

The Drought Impact Reporter was developed in 2005 by the University of Nebraska-Lincoln to provide a national database of drought impacts. Droughts can have an impact on: the agriculture; business and industry; energy; fire; plants and wildlife; relief, response, and restrictions; society and public health; tourism and recreation; and water supply and quality. Table 8-8 lists the drought impacts to Planning Area 1 from 2008 to 2017 based on reports received by the Drought Impact Reporter.

Table 8-8. Drought Impacts, 2008-2017

DROUGHT IMPACTS 2008-2017	
Agriculture	50
Business & Industry	0
Energy	2
Fire	15
Plants & Wildlife	17
Relief, Response & Restrictions	19
Society & Public Health	8
Tourism & Recreation	0
Water Supply & Quality	12

Drought has the potential to impact people in Planning Area 1. While it is rare that drought, in and of itself, leads to a direct risk to the health and safety of people in the U.S., severe water shortages could result in inadequate supply for human needs. Drought also is frequently associated with a variety of impacts, including:

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- Recreational activities that rely on water may be curtailed, such as hunting and fishing in or near the Lake Abilene or Lake Kirby area, resulting in fewer tourists and lower revenue.
- The number of health-related low-flow issues (e.g., diminished sewage flows, increased pollution concentrations, reduced firefighting capacity, and cross-connection contamination) will increase as the drought intensifies.
- Public safety from forest/range/wildfires will increase as water availability and/or pressure decreases.
- Respiratory ailments may increase as the air quality decreases.
- There may be an increase in disease due to wildlife concentrations (e.g., rabies, Rocky Mountain spotted fever, Lyme disease).
- Jurisdictions and residents may disagree over water use/water rights, creating conflict.
- Political conflicts may increase between municipalities, counties, states, and regions.
- Water management conflicts may arise between competing interests.
- Increased law enforcement activities may be required to enforce water restrictions.
- Severe water shortages could result in inadequate supply for human needs as well as lower quality of water for consumption.
- Firefighters may have limited water resources to aid in firefighting and suppression activities, increasing risk to lives and property.
- During drought there is an increased risk for wildfires and dust storms.
- The community may need increased operational costs to enforce water restriction or rationing.
- Prolonged drought can lead to increases in illness and disease related to drought.
- Utility providers can see decreases in revenue as water supplies diminish.
- Utilities providers may cut back energy generation and service to their customers to prioritize critical service needs.
- Hydroelectric power generation facilities and infrastructure would have significantly diminished generation capability. Dams simply cannot produce as much electricity from low water levels as they can from high water levels.
- Fish and wildlife food and habitat will be reduced or degraded over time during a drought and disease will increase, especially for aquatic life.
- Wildlife will move to more sustainable locations creating higher concentrations of wildlife in smaller areas, increasing vulnerability and further depleting limited natural resources.
- Severe and prolonged drought can result in the reduction of a species, or cause the extinction of a species altogether.
- Plant life will suffer from long-term drought. Wind and erosion will also pose a threat to plant life as soil quality will decline.
- Dry and dead vegetation will increase the risk of wildfire.
- Drought poses a significant risk to annual and perennial crop production and overall crop quality leading to higher food costs.
- Drought related declines in production may lead to an increase in unemployment.
- Drought may limit livestock grazing resulting in decreased livestock weight, potential increased livestock mortality, and increased cost for feed.

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- Negatively impacted water suppliers may face increased costs resulting from the transport water or develop supplemental water resources.
- Long term drought may negatively impact future economic development.
- WCTCOG resources may need to be utilized during droughts depleting the available resources for everyday activities.

The overall extent of damages caused by periods of drought is dependent on its extent and duration. The level of preparedness and pre-event planning done by government, businesses, and citizens will contribute to the overall economic and financial conditions in the aftermath of a drought event.

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HAZARD DESCRIPTION

Lightning is a discharge of electrical energy resulting from the buildup of positive and negative charges within a thunderstorm, creating a “bolt” when the buildup of charges becomes strong enough. This flash of light usually occurs within the clouds or between the clouds and the ground. A bolt of lightning can reach temperatures approaching 50,000 degrees Fahrenheit. Lightning rapidly heats the sky as it flashes but the surrounding air cools following the bolt. This rapid heating and cooling of the surrounding air causes the thunder which often accompanies lightning strikes. While most often affiliated with severe thunderstorms, lightning often strikes outside of heavy rain and might occur as far as 10 miles away from any rainfall.

According to FEMA, an average of 300 people are injured and 80 people are killed in the United States each year by lightning. Direct lightning strikes also have the ability to cause significant damage to buildings, critical facilities, and infrastructure. Lightning is also responsible for igniting wildfires that can result in widespread damages to property before firefighters have the ability to contain and suppress the resultant fire.

LOCATION

Lightning can strike in any geographic location and is considered a common occurrence in Texas. Planning Area 1, including the WCTCOG and all participating jurisdictions, is located in a region of the country that is moderately susceptible to a lightning strike. Therefore, lightning could occur at any location within the entire planning area. It is assumed that the entire Planning Area 1 is uniformly exposed to the threat of lightning.

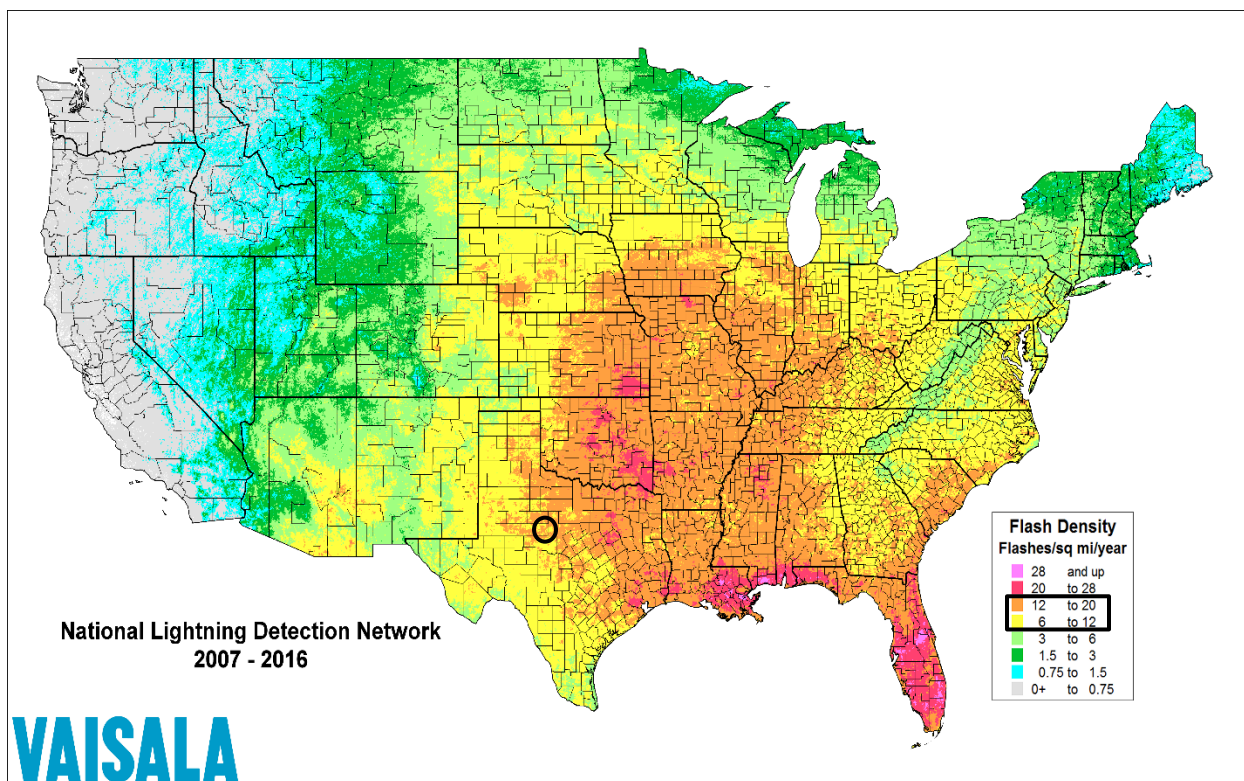
EXTENT

According to NOAA, the average number of cloud-to-ground flashes for the State of Texas between 2007 and 2016 was 11.3 flashes per square mile. Vaisala’s U.S. National Lightning Detection Network lightning flash density map (Figure 9-1) shows a range of six to twenty cloud-to-ground lightning flashes per square mile per

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year for the entire Planning Area 1. The black circle indicates Planning Area 1 on Figure 9-1. This rate equates to approximately 5,514 to 18,380 flashes per year for the entire planning area.

Figure 9-1. Lightning Flash Density, 2007-2016



The extent for lightning can be expressed in terms of the number of strikes in an interval. NOAA utilizes lightning activity levels (LALs) on a scale from 1-6. LAL rankings reflect the frequency of cloud-to-ground lightning either forecast or observed (Table 9-1).

Table 9-1. NOAA Lightning Activity Levels (LAL)

LAL	CLOUD & STORM DEVELOPMENT	LIGHTNING STRIKES/ 15 MIN
1	No thunderstorms.	-
2	Cumulus clouds are common but only a few reach the towering cumulus stage. A single thunderstorm must be confirmed in the observation area. The clouds produce mainly virga, but light rain will occasionally reach the ground. Lightning is very infrequent.	1-8
3	Towering cumulus covers less than two-tenths of the sky. Thunderstorms are few, but two to three must occur within the observation area. Light to moderate rain will reach the ground, and lightning is infrequent.	9-15

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LAL	CLOUD & STORM DEVELOPMENT	LIGHTNING STRIKES/ 15 MIN
4	Towering cumulus covers two to three-tenths of the sky. Thunderstorms are scattered and more than three must occur within the observation area. Moderate rain is common and lightning is frequent.	16-25
5	Towering cumulus and thunderstorms are numerous. They cover more than three-tenths and occasionally obscure the sky. Rain is moderate to heavy and lightning is frequent and intense.	>25
6	Similar to LAL 3 except thunderstorms are dry.	

The NCEI does not include the LAL for historical lightning events, therefore in order to determine the extent of lightning strikes, the yearly average range of estimated number of lightning strikes within the planning area (5,514 to 18,380 flashes) and a cloud-to-ground flash density of six to twenty per square mile were divided by the number¹ of thunderstorm events that occur annually in the planning area. Flash density is reported as a range of cloud-to-ground strikes at a county-wide level. Planning Area 1, including the WCTCOG and all participating jurisdictions, should expect an average range of 2 to 7 lightning strikes within 15 minutes at any given time during a lightning or combined lightning and thunderstorm event, indicating lightning strikes have an average LAL range of 2. An LAL of 2 can be anticipated in the future for all participating jurisdictions.

HISTORICAL OCCURRENCES

Table 9-2 depicts historical occurrences of lightning for Planning Area 1, including all participating jurisdictions, with associated damages according to the National Centers for Environmental Information (NCEI) data. Since January 1996, only four recorded lightning events are known to have impacted Planning Area 1, based upon NCEI records. It is highly likely additional lightning occurrences have gone unreported before and during the recording period. It should be noted that the WCTCOG facility is located in the City of Abilene. While the WCTCOG has no reported damages due to lightning events, the historic events posing a threat to the WCTCOG are reported on a city-wide basis.

The NCEI is a national data source organized under the National Oceanic and Atmospheric Administration. The NCEI is the largest archive available for climate data; however, it is important to note that the only incidents factored into this risk assessment are those that are reported to the NCEI for the entire Planning Area 1. Damage estimates provided in a table for losses have been modified to reflect the damage in 2018 dollars.

Table 9-2. Historical Lightning Events with Reported Damages, 1996-2017²

JURISDICTION	DATE	TIME	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
City of Abilene	4/23/2004	8:01 PM	0	0	\$33,225	\$0

¹ Analysis includes the highest number of events recorded in a given year during the reporting period in order to account for typical under reporting of thunderstorm and lightning events.

² Damage values are in 2018 dollars.

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JURISDICTION	DATE	TIME	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
City of Abilene	8/20/2004	5:00 AM	0	0	\$0	\$0
City of Abilene	5/15/2013	5:50 PM	0	0	\$268,147	\$0
City of Abilene	5/19/2015	3:45 AM	0	0	\$10,507	\$0

Based on the list of historical lightning events for Planning Area 1 (listed above), including the WCTCOG and all participating jurisdictions, 2 events have occurred since the 2012 Plan.

SIGNIFICANT EVENTS

May 15, 2013 – City of Abilene

The combination of a dryline and an upper level disturbance produced a few severe thunderstorms across the Big Country and the counties of Brown and San Saba. The storms produced mostly damaging winds and a few reports of large hail. Lightning struck the Trinity Church of the Nazarene in the City of Abilene. A church official estimated the damage to be two hundred and fifty thousand dollars.

PROBABILITY OF FUTURE EVENTS

Based on historical records and input from the planning team the probability of occurrence for future lightning events in Planning Area 1, including the WCTCOG and all participating jurisdictions, is considered highly likely, or an event probable in the next year. The planning team stated that lightning occurs regularly in the area. According to NOAA, Planning Area 1 is located in an area of the country that experiences six to twenty lightning flashes per square mile per year (approximately 6,528 to 21,760 flashes per year). Given this estimated probability, it can be expected that future lightning events will continue to threaten life and cause minor property damages throughout the planning area, including the WCTCOG and all participating jurisdictions.

VULNERABILITY AND IMPACT

Vulnerability is difficult to evaluate since lightning events can occur at different strength levels, in random locations, and can create a broad range of damages depending on the strike location. Due to the randomness of these events, all existing and future structures and facilities in Planning Area 1 could potentially be impacted and remain vulnerable to possible injury and property loss from lightning strikes. Planning Area 1 has had only four reported lightning events, however the entire planning area, including the WCTCOG and all participating jurisdictions, are vulnerable and could be impacted by lightning.

The direct and indirect losses associated with these events include injury and loss of life, damage to structures and infrastructure, agricultural losses, utility failure (power outages), and stress on community resources. The entire population of Planning Area 1, including the WCTCOG and all participating jurisdictions, is considered exposed to the lightning hazard. The peak lightning season in the State of Texas is from June to August; however, the most fatalities occur in July. Fatalities occur most often when people are outdoors and/or participating in some form of recreation. Population located outdoors is considered at risk and more vulnerable to a lightning strike compared to being inside a structure. Moving to a lower risk location will decrease a person's vulnerability.

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The entire general building stock and all infrastructure of Planning Area 1 are considered exposed to the lightning hazard. Lightning can be responsible for damages to buildings, cause electrical, forest and/or wildfires, and damage infrastructure such as power transmission lines and communication towers. Agricultural losses can be extensive due to lightning and resulting fires.

The following critical facilities would be vulnerable to lightning events in each participating jurisdiction:

Table 9-3. Critical Facilities at Risk by Jurisdiction

JURISDICTION	CRITICAL FACILITIES
Taylor County	1 Fire Station, 2 Police Stations, 3 Dams (Greenlee, Atkins, and Shotwell Dams), 2 JP8 Fuel Facilities, BNSF Railroad
City of Abilene	4 Government/Municipal Facilities, 11 Fire Stations, 1 Police Station, 2 Hospitals, 1 Ambulance Service, AISD Facilities, WISD Facilities, Mobile Communications Center, Telephone Company, Airport, Gas Utility Facilities, Electric Utility Facilities, 3 Water Treatment Plants, 3 Water Supply Facilities, 3 TV Stations, BNSF Railroad
Town of Buffalo Gap	1 Fire Station, 1 City Hall, 1 County Utility Yard (County Crew), JNBG-ISD
Town of Lawn	2 Fire Stations, 1 City Hall
Town of Merkel	2 Municipal Facilities, 1 Police Station, 2 Fire Stations, 1 City Yard (Public Works Vehicles and Equipment), 1 County Utility Yard (County Crew), 1 Urgent Care Facility, 1 Safe Room/Shelter, 1 Pump Station, 2 Water Towers, 1 Waste Water Treatment Facility, State Fire Response Facility. MISD Facilities, 1 Electrical Services Facility, 1 Water Supply Facility
Town of Trent	1 Municipal Facility, Fire Station, Trent ISD Facilities, Burlington North Railroad
City of Tuscola	2 Municipal Facilities, 2 Fire Stations, 2 Water Utility Facilities, JNISD Facilities, 1 Water Treatment Facility
City of Tye	1 Fire Department, 1 Police Department, 2 Government Facilities, 1 Water Tower, 3 Pump Stations, 2 Lift Stations, Public Works Facilities, 1 Energy Plant
WCTCOG	WCTCOG Regional Facility, Law Enforcement Training Facility

Impact of lightning experienced in Planning Area 1 has resulted in no injuries or fatalities. Impact of lightning events experienced in Planning Area 1, including the WCTCOG and all participating jurisdictions, would be “Limited,” and injuries and illnesses would be treatable with first aid. The quality of life lost would be minor, and facilities would be shut down for 24 hours or less. Overall, the average loss estimate for Planning Area 1, including all participating jurisdictions, (in 2018 dollars) is \$311,879, having an approximate annual loss estimate of \$14,176 (Table 9-4).

Table 9-4. Potential Annualized Losses for Planning Area 1³

JURISDICTION	PROPERTY & CROP LOSS	ANNUAL LOSS ESTIMATE
Taylor County	\$0	\$0
City of Abilene	\$311,879	\$14,176
Town of Buffalo Gap	\$0	\$0
Town of Lawn	\$0	\$0
Town of Merkel	\$0	\$0
Town of Trent	\$0	\$0
City of Tuscola	\$0	\$0
City of Tye	\$0	\$0
WCTCOG	\$0	\$0
Planning Area	\$311,879	\$14,176

ASSESSMENT OF IMPACTS

Lightning events have the potential to pose a significant risk to people and can create dangerous and difficult situations for public health and safety officials. Impacts to the planning area can include:

- Individuals exposed to the storm can be directly struck, posing significant health risks and potential death.
- Structures can be damaged or crushed by falling trees damaged by lightning, which can result in physical harm to the occupants.
- Lightning strikes can result in widespread power outages increasing the risk to more vulnerable portions of the population who rely on power for health and/or life safety.
- Extended power outage often results in an increase in structure fires and carbon monoxide poisoning as individuals attempt to cook or heat their homes with alternate, unsafe cooking or heating devices, such as grills.
- Lightning strikes can be associated with structure fires and wildfires, creating additional risk to residents and first responders.
- Emergency operations and services may be significantly impacted due to power outages and/or loss of communications.

³ Damage values are in 2018 dollars.

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- City, county departments or other government services may be damaged, delaying response and recovery efforts for the entire community.
- Economic disruption due to power outages and fires negatively impacts the programs and services provided by the community due to short and long term loss in revenue.
- Some businesses not directly damaged by lightning events may be negatively impacted while utilities are being restored, further slowing economic recovery.
- Businesses that are more reliant on utility infrastructure than others may suffer greater damages without a backup power source.
- WCTCOG Resources can be taxed during response and recovery during these events and detract from the utilization of these resources.

The economic and financial impacts of lightning on the area will depend entirely on the scale of the event, what is damaged, and how quickly repairs to critical components of the economy can be implemented. The level of preparedness and pre-event planning done by the county, communities, local businesses, and citizens will also contribute to the overall economic and financial conditions in the aftermath of any lightning event.

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HAZARD DESCRIPTION

A wildfire event can rapidly spread out of control and occurs most often in the summer when the brush is dry and flames can move unchecked through a highly vegetative area. Wildfires can start as a slow burning fire along the forest floor, killing and damaging trees. The fires often spread more rapidly as they reach the tops of trees with wind carrying the flames from tree to tree. Usually, dense smoke is the first indication of a wildfire.

A wildfire event often begins unnoticed and spreads quickly, lighting brush, trees, and homes on fire. For example, a wildfire may be started by a campfire that was not doused properly, a tossed cigarette, burning debris, or arson.

Texas has seen a significant increase in the number of wildfires in the past 30 years, which included wildland, interface, or intermix fires. Wildland fires are fueled almost exclusively by natural vegetation, while interface or intermix fires are urban/wildland fires in which vegetation and the built-environment provide the fuel.

LOCATION

A wildfire event can be a potentially damaging consequence of drought. Wildfires can vary greatly in terms of size, location, intensity, and duration. While wildfires are not confined to any specific geographic location, they are most likely to occur in open grasslands. The threat to people and property from a wildfire event is greater in the fringe areas where developed areas meet open grass lands, such as the Wildland Urban Interface (WUI). (Figures 10-1 through 10-8). It is estimated that 37 percent of the total population in Planning Area 1 live within the WUI. However, the entire Planning Area 1 is at risk for wildfires.

Figure 10-1. Wildland Urban Interface Map – Taylor County

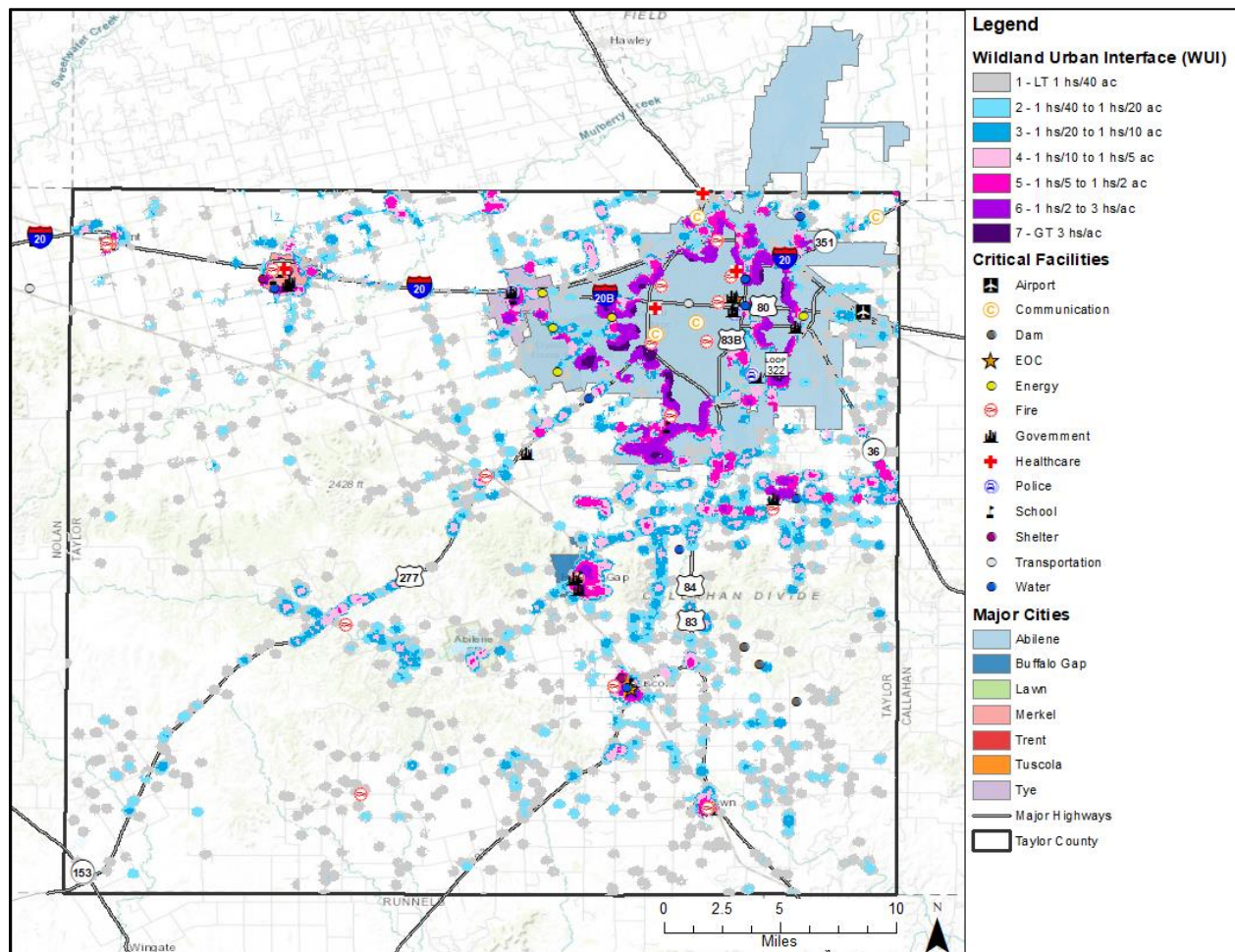
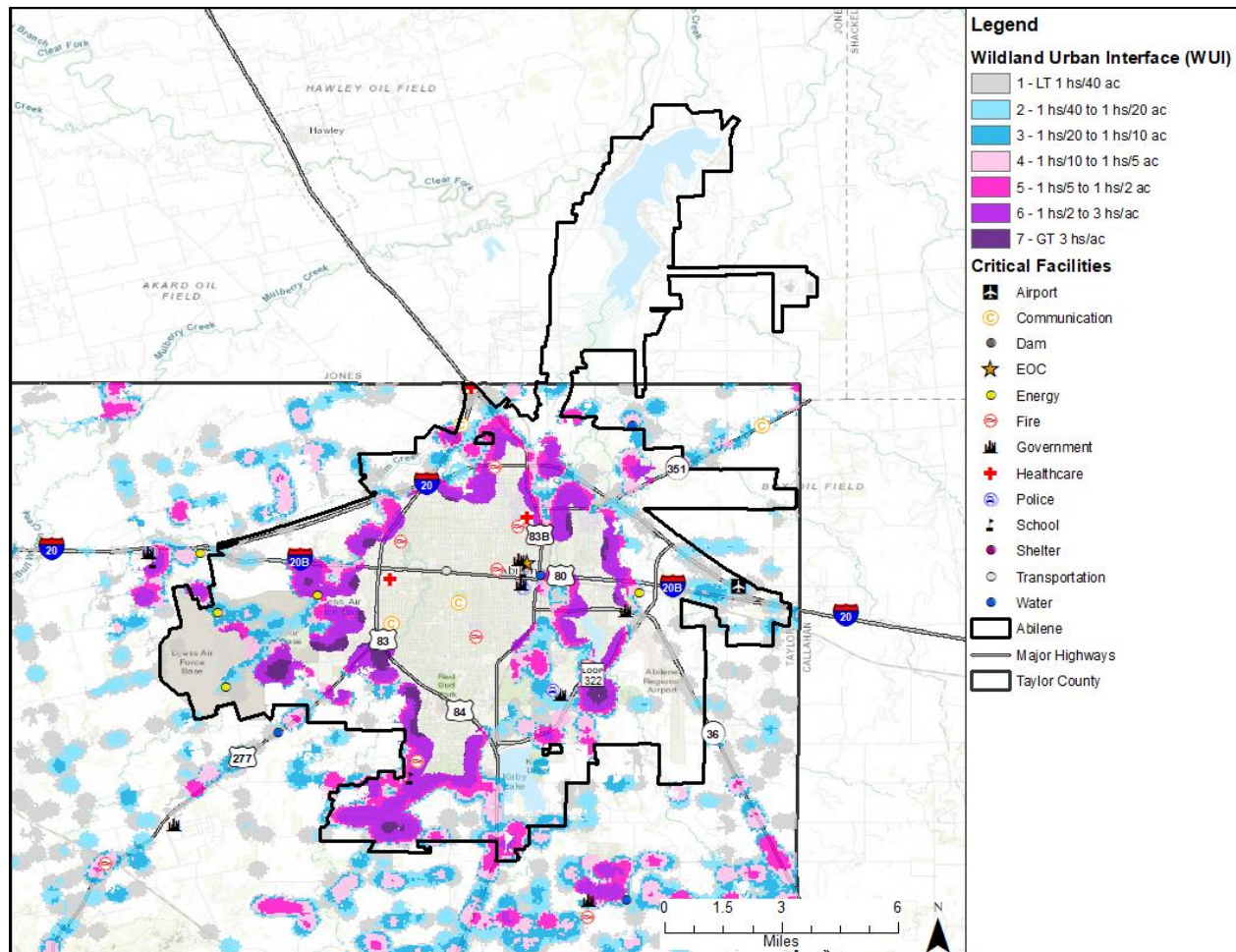
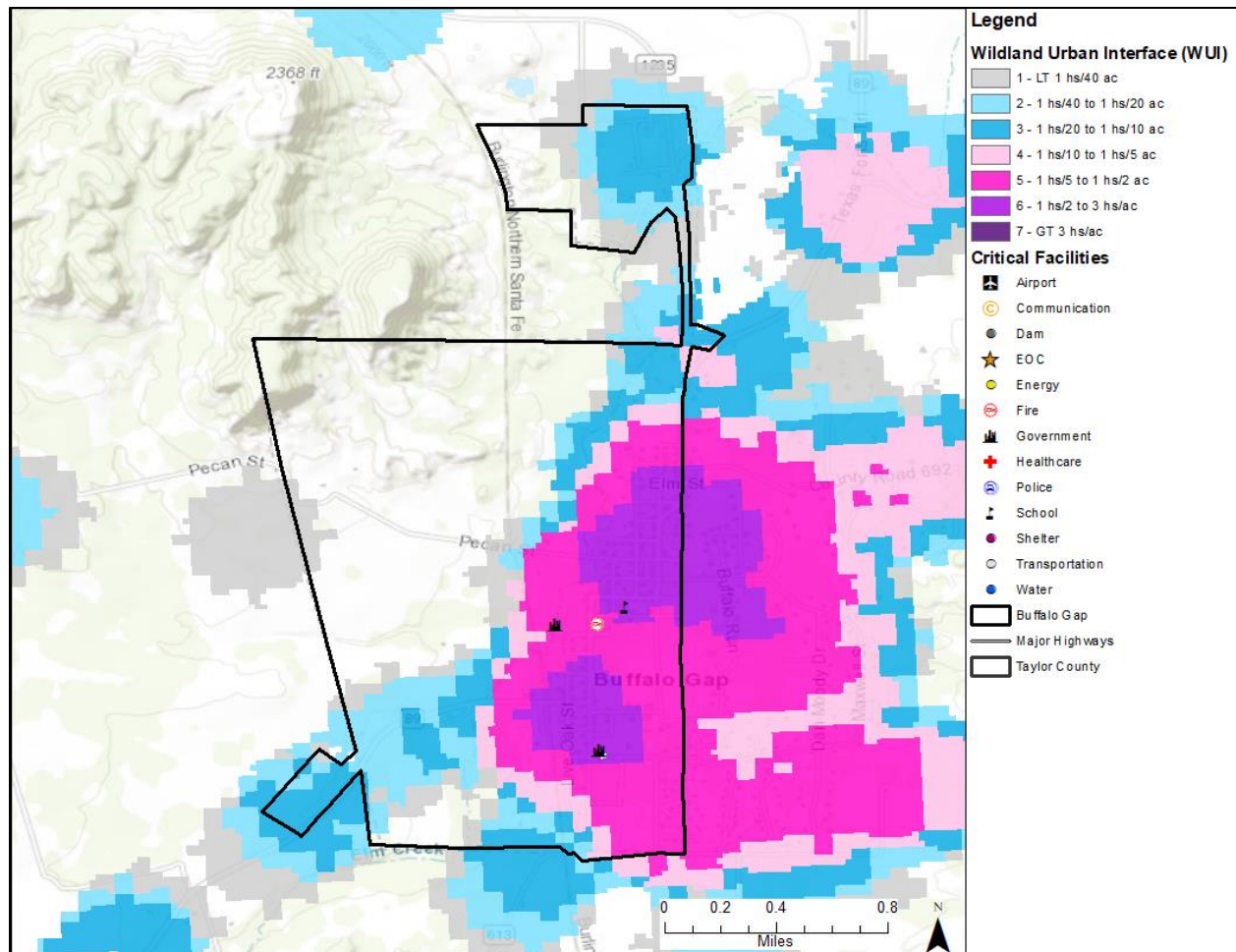


Figure 10-2. Wildland Urban Interface Map – City of Abilene and WCTCOG

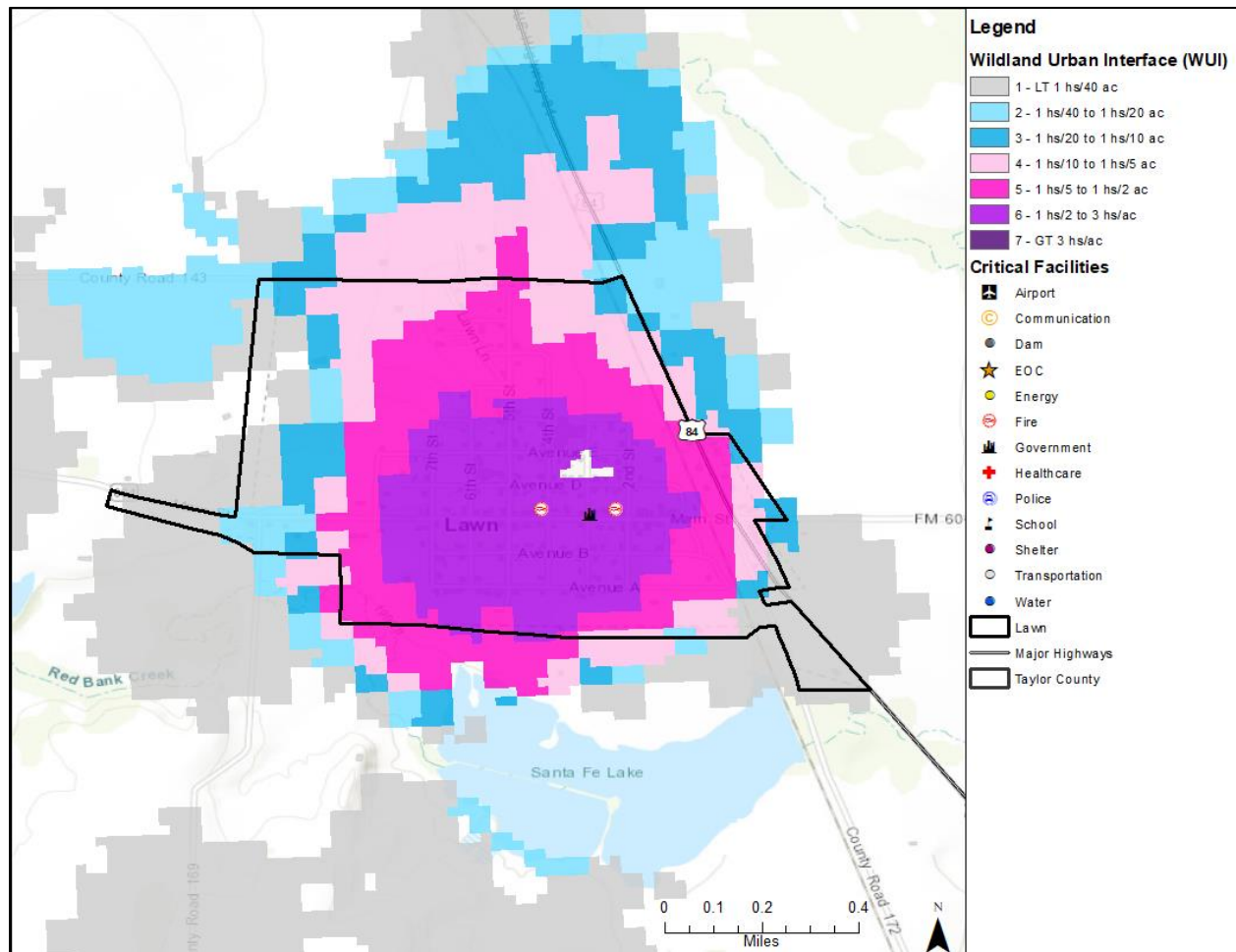
It is estimated that 34.1 percent of the total population in the City of Abilene live within the WUI. However, the entire City of Abilene is at risk for wildfires. The WCTCOG facility is located in the WUI.

Figure 10-3. Wildland Urban Interface Map – Town of Buffalo Gap



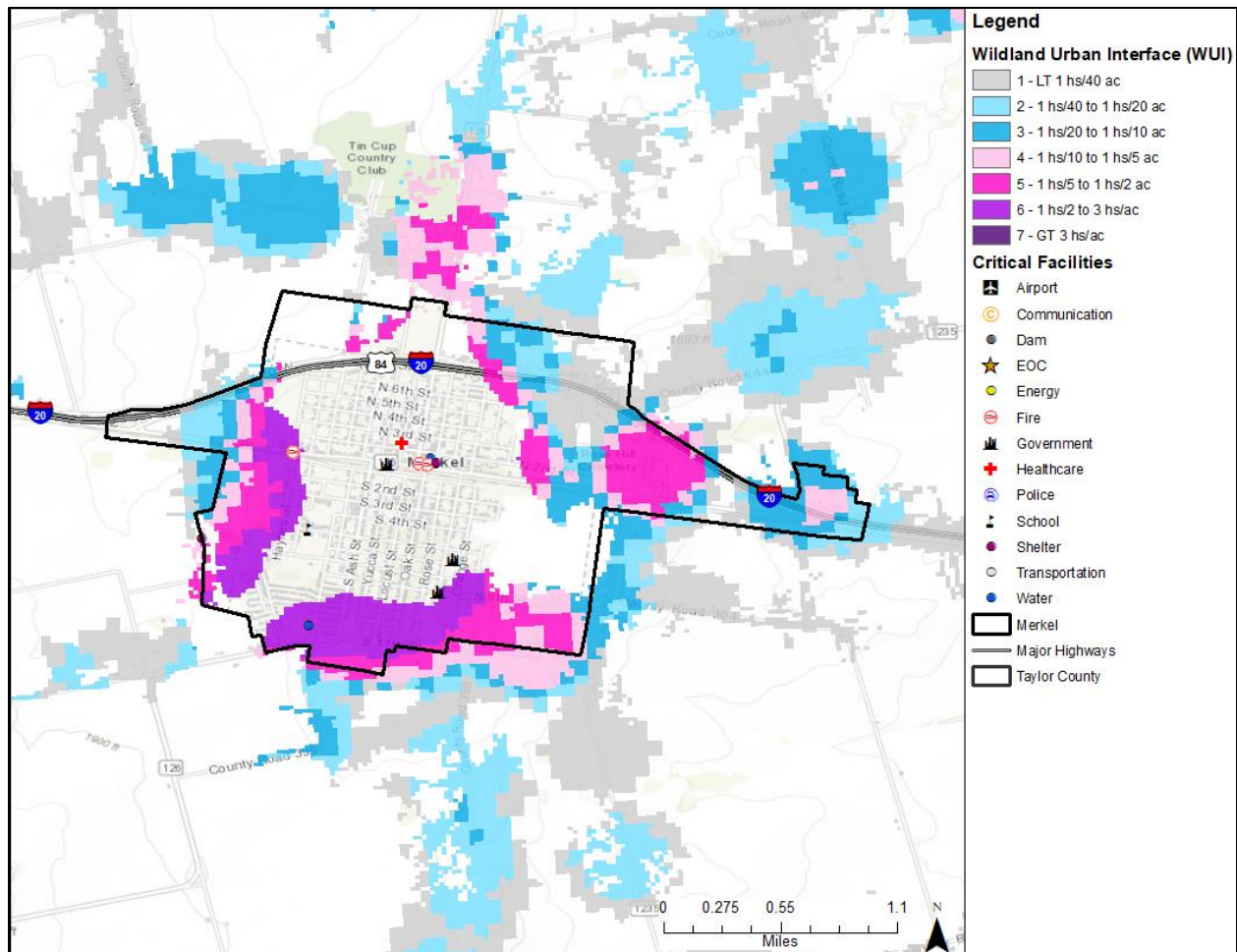
It is estimated that 100 percent of the total population in the Town of Buffalo Gap live within the WUI. Therefore, the entire Town of Buffalo Gap is at risk for wildfires.

Figure 10-4. Wildland Urban Interface Map – Town of Lawn



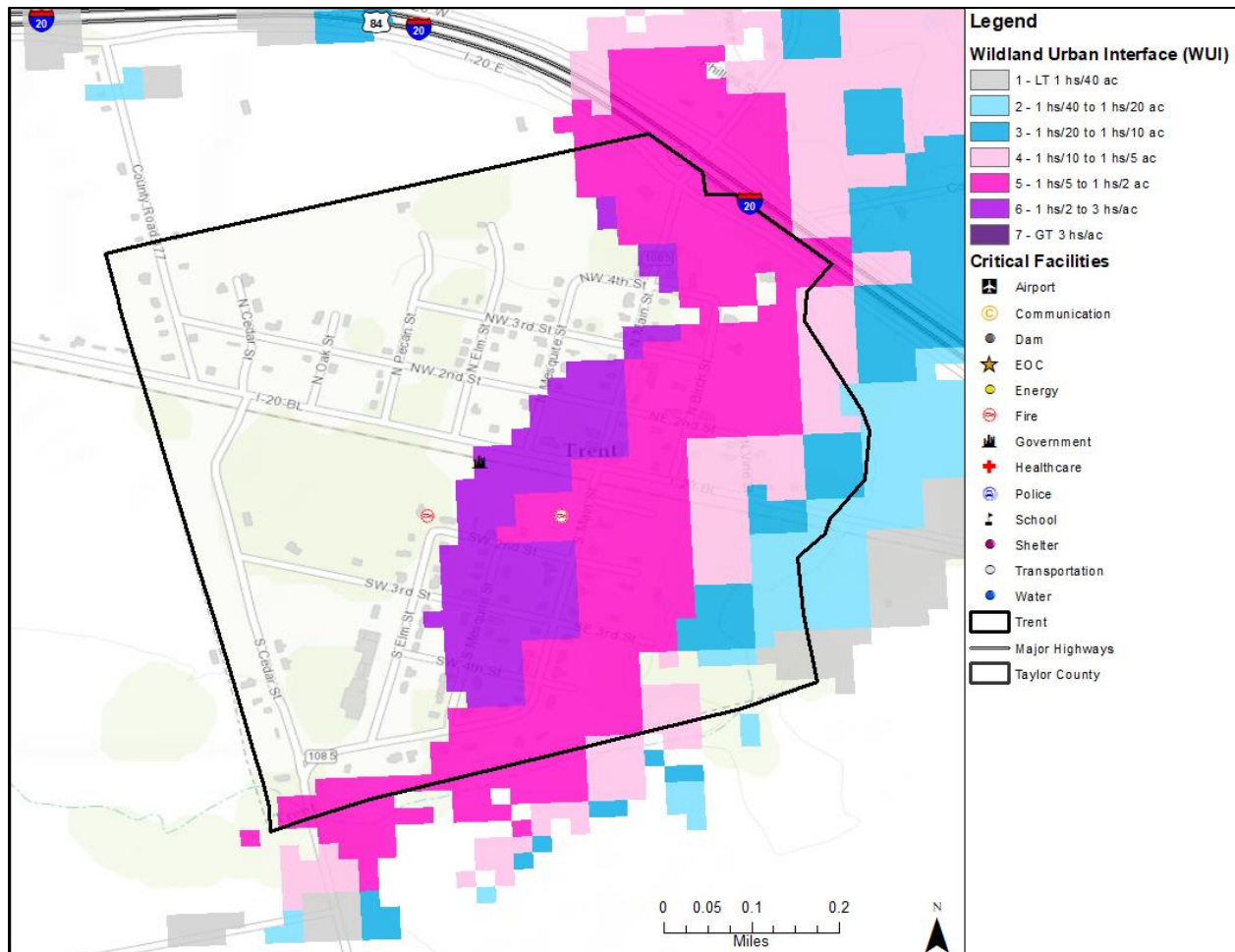
It is estimated that 100 percent of the total population in the Town of Lawn live within the WUI. Therefore, the entire Town of Lawn is at risk for wildfires.

Figure 10-5. Wildland Urban Interface Map – Town of Merkel



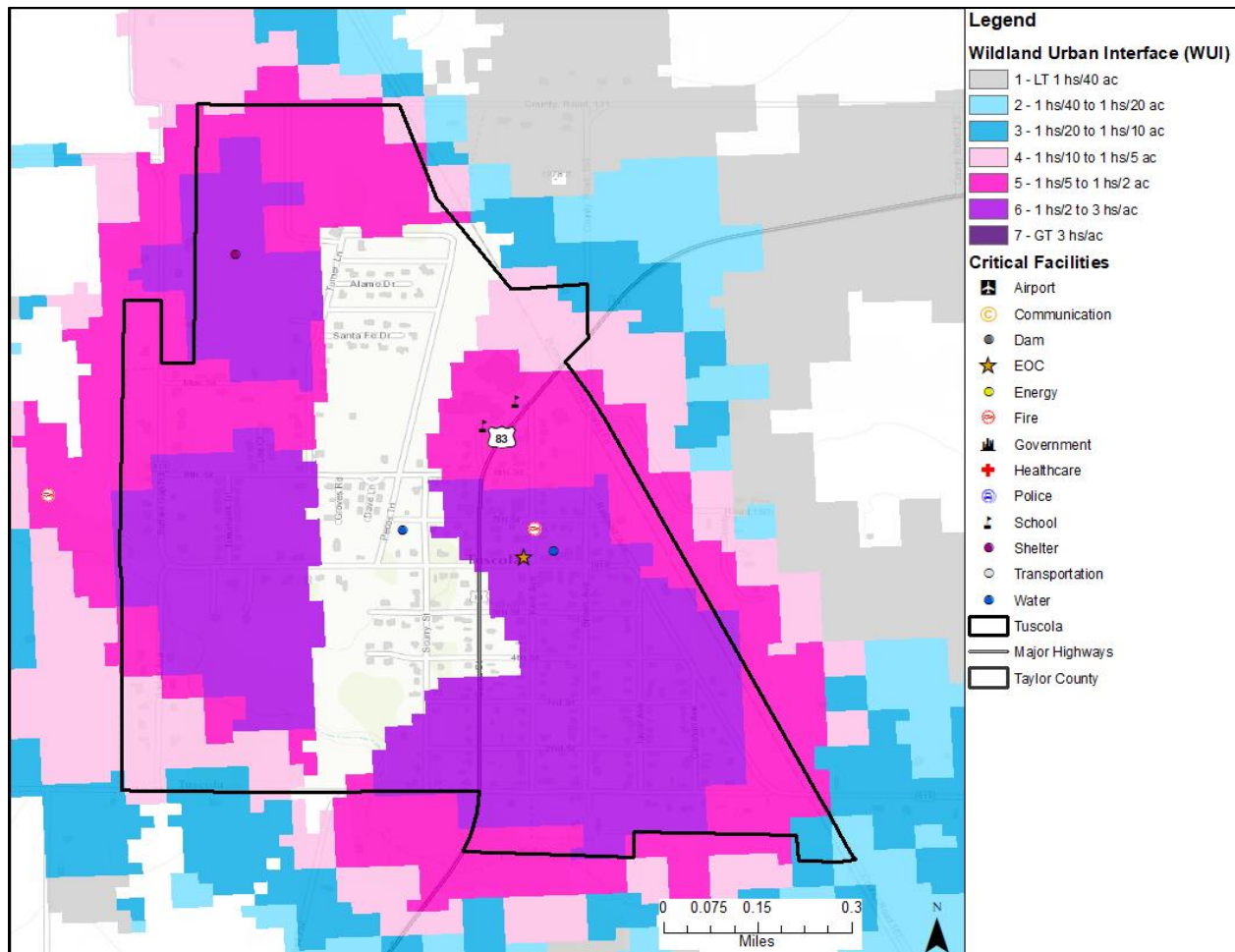
It is estimated that 23.2 percent of the total population in the Town of Merkel live within the WUI. However, the entire Town of Merkel is at risk for wildfires.

Figure 10-6. Wildland Urban Interface Map – Town of Trent



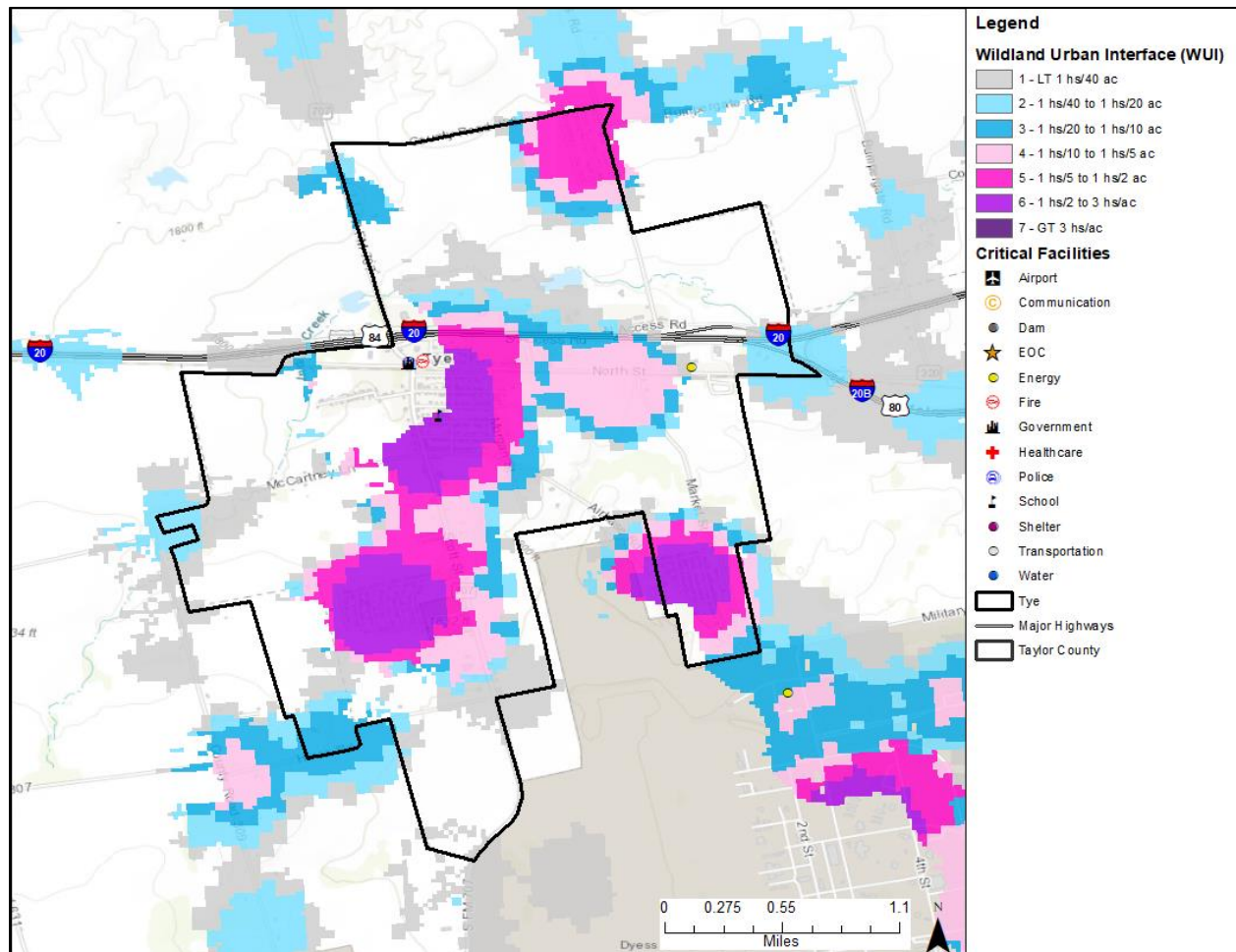
It is estimated that 45.8 percent of the total population in the Town of Trent live within the WUI. However, the entire Town of Trent is at risk for wildfires.

Figure 10-7. Wildland Urban Interface Map – City of Tuscola



It is estimated that 77.8 percent of the total population in the City of Tuscola live within the WUI. However, the entire City of Tuscola is at risk for wildfires.

Figure 10-8. Wildland Urban Interface Map – City of Tye



It is estimated that 84.4 percent of the total population in the City of Tye live within the WUI. However, the entire City of Tye is at risk for wildfires.

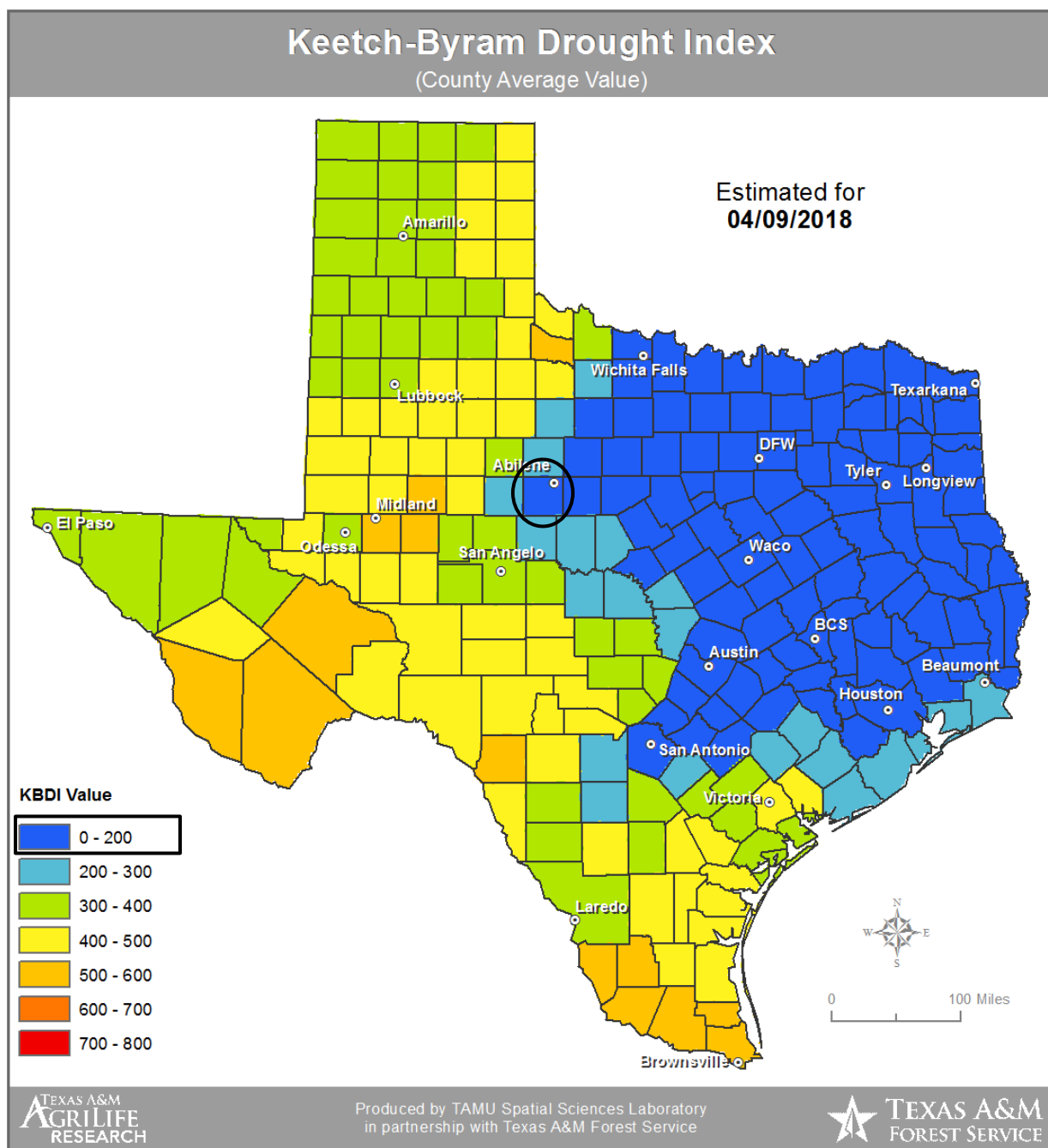
EXTENT



Risk for a wildfire event is measured in terms of magnitude and intensity using the Keetch Byram Drought Index (KBDI), a mathematical system for relating current and recent weather conditions to potential or expected fire behavior. The KBDI determines forest fire potential based on a daily water balance, derived by balancing a drought factor with precipitation and soil moisture (assumed to have a maximum storage capacity of eight inches), and is expressed in hundredths of an inch of soil moisture depletion.

Each color in Figure 10-9 represents the drought index at that location. The drought index ranges from 0 to 800. A drought index of 0 represents no moisture depletion, and a drought index of 800 represents absolutely dry conditions.

Figure 10-9. Keetch-Byram Drought Index (KBDI) for the State of Texas, 2018¹



¹ Planning Area 1 is located within the black circle.

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Fire behavior can be categorized at four distinct levels on the KBDI:

- **0 -200:** Soil and fuel moisture are high. Most fuels will not readily ignite or burn. However, with sufficient sunlight and wind, cured grasses and some light surface fuels will burn in spots and patches.
- **200 -400:** Fires more readily burn and will carry across an area with no gaps. Heavier fuels will not readily ignite and burn. Expect smoldering and the resulting smoke to carry into and possibly through the night.
- **400 -600:** Fires intensity begins to significantly increase. Fires will readily burn in all directions exposing mineral soils in some locations. Larger fuels may burn or smolder for several days creating possible smoke and control problems.
- **600 -800:** Fires will burn to mineral soil. Stumps will burn to the end of underground roots and spotting will be a major problem. Fires will burn through the night and heavier fuels will actively burn and contribute to fire intensity.

The KBDI is a good measure of the readiness of fuels for a wildfire event. It should be referenced as the area experiences changes in precipitation and soil moisture, while caution should be exercised in dryer, hotter conditions.

The range of intensity for Planning Area 1 in a wildfire event is within 400 to 600. The average extent to be mitigated for Planning Area 1, including the WCTCOG and all participating jurisdictions, is a KBDI of 265. At this level fires burn more readily and will carry across an area with no gaps. Heavier fuels will not readily ignite and burn.

The Texas Forest Service's Fire Intensity Scale identifies areas where significant fuel hazards and associated dangerous fire behavior potential exist based on weighted average of four percentile weather categories. Planning Area 1 is between a potential moderate to high wildfire intensities. Figures 10-10 through 10-17 identify the wildfire intensity for Planning Area 1.

Figure 10-10. Fire Intensity Scale Map – Taylor County

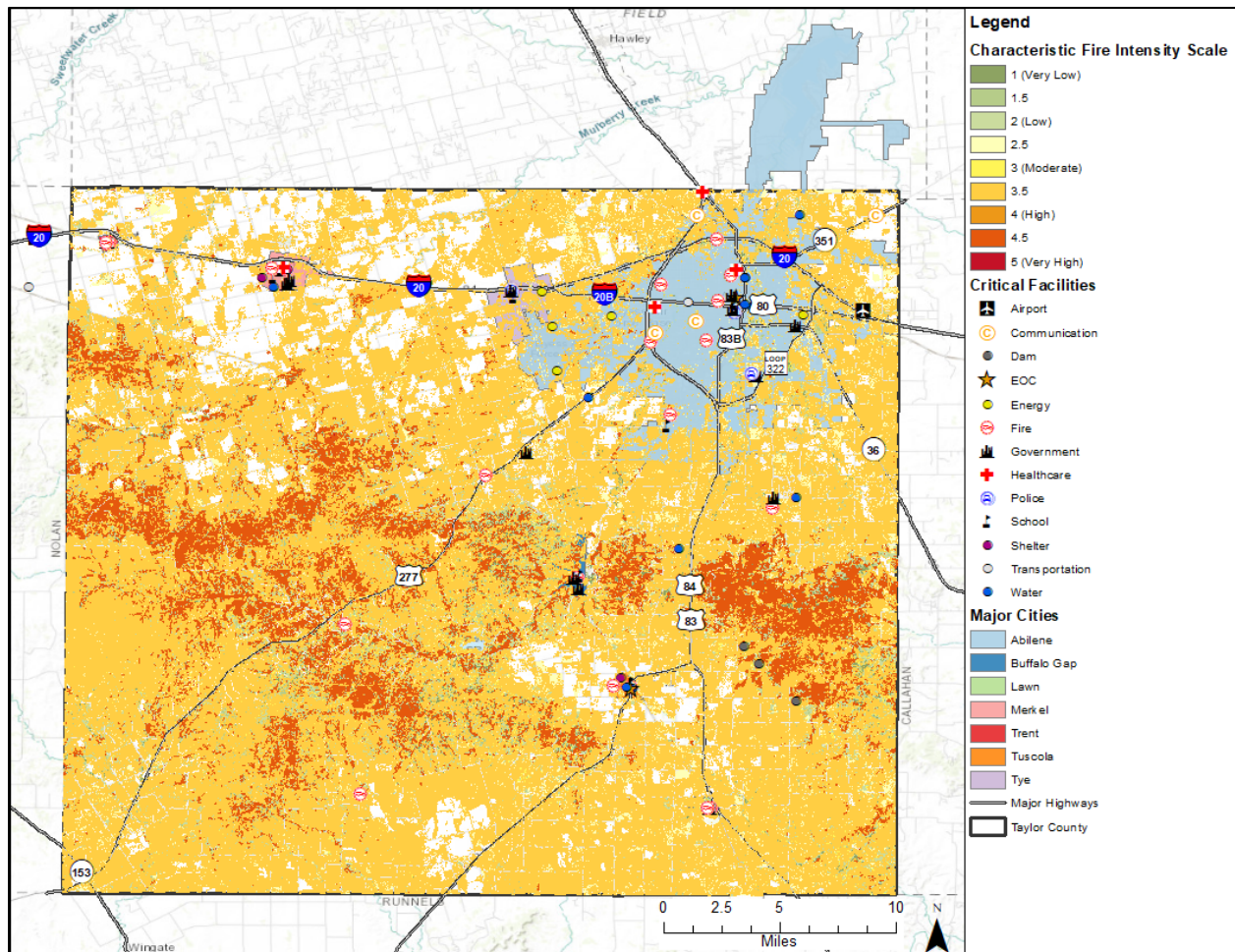


Figure 10-11. Fire Intensity Scale Map – City of Abilene and WCTCOG

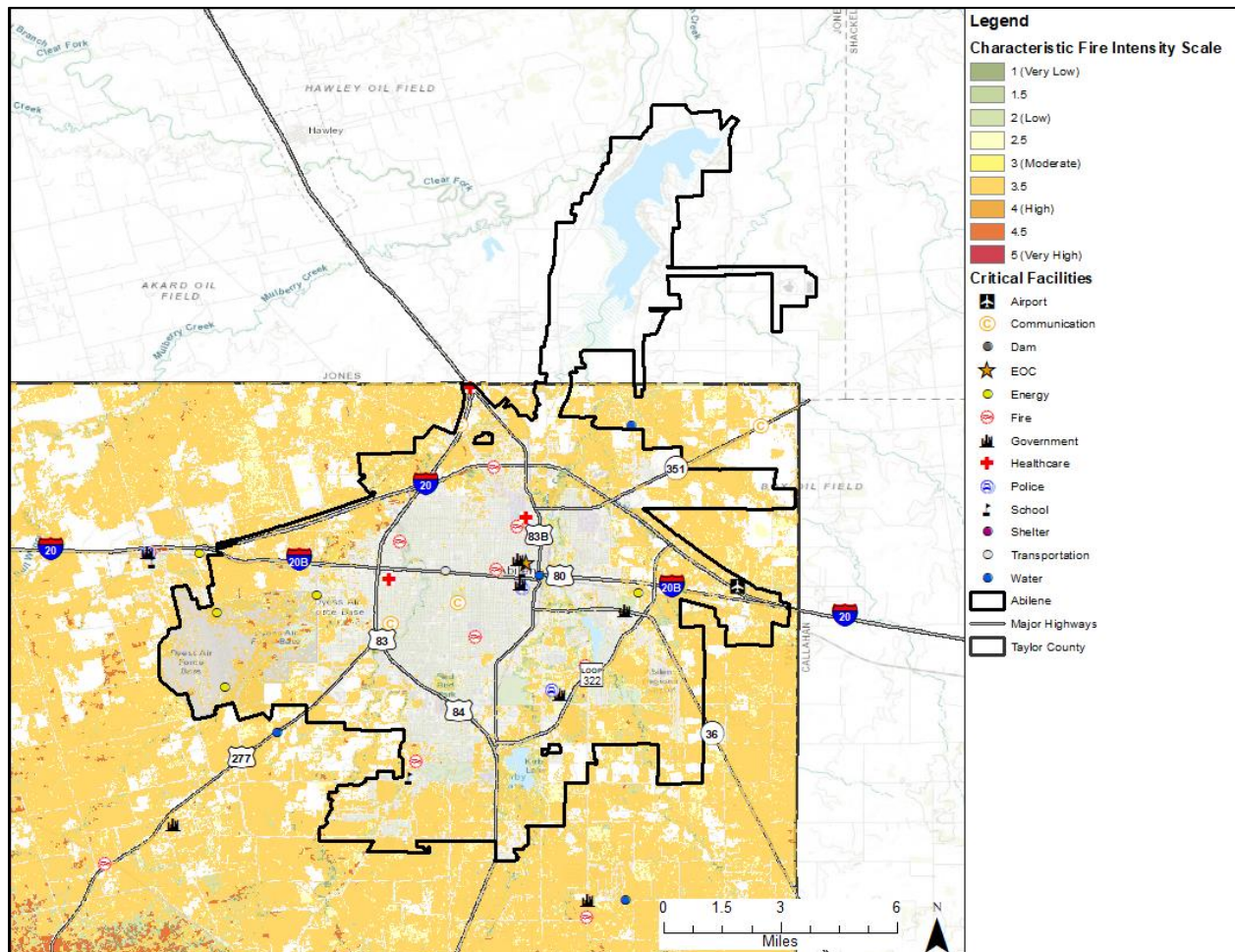


Figure 10-12. Fire Intensity Scale Map – Town of Buffalo Gap

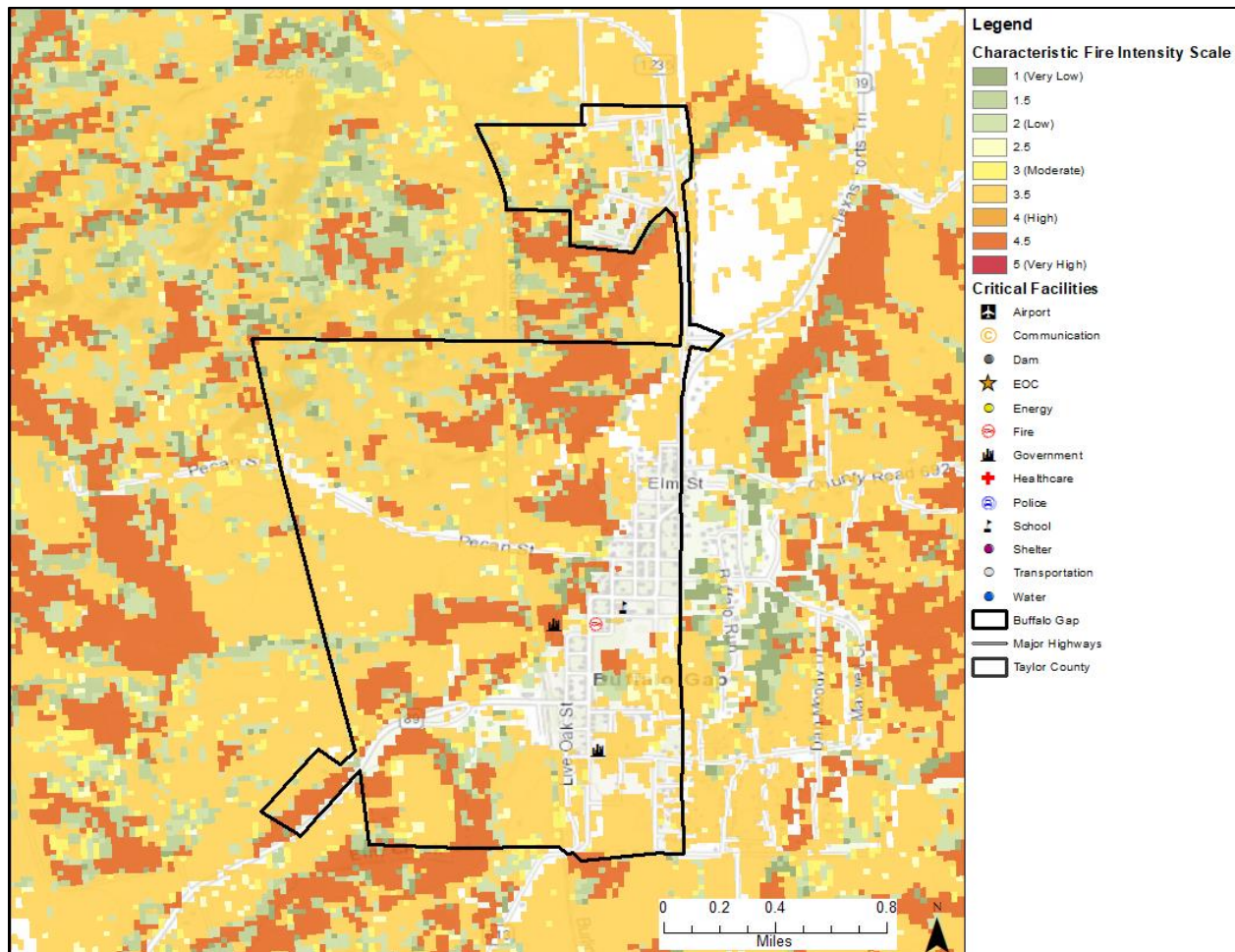


Figure 10-13. Fire Intensity Scale Map – Town of Lawn

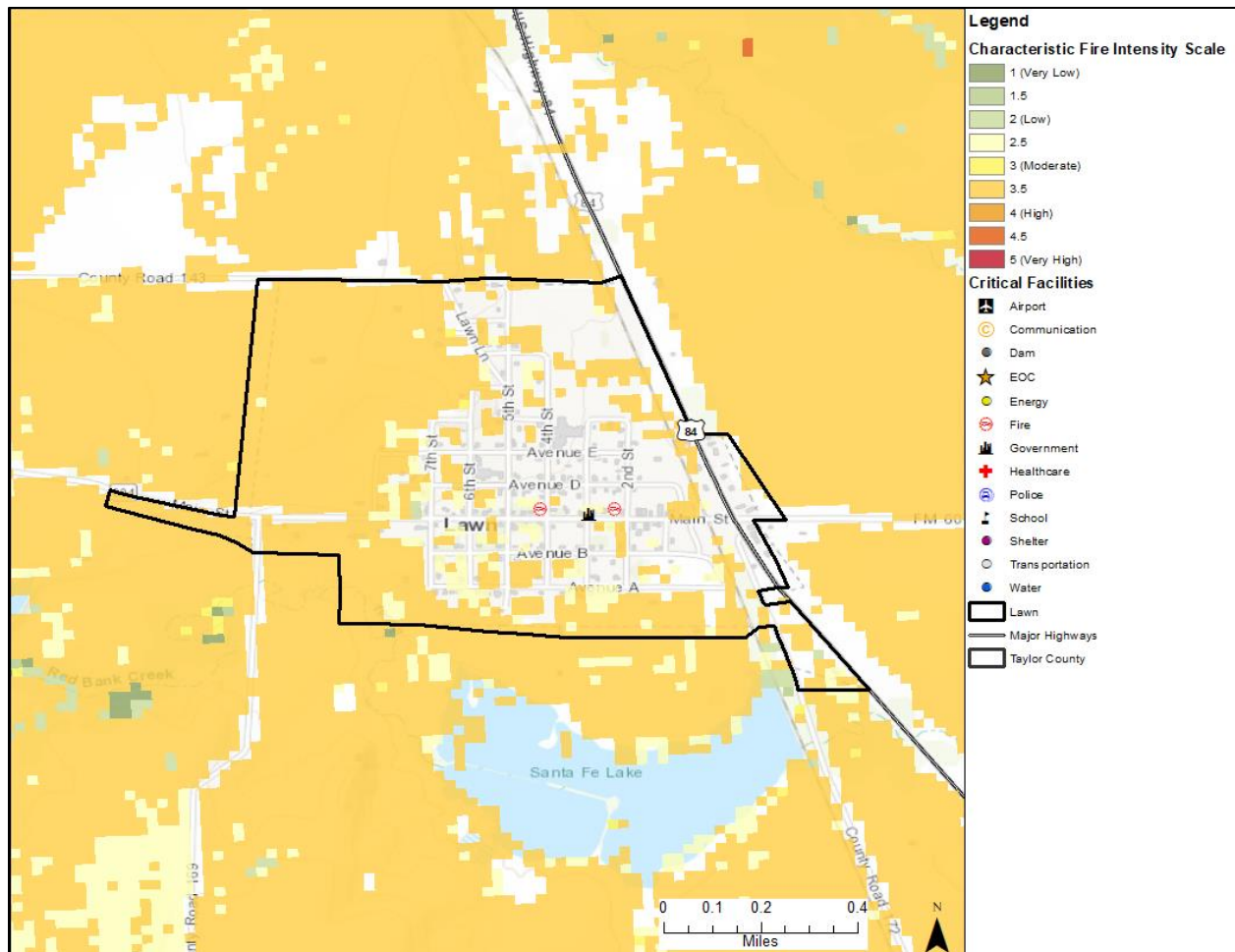


Figure 10-14. Fire Intensity Scale Map – Town of Merkel

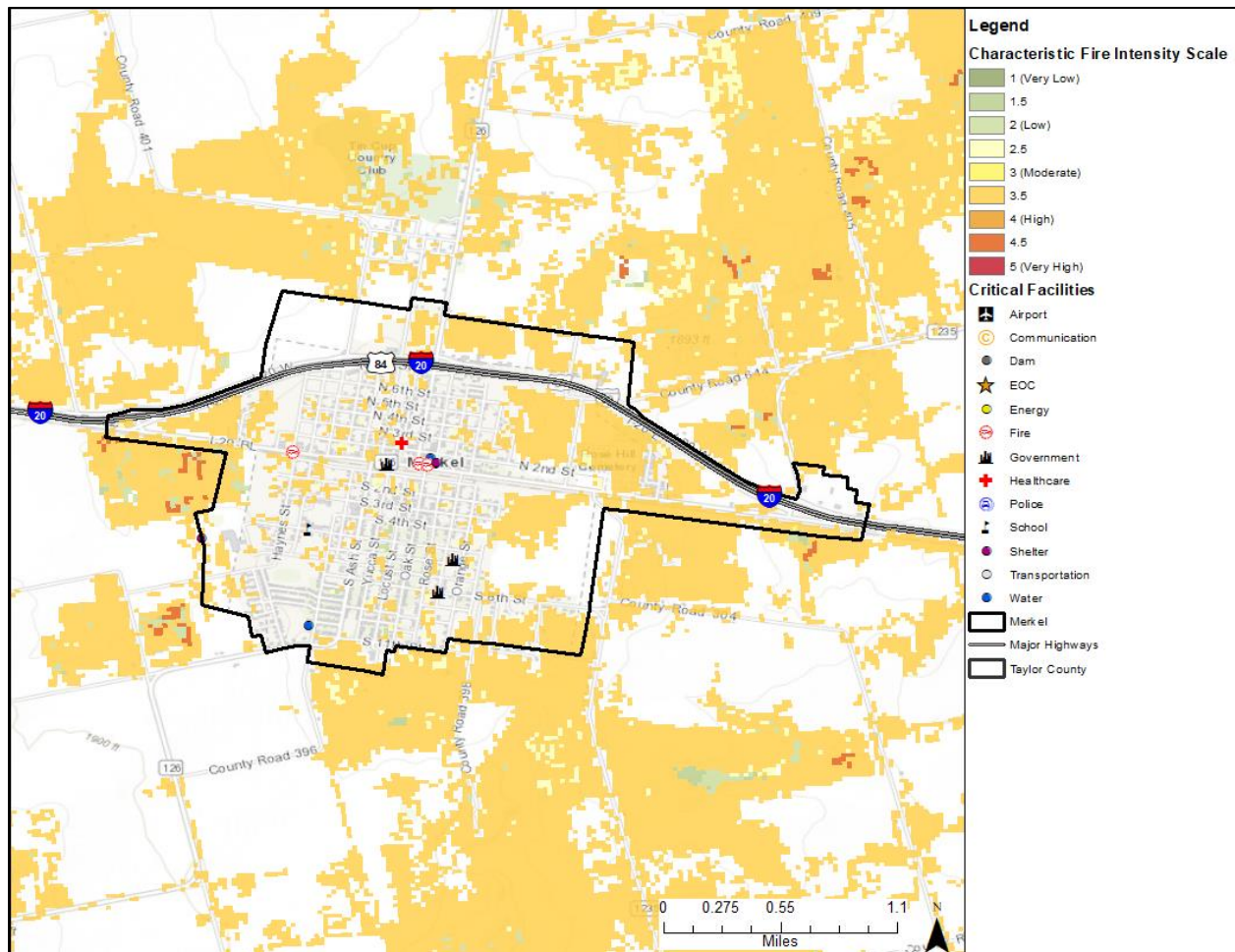


Figure 10-15. Fire Intensity Scale Map – Town of Trent

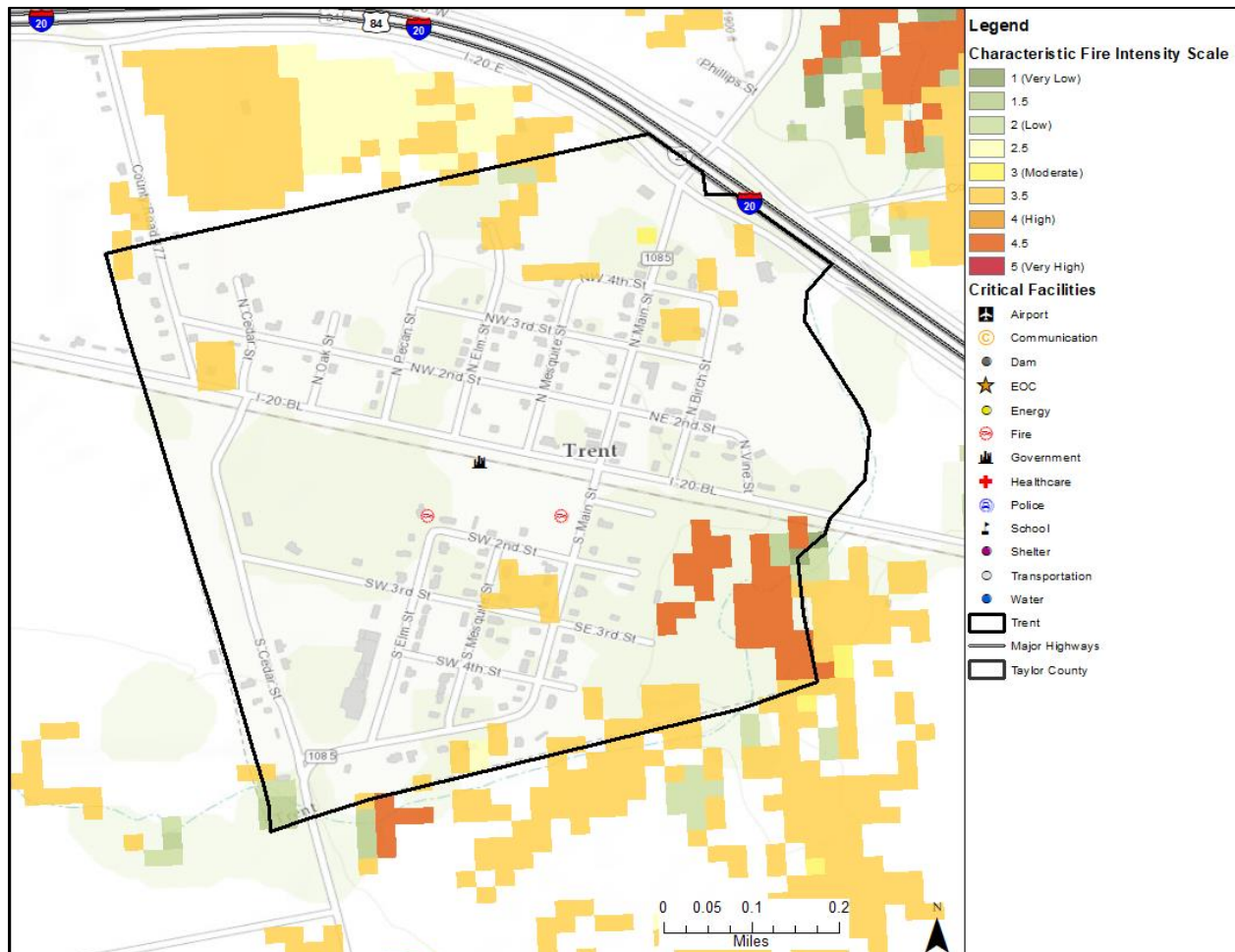


Figure 10-16. Fire Intensity Scale Map – City of Tuscola

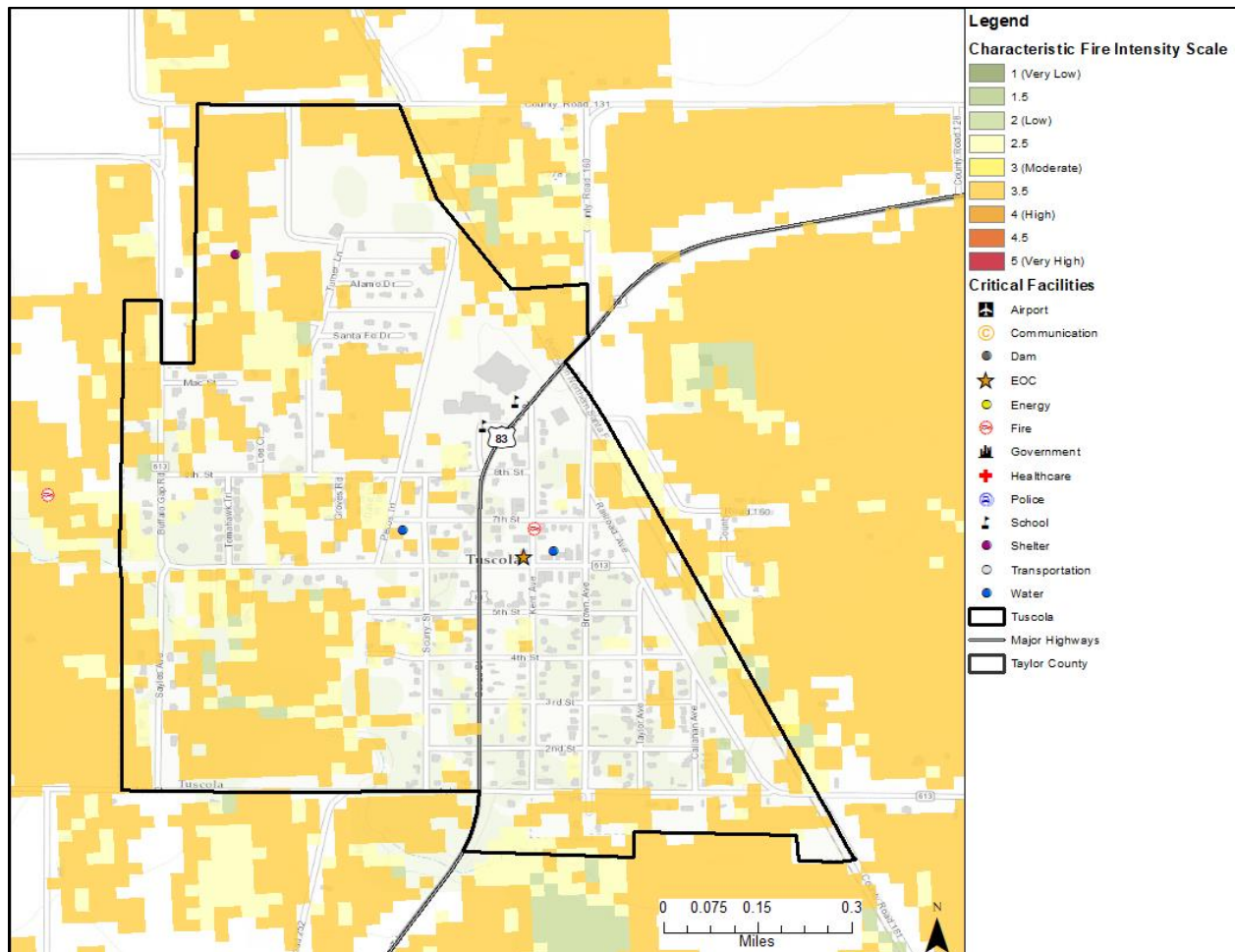
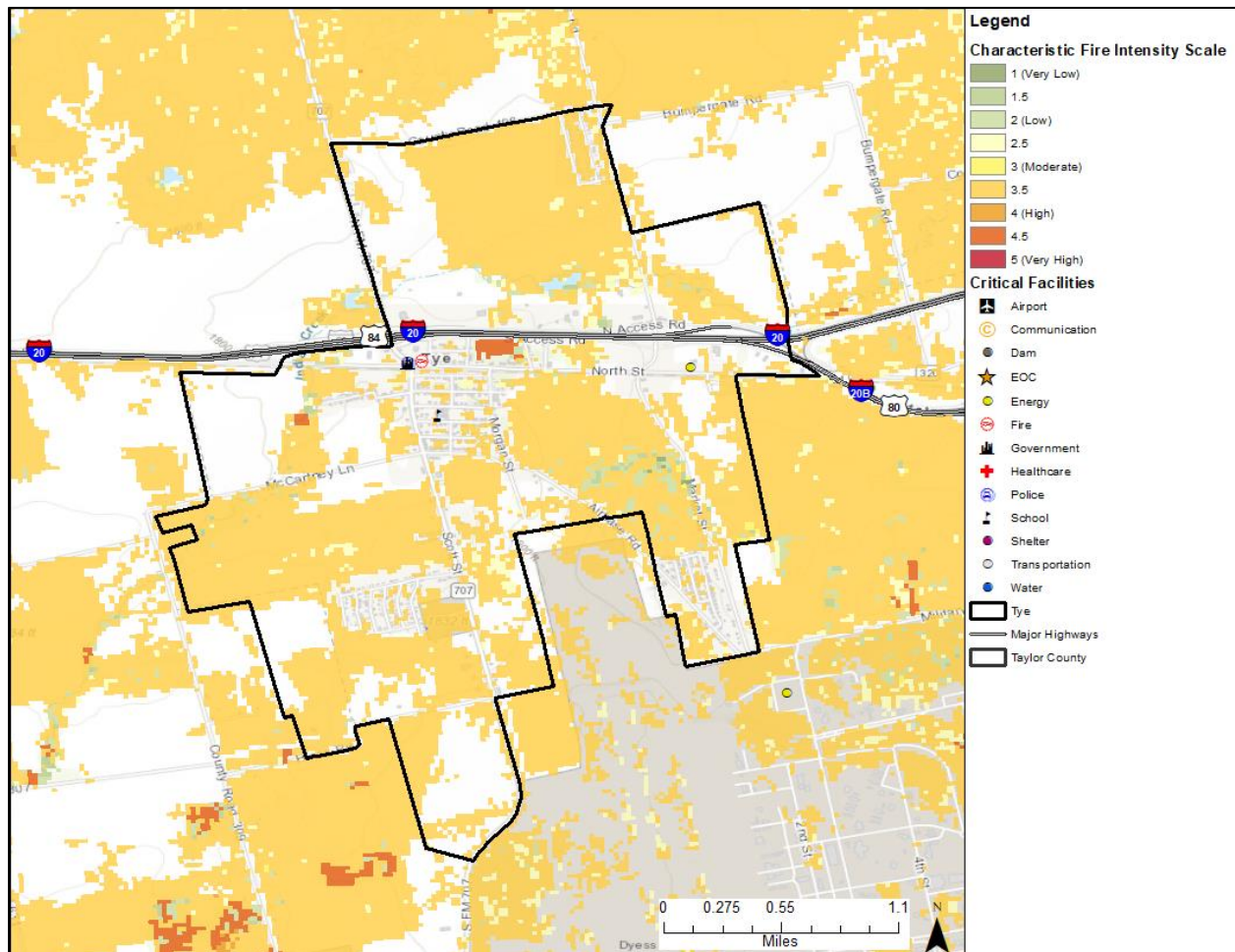


Figure 10-17. Fire Intensity Scale Map – City of Tye



HISTORICAL OCCURRENCES

The Texas Forest Service reported 1,409 wildfire events between 2005 and 2015. The National Centers for Environmental Information (NCEI) includes nine reported events from 1996 through 2017 for the planning area. Each of these events were accounted for in the Texas Forest Service (TFS) data. The TFS started collecting wildfire data in 1985, however, volunteer fire departments did not start reporting events until 2005. Due to a lack of recorded data for wildfire events prior to 2005 and after 2015, frequency calculations are based on an eleven-year period using only data from recorded years. The map below shows approximate locations of wildfires, which can be grass or brushfires of any size (Figure 10-18). Table 10-1 identifies the number of wildfires by jurisdiction and total acreage burned. It should be noted that the WCTCOG facility is located in the City of Abilene. The WCTCOG has no reported damages due to wildfire.

Figure 10-18. Location and Historic Wildfire Events for Planning Area 1

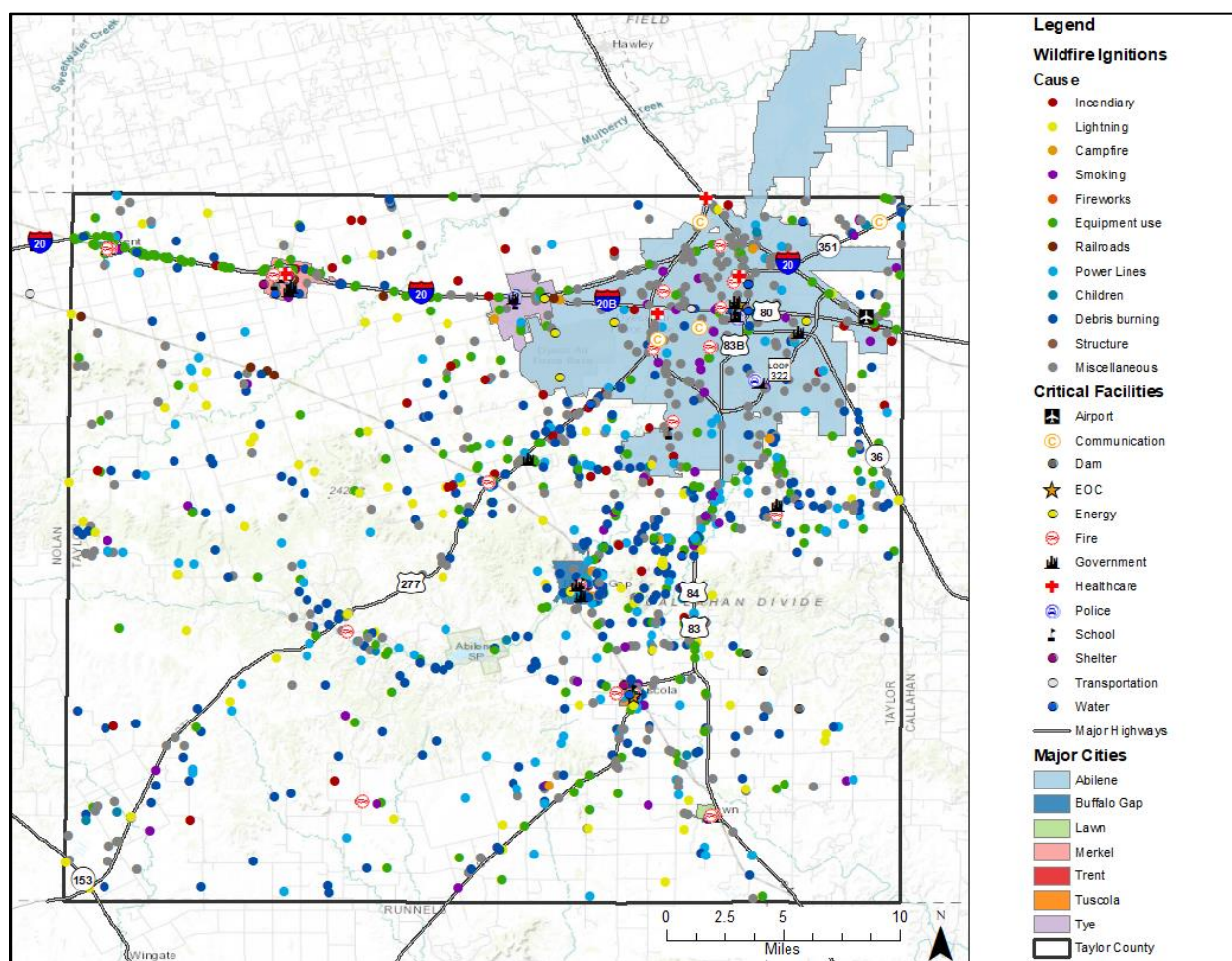


Table 10-1. Historical Wildfire Events Summary

JURISDICTION	NUMBER OF EVENTS	ACRES BURNED
Taylor County	1,409	27,886
City of Abilene	271	2,967
Town of Buffalo Gap	42	423
Town of Lawn	36	907
Town of Merkel	19	317
Town of Trent	38	339
City of Tuscola	17	162
City of Tye	39	340
WCTCOG	0	0

Table 10-2. Acreage of Suppressed Wildfire by Year

JURISDICTION	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Taylor County	1,554	5,514	1,401	4,090	5,030	2,851	4,938	695	224	1,384	205
City of Abilene	0	14	40	2,020	60	15	659	57	5	60	37
Town of Buffalo Gap	382	4	2	11	6	0	16	1	0	1	0
Town of Lawn	0	337	18	543	0	4	5	0	0	0	0
Town of Merkel	0	0	0	0	101	200	15	0	1	0	0
Town of Trent	32	57	0	7	5	5	232	0	0	1	0
City of Tuscola	5	63	2	34	0	2	26	30	0	0	0
City of Tye	32	57	0	8	5	5	232	0	0	1	0
WCTCOG	0	0	0	0	0	0	0	0	0	0	0

Based on the list of historical wildfire events for Planning Area 1 (listed above), including the WCTCOG and all participating jurisdictions, 816 events have occurred since the 2012 Plan.

PROBABILITY OF FUTURE EVENTS

Wildfires can occur at any time of the year. As the jurisdictions within the county move into wildland, the potential area of occurrence of wildfire increases. With 1,409 events in an 11-year period, an event within Planning Area 1, including all participating jurisdictions, is highly likely, meaning an event is probable within the next year.

VULNERABILITY AND IMPACT

Periods of drought, dry conditions, high temperatures, and low humidity are factors that contribute to the occurrence of a wildfire event. Areas along railroads and people whose homes are in woodland settings have an increased risk of being affected by wildfire.

The heavily populated, urban areas of Planning Area 1 are not likely to experience large, sweeping fires. Areas outside of city limits and in the unincorporated areas of Planning Area 1 are vulnerable. Unoccupied buildings and open spaces that have not been maintained have the greatest vulnerability to wildfire. The overall level of concern for wildfires is located mostly along the perimeter of the study area where wildland and urban areas interface. Figures 10-1 through 10-8 illustrate the areas that are the most vulnerable to wildfire throughout the planning area.

The following critical facilities are located in the WUI and are more susceptible to wildfire in each participating jurisdiction.

Table 10-3. Critical Facilities in WUI by Jurisdiction

JURISDICTION	CRITICAL FACILITIES
Taylor County	1 Fire Station, 2 JP8 Fuel Facilities
City of Abilene	4 Fire Stations, 1 Hospital, WISD Facilities, Telephone Company, Airport, Gas Utility Facilities, Electric Utility Facilities, 3 Water Treatment Plants, 3 Water Supply Facilities
Town of Buffalo Gap	2 Fire Stations, 1 City Hall, 1 County Utility Yard (County Crew), JNBG-ISD
Town of Lawn	2 Fire Stations, 1 City Hall
Town of Merkel	1 Water Tower, 1 State Fire Response Facility
Town of Trent	1 Municipal Facility, 1 Fire Station
City of Tuscola	2 Municipal Facilities, 2 Fire Stations, 1 Water Utility Facilities, JNISD Facilities, 1 Water Treatment Facility
City of Tye	1 School
WCTCOG	WCTCOG Regional Facility, Law Enforcement Training Facility

Within Planning Area 1, a total of 1,409 fire events were reported from 2005 to 2015. All of these events were suspected wildfires. Historic loss and annualized estimates due to wildfires are presented in Table 10-4 below. The frequency is approximately 170 events every year.

Table 10-4. Historic Loss Estimates Due to Wildfire²

JURISDICTION	NUMBER OF EVENTS	ACRES BURNED	ANNUAL ACRE LOSSES
Taylor County	1,409	27,886	2,535
City of Abilene	271	2,967	270
Town of Buffalo Gap	42	423	38
Town of Lawn	36	907	82
Town of Merkel	19	317	29
Town of Trent	38	339	31
City of Tuscola	17	162	15
City of Tye	39	340	31
WCTCOG	0	0	0

Figures 10-19 and 10-26 show Planning Area 1 and the threat of wildfire to the County and participating jurisdictions including the WCTCOG.

² Events divided by 11 years of data.

Figure 10-19. Wildfire Ignition Density – Taylor County

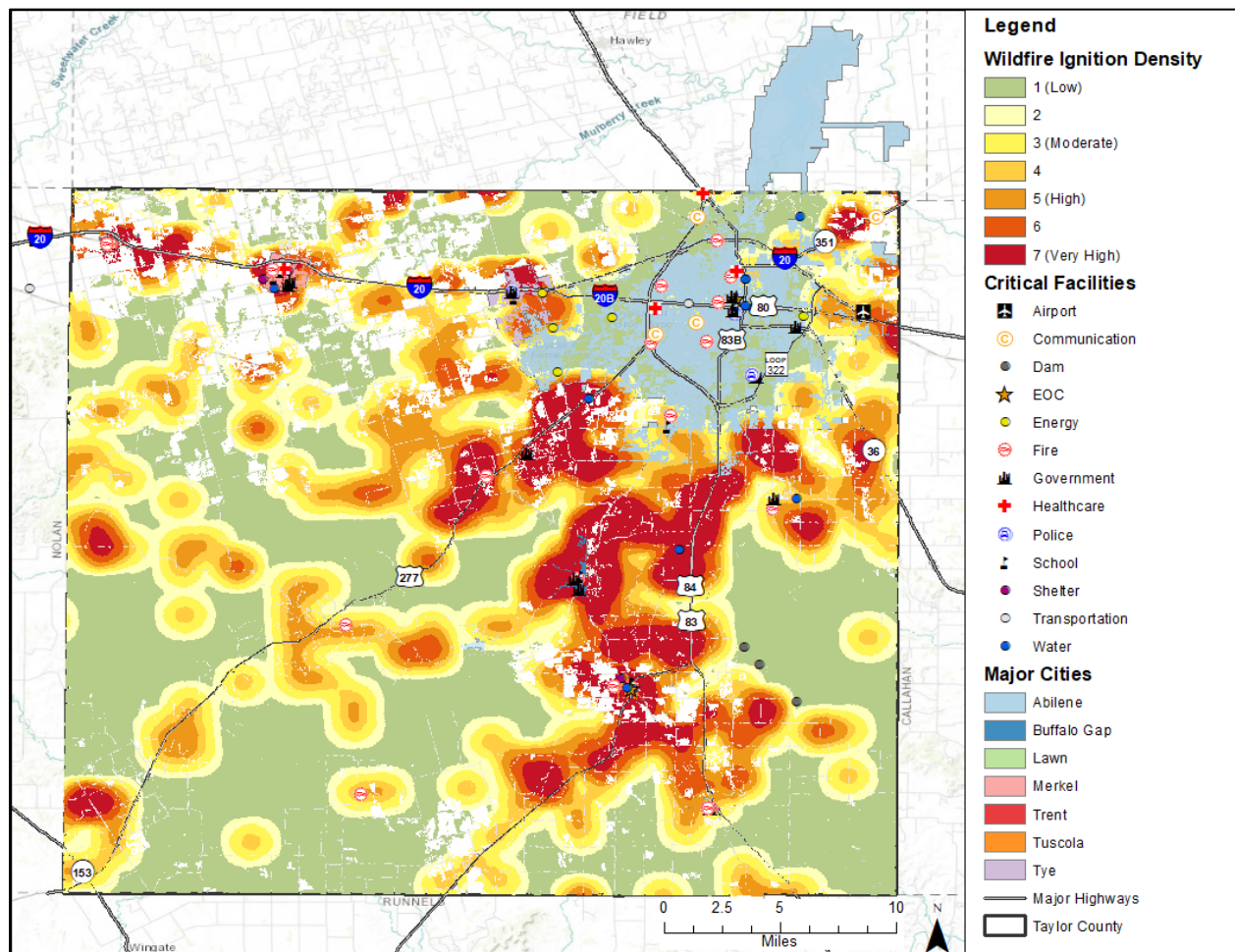


Figure 10-20. Wildfire Ignition Density – City of Abilene and WCTCOG

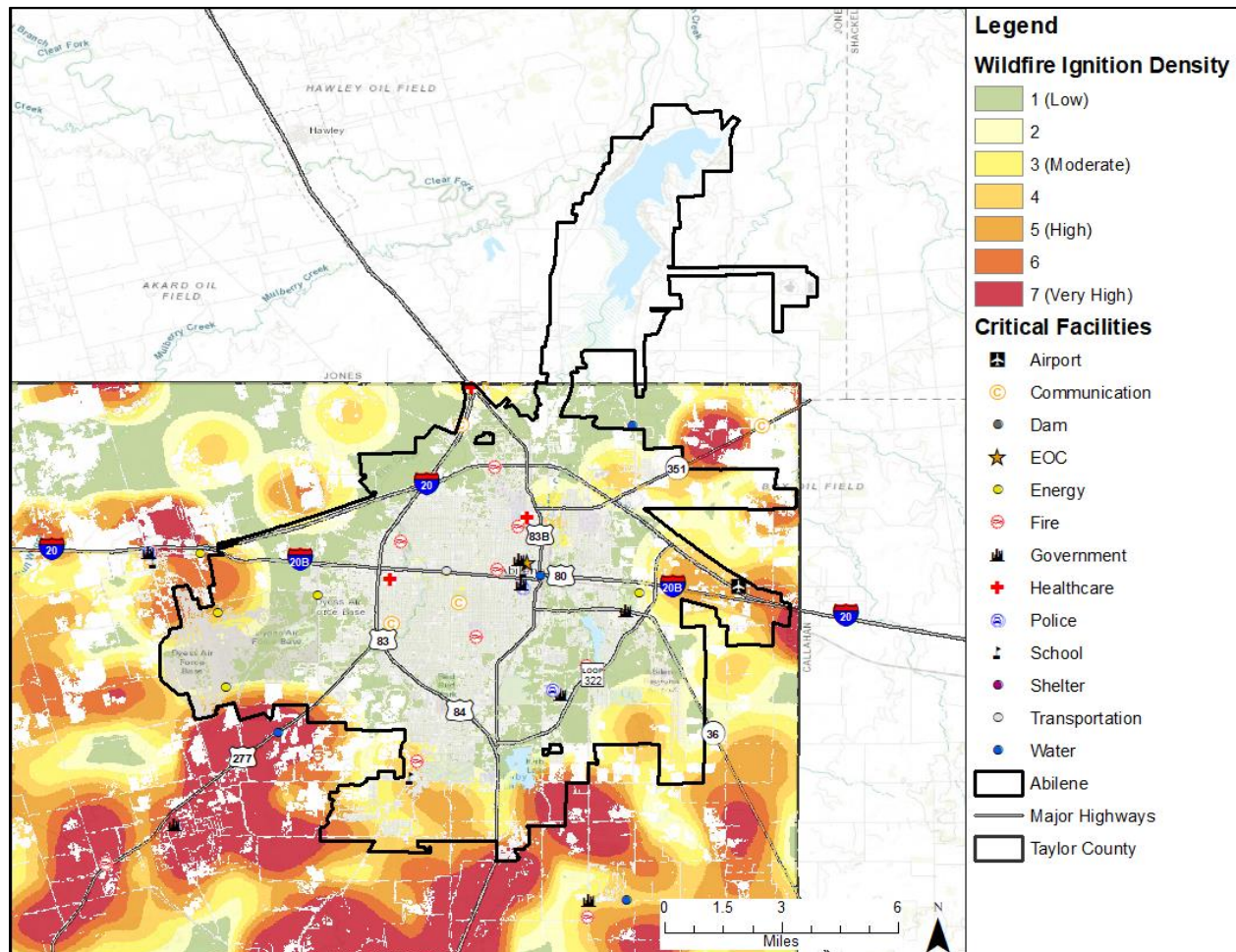


Figure 10-21. Wildfire Ignition Density – Town of Buffalo Gap

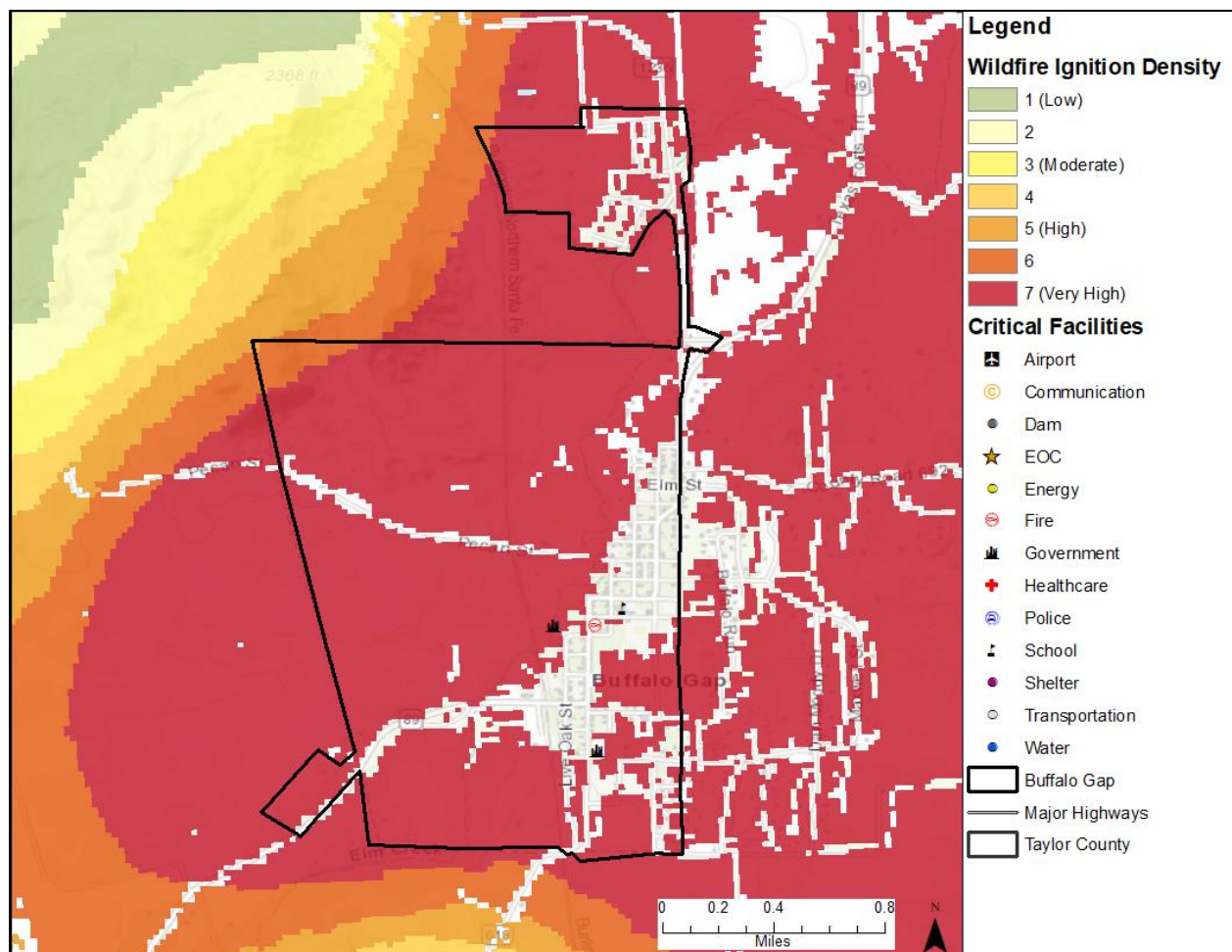


Figure 10-22. Wildfire Ignition Density – Town of Lawn

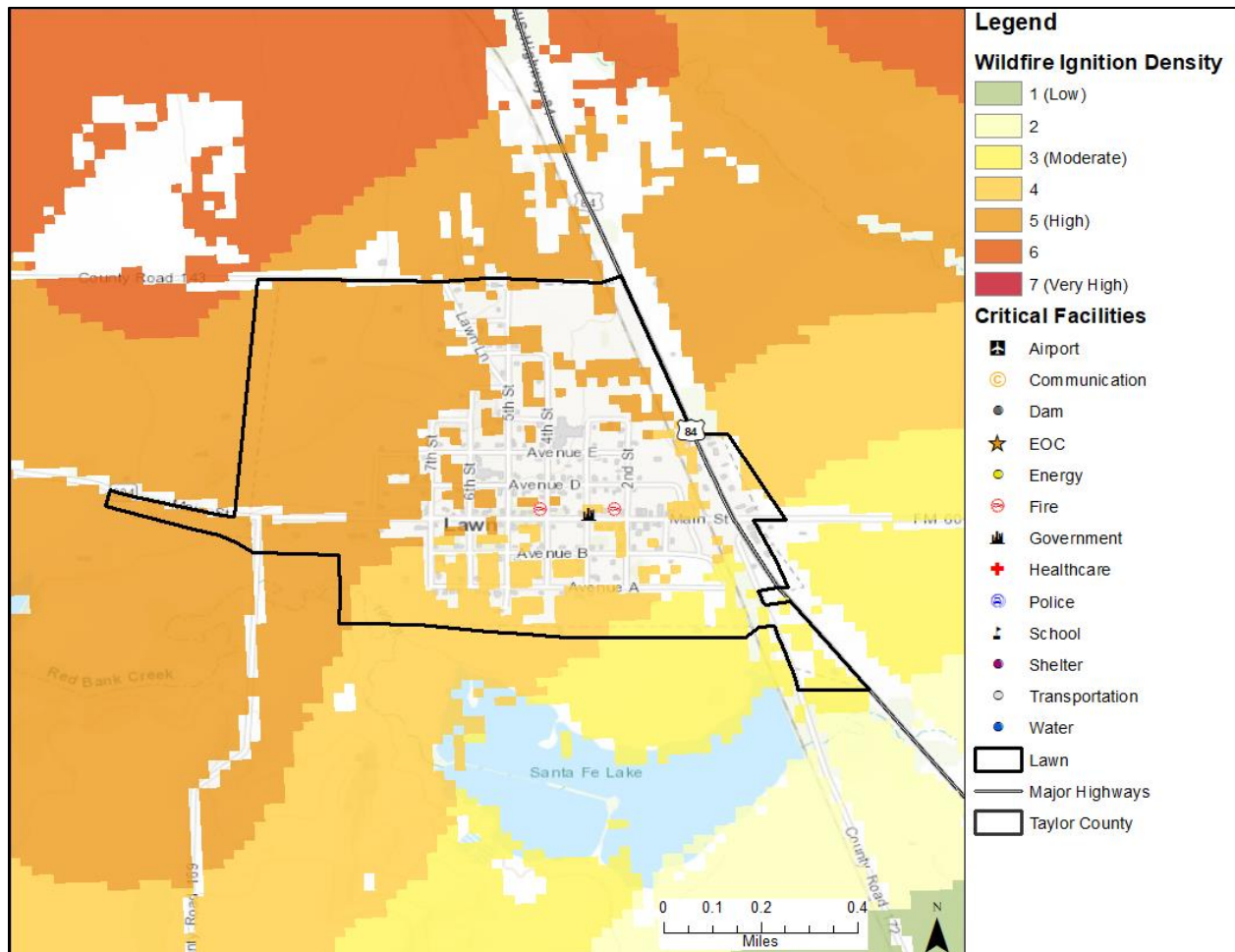


Figure 10-23. Wildfire Ignition Density – Town of Merkel

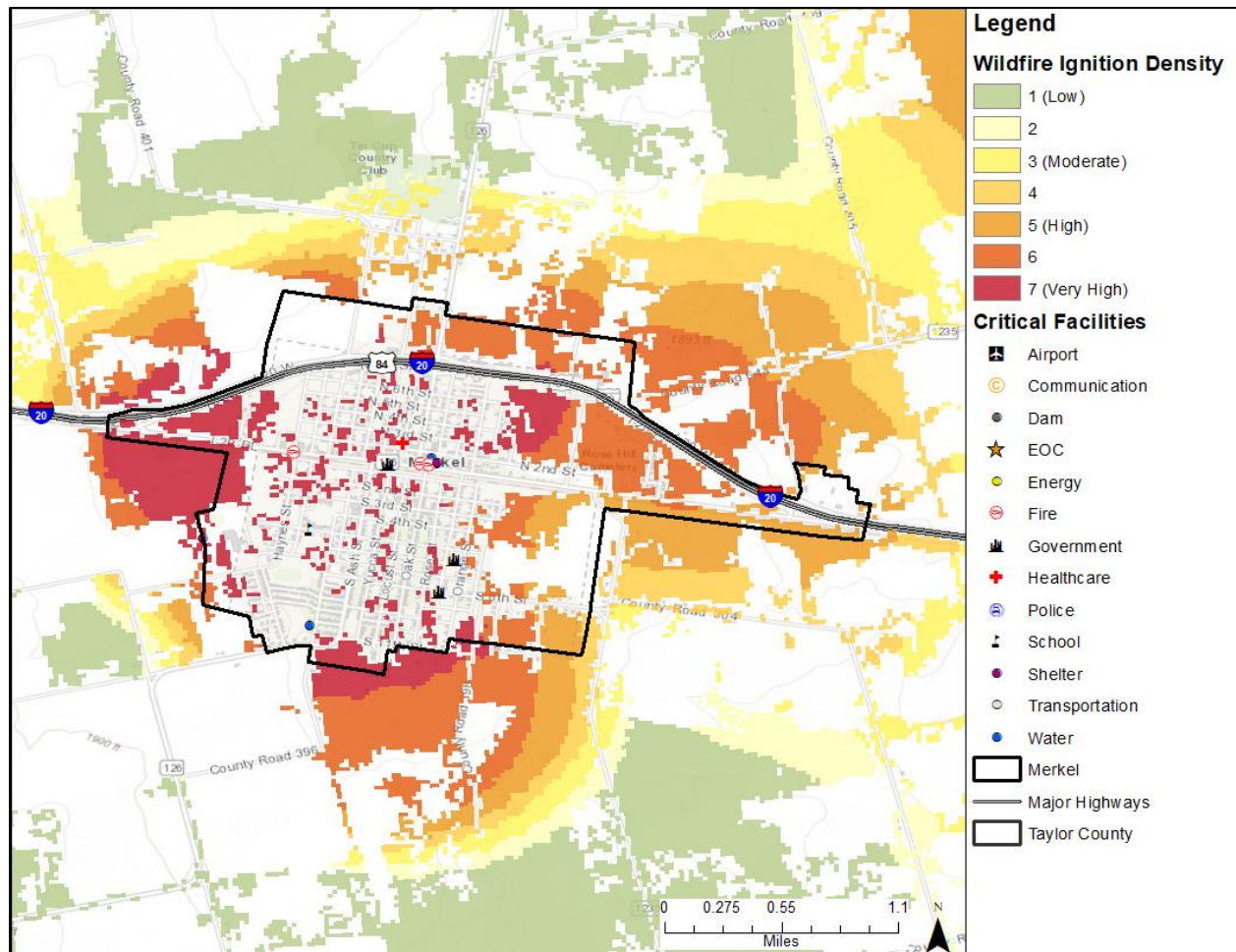


Figure 10-24. Wildfire Ignition Density – Town of Trent

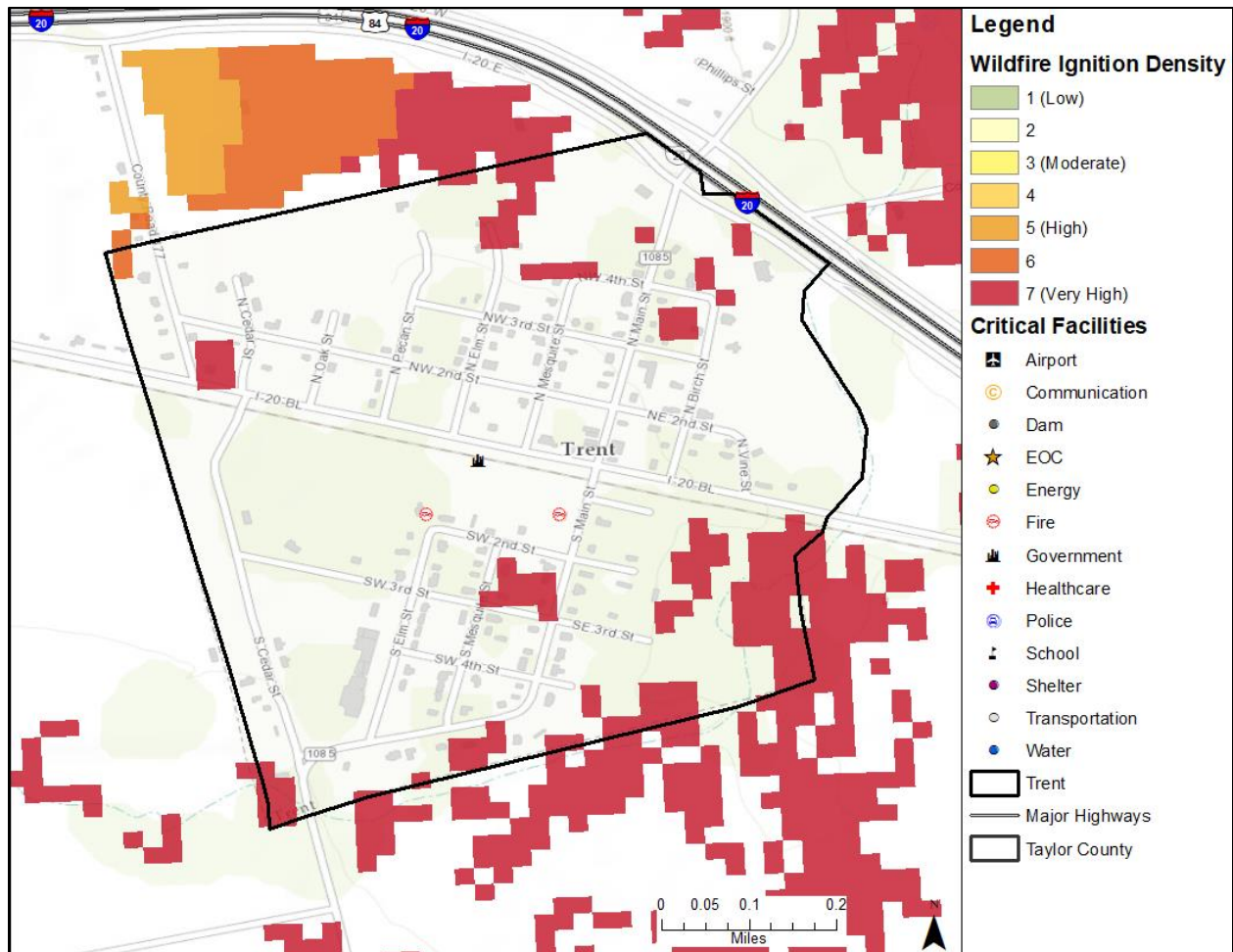


Figure 10-25. Wildfire Ignition Density – City of Tuscola

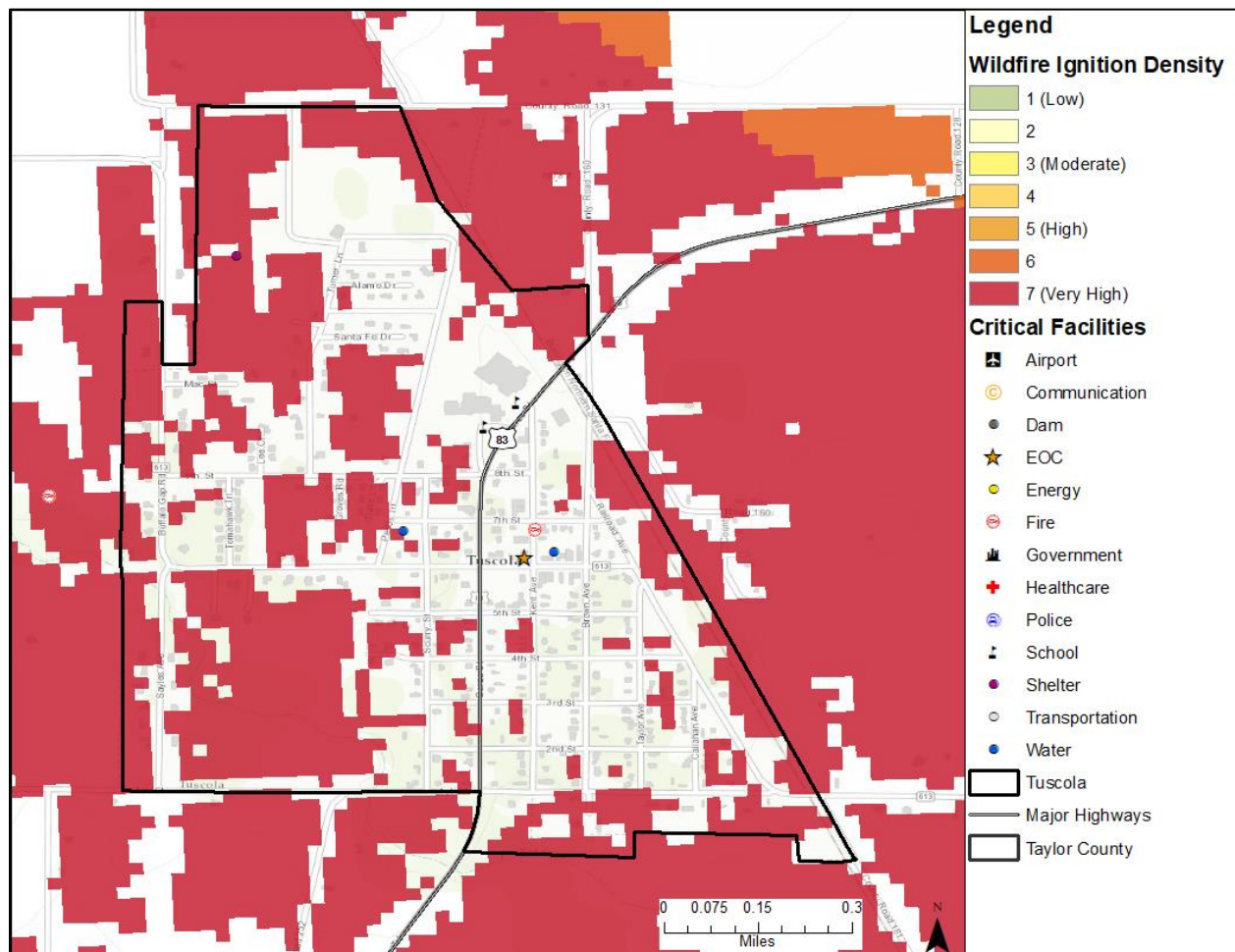
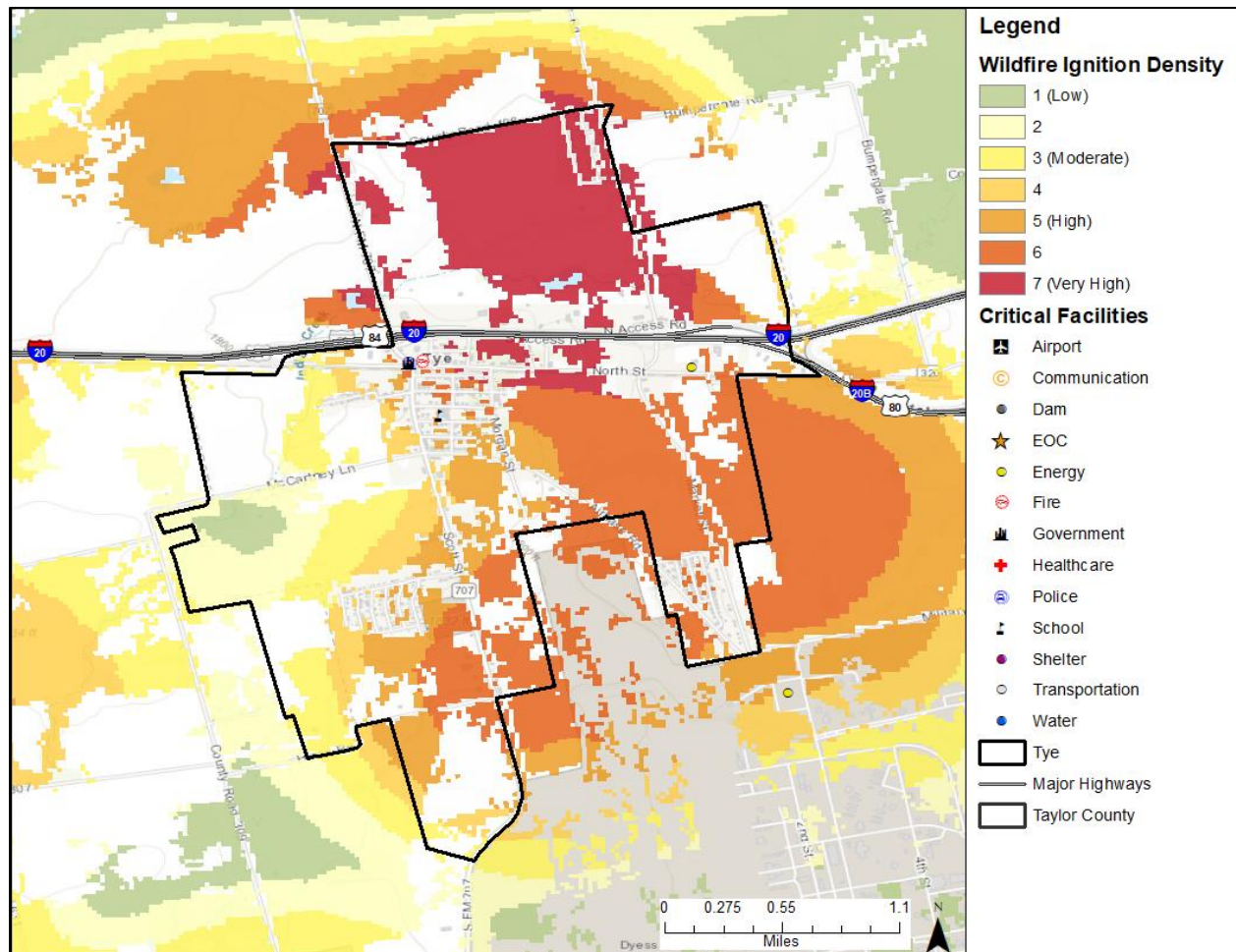


Figure 10-26. Wildfire Ignition Density – City of Tye



SECTION 10: WILDFIRE

Diminished air quality is an environmental impact that can result from a wildfire event and pose a potential health risk. The smoke plumes from wildfires can contain potentially inhalable carcinogenic matter. Fine particles of invisible soot and ash that are too small for the respiratory system to filter can cause immediate and possibly long-term health effects. The elderly or those individuals with compromised respiratory systems may be more vulnerable to the effects of diminished air quality after a wildfire event.

Climatic conditions such as severe freezes and drought can significantly increase the intensity of wildfires since these conditions kill vegetation, creating a prime fuel source for wildfires. The intensity and rate at which wildfires spread are directly related to wind speed, temperature, and relative humidity.

The severity of impact from major wildfire events can be substantial. Such events can cause multiple deaths, shut down facilities for 30 days or more, and cause more than 50 percent of affected properties to be destroyed or suffer major damage. Severity of impact is gauged by acreage burned, homes and structures lost, and the number of resulting injuries and fatalities.

For Planning Area 1 the impact from a wildfire event can be considered "Limited," meaning injuries and/or illnesses are treatable with first aid, shutdown of facilities and services for 24 hours or less, and less than 10% of property is destroyed or with major damage. Severity of impact is gauged by acreage burned, homes and structures lost, injuries and fatalities. Based on this, impact for each participating jurisdiction are listed below in Table 10-5.

Table 10-5. Impact by Jurisdiction

JURISDICTION	IMPACT	DESCRIPTION
Taylor County	Limited	Taylor County has an estimated 169,541 people or 37 percent of the total population that live within the Wildland Urban Interface (WUI). Taylor County, including citizens in unincorporated areas, could be injured or suffer illnesses, but not permanent disability. Critical facilities could be shut down for 24 hours or less, and less than 10 percent of total property could be damaged.
City of Abilene	Limited	The City of Abilene has an estimated 40,335 people or 34.1 percent of the total population that live in the WUI, and the city has a low wildfire threat. Citizens could be injured or suffer illnesses, but not permanent disability. Critical facilities could be shut down for 24 hours or less, and less than 10 percent of total property could be damaged.
Town of Buffalo Gap	Minor	The Town of Buffalo Gap has an estimated 525 people or 100 percent of the total population that live in the WUI, and the town has a low to moderate wildfire threat. Citizens could be injured or suffer illnesses, but not permanent disability. Critical facilities could be shut down for 24 hours or less, and less than 10 percent of total property could be damaged.
Town of Lawn	Minor	The Town of Lawn has an estimated 400 people or 100 percent of the total population that live in the WUI, and the town has a moderate wildfire threat. Citizens could be

JURISDICTION	IMPACT	DESCRIPTION
		injured or suffer illnesses, but not permanent disability. Critical facilities could be shut down for a week, and 10 percent of total property could be damaged.
Town of Merkel	Limited	The Town of Merkel has an estimated 614 people or 23.2 percent of the total population that live in the WUI, and the town has a low wildfire threat. Citizens could be injured or suffer illnesses, but not permanent disability. Critical facilities could be shut down for 24 hours or less, and less than 10 percent of total property could be damaged.
Town of Trent	Minor	The Town of Trent has an estimated 141 people or 45.8 percent of the total population that live in the WUI, and the town has a low to moderate wildfire threat. Citizens could be injured or suffer illnesses, but not permanent disability. Critical facilities could be shut down for a week, and 10 percent of total property could be damaged.
City of Tuscola	Minor	The City of Tuscola has an estimated 614 people or 77.8 percent of the total population that live in the WUI, and the city has a moderate wildfire threat. Citizens could be injured or suffer illnesses, but not permanent disability. Critical facilities could be shut down for a week, and 10 percent of total property could be damaged.
City of Tye	Minor	The City of Tye has an estimated 1,035 people or 84.4 percent of the total population that live in the WUI, and the city has a moderate wildfire threat. Citizens could be injured or suffer illnesses, but not permanent disability. Critical facilities could be shut down for a week, and 10 percent of total property could be damaged.
WCTCOG	Minor	The WCTCOG facility is located in the City of Abilene and within the WUI. The threat of wildfire to the facility is moderate due to its location. In the event of a wildfire the facility could be shut down for a week, and more than 10 percent of total property could be damaged.

ASSESSMENT OF IMPACTS

A Wildfire event poses a potentially significant risk to public health and safety, particularly if the wildfire is initially unnoticed and spreads quickly. The impacts associated with a wildfire are not limited to the direct damages. Potential impacts for the planning area include:

- Persons in the area at the time of the fire are at risk for injury or death from burns and/or smoke inhalation.
- First responders are at greater risk of physical injury since they are in close proximity to the hazard while extinguishing flames, protecting property or evacuating residents in the area.
- First responders can experience heart disease, respiratory problems, and other long term related illnesses from prolonged exposure to smoke, chemicals, and heat.

SECTION 10: WILDFIRE

- Emergency services may be disrupted during a wildfire if facilities are impacted, roadways are inaccessible, or personnel are unable to report for duty.
- Critical city and/or county departments, including municipalities and other government services, may not be able to function and provide necessary services depending on the location of the fire and the structures or personnel impacted.
- Non-critical businesses may be directly damaged, suffer loss of utility services, or be otherwise inaccessible, delaying normal operations and slowing the recovery process.
- Displaced residents may not be able to immediately return to work, further slowing economic recovery.
- Roadways in or near the WUI could be damaged or closed due to smoke and limited visibility.
- Older homes are generally exempt from modern building code requirements, which may require fire suppression equipment in the structure.
- Some high density neighborhoods feature small lots with structures close together, increasing the potential for fire to spread rapidly.
- Air pollution from smoke may exacerbate respiratory problems of vulnerable residents.
- Charred ground after a wildfire cannot easily absorb rainwater, increasing the risk of flooding and potential mudflows.
- Wildfires can cause erosion, degrading stream water quality.
- Wildlife may be displaced or destroyed.
- Historical or cultural resources may be damaged or destroyed.
- Tourism can be significantly disrupted, further delaying economic recovery for the area.
- Economic disruption negatively impacts the programs and services provided by the community due to short and long-term loss in revenue.
- Fire suppression costs can be substantial, exhausting the financial resources of the community.
- Residential structures lost in a wildfire may not be rebuilt for years, reducing the tax base for the community.
- Lake Abilene and Lake Kirby recreation and tourism can be unappealing for years following a large wildfire, devastating directly related businesses.
- Direct impacts to municipal water supply may occur through contamination of ash and debris during the fire, destruction of aboveground delivery lines, and soil erosion or debris deposits into waterways after the fire.
- WCTCOG resources could be taxed during response and recovery diverting needed resources for everyday activities.

The economic and financial impacts of a wildfire event on local government will depend on the scale of the event, what is damaged, costs of repair or replacement, lost business days in impacted areas, and how quickly repairs to critical components of the economy can be implemented. The level of preparedness and pre-event planning done by government, businesses, and citizens will contribute to the overall economic and financial conditions in the aftermath of a wildfire event.

SECTION 11: TORNADO

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HAZARD DESCRIPTION



Tornadoes are among the most violent storms on the planet. A tornado is a rapidly rotating column of air extending between, and in contact with, a cloud and the surface of the earth. The most violent tornadoes are capable of tremendous destruction and have wind speeds of 250 miles per hour or more. In extreme cases, winds may approach 300 miles per hour. Damage paths can be in excess of one mile wide and 50 miles long.

The most powerful tornadoes are produced by “Supercell Thunderstorms.” These thunderstorms are created when horizontal wind shears (winds moving in different directions at different altitudes) begin to rotate the storm. This horizontal rotation can be tilted vertically by violent updrafts, and the rotation radius can shrink, forming a vertical column of very quickly swirling air. This rotating air can eventually reach the ground, forming a tornado.

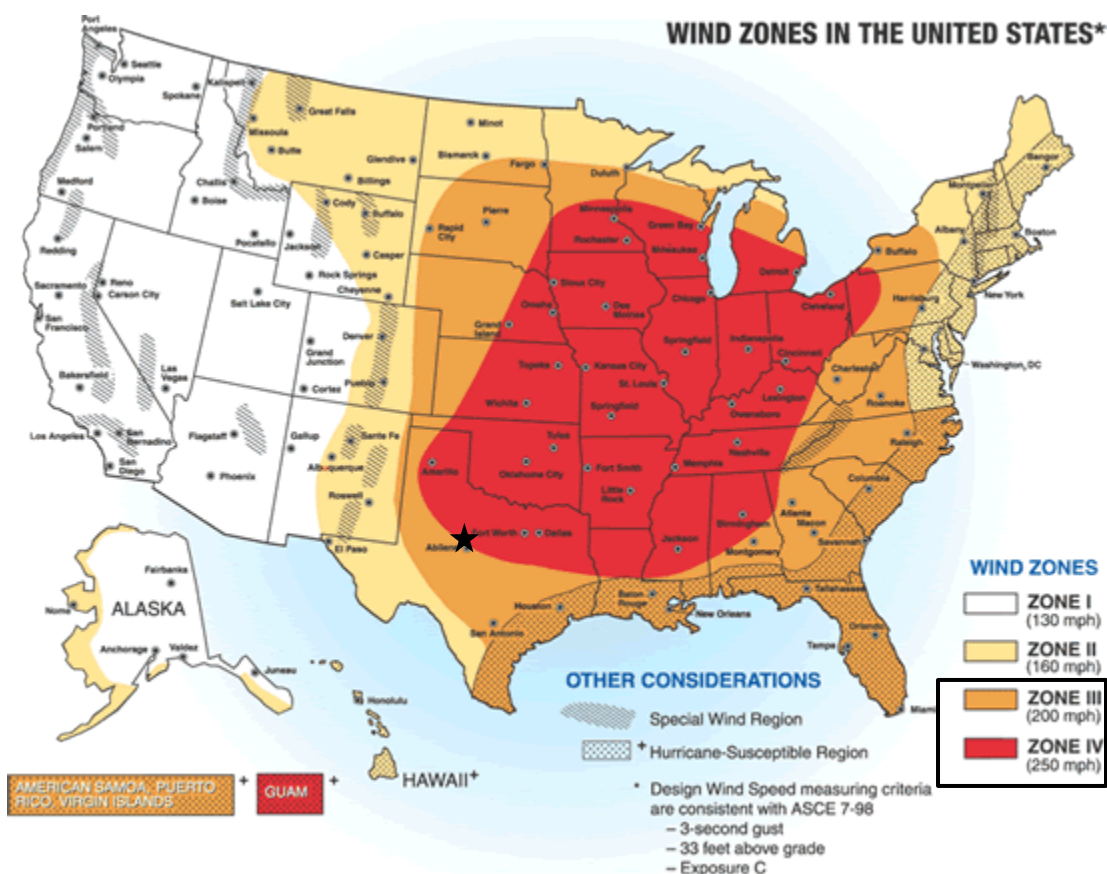
Table 11-1. Variations among Tornadoes

WEAK TORNADOES	STRONG TORNADOES	VIOLENT TORNADOES
➤ 69% of all tornadoes ➤ Less than 5% of tornado deaths ➤ Lifetime 1-10+ minutes ➤ Winds less than 110 mph	➤ 29% of all tornadoes ➤ Nearly 30% of all tornado deaths ➤ May last 20 minutes or longer ➤ Winds 110 – 205 mph	➤ 2% of all tornadoes ➤ 70% of all tornado deaths ➤ Lifetime can exceed one hour ➤ Winds greater than 205 mph

LOCATION

Tornadoes do not have any specific geographic boundary and can occur throughout the planning area uniformly. It is assumed that the entire Planning Area 1, including the WCTCOG and all participating jurisdictions, are uniformly exposed to tornado activity. Planning Area 1 is located in Wind Zone III and IV (Figure 11-1). Tornado winds can be as high as 250 mph.

Figure 11-1. FEMA Wind Zones in the United States¹



EXTENT

The destruction caused by tornadoes ranges from light to inconceivable, depending on the intensity, size, and duration of the storm. Typically, tornadoes cause the greatest damage to structures of light construction, such as residential homes (particularly mobile homes).

¹ Planning Area 1 is indicated by the star.

SECTION 11: TORNADO

Table 11-2. The Fujita Tornado Scale²

F-SCALE NUMBER	INTENSITY	WIND SPEED (MPH)	TYPE OF DAMAGE DONE	PERCENT OF APPRAISED STRUCTURE VALUE LOST DUE TO DAMAGE
F0	Gale Tornado	40 – 72	Some damage to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages sign boards.	None Estimated
F1	Moderate Tornado	73 – 112	The lower limit is the beginning of hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off roads; attached garages may be destroyed.	0% – 20%
F2	Significant Tornado	113 – 157	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.	50% – 100%
F3	Severe Tornado	158 – 206	Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted.	100%
F4	Devastating Tornado	207 – 260	Well-constructed homes leveled; structures with weak foundations blown off some distance; cars thrown and large missiles generated.	100%
F5	Incredible Tornado	261 – 318	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles flying through the air in excess of 330 yards; trees debarked; steel reinforced concrete badly damaged.	100%

Tornado magnitudes prior to 2005 were determined using the traditional version of the Fujita Scale (Table 11-2). Since February 2007, the Fujita Scale has been replaced by the Enhanced Fujita Scale (Table 11-3), which retains the same basic design and six strength categories as the previous scale. The newer scale reflects more refined assessments of tornado damage surveys, standardization, and damage consideration to a wider range of structures.

² Source: <http://www.tornadoproject.com/fscale/fscale.htm>

Table 11-3. Enhanced Fujita Scale for Tornadoes

STORM CATEGORY	DAMAGE LEVEL	3 SECOND GUST (MPH)	DESCRIPTION OF DAMAGES	PHOTO EXAMPLE
EF0	Gale	65–85	Some damage to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages sign boards.	
EF1	Weak	86–110	The lower limit is the beginning of hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off roads; attached garages may be destroyed.	
EF2	Strong	111–135	Considerable damage; roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.	
EF3	Severe	136–165	Roof and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted.	
EF4	Devastating	166–200	Well-constructed homes leveled; structures with weak foundations blown off some distance; cars thrown and large missiles generated.	
EF5	Incredible	200+	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles flying through the air in excess of 330 yards; trees debarked; steel reinforced concrete badly damaged.	

Both the Fujita Scale and Enhanced Fujita Scale should be referenced in reviewing previous occurrences since tornado events prior to 2007 will follow the original Fujita Scale. The largest magnitude reported within the planning area is F3 on the Fujita Scale, a “Severe Tornado.” Based on the planning areas location in Wind Zone III and VI, the planning area could experience anywhere from an EF0 to EF5 depending on the wind speed.

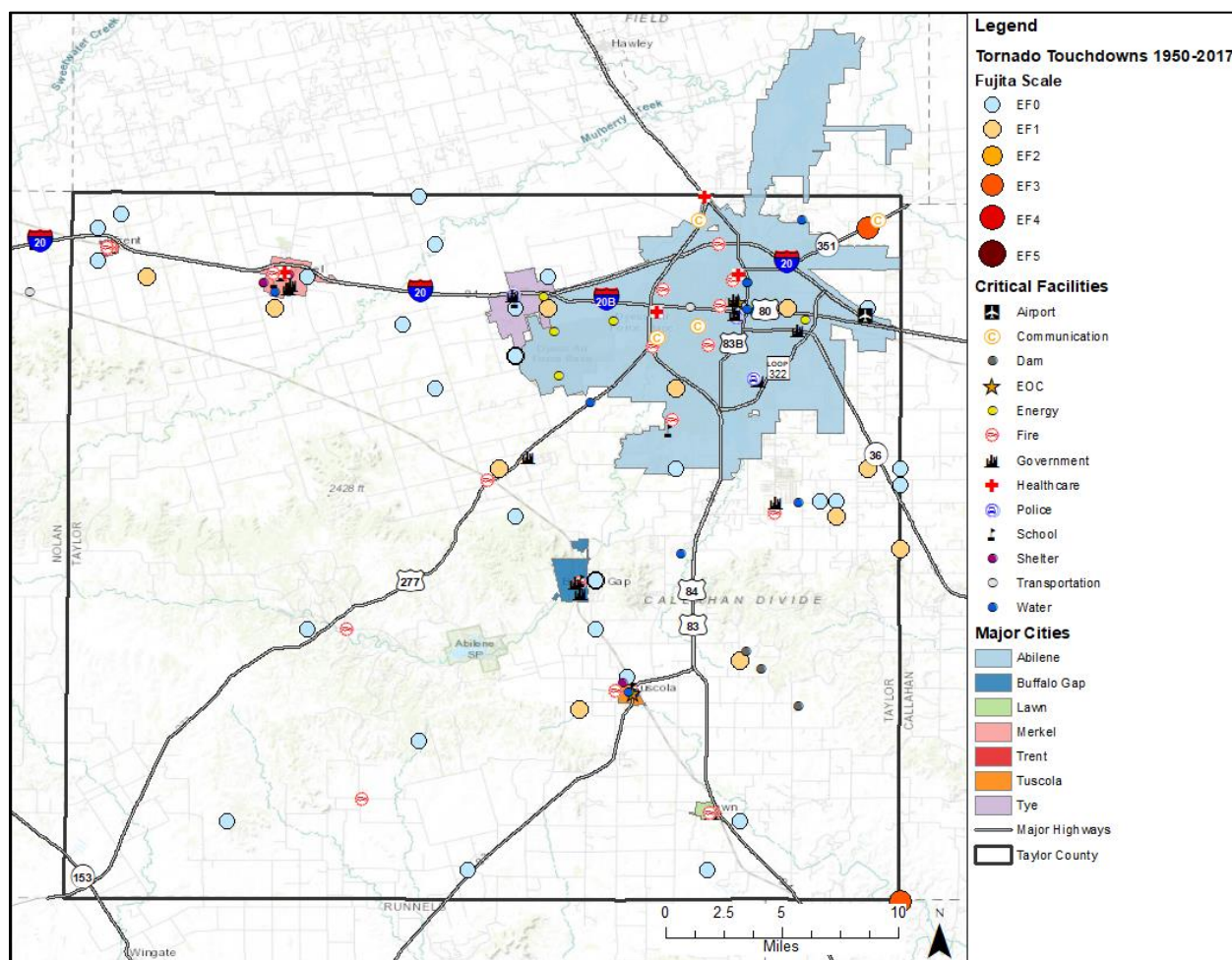
The events in Planning Area 1 have been between F0 and F3 (Table 11-4). Therefore, the range of intensity that Planning Area 1, including the WCTCOG and all participating jurisdictions, would be expected to mitigate is a tornado event that would be a low to severe risk, an EF0 to EF3.

HISTORICAL OCCURRENCES

Only reported tornadoes were factored into the Risk Assessment. It is likely that a high number of occurrences have gone unreported over the past 68 years.

Figure 11-2 identifies the locations of previous occurrences in Planning Area 1 from 1950 through 2017. A total of 64 events have been recorded by the Storm Prediction Center (NOAA) and NCEI databases for the entire planning area. The most significant event reported occurred in Taylor County on May 25, 1976. The F3 tornado and associated storm system caused substantial damage in the county, exceeding more than \$11,055,000 in damages in 2018 dollars. The tornado resulted in 1 injury.

Figure 11-2. Spatial Historical Tornado Events, 1950-2017³



³ Source: NOAA Records

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Only those incidents that have had death, injury, property or crop damage reported have been listed in Table 11-4. The dollar amounts are estimated in 2018 dollars. It should be noted that the WCTCOG facility is located in the City of Abilene. While the City of Abilene has experienced 2 tornado events, none have directly impacted the WCTCOG facility.

Table 11-4. Historical Tornado Events, 1950-2017

JURISDICTION	DATE	TIME	MAGNITUDE	DEATH	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
Taylor County	6/15/1951	10:20 PM	F1	0	6	\$2,411,719	\$0
Taylor County	4/25/1957	3:30 PM	F0	0	0	\$269	\$0
Taylor County	5/8/1957	10:38 PM	F0	0	0	\$268	\$0
Taylor County	4/20/1958	12:30 AM	F1	0	0	\$21,614	\$0
Taylor County	6/8/1958	7:30 PM	F1	0	0	\$259	\$0
Taylor County	5/10/1959	3:00 PM	F1	0	0	\$21,539	\$0
Taylor County	5/10/1959	3:15 PM	F1	0	0	\$215,391	\$0
Taylor County	3/16/1961	3:30 PM	F2	0	0	\$20,961	\$0
Taylor County	7/14/1962	6:00 PM	F1	0	5	\$0	\$0
Taylor County	4/26/1970	4:00 PM	F2	0	0	\$16,224	\$0
Taylor County	3/10/1973	3:00 AM	F2	0	1	\$144,258	\$0
Taylor County	9/6/1973	5:30 PM	F1	0	0	\$138,194	\$0
Taylor County	5/25/1976	3:00 PM	F3	0	1	\$11,055,491	\$0
Taylor County	7/3/1978	3:50 PM	F2	0	0	\$950,739	\$0
Taylor County	10/30/1979	4:45 AM	F2	0	0	\$83,063	\$0
Taylor County	3/14/1982	1:00 AM	F1	0	0	\$66,099	\$0
Taylor County	3/14/1982	1:35 AM	F2	0	0	\$660,990	\$0
Taylor County	3/14/1982	2:15 AM	F3	0	5	\$6,609,897	\$0
Taylor County	5/30/1983	3:35 PM	F1	0	0	\$76	\$0
Taylor County	6/5/1983	3:05 PM	F0	0	0	\$75	\$0
Taylor County	6/5/1983	3:40 PM	F0	0	0	\$75	\$0
Taylor County	4/28/1985	8:20 PM	F2	1	0	\$584,317	\$0
Taylor County	4/14/1993	2:05 AM	F1	0	0	\$867,549	\$868

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JURISDICTION	DATE	TIME	MAGNITUDE	DEATH	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
City of Abilene	5/7/2002	8:45 PM	F0	0	0	\$1,390	\$0
City of Tye	6/13/2002	7:08 PM	F0	0	0	\$694	\$0
Taylor County	3/4/2004	11:26 AM	F0	0	0	\$13,333	\$0
Taylor County	3/4/2004	11:51 AM	F1	0	0	\$199,990	\$0
City of Tuscola	3/4/2004	11:31 AM	F2	0	2	\$1,066,613	\$0
Town of Merkel	5/27/2004	2:40 PM	F0	0	0	\$6,606	\$0

Table 11-5. Summary of Historical Tornado Events, 1950-2017

JURISDICTION	NUMBER OF EVENTS	MAGNITUDE	FATALITIES	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
Taylor County	47	F3	1	18	\$24,082,390	\$868
City of Abilene	2	F0	0	0	\$1,390	\$0
Town of Buffalo Gap	3	F0	0	0	\$0	\$0
Town of Lawn	2	F0	0	0	\$0	\$0
Town of Merkel	1	F0	0	0	\$6,606	\$0
Town of Trent	2	F0	0	0	\$0	\$0
City of Tuscola	3	F2	0	2	\$1,066,613	\$0
City of Tye	4	F0	0	0	\$694	\$0
WCTCOG	0	N/A	N/A	N/A	N/A	N/A
TOTAL LOSSES	64	(Max Extent)	1	20	\$25,158,562	

Based on the list of historical tornado events for Planning Area 1 (listed above), including all participating jurisdictions, 2 of the events have occurred since the 2012 Plan.

SIGNIFICANT EVENTS

May 25, 1976 – Taylor County

A large tornado touched down in Taylor County near the West Texas Utilities Plant at 3:00PM. The tornado damaged or destroyed 20 structures. Damages caused by the event exceeded \$11 million (2018) dollars.

April 28, 1985 – Taylor County

A tornado touched down in extreme southeast Taylor County. Moving north-northeast, the tornado struck a small frame home, killing the occupant. The tornado traveled approximately 2½ miles on the ground and was estimated at 300 yards wide.

PROBABILITY OF FUTURE EVENTS

Tornadic storms can occur at any time of year and at any time of day, but they are typically more common in the spring months during the late afternoon and evening hours. A smaller, high frequency period can emerge in the fall during the brief transition between the warm and cold seasons. According to historical records, the planning area can experience a tornado touchdown approximately once every year. This frequency supports a highly likely probability of future events for Planning Area 1, including the WCTCOG and all participating jurisdictions.

VULNERABILITY AND IMPACT

Because tornadoes often cross jurisdictional boundaries, all existing and future buildings, facilities, and populations in planning area are considered to be exposed to this hazard and could potentially be impacted. The damage caused by a tornado is typically a result of high wind velocity, wind-blown debris, lightning, and large hail.

The average tornado moves from southwest to northeast, but tornadoes have been known to move in any direction. Consequently, vulnerability of humans and property is difficult to evaluate since tornadoes form at different strengths, in random locations, and create relatively narrow paths of destruction. Although tornadoes strike at random, making all buildings vulnerable, three types of structures are more likely to suffer damage:

- Manufactured Homes;
- Homes on crawlspaces (more susceptible to lift); and
- Buildings with large spans, such as shopping malls, gymnasiums, and factories.

Tornadoes can cause a significant threat to people as they could be struck by flying debris, falling trees/branches, utility lines, and poles. Blocked roads could prevent first responders to respond to calls. Tornadoes commonly cause power outages which could cause health and safety risks to residents, as well as to patients in hospitals.

Planning Area 1 features multiple mobile or manufactured home parks throughout the planning area, including all participating jurisdictions. These parks are typically more vulnerable to tornado events than typical site built structures. In addition, manufactured homes are located sporadically throughout the planning area including participating jurisdictions and unincorporated county which would also be more vulnerable. The U.S. Census data indicates a total of 2,865 manufactured homes located in Planning Area 1 (5.0%), including participating jurisdictions and unincorporated county (Table 11-6). In addition, 60.1% (approximately 34,141 structures) of the single family residential (SFR) structures in the entire planning area were built before 1980. These structures would typically be built to lower or less stringent construction standards than newer construction and may be more susceptible to damages during significant tornado events. The WCTCOG does not have any manufactured homes or portable buildings and the facility, built in 2007, is not considered more vulnerable.

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Table 11-6. Structures at Greater Risk by Jurisdiction

JURISDICTION	MANUFACTURED HOMES	SFR STRUCTURES BUILT BEFORE 1980
Taylor County ⁴	2,865	34,141
City of Abilene	1,485	30,573
Town of Buffalo Gap	42	141
Town of Lawn	24	108
Town of Merkel	137	963
Town of Trent	22	137
City of Tuscola	39	229
City of Tye	259	265
WCTCOG	0	0

The following critical facilities would be vulnerable to tornado events in each participating jurisdiction:

Table 11-7. Critical Facilities at Risk by Jurisdiction

JURISDICTION	CRITICAL FACILITIES
Taylor County	1 Fire Station, 2 Police Stations, 3 Dams (Greenlee, Atkins, and Shotwell Dams), 2 JP8 Fuel Facilities, BNSF Railroad
City of Abilene	4 Government/Municipal Facilities, 11 Fire Stations, 1 Police Station, 2 Hospitals, 1 Ambulance Service, AISD Facilities, WISD Facilities, Mobile Communications Center, Telephone Company, Airport, Gas Utility Facilities, Electric Utility Facilities, 3 Water Treatment Plants, 3 Water Supply Facilities, 3 TV Stations, BNSF Railroad
Town of Buffalo Gap	1 Fire Station, 1 City Hall, 1 County Utility Yard (County Crew), JNBG-ISD
Town of Lawn	2 Fire Stations, 1 City Hall
Town of Merkel	2 Municipal Facilities, 1 Police Station, 2 Fire Stations, 1 City Yard (Public Works Vehicles and Equipment), 1 County Utility Yard (County Crew), 1 Urgent Care Facility, 1 Safe Room/Shelter, 1 Pump Station, 2 Water Towers, 1 Waste Water Treatment Facility, State Fire Response Facility. MISD Facilities, 1 Electrical Services Facility, 1 Water Supply Facility

⁴ County totals includes all jurisdictions and unincorporated areas within the county.

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JURISDICTION	CRITICAL FACILITIES
Town of Trent	1 Municipal Facility, Fire Station, Trent ISD Facilities, Burlington North Railroad
City of Tuscola	2 Municipal Facilities, 2 Fire Stations, 2 Water Utility Facilities, JNISD Facilities, 1 Water Treatment Facility
City of Tye	1 Fire Department, 1 Police Department, 2 Government Facilities, 1 Water Tower, 3 Pump Stations, 2 Lift Stations, Public Works Facilities, 1 Energy Plant
WCTCOG	WCTCOG Regional Facility, Law Enforcement Training Facility

The average loss estimate of property and crop is \$25,158,562 (in 2018 dollars), having an approximate annual loss estimate of \$369,978 (Table 11-8). Based on historic loss and damages, the impact of tornado on Planning Area 1, including the WCTCOG and all participating jurisdictions, can be considered “Limited,” with less than 10 percent of property expected to be destroyed. However, the number of injuries and fatalities indicates a “Substantial” impact.

Table 11-8. Potential Annualized Losses by Jurisdiction, 1950-2017

JURISDICTION	PROPERTY & CROP LOSS	ANNUAL LOSS ESTIMATES
Taylor County	\$24,083,259	\$354,166
City of Abilene	\$1,390	\$20
Town of Buffalo Gap	\$0	\$0
Town of Lawn	\$0	\$0
Town of Merkel	\$6,606	\$97
Town of Trent	\$0	\$0
City of Tuscola	\$1,066,613	\$15,685
City of Tye	\$694	\$10
WCTCOG	\$0	\$0
Planning Area 1	\$25,158,562	\$369,978

ASSESSMENT OF IMPACTS

Tornadoes have the potential to pose a significant risk to the population and can create dangerous situations. Often times, providing and preserving public health and safety is difficult. Impacts to the planning area can include:

- Individuals exposed to the storm can be struck by flying debris, falling limbs, or downed trees causing serious injury or death.

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- Structures can be damaged or crushed by falling trees, which can result in physical harm to the occupants.
- Manufactured homes may suffer substantial damage as they would be more vulnerable than typical site built structures.
- Significant debris and downed trees can result in emergency response vehicles being unable to access areas of the community.
- Downed power lines may result in roadways being unsafe for use, which may prevent first responders from answering calls for assistance or rescue.
- Tornadoes often result in widespread power outages increasing the risk to more vulnerable portions of the population who rely on power for health and/or life safety.
- Extended power outages can result in an increase in structure fires and/or carbon monoxide poisoning as individuals attempt to cook or heat their home with alternate, unsafe cooking or heating devices, such as grills.
- Tornadoes can destroy or make residential structures uninhabitable, requiring shelter or relocation of residents in the aftermath of the event.
- First responders must enter the damage area shortly after the tornado passes to begin rescue operations and to organize cleanup and assessments efforts, therefore they are exposed to downed power lines, unstable and unusual debris, hazardous materials, and generally unsafe conditions, elevating the risk of injury to first responders and potentially diminishing emergency response capabilities.
- Emergency operations and services may be significantly impacted due to damaged facilities, loss of communications, and damaged emergency vehicles and equipment.
- City or county departments, municipalities and government services may be damaged or destroyed, delaying response and recovery efforts for the entire community.
- Private sector entities that the participating jurisdictions and their residents rely on, such as utility providers, financial institutions, and medical care providers may not be fully operational and may require assistance from neighboring communities until full services can be restored.
- Economic disruption negatively impacts the programs and services provided by the community due to short and long term loss in revenue.
- Damage to infrastructure may slow economic recovery since repairs may be extensive and lengthy.
- Some businesses not directly damaged by the tornado may be negatively impacted while roads and utilities are being restored, further slowing economic recovery.
- When the community is affected by significant property damage it is anticipated that funding would be required for infrastructure repair and restoration, temporary services and facilities, overtime pay for responders, and normal day-to-day operating expenses.
- Displaced residents may not be able to immediately return to work, further slowing economic recovery.
- Residential structures destroyed by a tornado may not be rebuilt for years, reducing the tax base for the community.
- Large or intense tornadoes may result in a dramatic population fluctuation, as people are unable to return to their homes or jobs and must seek shelter and/or work outside of the affected area.

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- Businesses that are uninsured or underinsured may have difficulty reopening, which results in a net loss of jobs for the community and a potential increase in the unemployment rate.
- Recreation activities may be unavailable and tourism can be unappealing for years following a large tornado, devastating directly related local businesses.
- Resources allocated for everyday use by the COG may be taxed during response and recovery deterring those resources and depleting them.

The economic and financial impacts of a tornado event on the community will depend on the scale of the event, what is damaged, costs of repair or replacement, lost business days in impacted areas, and how quickly repairs to critical components of the economy can be implemented. The level of preparedness and pre-event planning done by government, businesses, and citizens will contribute to the overall economic and financial conditions in the aftermath of a tornado event.

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HAZARD DESCRIPTION

Floods generally result from excessive precipitation. The severity of a flood event is determined by a combination of several major factors, including: stream and river basin topography and physiography; precipitation and weather patterns; recent soil moisture conditions; and the degree of vegetative clearing and impervious surface. Typically, floods are long-term events that may last for several days.

The primary types of general flooding are inland and coastal flooding. Due to Planning Area 1's inland location, only inland flooding is profiled in this section. Inland or riverine flooding is a result of excessive precipitation levels and water runoff volumes within the watershed of a stream or river. Inland or riverine flooding is overbank flooding of rivers and streams, typically resulting from large-scale weather systems that generate prolonged rainfall over a wide geographic area, thus it is a naturally occurring and inevitable event. Some river floods occur seasonally when winter or spring rainfalls fill river basins with too much water, too quickly. Torrential rains from decaying hurricanes or tropical systems can also produce river flooding.

LOCATION

The Flood Insurance Rate Map (FIRM) data provided by FEMA for Planning Area 1 shows the following flood hazard areas:

- Zone A: Areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies. Because detailed hydraulic analyses have not been performed, no

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Base Flood Elevations (BFEs) or flood depths are shown. Mandatory flood insurance requirements and floodplain management standards apply.

- Zone AE: Areas subject to inundation by 1-percent-annual-chance shallow flooding. It is the base floodplain where base flood elevations are provided. AE zones are now used on new format FIRMs instead of A1-30 zones.
- Zone AO: Areas subject to 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between 1 and 3 feet.
- Zone X: Moderate risk areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee. No BFEs or base flood depths are shown within these zones.

Full flood zone delineations with elevations are only available in the City of Abilene. All other participating jurisdictions have limited flood hazard boundary maps where base flood elevations have not been determined. In order to enhance future risk assessments and improve floodplain management for participating jurisdictions, this data deficiency has been addressed with mitigation actions (Section 19 specifically developed to identify and fully study, flood hazard areas throughout the planning area.

Locations of estimated flood zones for all participating jurisdictions, based on the available Flood Insurance Rate Maps (FIRM) from FEMA are illustrated in Figures 12-1 to 12-8. The WCTCOG facility is located in the City of Abilene and is located outside of the SFHA.

Figure 12-1. Estimated Flood Zones in Taylor County

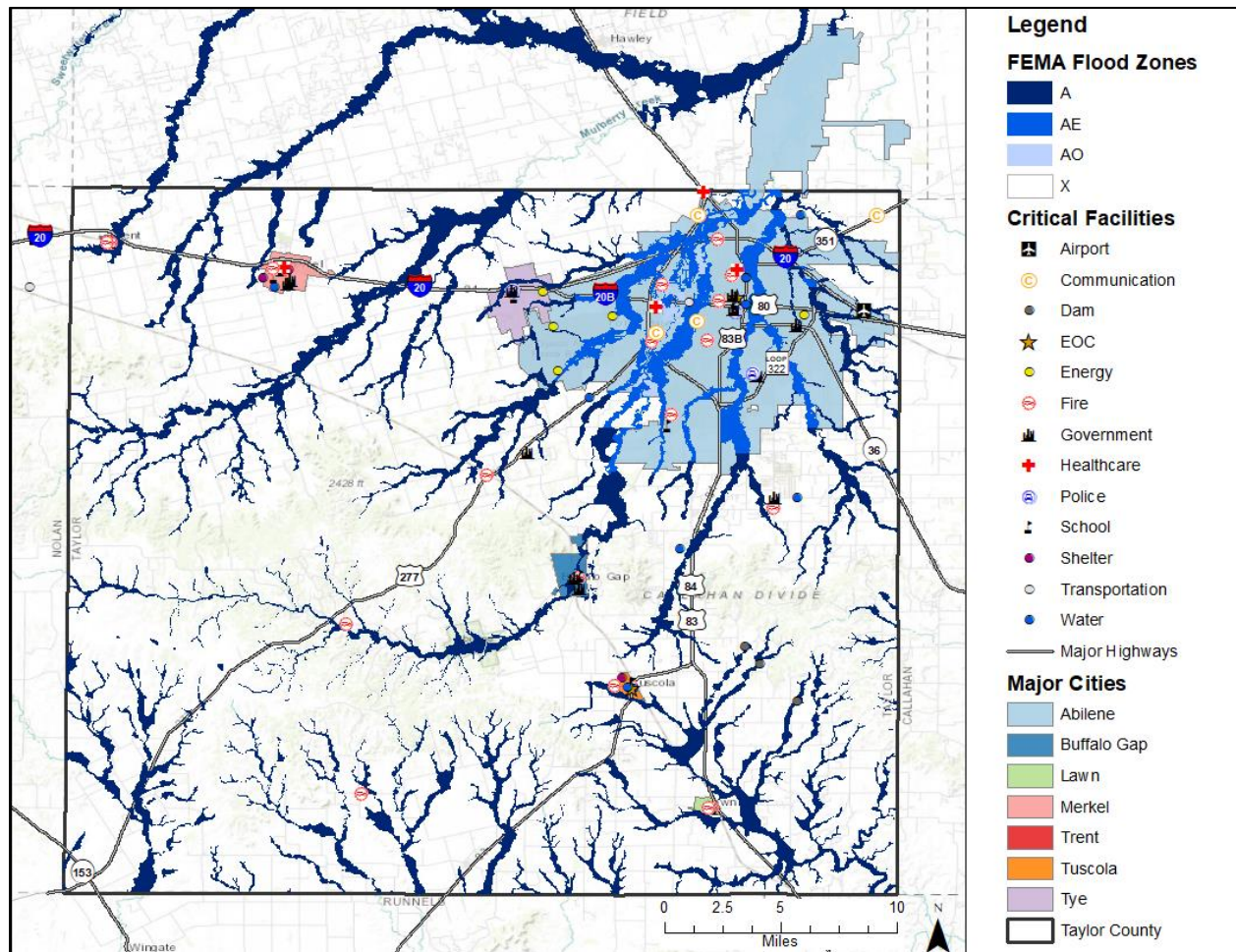


Figure 12-2. Estimated Flood Zones in the City of Abilene and the WCTCOG¹

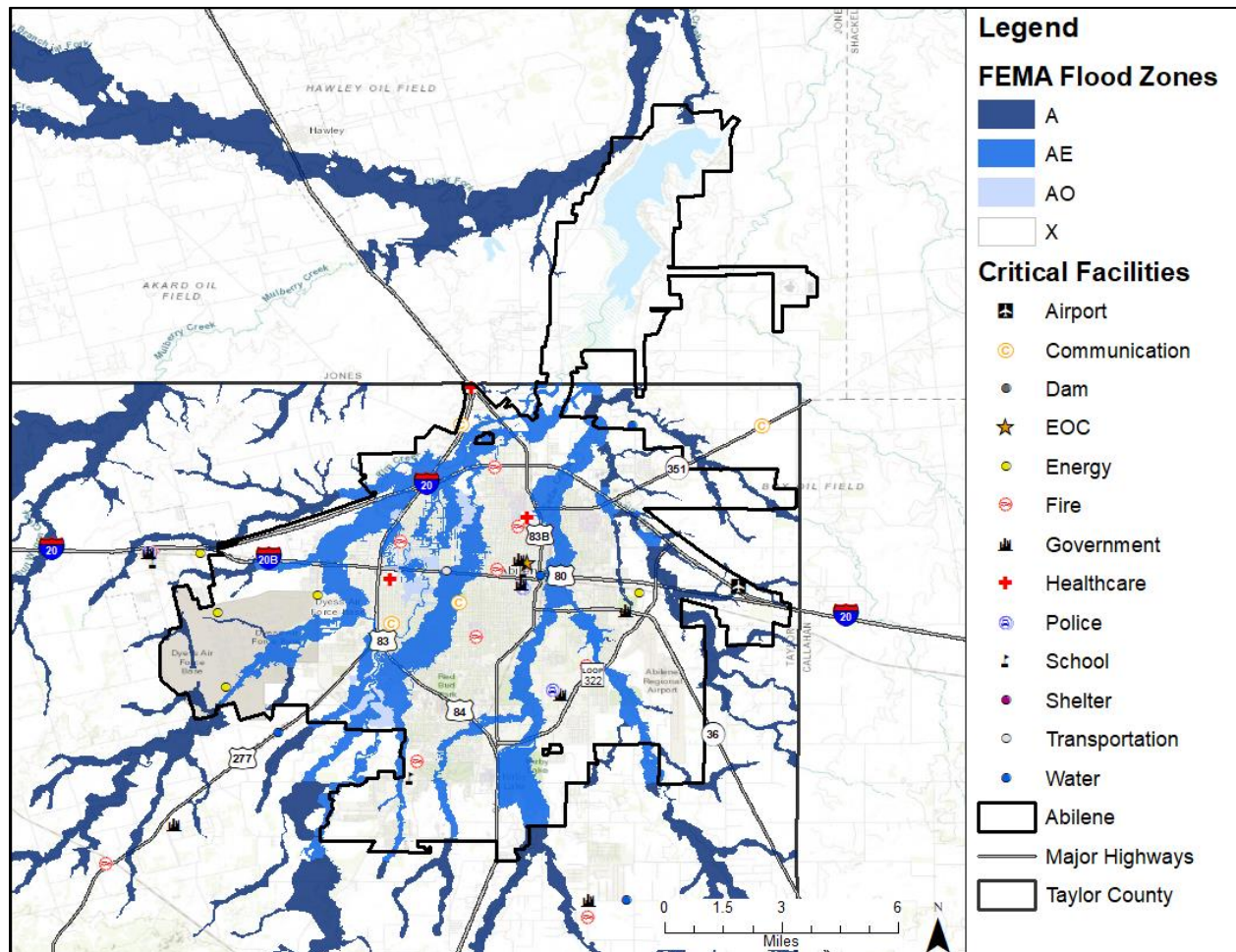


Figure 12-3. Estimated Flood Zones in the Town of Buffalo Gap

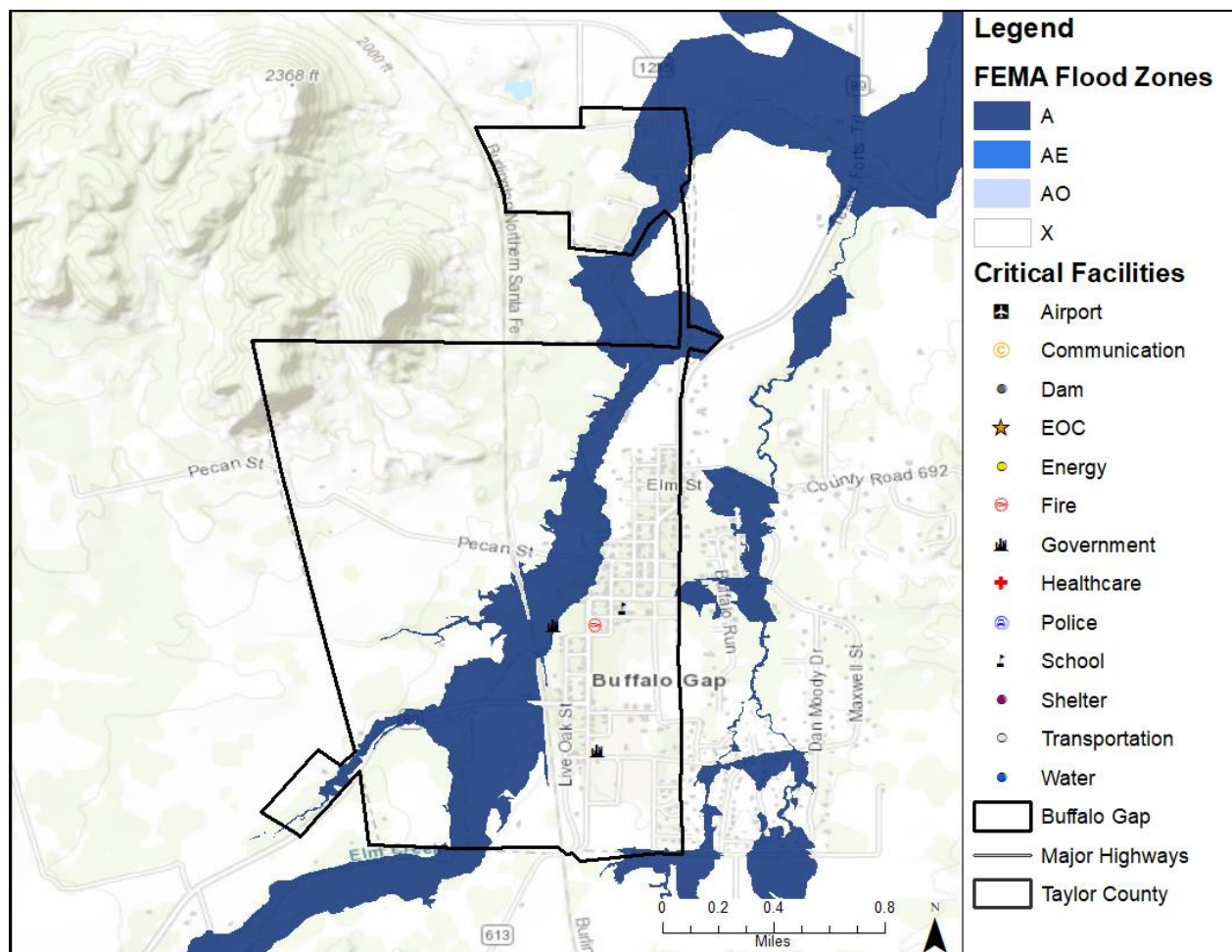
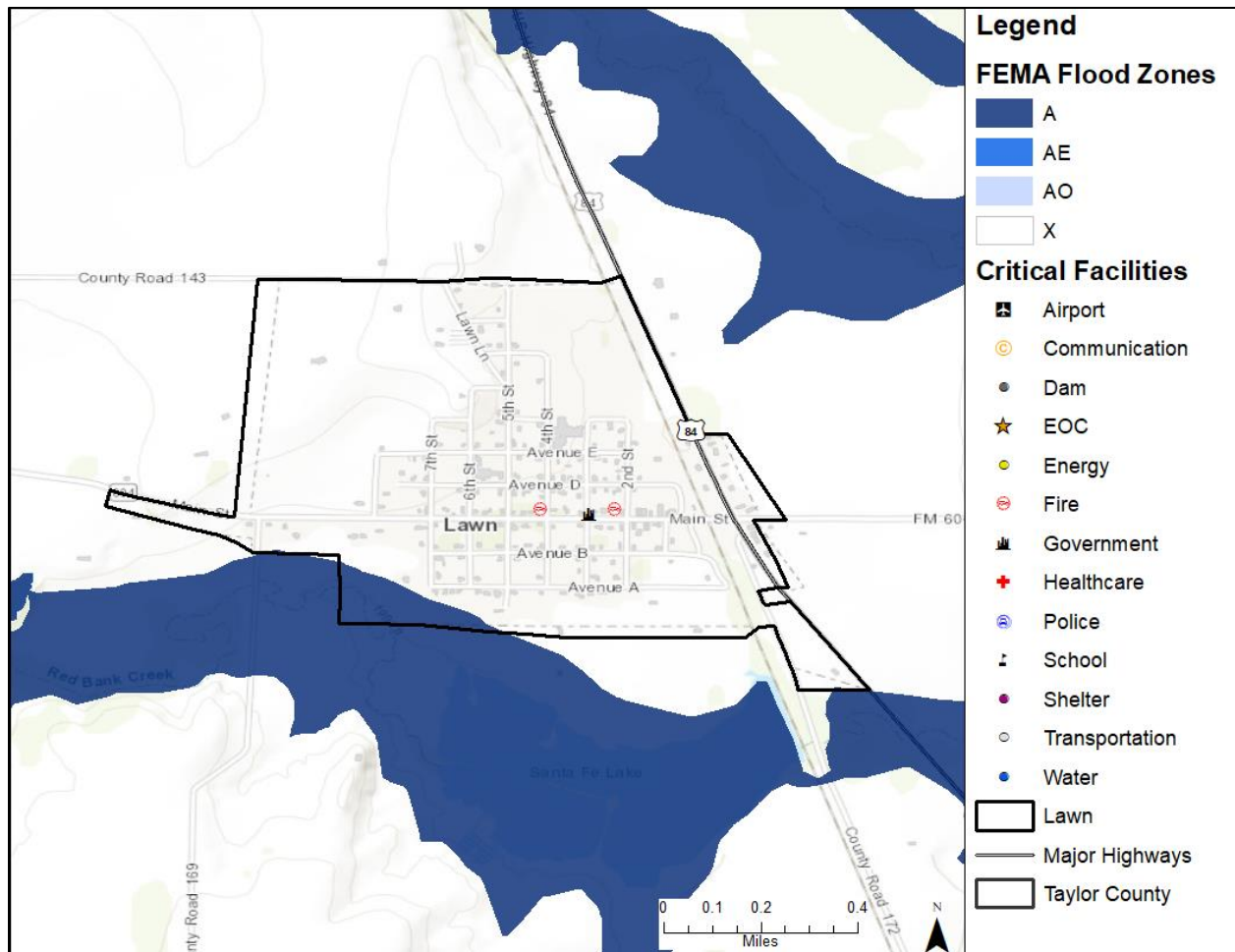


Figure 12-4. Estimated Flood Zones in the Town of Lawn



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Figure 12-5. Estimated Flood Zones in the Town of Merkel

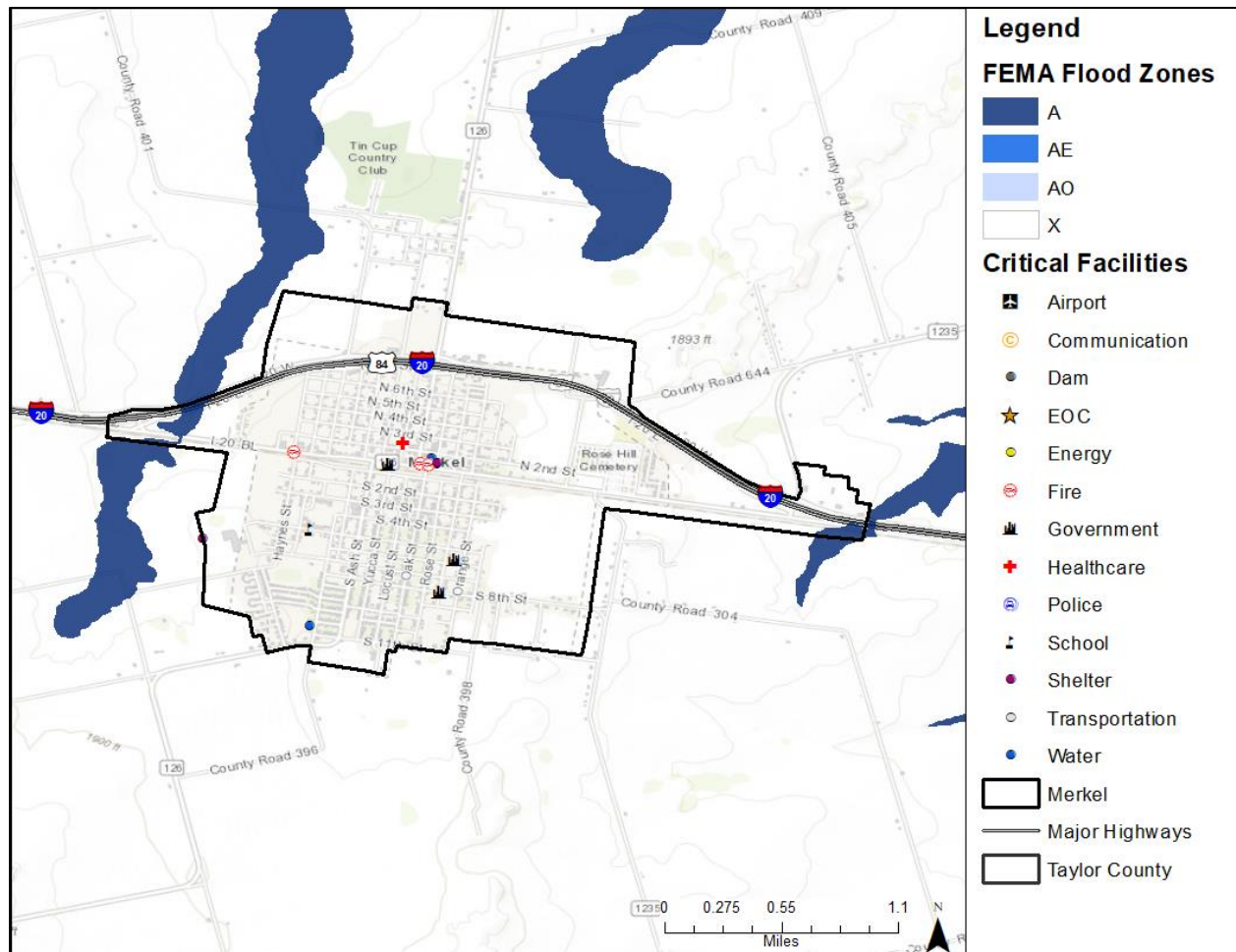


Figure 12-6. Estimated Flood Zones in the Town of Trent

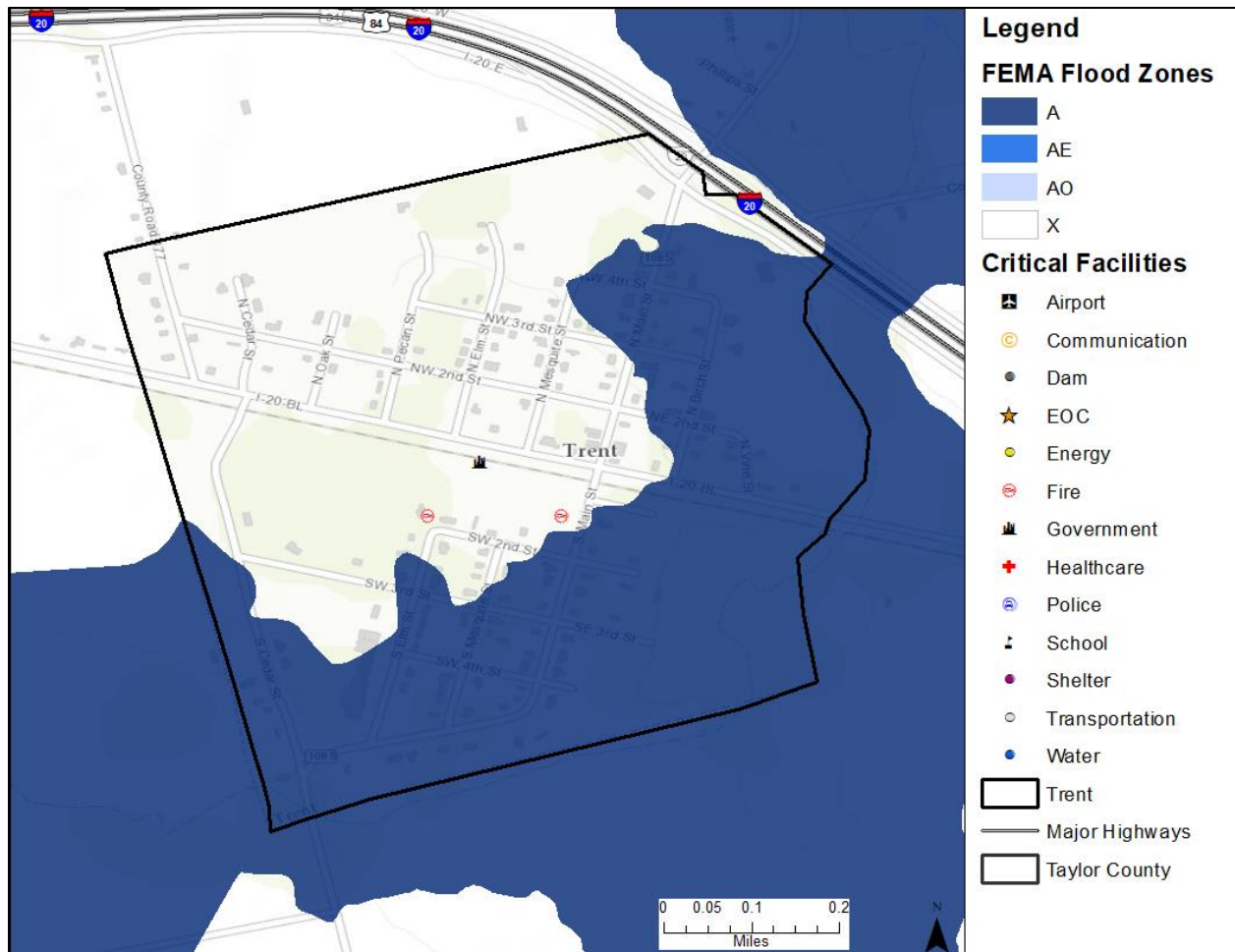


Figure 12-7. Estimated Flood Zones in the City of Tuscola

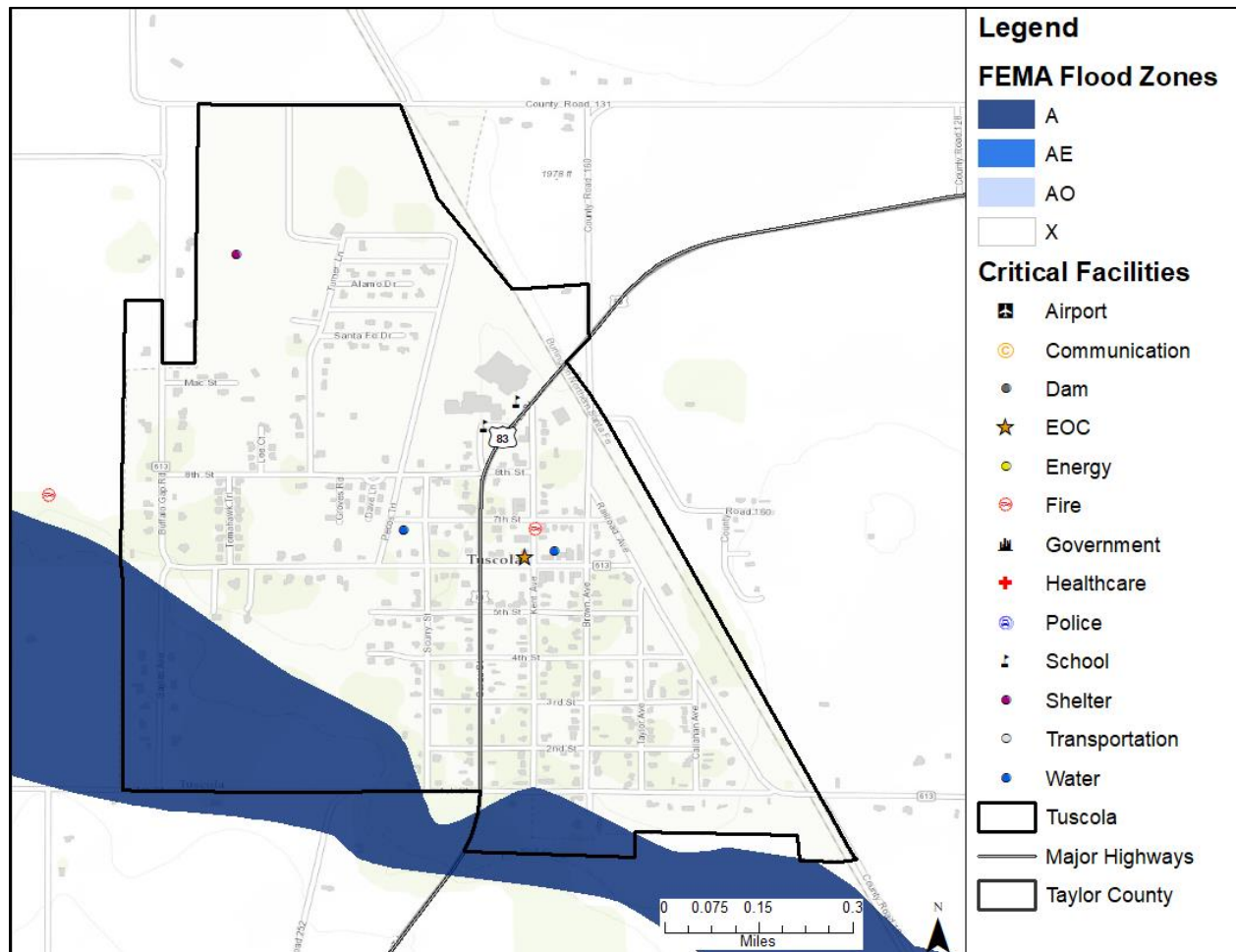
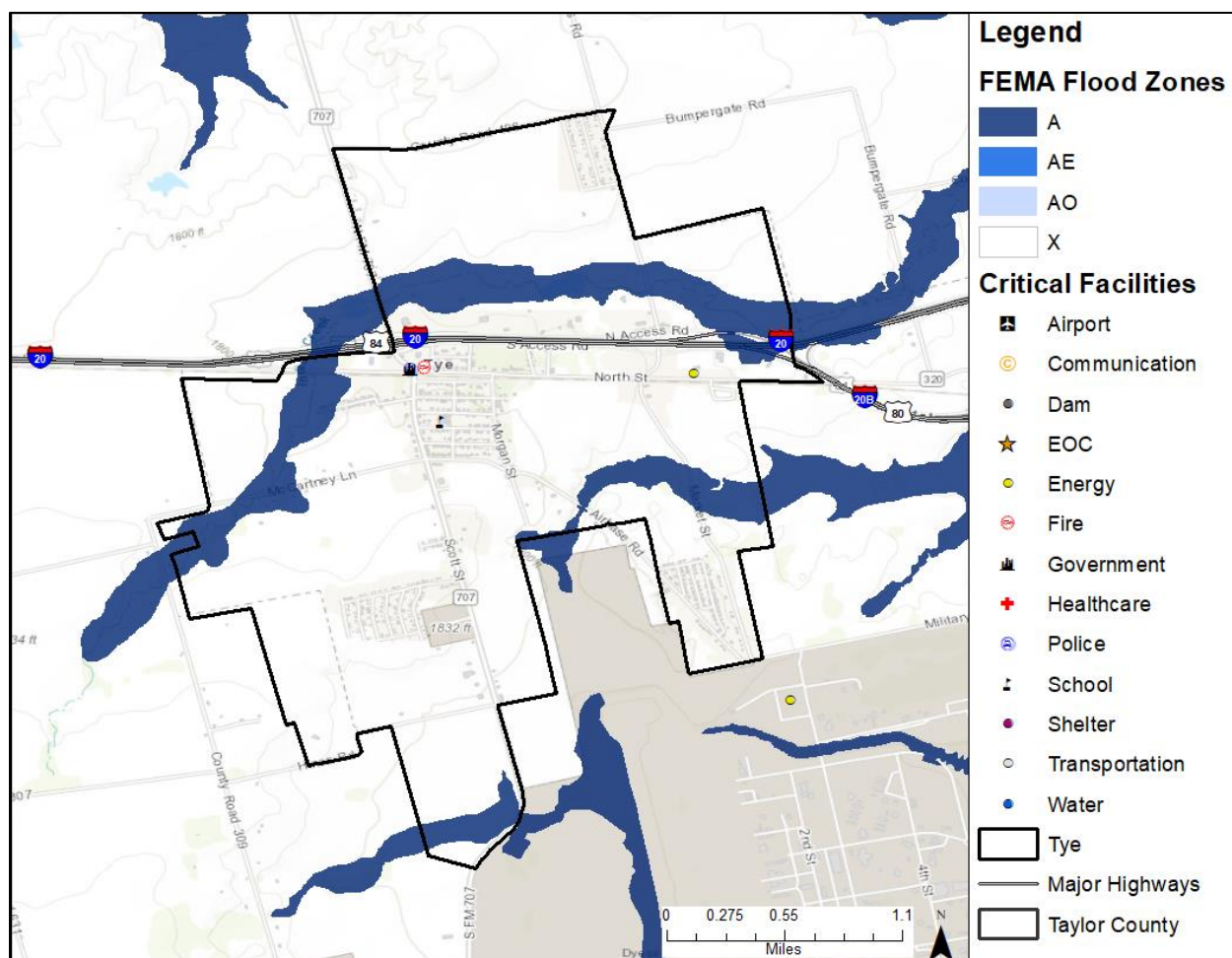


Figure 12-8. Estimated Flood Zones in the City of Tye

EXTENT

The severity of a flood event is determined by a combination of several factors including: stream and river basin topography and physiography; precipitation and weather patterns; recent soil moisture conditions; and degree of vegetative clearing and impervious surface. Typically, floods are long-term events that may last for several days.

Determining the intensity and magnitude of a flood event is dependent upon the flood zone and location of the flood hazard area in addition to depths of flood waters. Extent of flood damages can be expected to be more damaging in the areas that will convey a base flood. FEMA categorizes areas on the terrain according to how the area will convey flood water. Flood zones are the categories that are mapped on Flood Insurance Rate Maps. Table 12-1 provides a description of FEMA flood zones and the flood impact in terms of severity or potential harm. Flood Zones A, AE, AO and X are the only hazard areas mapped in the region. Figures 12-1

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through 12-8 should be read in conjunction with the extent for flooding in Tables 12-1, 12-2, and 12-3 to determine the intensity of a potential flood event.

Table 12-1. Flood Zones

INTENSITY	ZONE	DESCRIPTION
HIGH	ZONE A	Areas with a one percent annual chance of flooding and a 26 percent chance of flooding over the life of a 30-year mortgage. Because detailed analyses are not performed for such areas, no depths or base flood elevations are shown within these zones.
	ZONE A1-30	These are known as numbered A Zones (e.g., A7 or A14). This is the base floodplain where the FIRM shows a Base Flood Elevation (BFE) (old format).
	ZONE AE	The base floodplain where base flood elevations are provided. AE Zones are now used on the new format FIRMs instead of A1-A30 Zones.
	ZONE AO	River or stream flood hazard areas and areas with a one percent or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from one to three feet. These areas have a 26 percent chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.
	ZONE AH	Areas with a one percent annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from one to three feet. These areas have a 26 percent chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
	ZONE A99	Areas with a one percent annual chance of flooding that will be protected by a federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones.
	ZONE AR	Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or a dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A zones if the structure is built or restored in compliance with Zone AR floodplain management regulations.
MODERATE to LOW	ZONE X 500	An area inundated by 500-year flooding; an area inundated by 100-year flooding with average depths of less than one foot or with drainage areas less than one square mile; or an area protected by levees from 100-year flooding.

Zone A is interchangeably referred to as the 100-year flood, the one-percent-annual chance flood, the Special Flood Hazard Area (SFHA), or more commonly, the base flood. This is the area that will convey the base flood

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and constitutes a threat to the planning area. The impact from a flood event can be more damaging in areas that will convey a base flood.

Structures built in the SFHA are subject to damage by rising waters and floating debris. Moving flood water exerts pressure on everything in its path and causes erosion of soil and solid objects. Utility systems, such as heating, ventilation, air conditioning, fuel, electrical systems, sewage maintenance systems and water systems, if not elevated above base flood elevation, may also be damaged.

The intensity and magnitude of a flood event is also determined by the depth of flood waters. Table 12-2 below describes the category of risk and potential magnitude of an event in correlation to water depth. The water depths depicted in Table 12-2 are an approximation based on elevation data. Table 12-3 describes the extent associated with stream gauge data provided by the United States Geological Survey (USGS).

Table 12-2. Extent Scale – Water Depth

SEVERITY	DEPTH (in feet)	DESCRIPTION
BELOW FLOOD STAGE	0 to 15	Water begins to exceed low sections of banks and the lowest sections of the floodplain.
ACTION STAGE	16 to 23	Flow is well into the floodplain; minor lowland flooding reaches low areas of the floodplain. Livestock should be moved from low lying areas.
FLOOD STAGE	24 to 28	Homes are threatened and properties downstream of river flows or in low lying areas begin to flood.
MODERATE FLOOD STAGE	29 to 32	At this stage the lowest homes downstream flood. Roads and bridges in the floodplain flood severely and are dangerous to motorists.
MAJOR FLOOD STAGE	33 and above	Major flooding approaches homes in the floodplain. Primary and secondary roads and bridges are severely flooded and very dangerous. Major flooding extends well into the floodplain, destroying property, equipment, and livestock.

Table 12-3. Extent for Planning Area 1²

JURISDICTION ³	ESTIMATED SEVERITY PER FLOOD EVENT	PEAK FLOOD EVENT
Taylor County	Below Flood Stage, 0 to 15 feet (9.6)	Action Stage: Elm Creek near the City of Abilene reached an overflow elevation of 18.68 feet in September of 1974.
Taylor County	Below Flood Stage, 0 to 15 feet (6.5)	Below Flood Stage: Little Elm Creek near the City of Abilene, reached an overflow elevation of 11.52 feet in September 1974.
City of Abilene	Below Flood Stage, 0 to 15 feet (7.4)	Action Stage: Cedar Creek at the City of Abilene reached an overflow elevation of 16.8 in October 1982.
City of Abilene	Below Flood Stage, 0 to 15 feet (6.1)	Below Flood Stage: Cat Claw Creek at City of Abilene reached an overflow elevation of 9.56 in July 2002.
City of Abilene	Below Flood Stage, 0 to 15 feet (6.5)	Below Flood Stage: Cedar Creek at IH 20 in the City of Abilene reached an overflow elevation of 9.08 in July 2015.
City of Abilene	Below Flood Stage, 0 to 15 feet (10.2)	Action Stage: Elm Creek at the City of Abilene reached an overflow elevation of 15.37 feet in October of 1982.

The range of flood intensity that Planning Area 1 can experience is high, or Zone A. Based on reporting from the USGS, a flood event can place the County at the extent of “Below Flood Stage” as shown in Tables 12-2 and 12-3. However, Planning Area 1 has experienced flooding over 18 feet. Based on historical occurrences the planning area, including all participating jurisdictions, could typically expect to experience up to 5 inches of rainfall within an 8-hour period, resulting in flash flooding.

The data described in Tables 12-1 through 12-3, together with Figures 12-1 through 12-8, provides an estimated potential magnitude and severity for the planning area. For example, the City of Abilene, as shown in Figure 12-2, has areas designated as Zone A and Zone AE. Reading this figure in conjunction with Table 12-1 means the area is an area of high risk for flood.

HISTORICAL OCCURRENCES

Historical evidence indicates that areas within the planning area are susceptible to flooding, especially in the form of flash flooding. It is important to note that only flood events that have been reported have been factored into this risk assessment, therefore it is likely that additional flood occurrences have gone unreported before

² Severity estimated by averaging floods at certain stage level over the history of flood events. Severity and peak events are based on U.S. Geological Survey data.

³ Severity is provided for jurisdictions where peak data was provided.

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and during the recording period. Table 12-4 identifies historical flood events that resulted in damages, injuries, or fatalities within Planning Area 1, including the WCTCOG and all participating jurisdictions. Table 12-5 provides the historical flood event summary by jurisdiction. Historical Data is provided by the Storm Prediction Center (NOAA), NCEI database for the planning area.

Table 12-4. Historical Flood Events, 1996-2017⁴

JURISDICTION	DATE	TIME	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
City of Abilene	6/7/1996	2:20 AM	0	0	\$797,237	\$0
Town of Merkel	8/28/1996	4:45 PM	0	0	\$158,839	\$0
City of Abilene	9/14/1996	11:30 PM	0	0	\$158,336	\$0
City of Abilene	5/15/1997	1:00 AM	0	0	\$390,153	\$0
City of Abilene	6/6/1997	4:00 AM	0	0	\$155,867	\$38,967
City of Abilene	6/8/1997	10:30 AM	0	0	\$779,333	\$311,733
Town of Buffalo Gap	6/23/1997	5:30 AM	0	0	\$23,380	\$7,793
City of Abilene	10/17/2000	9:45 AM	0	0	\$2,871,886	\$0
Taylor County	7/6/2002	4:30 AM	0	0	\$20,809,614	\$0
City of Abilene	4/23/2004	7:10 PM	0	0	\$39,870	\$0
City of Abilene	10/25/2004	9:34 PM	0	0	\$19,632	\$0
City of Abilene	3/30/2007	2:00 PM	0	0	\$10,950	\$0
Town of Buffalo Gap	5/15/2007	1:59 PM	0	0	\$18,023	\$0
City of Abilene	6/27/2007	3:05 AM	0	0	\$8,394	\$0
City of Abilene	7/2/2007	1:42 PM	0	0	\$2,399	\$0
Taylor County	8/2/2007	12:30 PM	0	0	\$12,017,012	\$0
Taylor County	8/18/2007	3:46 AM	0	0	\$600,851	\$0
Taylor County	8/18/2007	5:30 AM	1	0	\$36,051	\$0
City of Abilene	8/18/2007	9:30 PM	0	0	\$6,008,506	\$0

⁴ Only recorded events with fatalities, injuries, and/or damages are listed, values are in 2018 dollars.

Table 12-5. Summary of Historical Flood Events, 1996-2017

JURISDICTION	NUMBER OF EVENTS	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
Taylor County	16	1	0	\$33,463,528	\$0
City of Abilene	40	0	0	\$11,242,563	\$350,700
Town of Buffalo Gap	4	0	0	\$41,403	\$7,793
Town of Lawn	0	0	0	\$0	\$0
Town of Merkel	1	0	0	\$158,839	\$0
Town of Trent	2	0	0	\$0	\$0
City of Tuscola	2	0	0	\$0	\$0
City of Tye	0	0	0	\$0	\$0
WCTCOG	0	0	0	\$0	\$0
Total Losses	65	1	0	\$45,264,826	

Based on the list of historical flood events for Planning Area 1 (listed above), including the WCTCOG and all participating jurisdictions, 29 events have occurred since the 2012 Plan.

SIGNIFICANT EVENTS

Flash Flood on July 7, 2002 – Taylor County

Thunderstorms moved into Taylor County in the early hours of July 6th. Rainfall rates of 2 to 3 inches per hour produced rainfall amounts of up to 12 inches in the southern portions of the county. A fire station on the south side of Abilene reported 5.2 inches of rain in less than 2 hours. The automated weather station at the Abilene airport reported 4 inches in 2 hours. This rainfall produced flooding of low water crossings and some creek flooding during the morning in Abilene. The heaviest rains occurred to the south of Abilene, in the Buffalo Gap, Tuscola, Ovalo and Lake Abilene areas. Water from these areas flowed in the Elm Creek, Cat Claw Creek, and Cedar Creek, then into the City of Abilene. Cat Claw Creek, and Elm Creek crested at record levels on the evening of the 6th. The flood waters did not recede significantly until the evening of the 7th. Around 1,000 residents had to evacuate to higher ground. The flooding throughout the county resulted in significant property damage with 31 homes destroyed, 339 receiving major damage, and 322 received minor damage.

Flash Flood on August 2, 2007 – Taylor County

Heavy rainfall from a weak surface front and an upper level disturbance, combined with already saturated soil from an unusually wet summer led to flash flooding across portions of the Texas Big Country. Flooding was reported along Cedar Creek. Water entered homes along FM1750. The flash flooding washed out several roads and entered approximately 10 homes near Potosi.

Flash Flood on August 18, 2007 – Taylor County

Heavy rain from the remnants of Tropical Depression Erin closed many roads across the region. High waters washed away two homes near Elm Creek south of Abilene. Abilene rescue crews carried out about 50 high water rescues due to the rapidly rising waters. Approximately 215 homes in the town of Hamlin were flooded, with several roads, culverts, and bridge approaches washed out in Jones County. Flash flooding caused one fatality as a woman was swept away by raging waters near the intersection of U.S. Highway 277 and Farm Road 89 as she attempted to escape her vehicle which had become stranded in flood waters.

PROBABILITY OF FUTURE EVENTS

Based on recorded historical occurrences and extent within Planning Area 1, including the WCTCOG and all participating jurisdictions, flooding is highly likely and an event will likely occur within the next year.

VULNERABILITY AND IMPACT

A property's vulnerability to a flood depends on its location and proximity to the floodplain. Structures that lie along banks of a waterway are the most vulnerable and are often repetitive loss structures. The County and all participating jurisdictions encourage development outside of the floodplain. While the property damage impact for flood for the entire planning area is limited as facilities and services would be shut down for 24 hours or less, and less than 10 percent of property would be destroyed or suffer major damage. However, the past fatality indicates a substantial impact with multiple deaths possible for some participating jurisdictions, depending on the scale of the storm.

Table 12-6 includes the critical facilities identified in Appendix C that were determined to be located within the SFHA by jurisdiction.

Table 12-6. Critical Facilities in the Floodplain by Jurisdiction

JURISDICTION	CRITICAL FACILITIES
Taylor County	2 Dams (Greenlee and Shotwell Dams)
City of Abilene	Airport, 1 Water Treatment Plant, BNSF Railroad
Town of Buffalo Gap	1 Fire Station, 1 City Hall
Town of Lawn	None
Town of Merkel	None
Town of Trent	None
City of Tuscola	None
City of Tye	None
WCTCOG	None

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Historic loss estimates due to flood are presented in Table 12-7 below. Considering 65 flood events over a 22-year period, frequency is approximately two to three events every year.

Table 12-7. Potential Annualized Losses by Jurisdiction, 1996-2017

JURISDICTION	NUMBER OF EVENTS	DEATHS	INJURIES	PROPERTY & CROP LOSS	ANNUAL LOSS ESTIMATES
Taylor County	16	1	0	\$33,463,528	\$1,521,069
City of Abilene	40	0	0	\$11,593,263	\$526,967
Town of Buffalo Gap	4	0	0	\$49,196	\$2,236
Town of Lawn	0	0	0	\$0	\$0
Town of Merkel	1	0	0	\$158,839	\$7,220
Town of Trent	2	0	0	\$0	\$0
City of Tuscola	2	0	0	\$0	\$0
City of Tye	0	0	0	\$0	\$0
WCTCOG	0	0	0	\$0	\$0
Total	65	1	0	\$45,264,826	\$2,057,492

The severity of a flooding event varies depending on the relative risk to citizens and structures located within each jurisdiction. Table 12-8 depicts the level of impact for Planning Area 1 and each participating jurisdiction.

Table 12-8. Impact by Jurisdiction

JURISDICTION	IMPACT	DESCRIPTION
Taylor County	Substantial	Taylor County could have injuries that would be treatable with first aid. Critical facilities would typically shut down for 24 hours or less, and less than 10 percent of property would be destroyed or damaged. However, the historical death resulting from flood indicates a substantial impact with multiple fatalities possible depending on the scale of the storm.
City of Abilene	Limited	The City of Abilene, including the WCTCOG, could have limited property damage with critical facilities typically shut down for 24 hours or less, and less than 10 percent of property would be destroyed or damaged.
Town of Buffalo Gap	Limited	The Town of Buffalo Gap could have injuries that would be treatable with first aid. Critical facilities would be shut down for 24 hours or less, and less than 10 percent of property would be destroyed or damaged.

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JURISDICTION	IMPACT	DESCRIPTION
Town of Lawn	Limited	The Town of Lawn could have injuries that would be treatable with first aid. Critical facilities would be shut down for 24 hours or less, and less than 10 percent of property would be destroyed or damaged.
Town of Merkel	Limited	The Town of Merkel could have injuries that would be treatable with first aid. Critical facilities would be shut down for 24 hours or less, and less than 10 percent of property would be destroyed or damaged.
Town of Trent	Limited	The Town of Trent could have injuries that would be treatable with first aid. Critical facilities would be shut down for 24 hours or less, and less than 10 percent of property would be destroyed or damaged.
City of Tuscola	Limited	The City of Tuscola could have limited property damage with critical facilities typically shut down for 24 hours or less, and less than 10 percent of property would be destroyed or damaged.
City of Tye	Limited	The City of Tye could have limited property damage with critical facilities typically shut down for 24 hours or less, and less than 10 percent of property would be destroyed or damaged.

ASSESSMENT OF IMPACTS

Flooding is the deadliest natural disaster that occurs in the U.S. each year, and it poses a constant and significant threat to the health and safety of the people in the entire Planning Area 1. Impacts to the planning area can include:

- Recreation activities at places such as the Lake Abilene or Lake Kirby may be unavailable and tourism can be unappealing for years following a large flood event, devastating directly related local businesses and negatively impacting economic recovery.
- Flood-related rescues may be necessary at swift and low water crossings or in flooded neighborhoods where roads have become impassable, placing first responders in harm's way.
- Evacuations may be required for entire neighborhoods because of rising floodwaters, further taxing limited response capabilities and increasing sheltering needs for displaced residents.
- Health risks and threats to residents are elevated after the flood waters have receded due to contaminated flood waters (untreated sewage and hazardous chemicals) and mold growth typical in flooded buildings and homes.
- Significant flood events often result in widespread power outages increasing the risk to more vulnerable portions of the population who rely on power for health and/or life safety.
- Extended power outage can result in an increase in structure fires and/or carbon monoxide poisoning as individuals attempt to cook or heat their home with alternate, unsafe cooking or heating devices, such as grills.
- Floods can destroy or make residential structures uninhabitable, requiring shelter or relocation of residents in the aftermath of the event.

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- First responders are exposed to downed power lines, contaminated and potentially unstable debris, hazardous materials, and generally unsafe conditions, elevating the risk of injury to first responders and potentially diminishing emergency response capabilities.
- Emergency operations and services may be significantly impacted due to damaged facilities.
- Significant flooding can result in the inability of emergency response vehicles to access areas of the community.
- Critical staff may suffer personal losses or otherwise impacted by a flood event and unable to report for duty, limiting response capabilities.
- City or county departments may be flooded, delaying response and recovery efforts for the entire community.
- Private sector entities that the jurisdiction and its residents rely on, such as utility providers, financial institutions, and medical care providers may not be fully operational and may require assistance from neighboring communities until full services can be restored.
- Damage to infrastructure may slow economic recovery since repairs may be extensive and lengthy.
- Some businesses not directly damaged by the flood may be negatively impacted while utilities are being restored or water recedes, further slowing economic recovery.
- When the community is affected by significant property damage it is anticipated that funding would be required for infrastructure repair and restoration, temporary services and facilities, overtime pay for responders, and normal day-to-day operating expenses.
- Displaced residents may not be able to immediately return to work, further slowing economic recovery.
- Residential structures substantially damaged by a flood may not be rebuilt for years and uninsured or underinsured residential structures may never be rebuilt, reducing the tax base for the community.
- Large floods may result in a dramatic population fluctuation, as people are unable to return to their homes or jobs and must seek shelter and/or work outside of the affected area.
- Businesses that are uninsured or underinsured may have difficulty reopening, which results in a net loss of jobs for the community and a potential increase in the unemployment rate.
- Flooding may cause significant disruptions of clean water and sewer services, elevating health risks and delaying recovery efforts.
- The psycho-social effects on flood victims and their families can traumatize them for long periods of time, creating long term increases in medical treatment and services.
- Extensive or repetitive flooding can lead to decreases in property value for the affected community.
- Flood poses a potential catastrophic risk to annual and perennial crop production and overall crop quality leading to higher food costs.
- Flood related declines in production may lead to an increase in unemployment.
- Large floods may result in loss of livestock, potential increased livestock mortality due to stress and water borne disease, and increased cost for feed.
- COG Resources allocated for day-to-day activities may be taxed during response and recovery.

The overall extent of damages caused by floods is dependent on the extent, depth and duration of flooding, and the velocities of flows in the flooded areas. The level of preparedness and pre-event planning done by government, businesses, and citizens will contribute to the overall economic and financial conditions in the aftermath of a flood event.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP) PARTICIPATION

Flood insurance offered through the National Flood Insurance Program (NFIP) is the best way for home and business owners to protect themselves financially against the flood hazard. Planning Area 1, including all participating jurisdictions except the Town of Lawn, participate in the NFIP and are in good standing. The Town of Lawn is not currently participating in the NFIP and is not currently mapped.

The City of Abilene currently has in place a flood damage prevention ordinance that includes standards above the minimum FEMA requirement such as 18" of freeboard. It is important to note that WCTCOG is not an active participant in NFIP however, they reside in Abilene which is an active participant in NFIP. All other participating jurisdictions currently have in place minimum NFIP standards for new construction and substantial improvements of structures. All NFIP participants regulate development in the Special Flood Hazard Areas (SFHAs). These jurisdictions are considering adopting additional higher regulatory NFIP standards to limit floodplain development. The Town of Lawn is considering joining the NFIP.

The flood hazard areas throughout Planning Area 1 are subject to periodic inundation, which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, of which adversely affect public safety.

These flood losses are created by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, flood-proofed or otherwise protected from flood damage. Mitigation actions are included to address flood maintenance issues as well, including routinely clearing debris from drainage systems and bridges and expanding drainage culverts and storm water structures to more adequately convey flood waters.

It is the purpose of Planning Area 1, including all participating jurisdictions to continue to promote the public health, safety and general welfare by minimizing public and private losses due to flood conditions in specific areas. All of the NFIP participating jurisdictions in the Plan are guided by their local Flood Damage Prevention Ordinance. These communities will continue to comply with NFIP requirements through their local permitting, inspection, and record-keeping requirements for new and substantially developed construction. Further, the NFIP program for both of the participating jurisdictions promotes sound development in floodplain areas and includes provisions designed to:

- Protect human life and health;
- Minimize expenditure of public money for costly flood control projects;
- Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- Minimize prolonged business interruptions;
- Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in floodplains;
- Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas; and
- Ensure that potential buyers are notified that property is in a flood area.

SECTION 12: FLOOD

In order to accomplish these tasks, Planning Area 1, including all participating jurisdictions, seek to follow these guidelines to achieve flood mitigation by:

- Restrict or prohibit uses that are dangerous to health, safety, or property in times of flood, such as filling or dumping, that may cause excessive increases in flood heights and/or velocities;
- Require that uses vulnerable to floods, including facilities, which serve such uses, be protected against flood damage at the time of initial construction as a method of reducing flood losses;
- Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters;
- Control filling, grading, dredging, and other development, which may increase flood damage; and
- Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

NFIP COMPLIANCE AND MAINTENANCE

As mentioned, Planning Area 1, including all participating jurisdictions, have developed mitigation actions that relate to either NFIP participation, maintenance or compliance. Compliance and maintenance actions can be found in Section 19.

Flooding was identified by the majority of the participating jurisdictions as a moderate risk hazard during hazard ranking activities at the Risk Assessment Workshop. As such, many of the mitigation actions were developed with flood mitigation in mind. A majority of these flood actions address compliance with the NFIP and implementing flood awareness programs. All jurisdictions recognize the need and are working towards adopting higher NFIP regulatory standards to further minimize flood risk in their community. In addition, all jurisdictions are focusing on NFIP public awareness activities. This includes promoting the availability of flood insurance by placing NFIP brochures and flyers in public libraries or public meeting places.

All participating jurisdictions in the NFIP have a designated floodplain administrator. The floodplain administrators in the planning area will continue to maintain compliance with the NFIP including continued floodplain administration, zoning ordinances, and development regulation. The floodplain ordinance adopted by each participating jurisdiction outlines the minimum requirements for development in special flood hazard areas.

REPETITIVE LOSS

The Severe Repetitive Loss (SRL) Grant Program under FEMA provides federal funding to assist states and communities in implementing mitigation measures to reduce or eliminate the long-term risk of flood damage to severe repetitive loss residential structures insured under the NFIP. The Texas Water Development Board (TWDB) administers the SRL grant program for the State of Texas. One of the goals of the FMA program is to reduce the burden of repetitive loss and severe repetitive loss properties on the NFIP through mitigation activities that significantly reduce or eliminate the threat of future flood damages.

Repetitive Loss properties are defined as structures that are:

- Any insurable building for which 2 or more claims of more than \$1,000 each, paid by the National Flood Insurance Program (NFIP) within any 10-year period, since 1978;

SECTION 12: FLOOD

- May or may not be currently insured under the NFIP.

Severe Repetitive Loss properties are defined as residential properties that are:

- Covered under the NFIP and have at least four flood related damage claim payments (building and contents) over \$5,000.00 each, and the cumulative amount of such claims payments exceed \$20,000; or
- At least two separate claim payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.

In either scenario, at least two of the referenced claims must have occurred within any ten-year period, and must be greater than 10 days apart.⁵ Table 12-9 shows repetitive loss and severe repetitive loss properties for Planning Area 1, including all participating jurisdictions. There are no repetitive loss properties reported for the following jurisdictions: Town of Lawn⁶, Town of Merkel, Town of Trent, City of Tuscola, City of Tye, and the WCTCOG.

Table 12-9. Repetitive Loss and Severe Repetitive Loss Properties

JURISDICTION	BUILDING TYPE	NUMBER OF STRUCTURES	NUMBER OF LOSSES
Taylor County	Single Family	1	2
Abilene ⁷	Single Family	59	165
	Non-Residential	1	3
	Other-Residential	1	2
Buffalo Gap	Single Family	4	9

⁵ Source: Texas Water Development Board

⁶ The Town of Lawn is not currently participating in the NFIP and is not currently mapped.

⁷ Some repetitive loss properties in the City of Abilene are located in Jones County.

SECTION 13: WINTER STORM

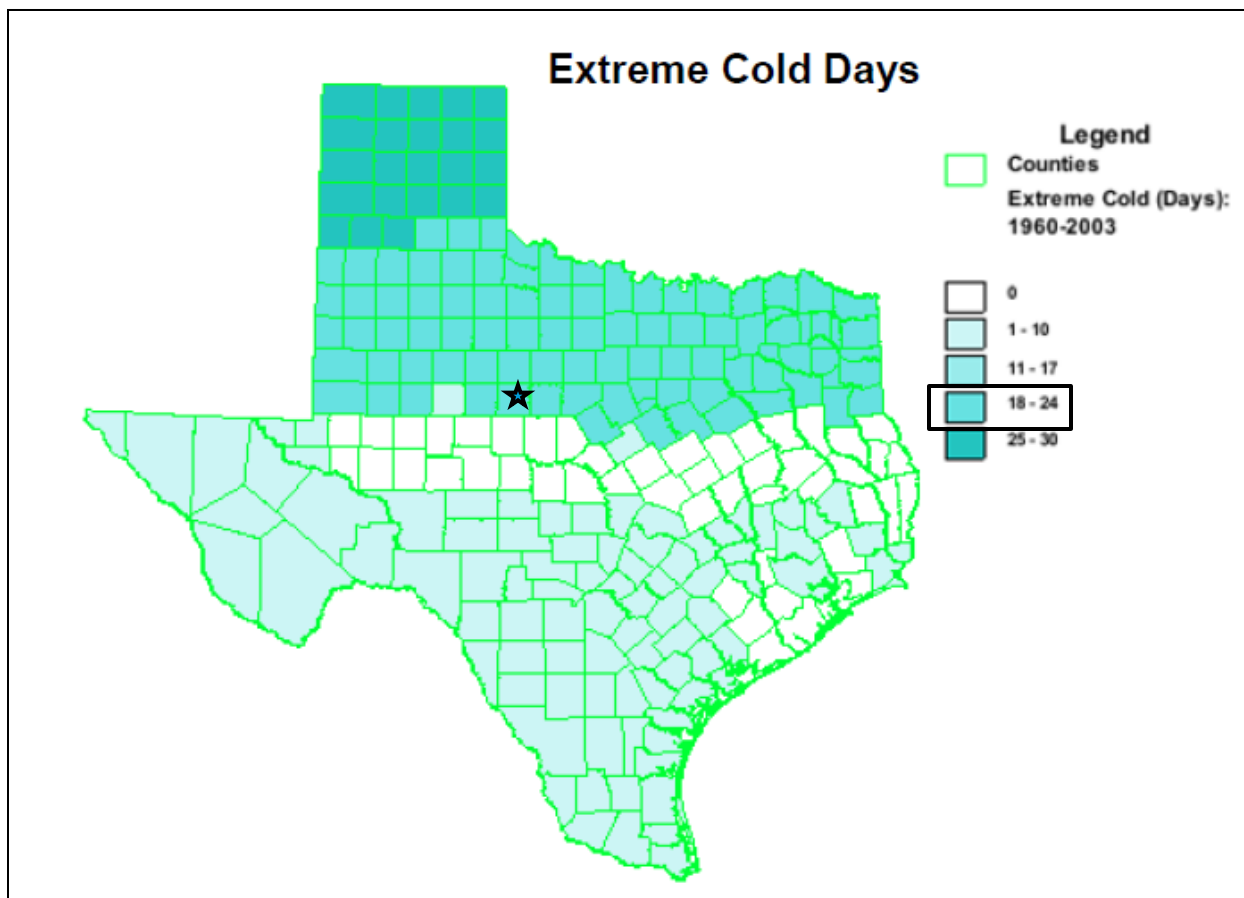
Hazard Description.....	1
Location	3
Extent.....	3
Historical Occurrences	4
Significant Events	5
Probability of Future Events	5
Vulnerability and Impact.....	6
Assessment of Impacts	8

HAZARD DESCRIPTION



A severe winter storm event is identified as a storm with snow, ice, or freezing rain. This type of storm can cause significant problems for area residents. Winter storms are associated with freezing or frozen precipitation such as freezing rain, sleet, snow, and the combined effects of winter precipitation and strong winds. Wind chill is a function of temperature and wind. Low wind chill is a product of high winds and freezing temperatures.

Winter storms that threaten Planning Area 1 usually begin as powerful cold fronts that push south from central Canada. Although the county is at risk to ice hazards, extremely cold temperatures, and snow, the effects and frequencies of winter storm events are generally mild and short-lived. As indicated in Figure 13-1, on average, Planning Area 1, including the WCTCOG and all participating jurisdictions, typically experiences 18-24 extreme cold days every year. During times of ice and snow accumulation, response times will increase until public works road crews are able to make major roads passable. Table 13-1 describes the types of winter storms possible to occur in Planning Area 1, including the WCTCOG and all participating jurisdictions.

Figure 13-1. Extreme Cold Days, 1960-2003¹**Table 13-1. Types of Winter Storms**

TYPE OF WINTER STORM	DESCRIPTION
Winter Weather Advisory	This alert may be issued for a variety of severe conditions. Weather advisories may be announced for snow, blowing or drifting snow, freezing drizzle, freezing rain, or a combination of weather events.
Winter Storm Watch	Severe winter weather conditions may affect your area (freezing rain, sleet, or heavy snow may occur separately or in combination).
Winter Storm Warning	Severe winter weather conditions are imminent.
Freezing Rain or Freezing Drizzle	Rain or drizzle is likely to freeze upon impact, resulting in a coating of ice glaze on roads and all other exposed objects.

¹ Source: National Weather Service. Planning Area 1 indicated by star.

SECTION 13: WINTER STORM

TYPE OF WINTER STORM	DESCRIPTION
Sleet	Small particles of ice usually mixed with rain. If enough sleet accumulates on the ground, it makes travel hazardous.
Blizzard Warning	Sustained wind speeds of at least 35 mph are accompanied by considerable falling or blowing snow. This alert is the most perilous winter storm with visibility dangerously restricted.
Frost/Freeze Warning	Below freezing temperatures are expected and may cause significant damage to plants, crops, and fruit trees.
Wind Chill	A strong wind combined with a temperature slightly below freezing can have the same chilling effect as a temperature nearly 50 degrees lower in a calm atmosphere. The combined cooling power of the wind and temperature on exposed flesh is called the wind-chill factor.

LOCATION

Winter storm events are not confined to specific geographic boundaries. Therefore, all existing and future buildings, facilities, and populations in Planning Area 1, including the WCTCOG and all participating jurisdictions, are considered to be exposed to a winter storm hazard and could potentially be impacted.

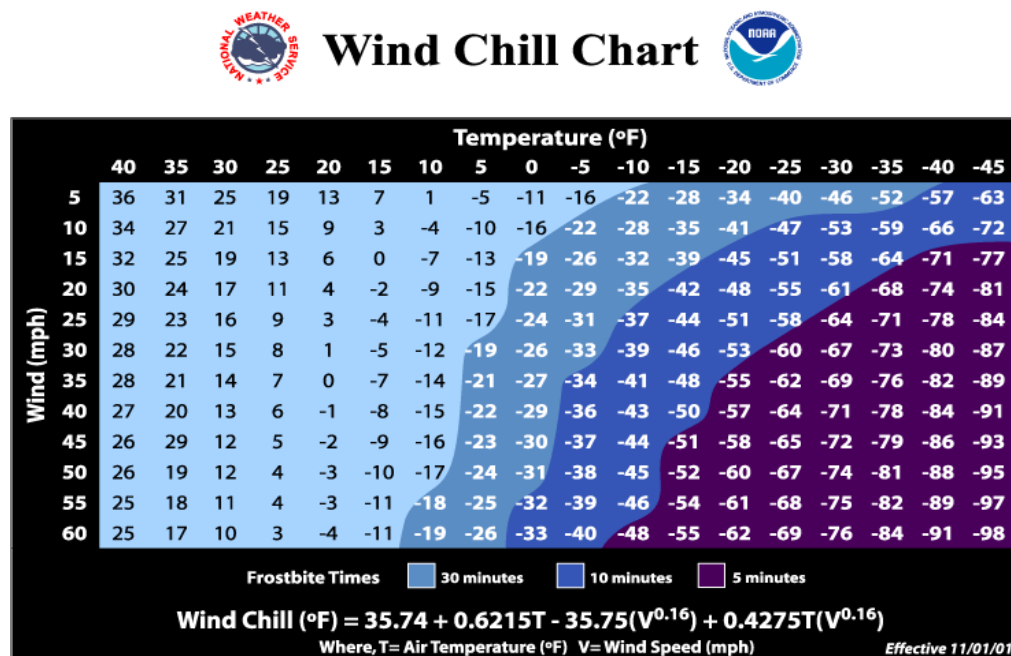
EXTENT

The extent or magnitude of a severe winter storm is measured in intensity based on the temperature and level of accumulations as shown in Table 13-2. Table 13-2 should be read in conjunction with the wind-chill factor described in Figure 13-2 to determine the intensity of a winter storm. The chart is not applicable when temperatures are over 50°F or winds are calm. This is an index developed by the National Weather Service.

Table 13-2. Magnitude of Severe Winter Storms

INTENSITY	TEMPERATURE RANGE (Fahrenheit)	EXTENT DESCRIPTION
Mild	40° – 50°	Winds less than 10 mph and freezing rain or light snow falling for short durations with little or no accumulations
Moderate	30° – 40°	Winds 10 – 15 mph and sleet and/or snow up to 4 inches
Significant	25° – 30°	Intense snow showers accompanied with strong gusty winds between 15 and 20 mph with significant accumulation
Extreme	20° – 25°	Wind driven snow that reduces visibility, heavy winds (between 20 to 30 mph), and sleet or ice up to 5 millimeters in diameter
Severe	Below 20°	Winds of 35 mph or more and snow and sleet greater than 4 inches

Figure 13-2. Wind Chill Chart



Wind chill temperature is a measure of how cold the wind makes real air temperature feel to the human body. Since wind can dramatically accelerate heat loss from the body, a blustery 30°F day would feel just as cold as a calm day with 0°F temperatures. Planning Area 1, including the WCTCOG and all participating jurisdictions, has never experienced a blizzard, but based on 49 previous occurrences recorded from 1996 through 2017, it has been subject to winter storm watches, warnings, freezing rain, sleet, snow, and wind chill.

The average number of cold days is similar for the entire planning area, including the county, cities, towns, and the WCTCOG. Therefore, the intensity or extent of a winter storm event to be mitigated for the area ranges from mild to significant according to the definitions at Table 13-2. Planning Area 1, including the WCTCOG and all participating jurisdiction, can expect anywhere between 0.1 to 4.0 inches of ice and snow during a winter storm event and temperatures between 25 and 50 degrees with winds ranging from 0 to 20 mph.

HISTORICAL OCCURRENCES

Table 13-3 shows historical occurrences for Planning Area 1 from 1996 through 2017 provided by the NCEI database. There have been 49 recorded winter storm events in the planning area. Historical winter storm information, as provided by the NCEI, identifies winter storm activity across a multi-county forecast area for each event. The appropriate percentage of the total property and crop damage reported for the entire forecast area has been allocated to each county impacted by the event. Historical winter storm data for the county, all participating jurisdictions and the WCTCOG are provided on a County-wide basis per the NCEI database. Table 13-3 shows historical incident information for the planning area. Only those events that have reported death, injuries or property/crop damage are reported below.

Table 13-3. Historical Winter Storm Events, 1996-2017²

JURISDICTION	DATE	DEATHS	INJURIES	PROPERTY DAMAGE	CROP DAMAGE
Taylor County	11/7/2000	0	0	\$7,176	\$0
Taylor County	2/24/2003	0	5	\$272,915	\$0
Taylor County	12/22/2004	0	0	\$39,388	\$0
Taylor County	1/12/2007	0	0	\$370,308	\$0
Taylor County	12/26/2017	1	0	\$0	\$0
TOTALS		1	5	\$689,787	

Based on the list of historical winter storm events for Planning Area 1 (listed above), including the WCTCOG and all participating jurisdictions, 18 events have occurred since the 2012 Plan.

SIGNIFICANT EVENTS

February 24, 2003 – Taylor County

An arctic cold front moved through West Central Texas on the 23rd, dropping temperatures into the teens and 20s across all of the area. Thunderstorms dropped large amounts of sleet and some hail to one half inch in diameter during the morning of the 24th. The Big Country saw 1 to 3 inches of sleet during the afternoon and early evening of the 24th, with the activity slipping to the southeast into the Heartland during the evening of the 24th. One-half to 1 inch of sleet was reported across the Heartland. With temperatures remaining below freezing until the morning of the 26th, the accumulated ice remained on area roadways, with numerous accidents reported. There were also some minor injuries reported in the Abilene area, due to people slipping and falling down on the ice.

December 26, 2017 – Taylor County

Light freezing rain, sleet and freezing drizzle resulted in a few fatalities across West Central Texas on the morning of December 27. According to the Texas Department of Transportation, roadways became icy across the western half of the region mainly along and west of U.S. Highway 83. Widespread freezing fog and drizzle fell, resulting in areas of ice on Interstate 20 and secondary roadways and bridges. A motorist was killed on the morning of December 27, 12 miles south of Buffalo Gap, according to the Texas Department of Public Safety. The vehicle he was driving collided with a box truck after sliding out of control on ice.

PROBABILITY OF FUTURE EVENTS

According to historical records, the planning area experiences approximately two to three winter storm events per year. Hence, the probability of a future winter storm event affecting Planning Area 1, including the

² Values are in 2018 dollars.

SECTION 13: WINTER STORM

WCTCOG and all participating jurisdictions, is highly likely, with a winter storm likely to occur within the next year.

VULNERABILITY AND IMPACT

During periods of extreme cold and freezing temperatures, water pipes can freeze and crack, and ice can build up on power lines, causing them to break under the weight or causing tree limbs to fall on the lines. These events can disrupt electric service for long periods.

An economic impact may occur due to increased consumption of heating fuel, which can lead to energy shortages and higher prices. House fires and resulting deaths tend to occur more frequently from increased and improper use of alternate heating sources. Fires during winter storms also present a greater danger because water supplies may freeze and impede firefighting efforts.

All populations, buildings, critical facilities, and infrastructure in the entire Planning Area 1 are vulnerable to severe winter events.

The following critical facilities would be vulnerable to Winter Storm events in each participating jurisdiction:

Table 13-4. Critical Facilities at Risk by Jurisdiction

JURISDICTION	CRITICAL FACILITIES
Taylor County	1 Fire Station, 2 Police Stations, 3 Dams (Greenlee, Atkins, and Shotwell Dams), 2 JP8 Fuel Facilities, BNSF Railroad
City of Abilene	4 Government/Municipal Facilities, 11 Fire Stations, 1 Police Station, 2 Hospitals, 1 Ambulance Service, AISD Facilities, WISD Facilities, Mobile Communications Center, Telephone Company, Airport, Gas Utility Facilities, Electric Utility Facilities, 3 Water Treatment Plants, 3 Water Supply Facilities, 3 TV Stations, BNSF Railroad
Town of Buffalo Gap	1 Fire Station, 1 City Hall, 1 County Utility Yard (County Crew), JNBG-ISD
Town of Lawn	2 Fire Stations, 1 City Hall
Town of Merkel	2 Municipal Facilities, 1 Police Station, 2 Fire Stations, 1 City Yard (Public Works Vehicles and Equipment), 1 County Utility Yard (County Crew), 1 Urgent Care Facility, 1 Safe Room/Shelter, 1 Pump Station, 2 Water Towers, 1 Waste Water Treatment Facility, State Fire Response Facility. MISD Facilities, 1 Electrical Services Facility, 1 Water Supply Facility
Town of Trent	1 Municipal Facility, Fire Station, Trent ISD Facilities, Burlington North Railroad
City of Tuscola	2 Municipal Facilities, 2 Fire Stations, 2 Water Utility Facilities, JNISD Facilities, 1 Water Treatment Facility
City of Tye	1 Fire Department, 1 Police Department, 2 Government Facilities, 1 Water Tower, 3 Pump Stations, 2 Lift Stations, Public Works Facilities, 1 Energy Plant

SECTION 13: WINTER STORM

JURISDICTION	CRITICAL FACILITIES
WCTCOG	WCTCOG Regional Facility, Law Enforcement Training Facility

People and animals are subject to health risks from extended exposure to cold air. Elderly people are at greater risk of death from hypothermia during these events, especially in the rural areas of the county where populations are sparse, icy roads may impede travel, and there are fewer neighbors to check in on the elderly. According to the U.S. Center for Disease Control, every year hypothermia kills about 600 Americans, half of whom are 65 years of age or older.

The WCTCOG employees may be at risk during winter storm events, particularly those whose jobs consist of outdoor activities such as maintenance. The WCTCOG employs 37 people.

Population over 65 in Planning Area 1 is estimated at 13.9% of the total population or an estimated total of 18,762³ potentially vulnerable residents in the planning area based on age (Table 13-5).

Table 13-5. Population at Greater Risk by Jurisdiction

JURISDICTION	POPULATION 65 AND OLDER
Taylor County ⁴	18,762
City of Abilene	15,476
Town of Buffalo Gap	88
Town of Lawn	56
Town of Merkel	434
Town of Trent	68
City of Tuscola	111
City of Tye	123

Historic loss, in 2018 dollars, is estimated at \$689,787 in damages over the 22-year recording period giving an approximate loss of \$31,354 in damages annually (Table 13-6). The potential severity of impact Planning Area 1, including the WCTCOG and all participating jurisdictions, are limited meaning injuries are treatable with first aid, shutdown of facilities and services for 24 hours or less, and less than 10% of property destroyed or with major damage.

³ US Census Bureau 2016 data for Planning Area 1.

⁴ County totals includes all incorporated jurisdictions and unincorporated areas.

Table 13-6. Winter Storm Event Damage Totals, 1996-2017

JURISDICTION	PROPERTY & CROP LOSS	ANNUALIZED LOSS ESTIMATES
Taylor County	\$689,787	\$31,354

ASSESSMENT OF IMPACTS

The greatest risk from a winter storm hazard is to public health and safety. Potential impacts for the planning area may include:

- Vulnerable populations, particularly the elderly and infants, can face serious or life-threatening health problems from exposure to extreme cold including hypothermia and frostbite.
- Loss of electric power or other heat source can result in increased potential for fire injuries or hazardous gas inhalation because residents burn candles for light or use fires or generators to stay warm.
- Response personnel, including utility workers, public works personnel, debris removal staff, tow truck operators, and other first responders, are subject to injury or illness resulting from exposure to extreme cold temperatures.
- Response personnel would be required to travel in potentially hazardous conditions, elevating the life safety risk due to accidents and potential contact with downed power lines.
- Operations or service delivery may experience impacts from electricity blackouts due to winter storms.
- Power outages are possible throughout the planning area due to downed trees and power lines and/or rolling blackouts.
- Critical facilities without emergency backup power may not be operational during power outages.
- Emergency response and service operations may be impacted by limitations on access and mobility if roadways are closed, unsafe, or obstructed.
- Hazardous road conditions will likely lead to increases in automobile accidents, further straining emergency response capabilities.
- Depending on the severity and scale of damage caused by ice and snow events, damage to power transmission and distribution infrastructure can require days or weeks to repair.
- A winter storm event could lead to tree, shrub, and plant damage or death.
- Severe cold and ice could significantly damage agricultural crops.
- Schools may be forced to shut early due to treacherous driving conditions.
- Exposed water pipes may be damaged by severe or late season winter storms at both residential and commercial structures, causing significant damages.
- WCTCOG Resources can be taxed during response and recovery diverting necessary day-to-day resources.

The economic and financial impacts of winter weather on the community will depend on the scale of the event, what is damaged, and how quickly repairs to critical components of the economy can be implemented. The level of preparedness and pre-event planning done by businesses and citizens will also contribute to the overall economic and financial conditions in the aftermath of a winter storm event.

SECTION 14: EXPANSIVE SOILS

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Probability of Future Events	7
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HAZARD DESCRIPTION

Expansive soils are soils and soft rocks with a relatively high percentage of clay minerals that are subject to changes in volume as they swell and shrink with changing moisture conditions. Drought conditions can cause soils to contract in response to a loss of soil moisture.

Expansive soils contain minerals such as smectite clays that are capable of absorbing water. When these clays absorb water they increase in volume and expand. Expansions in soil of 10 percent or more are not uncommon in Planning Area 1. The change in soil volume and resulting expansion can exert enough force on a building or other structure to cause damage.

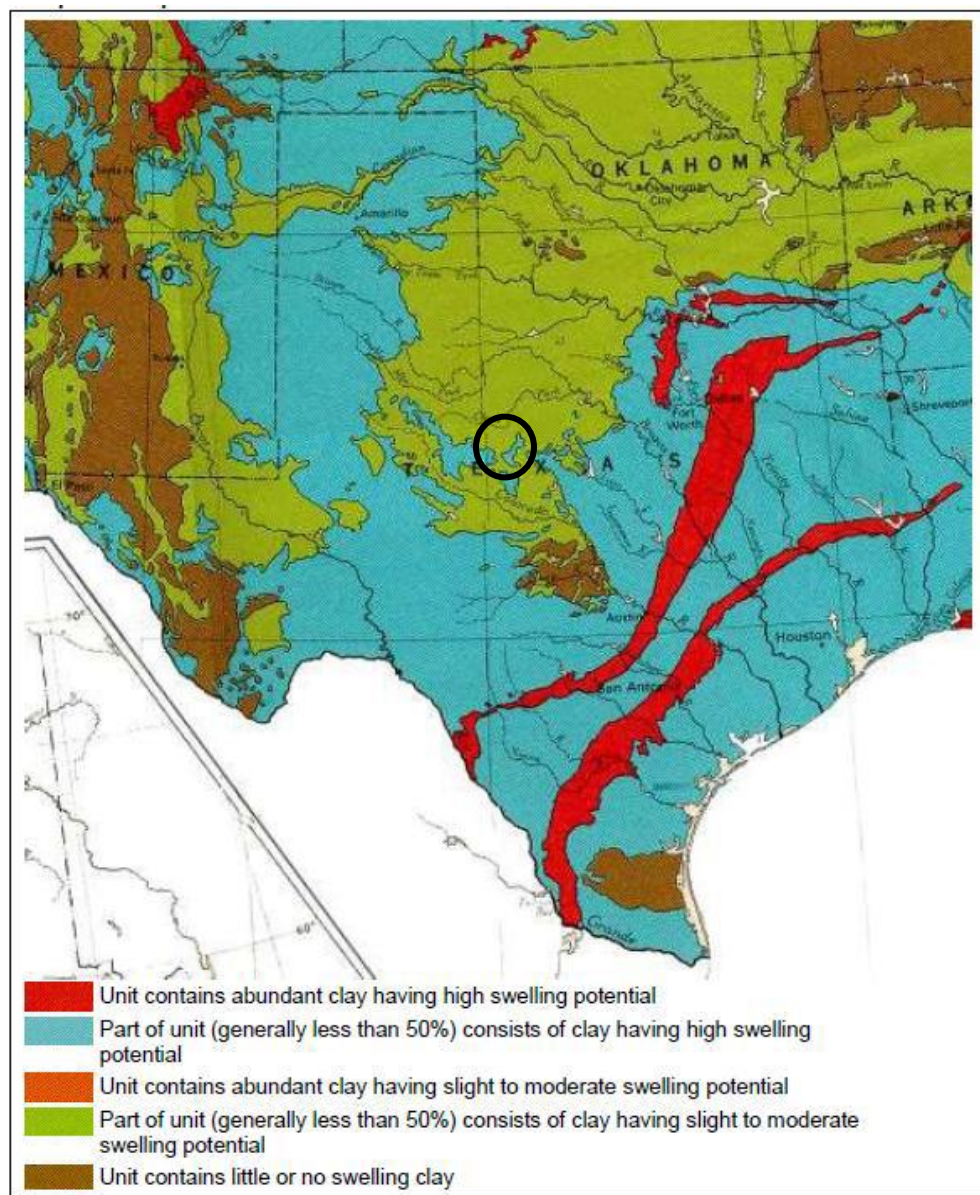


Expansive soils will also lose volume and shrink when they dry. A reduction in soil volume can affect the support to buildings or other structures and result in damage. Fissures in the soil can also develop and facilitate the deep penetration of water when moist conditions or runoff occurs. This produces a cycle of shrinkage and swelling that places repetitive stress on structures.

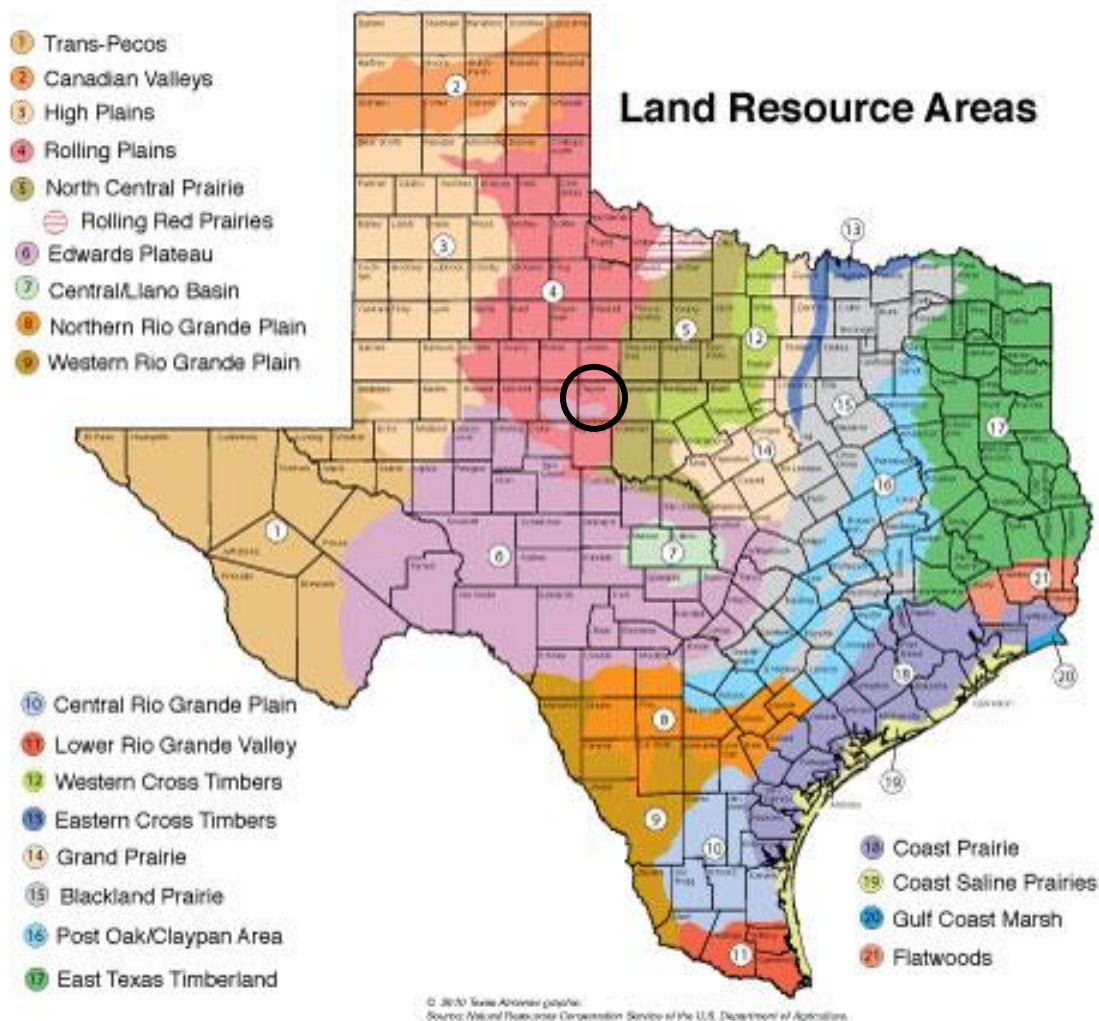
LOCATION

Planning Area 1, including the WCTCOG and all participating jurisdictions, may be affected by some degree of expansive soils. Figure 14-1 depicts expansive soils across the State of Texas and Planning Area 1 is identified within the black circle. These areas receive the most moisture and are also vulnerable to droughts, which can cause the soils to expand and contract. Figure 14-2 depicts the types of land resources in the State of Texas due to their soil types.

Figure 14-1. Texas Geological Survey¹



¹ Source: United States Geological Survey, <http://www.usgs.gov>

Figure 14-2. Texas Geological Survey²

Planning Area 1, including the WCTCOG and all participating jurisdictions, is located within the Rolling Plains and the Edwards Plateau, as identified within the black circle in Figure 14-2. The entire planning area is located in an area affected by slight to moderate expansive soils.

Rolling Plains: The Rolling Prairies consist of about 12.6 million acres of east-central Texas, extending southwesterly from the Red River to Bexar County. Several Texas rivers begin in the gently rolling hills and broad flats of the Rolling Plains. These rivers and their numerous tributaries are responsible for the rolling character of the land. The rivers have cut canyons that shelter some plants and animals typical of the Rocky Mountains. Average annual rainfall is 20 to 28 inches, with peaks in May and September.

² Source: USDA, <http://www.nrcs.usda.gov>

SECTION 14: EXPANSIVE SOILS

While the vast majority of Planning Area 1 is located in the Rolling Plain Plateau, a small portion of the county is located in the Edwards Plateau Prairie.

Edwards Plateau: The 22.7 million acres of the Edwards Plateau are in South Central Texas, east of the Trans-Pecos and west of the Blackland Prairie. Uplands are nearly level to undulating, except near large stream valleys, where the landscape is hilly with deep canyons and steep slopes. There are many cedar brakes in this area and surface drainage is rapid.

Upland soils are mostly shallow, stony, or gravelly, and consisting of dark alkaline clays and clay loams underlain by limestone. Lighter-colored soils are on steep sideslopes and deep, less-stony soils are in the valleys. Bottomland soils are mostly deep, dark-gray or brown, with alkaline loams and clays.

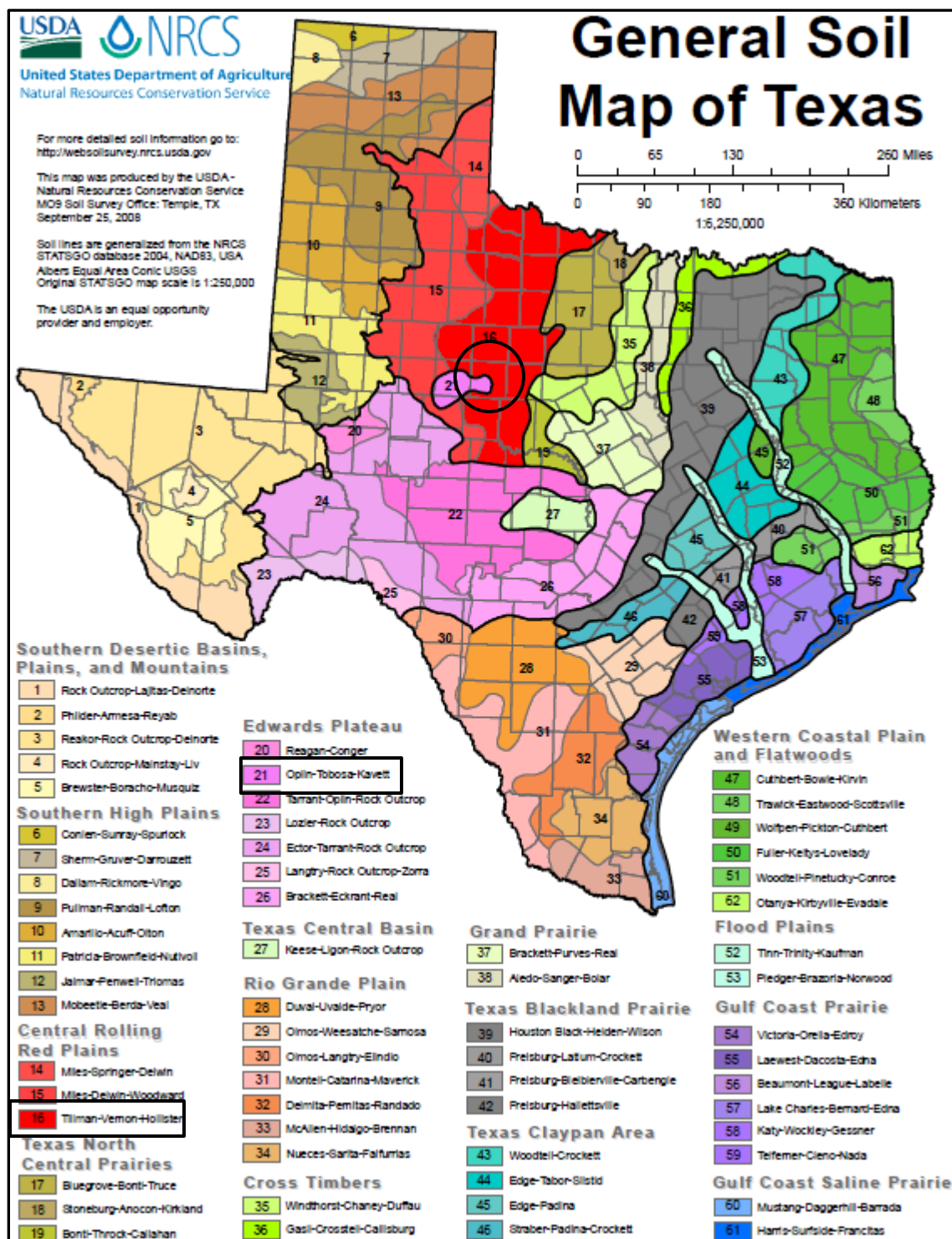
Raising beef cattle is the main enterprise in this region, but it is also the center of Texas' and the nation's mohair and wool production. The area provides a major deer habitat and hunting leases produce income. Cropland is mostly in the valleys on the deeper soils and is used mainly for growing forage crops and hay. The major soil-management concerns are brush control, large stones, low fertility, excess lime, and limited soil moisture.

EXTENT

The extent to which soil expansion is present in an area can be determined using the predominant soil composition and associated permeability. The soil survey was developed by the USDA Soils Conservation Service and contains information that can be applied in determining the suitability of soils in the planning area when selecting sites for roads, structures, and infrastructure.³ Figure 14-3 shows the predominant soil types throughout the state of Texas and the planning area.

³ Source: United States Department of Agriculture Soil Conservation Service

Figure 14-3. USDA General Soil Map of Texas



The red area marked as #16 indicates predominant soils including Tilman, Vernon, and Holister. The pink area marked as #21 indicates predominant soils including Oplin, Tobosa and Kavett. The Taylor County Soil Survey

SECTION 14: EXPANSIVE SOILS

provides a description of these predominant soils along with the plasticity index of each. Higher plasticity index soils exhibit greater sensitivity to drought conditions. The shrinking and swelling causes significant problems with foundations, roadways, sidewalks and other structures and infrastructure. Table 14-1 includes the plasticity index value ranges and soil properties while Table 14-2 includes additional descriptions of the soil types predominant throughout the planning area with the assigned plasticity index per soil type by area as identified in Figure 14-3. The predominant soil types for each area can vary greatly from one plat to the next.

The Plasticity Index is provided for each type of soil within the planning area. However, without a detailed soil survey map of the area, it is not possible to differentiate the plasticity index from one jurisdiction to the next. The plasticity index ranges are provided on a county-wide basis for each predominant soil type. This data deficiency is addressed in the mitigation actions in Section 19 of this plan. The plasticity index for each soil type as well as the descriptions provided in the tables below represent a summary of the data provided in the USDA Soil Survey of Taylor County.⁴

Table 14-1. Value and Plasticity Index of Soils

PLASTICITY INDEX	SWELLING POTENTIAL
0-18	Low
18-22	Medium
22-35	High
>35	Very High

Table 14-2. Planning Area 1 Soil Description by Area and Plasticity Index of Soils

AREA	SOILS	DESCRIPTION	PLASTICITY INDEX	POTENTIAL EXPANSION/EXTENT LEVEL
16	Tillman-Vernon-Holister	Tillman series soil consists of deep, nearly level to gently sloping, well drained, clayey soils on uplands. This predominant soil type is typically suitable for crops. Vernon series soil consists of moderately deep, gently sloping to strongly sloping, well drained, clayey soils on uplands. This predominant soil type is typically suitable for crops. Holister series soil consists of very deep, well drained, very slowly permeable soils. This predominant soil type is typically suitable for crops.	15-30; 30-50	Medium, High, Very High

⁴ USDA Soil Survey of Taylor County, 1976, website:

https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/texas/taylorTX1976/taylor.pdf

SECTION 14: EXPANSIVE SOILS

AREA	SOILS	DESCRIPTION	PLASTICITY INDEX	POTENTIAL EXPANSION/EXTENT LEVEL
21	Oplin-Tobosa-Kavett	Oplin series soil consists of very shallow and shallow, well drained, moderately permeable soils. . This predominant soil type is typically suitable for rangeland. Tobosa series soils consists of deep, nearly level to gently sloping, well drained, clayey soils on uplands. This predominant soil type is typically suitable for crops. Kavett series soil consists of shallow, nearly level to gently sloping, well drained, clayey soils on uplands. This predominant soil type is typically suitable for crops.	25-35; 30-45	High, Very High

High plasticity soils are prone to shrink and swell as soil moisture changes, which can degrade pavement, causing longitudinal cracking and edge drop-off. This effect can damage foundations of buildings and homes. Planning Area 1 is subject to a range of plasticity Index levels including medium, high, and very high, as indicated by the soils in Figure 14-3, and Tables 14-1 through 14-2 above. Plasticity of soils are highly subject to location and soil moisture content in any given time frame and location. Due to the broad plasticity index range throughout Planning Area 1, the worst the entire planning area may anticipate is very high swelling potential.

HISTORICAL OCCURRENCES

Expansive soils is a condition that is native to Texas soil characteristics, and cannot be documented as a time-specific event, except when it leads to structural and infrastructure damage. Extreme conditions can damage roads, structures, and infrastructure, including projects still under construction. Damages from expansive soils are typically associated with droughts, previous occurrences for expansive soils can be correlated with previous occurrences for drought.

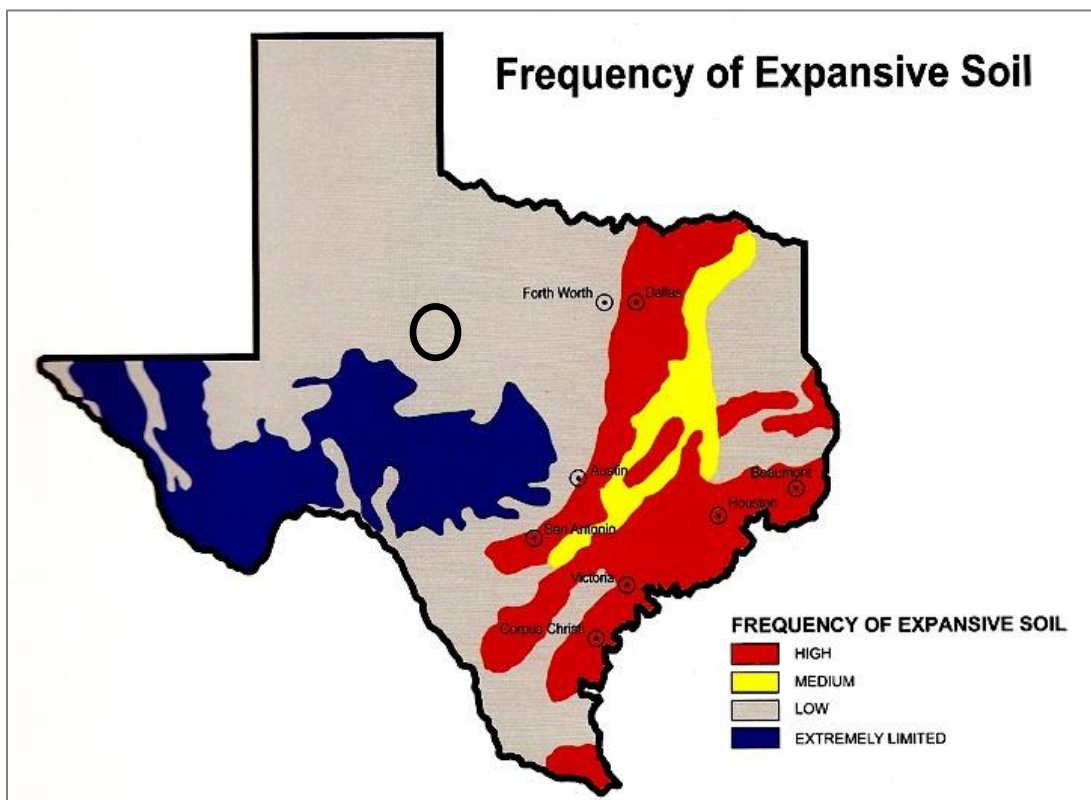
Expansive soils is a condition that is native to Texas soil characteristics, and cannot be documented as a time-specific event, except when it leads to structural and infrastructure damage. Extreme conditions can damage roads, structures, and infrastructure, including projects still under construction.

PROBABILITY OF FUTURE EVENTS

Since no records of specific incidences of loss associated with expansive soils were found, and no specific occurrences of expansive soils were identified within the planning area, the probability of future events cannot be determined at this time. However, according to public opinion and team input, the probability of future events of loss due to expansive soils within the planning area, is highly likely, especially when periods of drought increase throughout the planning area. Planning Area 1, including all participating jurisdictions, is shown in the black circle and is subject to a range of frequency of expansive soils, with a maximum “low” frequency. Though

the frequency is considered low expansive soils in Figure 14-5; highly likely is defined as one episode per year; therefore for the sake of mitigation planning in this plan highly likely is the probability of expansive soils in the planning area.

Figure 14-5. Frequency of Expansive Soils



VULNERABILITY AND IMPACT

The effects of expansive soils are most prevalent when periods of moderate to high precipitation are followed by drought and then again by periods of rainfall. Other cases of damage result from increases in moisture volume from such sources as broken or leaking water and sewer lines. Dry clays are capable of absorbing water and will increase in volume in an amount proportional to the amount of water absorbed. Soils capable of changes in volume present a hazard to structures built over them and to the pipelines buried in them. Houses and one-story commercial buildings are more apt to be damaged by the expansion of swelling clays than are multi-story buildings, which are usually heavy enough to counter swelling pressures. However, if constructed on wet clay, multi-story buildings may also be damaged by clay shrinkage when moisture levels are substantially reduced.



SECTION 14: EXPANSIVE SOILS

Cracked foundations and floors, jammed windows and doors, and ruptured pipelines are typical types of damage resulting from swelling soils. Damage to the upper floors of larger buildings can occur when motion in the structure is significant. While all infrastructure within Planning Area 1, including all participating jurisdictions, is vulnerable, slab on grade structures are more likely to suffer damages from expansive soils. In addition, older structures built to less stringent building codes may also be more susceptible to damages than new construction.

While the number of slab on grade structures is not available, the U.S. Census data indicates approximately 34,141 of the residential structures in the planning area were built before 1980 (Table 14-4) and may be more susceptible to damages. It should be noted that the WCTCOG facility, located in the City of Abilene, was built in 2007 and is not considered to be at greater risk.

Table 14-4. Structures at Greater Risk by Jurisdiction

JURISDICTION	SFR STRUCTURES BUILT BEFORE 1980
Taylor County	34,141
City of Abilene	30,573
Town of Buffalo Gap	141
Town of Lawn	108
Town of Merkel	963
Town of Trent	137
City of Tuscola	229
City of Tye	265

The following critical facilities would be vulnerable to expansive soils in the planning area by jurisdiction.

Table 14-5. Critical Facilities by Jurisdiction

JURISDICTION	CRITICAL FACILITIES
Taylor County	1 Fire Station, 2 Police Stations, 3 Dams (Greenlee, Atkins, and Shotwell Dams), 2 JP8 Fuel Facilities, BNSF Railroad
City of Abilene	4 Government/Municipal Facilities, 11 Fire Stations, 1 Police Station, 2 Hospitals, 1 Ambulance Service, AISD Facilities, WISD Facilities, Mobile Communications Center, Telephone Company, Airport, Gas Utility Facilities, Electric Utility Facilities, 3 Water Treatment Plants, 3 Water Supply Facilities, 3 TV Stations, BNSF Railroad
Town of Buffalo Gap	1 Fire Station, 1 City Hall, 1 County Utility Yard (County Crew), JNBG-ISD
Town of Lawn	2 Fire Stations, 1 City Hall

SECTION 14: EXPANSIVE SOILS

JURISDICTION	CRITICAL FACILITIES
Town of Merkel	2 Municipal Facilities, 1 Police Station, 2 Fire Stations, 1 City Yard (Public Works Vehicles and Equipment), 1 County Utility Yard (County Crew), 1 Urgent Care Facility, 1 Safe Room/Shelter, 1 Pump Station, 2 Water Towers, 1 Waste Water Treatment Facility, State Fire Response Facility. MISD Facilities, 1 Electrical Services Facility, 1 Water Supply Facility
Town of Trent	1 Municipal Facility, Fire Station, Trent ISD Facilities, Burlington North Railroad
City of Tuscola	2 Municipal Facilities, 2 Fire Stations, 2 Water Utility Facilities, JNISD Facilities, 1 Water Treatment Facility
City of Tye	1 Fire Department, 1 Police Department, 2 Government Facilities, 1 Water Tower, 3 Pump Stations, 2 Lift Stations, Public Works Facilities, 1 Energy Plant
WCTCOG	WCTCOG Regional Facility, Law Enforcement Training Facility

The impact of expansive soils ranges from cosmetic cracks in walls to substantial foundation and structural damage that can result in a need for building demolition. Infrastructure such as pipelines can be damaged, causing increased maintenance and repairs, replacement, or damage to the point of failure. Sewer and water lines are also affected by shrink and swell soils. The movement of the soils can snap water and sewer lines, producing a minimum of temporary discomfort, and a maximum of a serious health and welfare risk.

Homeowners and public agencies that assume they cannot afford preventative measures such as more costly foundations and floor systems, often incur the largest percentage of damage and costly repairs from expanding soil. No figures are available for the total damage to homes in the planning area from expansive clays. Planning Area 1, including the WCTCOG and all participating jurisdictions, the most extensive damage from expansive soils can occur to bridges, highways, streets, and parking lots. The greatest damage occurs when structures are constructed when clays are dry (such as during a drought) and then subsequent soaking rains swell the clay.

The impact of expansive soils experienced in Planning Area 1 has resulted in no injuries and fatalities, supporting a limited severity of impact meaning injuries and/or illnesses are treatable with first aid, shutdown of facilities and services for 24 hours or less, and less than 10 percent of property is destroyed or with major damage.

SECTION 15: EARTHQUAKE

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HAZARD DESCRIPTION

An earthquake is the sudden movement of the Earth’s surface cause by the release of stress accumulated within or along the edge of the Earth’s tectonic plates, volcanic eruption, or by a manmade explosion. The majority of earthquakes occur along faults; however earthquakes can occur within plate interiors. Over geologic time, plates move and plate boundaries change, pushing weaken boundary regions to the interior part of the plates. These areas of weakness within the continents can cause earthquakes in response to stresses that originate at the edges of the plate or in the deeper crust.

Earthquakes’ locations are described by their focal depth and geographic position of the epicenter. The focal depth of an earthquake is the depth from the Earth’s surface to the region where an earthquake’s energy originates (the focus or hypocenter). The epicenter is the point on the Earth’s surface directly above the hypocenter. Earthquakes usually occur without warning, with their effects impacting great distances away from the epicenter.

According to the U.S. Geological Society (USGS) Earthquake Hazards Program, an earthquake hazard is anything associated with an earthquake that may influence an individual’s normal activities. Table 15-1 describes definition and examples.

Table 15-1. Definitions of Earthquake Hazards¹

HAZARD	DESCRIPTION
Ground Motion (shaking)	The movement of the earth's surface from earthquakes or explosions. Ground motion or shaking is produced by waves that are generated by sudden slip on a fault or sudden pressure at the explosive source and travel through the earth and along its surface.

¹ Source: USGS, 2012

SECTION 15: EARTHQUAKE

HAZARD	DESCRIPTION
Landslide	A movement of surface material down a slope.
Liquefaction	A process by which water-saturated sediment temporarily loses strength and acts as a fluid, like when you wiggle your toes in the wet sand near the water at the beach. This effect can be caused by earthquake shaking.
Surface Faulting	Displacement that reaches the earth's surface during slip along a fault. Commonly occurs with shallow earthquakes, those with an epicenter less than 20 kilometers.
Seiche	The sloshing of a closed body of water from earthquake shaking
Tectonic Deformation	A change in the original shape of a material due to stress and strain.
Tsunami	A sea wave of local or distant origin that results from large-scale seafloor displacements associated with large earthquakes, major submarine slides, or exploding volcanic islands.

LOCATION

Earthquake hazard areas are mapped by the US Geological Survey from lowest hazard to highest hazard areas. Figure 15-1 shows major earthquake hazard areas. An Earthquake Hazard Map, also known as a Percent Peak Ground Accelerations (%PGA) Map. The map shows the %PGA values with a 2% chance of being exceeded over 50 years. %PGA is an earthquake measurement that displays three things: the geographic area affected (all colored areas on the map), the probability of an earthquake of each given level of severity (2% chance in 50 years), and the strength of ground movement (severity) shown as percent of the acceleration force of gravity (%g) (the PGA is indicated by color). Planning Area 1, including all participating jurisdictions, is indicated in Texas and is located in the lowest hazard areas of 0-4%g peak ground acceleration.

Figure 15-1. U.S. Map of Peak Ground Acceleration

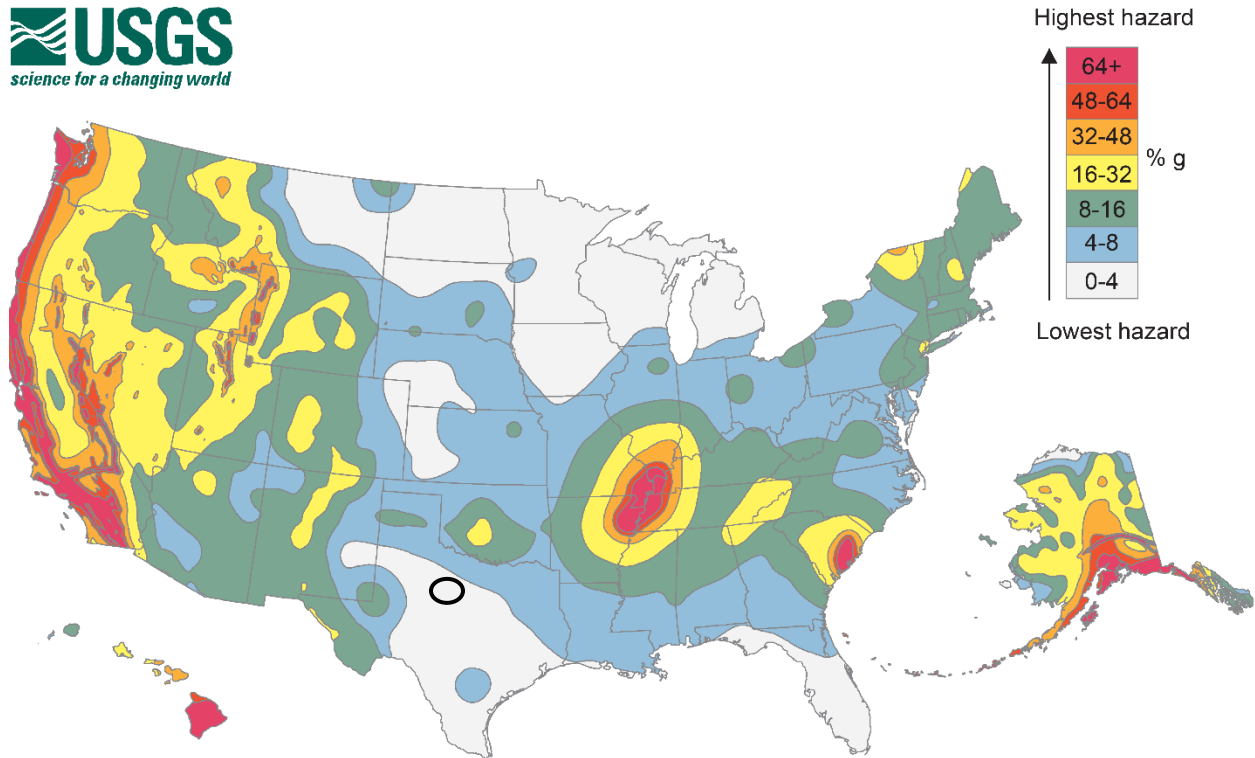
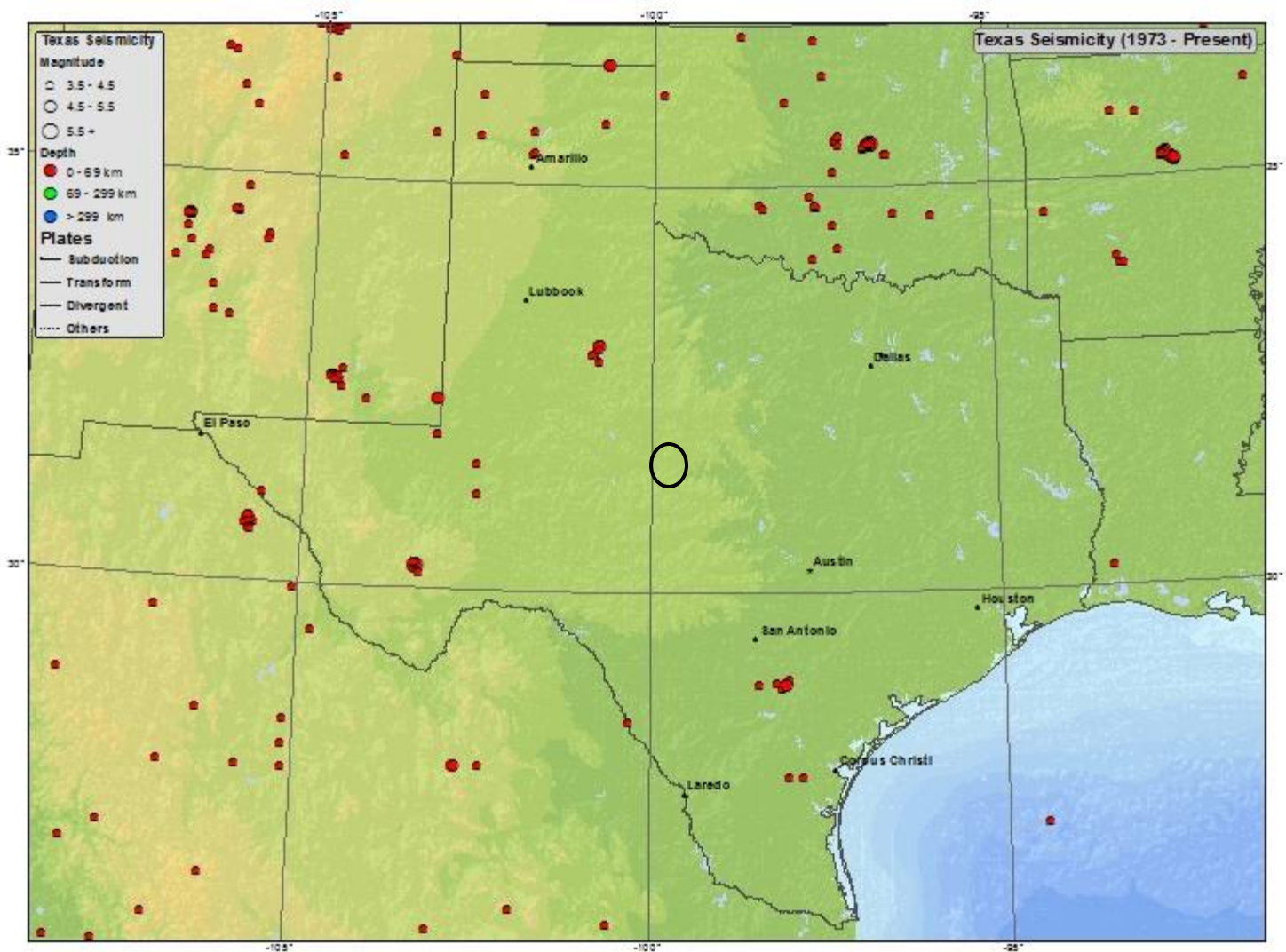


Figure 15-2 maps historic earthquake epicenters across Texas between 1973 and 2012. It is important to note that earthquakes that originate outside of the Planning Area 1's borders can still be felt, and be a hazard within the planning area.

Figure 15-2. Earthquake Epicenters in Texas, 1973-2012



EXTENT

The magnitude, or intensity of an earthquake, is a recorded value of the amplitude of seismic waves. The Richter scale is the most commonly used scale that measures the magnitude of earthquakes. It has no upper limit, and is not used to describe damage (Table 15-2).

Table 15-2. Richter Scale

RICHTER MAGNITUDES	EARTHQUAKE EFFECTS
2.5 or LESS	Usually not felt, but can be recorded by seismograph
2.5-5.4	Often felt, but only causes minor damage

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RICHTER MAGNITUDES	EARTHQUAKE EFFECTS
5.5-6.0	Slight damage to buildings and other structures
6.1 TO 6.9	May cause a lot of damage in very populated areas
7.0 TO 7.9	Major earthquake; serious damage
8 OR GREATER	Great earthquake; can totally destroy communities near the epicenter

The intensity of an earthquake is expressed by the Modified Mercalli Scale, based on the effects of ground shaking on people, buildings, and natural features, and is location dependent. The Modified Mercalli Scale gives the intensity of the earthquake in values ranging from I to XII. Table 15-3 summarizes earthquake intensity as described by the Modified Mercalli Scale and provides a comparison between the Richter and Modified Mercalli Intensity Scales.

Table 15-3. Modified Mercalli Intensity (MMI) Scale

SCALE	INTENSITY	DESCRIPTION OF EFFECTS	CORRESPONDING RICHTER MAGNITUDE
I	INSTRUMENTAL	Not Felt except by a very few under especially favorable conditions	
II	FEEBLE	Felt only by a few persons at rest, especially on upper floors of buildings	< 4.2
III	SLIGHT	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration Estimated	
IV	MODERATE	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors, disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.	
V	SLIGHTLY STRONG	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.	< 4.8

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SCALE	INTENSITY	DESCRIPTION OF EFFECTS	CORRESPONDING RICHTER MAGNITUDE
VI	STRONG	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.	< 5.4
VII	VERY STRONG	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken	< 6.1
VIII	DESTRUCTIVE	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned	
IX	RUINOUS	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.	< 6.9
X	DISASTROUS	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.	< 7.3
XI	VERY DISASTROUS	Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.	< 8.1
XII	CATASTROPHIC	Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.	> 8.1

Table 15-4 lists the Modified Mercalli Intensity (MMI) with the corresponding Acceleration (%g) (PGA), as well as the perceived shaking and potential damage expected.

Table 15-4. Modified Mercalli Intensity (MMIS) and PGA Equivalents

MMI	ACCELERATION (%g) (PGA)	PERCEIVED SHAKING	POTENTIAL DAMAGE
I	<.17	Not Felt	None
II	.17-1.4	Weak	None
III	.17-1.4	Weak	None

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MMI	ACCELERATION (%g) (PGA)	PERCEIVED SHAKING	POTENTIAL DAMAGE
IV	1.4-3.9	Light	None
V	3.9-9.2	Moderate	Very Light
VI	9.2-18	Strong	Light
VII	18-34	Very Strong	Moderate

Planning Area 1, including the WCTCOG and all participating jurisdictions, experience on average less than 2.5 Richter Scale or Level I or instrumental impact based on the Modified Mercalli intensity scale. This is what can be anticipated for in the future.

HISTORICAL OCCURRENCES

According to USGS, and the National Geophysical Data Center (NGDC), there are no “significant” earthquakes on record for the state of Texas, BPUB, and Planning Area 1 from 2150 B.C. to present. A significant earthquake, as defined by NGDC, is one that has caused at least moderate damage (approximately \$1 million or more), has resulted in 10 or more deaths, has registered as a magnitude 7.5 or greater, has registered as Modified Mercalli Intensity (MMI) Scale X or greater, or generated a tsunami. None of these criteria have been met by any seismic activity known to have impacted Planning Area 1, including the WCTCOG and all participating jurisdictions.

PROBABILITY OF FUTURE EVENTS

Earthquake Hazard Maps show the distribution of earthquake shaking levels that have a certain probability of occurring over a given period. According to the USGS, the entire Planning Area 1 has a PGA of 0-4%g for earthquakes with a 2-percent probability of occurring within 50 years. Based on historical records, the probability of an earthquake affecting Planning Area 1, including the WCTCOG and all participating jurisdictions, is unlikely, meaning that an event is probable in the next ten years.

VULNERABILITY AND IMPACT

Little warning is usually associated with earthquakes, and can impact areas a great distance away from the epicenter. The amount of damage depends on the density of population and buildings, and infrastructure construction in the affected area. Some places may be more vulnerable than others based on soil type, building age, and building codes in Planning Area 1, including the WCTCOG and all participating jurisdictions.

Table 15-5 includes the critical facilities that would be vulnerable to Earthquake events in each participating jurisdiction:

Table 15-5. Critical Facilities by Jurisdiction

JURISDICTION	CRITICAL FACILITIES
Taylor County	1 Fire Station, 2 Police Stations, 3 Dams (Greenlee, Atkins, and Shotwell Dams), 2 JP8 Fuel Facilities, BNSF Railroad
City of Abilene	4 Government/Municipal Facilities, 11 Fire Stations, 1 Police Station, 2 Hospitals, 1 Ambulance Service, AISD Facilities, WISD Facilities, Mobile Communications Center, Telephone Company, Airport, Gas Utility Facilities, Electric Utility Facilities, 3 Water Treatment Plants, 3 Water Supply Facilities, 3 TV Stations, BNSF Railroad
Town of Buffalo Gap	1 Fire Station, 1 City Hall, 1 County Utility Yard (County Crew), JNBG-ISD
Town of Lawn	2 Fire Stations, 1 City Hall
Town of Merkel	2 Municipal Facilities, 1 Police Station, 2 Fire Stations, 1 City Yard (Public Works Vehicles and Equipment), 1 County Utility Yard (County Crew), 1 Urgent Care Facility, 1 Safe Room/Shelter, 1 Pump Station, 2 Water Towers, 1 Waste Water Treatment Facility, State Fire Response Facility. MISD Facilities, 1 Electrical Services Facility, 1 Water Supply Facility
Town of Trent	1 Municipal Facility, Fire Station, Trent ISD Facilities, Burlington North Railroad
City of Tuscola	2 Municipal Facilities, 2 Fire Stations, 2 Water Utility Facilities, JNISD Facilities, 1 Water Treatment Facility
City of Tye	1 Fire Department, 1 Police Department, 2 Government Facilities, 1 Water Tower, 3 Pump Stations, 2 Lift Stations, Public Works Facilities, 1 Energy Plant
WCTCOG	WCTCOG Regional Facility, Law Enforcement Training Facility

With no historical events recorded, annualized loss-estimates for earthquakes are not available; neither is a breakdown of potential dollar losses of critical facilities and infrastructure. If a major earthquake should occur it could be substantial. However, it can only be said that the potential severity of impact from an earthquake for the entire Planning Area 1 is classified as limited, meaning that less than 10 percent of infrastructure would be damaged with critical facilities being shut down for less than 24 hours.

ASSESSMENT OF IMPACTS

Earthquakes have the potential to pose a significant risk to the population and can create dangerous situations. Often times, providing and preserving public health and safety is difficult. Impacts to the planning area can include:

- Individuals exposed to the event can be struck by flying debris, falling buildings, or downed power lines causing serious injury or death.
- Structures can be damaged or destroyed which can result in physical harm to the occupants.
- Significant debris can result in emergency response vehicles being unable to access areas of the community.
- Downed power lines may result in roadways being unsafe for use, which may prevent first responders from answering calls for assistance or rescue.

SECTION 15: EARTHQUAKE

- Earthquakes often result in widespread power outages increasing the risk to more vulnerable portions of the population who rely on power for health and/or life safety.
- Extended power outages can result in an increase in structure fires and/or carbon monoxide poisoning as individuals attempt to cook or heat their home with alternate, unsafe cooking or heating devices, such as grills.
- Earthquakes can destroy or make residential structures uninhabitable, requiring shelter or relocation of residents in the aftermath of the event.
- First responders must enter the damage area shortly after the earthquake to begin rescue operations and to organize cleanup and assessments efforts, therefore they are exposed to downed power lines, unstable and unusual debris, hazardous materials, and generally unsafe conditions, elevating the risk of injury to first responders and potentially diminishing emergency response capabilities.
- After shocks can further damage structures and present additional risks to trapped residents and/or first responders.
- Emergency operations and services may be significantly impacted due to damaged facilities, loss of communications, and damaged emergency vehicles and equipment.
- City or county departments, municipalities and government services may be damaged or destroyed, delaying response and recovery efforts for the entire community.
- Private sector entities that the participating jurisdictions and their residents rely on, such as utility providers, financial institutions, and medical care providers may not be fully operational and may require assistance from neighboring communities until full services can be restored.
- Economic disruption negatively impacts the programs and services provided by the community due to short and long term loss in revenue.
- Damage to infrastructure may slow economic recovery since repairs may be extensive and lengthy.
- Some businesses not directly damaged by the earthquake may be negatively impacted while roads and utilities are being restored, further slowing economic recovery.
- When the community is affected by significant property damage it is anticipated that funding would be required for infrastructure repair and restoration, temporary services and facilities, overtime pay for responders, and normal day-to-day operating expenses.
- Displaced residents may not be able to immediately return to work, further slowing economic recovery.
- Residential structures destroyed by an earthquake may not be rebuilt for years, reducing the tax base for the community.
- Large or intense earthquakes may result in a dramatic population fluctuation, as people are unable to return to their homes or jobs and must seek shelter and/or work outside of the affected area.
- Businesses that are uninsured or underinsured may have difficulty reopening, which results in a net loss of jobs for the community and a potential increase in the unemployment rate.
- Recreation activities may be unavailable and tourism can be unappealing for years following a large earthquake, devastating directly related local businesses.
- WCTCOG's resources could be taxed during response and recovery diverting necessary day -to-day operations from being accomplished.

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The economic and financial impacts of an earthquake event on the community will depend on the scale of the event, what is damaged, costs of repair or replacement, lost business days in impacted areas, and how quickly repairs to critical components of the economy can be implemented. The level of preparedness and pre-event planning done by government, businesses, and citizens will contribute to the overall economic and financial conditions in the aftermath of an earthquake event.

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HAZARD DESCRIPTION

Dams are water storage, control, or diversion structures that impound water upstream in reservoirs. Dam failure can take several forms, including a collapse of or breach in the structure. While most dams have storage volumes small enough that failures have few or no repercussions, dams storing large amounts can cause significant flooding downstream. Dam failures can result from any one or a combination of the following causes:

- Prolonged periods of rainfall and flooding, which cause most failures;
- Inadequate spillway capacity, resulting in excess overtopping of the embankment;
- Improper maintenance, including failure to remove trees, repair internal seepage problems, or maintain gates, valves, and other operational components;
- Improper design or use of improper construction materials;
- Failure of upstream dams in the same drainage basin;
- Landslides into reservoirs, which cause surges that result in overtopping;
- Destructive acts of terrorism; and,

Benefits provided by dams include water supplies for drinking; irrigation and industrial uses; flood control; hydroelectric power; recreation; and navigation. At the same time, dams also represent a risk to public safety. Dams require ongoing maintenance, monitoring, safety inspections, and sometimes even rehabilitation to continue safe service.

In the event of a dam failure, the energy of the water stored behind the dam is capable of causing rapid and unexpected flooding downstream, resulting in loss of life and substantial property damage. A devastating effect on water supply and power generation could be expected as well. The terrorist attacks of September 11, 2001 generated increased focus on protecting the country's infrastructure, including ensuring the safety of dams.

SECTION 16: DAM FAILURE

One major issue with the safety of dams is their age. The average age of America's 84,000 dams is 52 years. According to statistics released in 2009 by the Association of State Dam Safety Officials¹, more than 2,000 dams near population centers are in need of repair. In addition to the continual aging of dams, there have not been significant increases in the number of safety inspectors resulting in haphazard maintenance and inspection.

The Association of State Dam Safety Officials estimate that \$16 billion will be needed to repair all high-hazard dams, but the total for all state dam-safety budgets is less than \$60 million². The current maintenance budget does not match the scale of America's long-term modifications of its watersheds. Worse still, more people are moving into risky areas. As the American population grows, dams that once could have failed without major repercussions are now upstream of cities and development.



LOCATION

The State of Texas has 7,413 dams, all regulated by the Texas Commission on Environmental Quality (TCEQ). The National Dam Safety Review Board (in coordination with FEMA) and the National Inventory of Dams (NID) lists a total of 40 dams in the entire Planning Area 1, including all participating jurisdictions.³ Each of these dams were analyzed individually by location, volume, elevation, and condition (where available) when determining the risk, if any, for each dam. Each dam site was further analyzed for potential risks utilizing FEMA's National Flood Hazard Layer to map locations and fully understand development near the dam and

¹ Association of State Dam Safety Officials, Journal of Dam Safety

² Source: www.damsafety.org

³ The WCTCOG does not own or operate any dams and is not located within an estimated inundation zone.

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topographical variations that may increase risk. Most of the dams listed were embankments for typically small or dry detention drainage areas or shored up stream embankments. These types of structures are utilized for flood control and do not pose a dam failure risk. Other dams in the planning area feature such limited storage capacity that they pose no risk to structures, infrastructure, or citizens. Dams that were deemed to pose no past, current, or future risk to the planning area are not profiled in the plan as no loss of life or impact to critical facilities or infrastructure is expected in the event of a breach or a failure. Based on this detailed analysis, the planning team was able to determine that only 2 of the 40 dams pose a risk to the planning area. These dams, listed in Table 16-1, are profiled in detail below. Figure 16-1, illustrates the general location for the critical dams in the planning area.

Figure 16-1. Critical Dam Locations in Planning Area 1

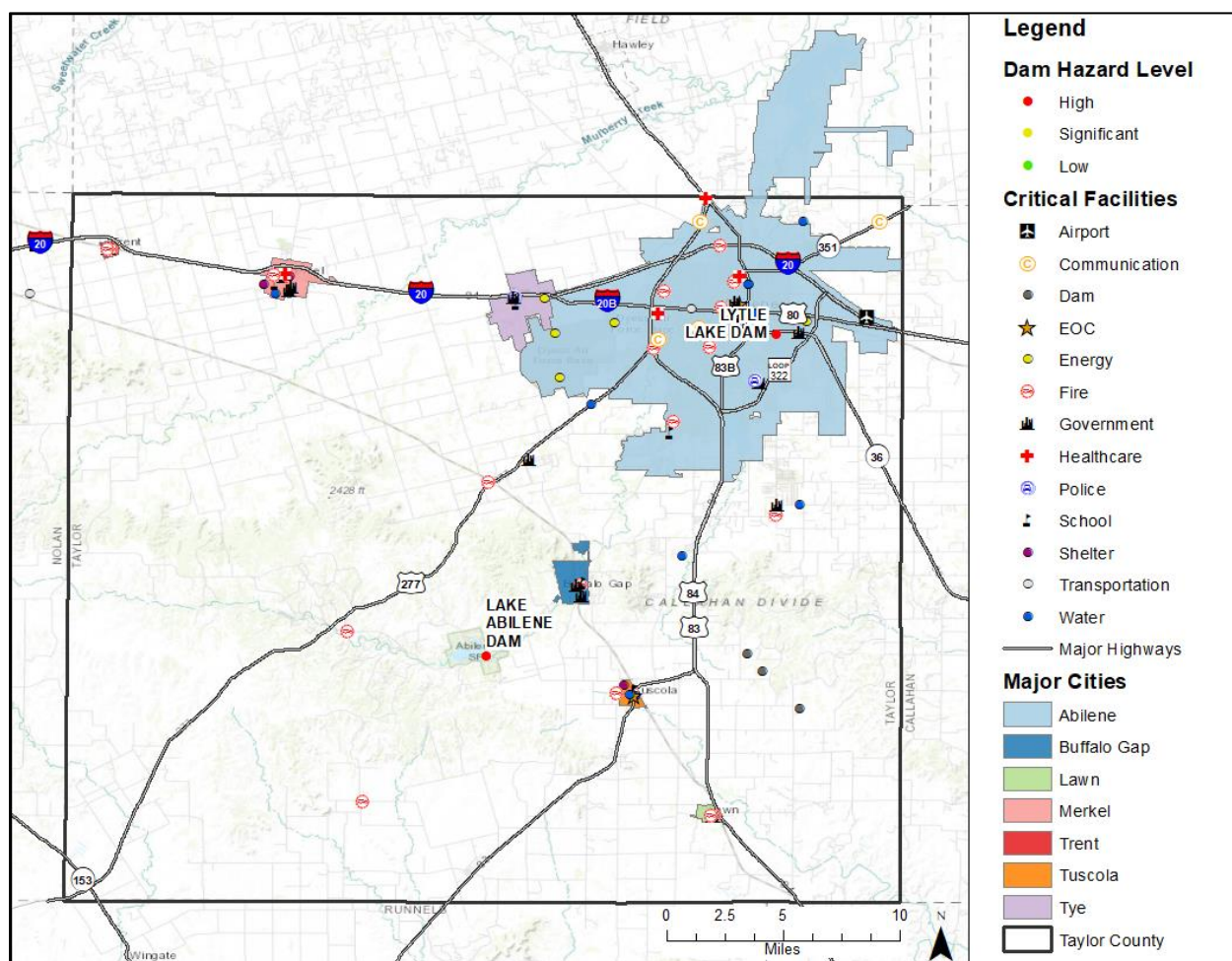


Table 16-1. Planning Area 1 Dam Survey

JURISDICTION	DAM NAME	HEIGHT (Ft.)	STORAGE (Acre Ft.)	CONDITION ⁴	PROFILED
Abilene	Lytle Lake Dam	30.2	4,375	Not Rated	Yes
Taylor County	Lake Abilene Dam	64	15,990	Not Rated	Yes

EXTENT

The extent or magnitude of a dam failure event is described in terms of the classification of damages that could result from a dam's failure, not the probability of failure. For dams with a maximum storage capacity of 100,000 acre-feet or more, all structures within five miles are considered to be at risk to potential dam failure hazards. For dams with a maximum storage capacity between 10,000 and 100,000 acre-feet, all structures within three miles are considered to be at risk to potential dam failure hazards. For dams with a maximum storage capacity of less than 10,000 acre-feet, all structures within one mile are considered to be at risk to potential dam failure hazards.

Lytle Lake Dam:

Lytle Lake Dam is located in the City of Abilene in Taylor County on the Lytle Creek. The dam was constructed in 1900 and is used primarily for recreational purposes. It is owned by the Lytle Lake Water Control and Improvement District. The area located near the dam is densely populated with residential and commercial development. While the flow of the breach is anticipated to follow the designated floodplain area, a catastrophic breach could impact approximately 200 residential structures within one mile of the dam as well as approximately 20 commercial structures and 2 schools. A dam failure could cause limited infrastructure damages, power outages, and utility systems disruptions. In the event of a breach, it is estimated the average breach width would be 181.1 feet with a maximum breach flow of 38,756 cubic feet per second according to the National Weather Service (NWS) Dam Break Equation. A dam breach could result in an estimated depth up to 20 feet with the highest depth in the immediate area of the dam breach.

Lake Abilene Dam:

Lake Abilene Dam is located in Taylor County on Elm Creek. The dam was constructed in 1921. The dam is owned by the City of Abilene. The reservoir is used for recreational purposes. The area located near the dam is semi-rural with moderate residential development. The area near the dam is limited rolling terrain with relatively limited changes in elevations. Approximately 250 residential structures and some limited infrastructure within three miles of the dam may be impacted in the event of a breach. A dam failure could also cause limited infrastructure damages, minor power outages, and utility systems disruptions. In the event of a breach, it is estimated the average breach width would be 302.2 feet with a maximum breach flow of 261,123 cubic feet per second according to the National Weather Service (NWS) Dam Break Equation. A dam

⁴ Condition provided if available.

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breach could result in an estimated depth of zero to 25 feet with the highest depth in the immediate area of the dam breach.

Table 16-2 represents the extent or magnitude of a dam failure event that could be expected for Planning Area 1 for the profiled dam. There are no dams posing a risk to the following participating jurisdictions: Town of Buffalo Gap, Town of Lawn, Town of Merkel, Town of Trent, City of Tuscola, City of Tye, and the WCTCOG. Any secondary flooding caused by a dam failure for these jurisdictions is covered under flood in Section 12. Therefore, these jurisdictions will not be profiling dam failure as a hazard.

Table 16-2. Extent by Jurisdiction

JURISDICTION	PROFILED DAM	EXTENT (FLOW DEPTH)	LEVEL OF INTENSITY TO MITIGATE
City of Abilene	Lytle Dam	0-20 Feet	Dam failure presents a low threat for the City. Loss of life is not expected. While residential and commercial structures could be impacted, including two schools, the greatest threat in the event of a breach would be flood. Critical facilities, infrastructure, and utilities could be minimally impacted. Economic loss would be minimal.
Taylor County	Lake Abilene Dam	0-25 Feet	Dam failure presents a low threat for the County. Loss of life is not expected. While residential structures could be impacted, the greatest threat in the event of a breach would be flood. Critical facilities, infrastructure, and utilities could be minimally impacted. Economic loss would be minimal.

HISTORICAL OCCURRENCES

There are approximately 84,000 dams in the United States today.⁵ Catastrophic dam failures have occurred frequently throughout the past century. Between 1918 and 1958, 33 major U.S. dam failures caused 1,680 deaths. From 1959 to 1965, nine major dams failed worldwide. Some of the largest disasters in the U.S. have resulted from dam failures. More than 90 dam incidents, including 23 dam failures, were reported in the past ten years to the National Performance of Dams Program, which collects and archives information on dam performance from state and federal regulatory agencies and dam owners.

⁵ Federal Emergency Management Agency, Dam Safety Program, available at: <http://www.fema.gov/hazards/damsafety/>

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The State of Texas has not experienced loss of life or extensive economic damage due to a dam failure since the first half of the twentieth century. However, there may be many incidents that are not reported and, therefore, the actual number of incidents is likely to be greater.

There has not been a recorded dam failure event for any of the participating jurisdictions in Planning Area 1.

PROBABILITY OF FUTURE EVENTS

No historical events of dam failure have been recorded in Planning Area 1, though the risk of dam failure is monitored closely. Due to the lack of historical occurrences, the probability of a future event is unlikely for those jurisdictions profiling dam failure as a hazard, meaning an event is possible in the next ten years.

VULNERABILITY AND IMPACT

There are 40 dams in Planning Area 1. All dams were evaluated in-depth to determine the risk, if any, associated with each dam. This analysis indicated 2 dams in the planning area that present a risk to structures or infrastructure in the planning area.

Flooding is the most prominent effect of dam failure. If the dam failure is extensive, a large amount of water would enter the downstream waterways forcing them out of their banks. There may be significant environmental effects, resulting in flooding that could disperse debris and hazardous materials downstream that can damage local ecosystems. If the event is severe, debris carried downstream can block traffic flow, cause power outages, and disrupt local utilities, such as water and wastewater, which could result in school closures. For specific vulnerability, please refer to the narratives below each hazardous dam in this section.

Annualized loss-estimates for dam failure are not available; neither is there a breakdown of potential dollar losses for critical facilities, infrastructure and lifelines, or hazardous-materials facilities. If a major dam should fail, however, the severity of impact could be substantial. The following participating jurisdictions are not located in any areas at risk for dam failure: Town of Buffalo Gap, Town of Lawn, Town of Merkel, Town of Trent, City of Tuscola, City of Tye and the WCTCOG.

A dam breach could result in possible injuries and fatalities with facilities being shut down for more than 30 days, and more than fifty percent of property in the path of the breach destroyed or damaged. For these reasons, creating mitigation actions to remove or protect people and structures from the path of destruction is necessary in order to minimize impact from dam failure.

ASSESSMENT OF IMPACTS

Any individual dam has a very specific area that will be impacted by a catastrophic failure. Dams identified as high or significant hazard can directly threaten the lives of individuals living or working in the inundation zone below the dam. The impact from any catastrophic failure would be similar to that of a flash flood. Potential impacts for the planning area include:

- Lives could be lost.

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- A dam breach at Lake Kirby and Abilene Lake could devastate the local economy, destroying recreational activities such as boating and camping for years. Tourism may be unavailable or unappealing, slowing economic recovery.
- There could be injuries from impacts with debris carried by the flood.
- Swift-water rescue of individuals trapped by the water puts the immediate responders at risk for their own lives.
- Individuals involved in the cleanup may be at risk from the debris left behind.
- Continuity of operations for any jurisdiction outside the direct impact area could be very limited.
- Roads and bridges could be destroyed.
- Homes and businesses could be damaged or destroyed.
- Emergency services may be temporarily unavailable.
- Disruption of operations and the delivery of services in the impacted area.
- A large dam with a high head of water could effectively scour the terrain below it for miles, taking out all buildings and other infrastructure.
- Scouring force could erode soil and any buried pipelines.
- Scouring action of a large dam will destroy all vegetation in its path.
- Wildlife and wildlife habitat caught in the flow will likely be destroyed.
- Fish habitat will likely be destroyed.
- Topsoil will erode, slowing the return of natural vegetation.
- The destructive high velocity water flow may include substantial debris and hazardous materials, significantly increasing the risks to life and property in its path.
- Debris and hazardous material deposited downstream may cause further pollution of areas far greater than the inundation zone.
- Destroyed businesses and homes may not be rebuilt, reducing the tax base and impacting long term economic recovery.
- Historical or cultural resources may be damaged or destroyed
- WCTCOG everyday resources can become taxed during response and recovery efforts compromising those assets for day to day activities.

The economic and financial impacts of dam failure on the area will depend entirely on the location of the dam, scale of the event, what is damaged, and how quickly repairs to critical components of the economy can be implemented. The level of preparedness and pre-event planning done by the community, local businesses, and citizens will also contribute to the overall economic and financial conditions in the aftermath of any dam failure event.

SECTION 17: MITIGATION STRATEGY

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MITIGATION GOALS

Based on the results of the risk and capability assessments, the Planning Team developed and prioritized the mitigation strategy. This involved utilizing the results of both assessments and reviewing the goals and objectives that were included in the previous 2012 Plan.

At the Mitigation Workshop in September 2017, Planning Team members reviewed the mitigation strategy from the previous 2012 Plan. The consensus among all members present was that the strategy developed for the 2012 Plan did not require changes, as it identified overall improvements to be sought in the Plan Update, but the order of the goals has been altered.

GOAL 1

Protect public health and safety.

OBJECTIVE 1.1

Advise the public about health and safety precautions to guard against injury and loss of life from hazards.

OBJECTIVE 1.2

Maximize utilization of the latest technology to provide adequate warning, communication, and mitigation of hazard events.

OBJECTIVE 1.3

Reduce the danger to, and enhance protection of, high risk areas during hazard events.

OBJECTIVE 1.4

Protect critical facilities and services.

GOAL 2

SECTION 17: MITIGATION STRATEGY

Build and support local capacity and commitment to continuously become less vulnerable to hazards.

OBJECTIVE 2.1

Build and support local partnerships to continuously become less vulnerable to hazards.

OBJECTIVE 2.2

Build a cadre of committed volunteers to safeguard the community before, during, and after a disaster.



OBJECTIVE 2.3

Build hazard mitigation concerns into county planning and budgeting processes.

GOAL 3

Increase public understanding, support, and demand for hazard mitigation.

OBJECTIVE 3.1

Heighten public awareness regarding the full range of natural and man-made hazards the public may face.

OBJECTIVE 3.2

Educate the public on actions they can take to prevent or reduce the loss of life or property from all hazards and increase individual efforts to respond to potential hazards.

OBJECTIVE 3.3

Publicize and encourage the adoption of appropriate hazard mitigation measures.

GOAL 4

Protect new and existing properties.

OBJECTIVE 4.1

Reduce repetitive losses to the National Flood Insurance Program (NFIP).

OBJECTIVE 4.2

Use the most cost-effective approach to protect existing buildings and public infrastructure from hazards.

OBJECTIVE 4.3

SECTION 17: MITIGATION STRATEGY

Enact and enforce regulatory measures to ensure that future development will not put people in harm's way or increase threats to existing properties.

GOAL 5

Maximize the resources for investment in hazard mitigation.

OBJECTIVE 5.1

Maximize the use of outside sources of funding.

OBJECTIVE 5.2

Maximize participation of property owners in protecting their properties.

OBJECTIVE 5.3

Maximize insurance coverage to provide financial protection against hazard events.

OBJECTIVE 5.4

Prioritize mitigation projects, based on cost-effectiveness and sites facing the greatest threat to life, health, and property.

SECTION 18: PREVIOUS ACTIONS

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SUMMARY

Planning Team members were given copies of the previous mitigation actions submitted in the 2012 Plan at the mitigation workshop. Participating jurisdictions within Planning Area 1 reviewed the previous actions and provided an analysis as to whether the action had been completed, should be deferred as an ongoing activity, or be deleted from the Plan Update. The actions from the 2012 Plan are included in this section as they were written in 2012, with the exception of the “2018 Analysis” section.

TAYLOR COUNTY

Taylor County (Past Action) – 1

Proposed Action:	Annual dam inspection, partner with SWCD to help fund repairs and maintenance, partner with property owners to report new damage or erosion, and patrol for illegal dumping at dams.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Dam Failure
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$10,000 per dam annually
Implementation Schedule:	As soon as possible
Coordinating Agency:	Taylor County Commissioners
Potential Funding Sources:	SWCD

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update. USDA/NRCS grant funding will be included as a potential funding source.

Taylor County (Past Action) – 2

Proposed Action:	Establish a public awareness program regarding availability of flood insurance by disseminating brochures in public places, such as City Hall.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012
Coordinating Agency:	Public Works Department
Potential Funding Sources:	Local revenues

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

Taylor County (Past Action) – 3		
	Proposed Action:	Develop a Community Wildfire Protection Plan (CWPP).

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	Upon funding
Coordinating Agency:	Taylor County
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

Taylor County (Past Action) – 4		
	Proposed Action:	Upgrade and elevate roads to Higher Regulatory standards (above 500-year) to provide emergency access to critical facilities during flooding events.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	High
Estimated Cost:	TBD
Implementation Schedule:	Upon funding
Coordinating Agency:	Town of Rule
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

Taylor County (Past Action) – 5		
	Proposed Action:	Investigate construction of safe room or shelter at public facility or school to house residents in the County during times of disaster, severe weather events, and as a Cooling Center during Extreme Heat events.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Thunderstorm, Tornado, Flood, Extreme Heat
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$6 Million
Implementation Schedule:	Upon funding
Coordinating Agency:	County Emergency Management Office
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Some have been completed, but not all, therefore an action will be included in the 2018 Plan Update.

Taylor County (Past Action) – 6		
	Proposed Action:	Implement a program to secure power lines in rural areas when transmission lines, due to thunderstorm, wind, ice and other weather events spark a fire which may go unnoticed, resulting in urban and rural fire.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire, Winter Storm, Thunderstorm
Effect on new/existing buildings:	N/A
Priority:	High
Estimated Cost:	TBD
Implementation Schedule:	Upon funding
Coordinating Agency:	County Emergency Mgmt./Power Companies
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

CITY OF ABILENE

City of Abilene (Past Action) – 1

	Proposed Action:	Develop regional water source – cedar ridge (permitting in progress).
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MITIGATION ACTION DETAILS

Hazard Addressed:	Drought
Effect on new/existing buildings:	N/A
Priority:	High
Estimated Cost:	\$25,000,000
Implementation Schedule:	2005-2025
Coordinating Agency:	City of Abilene
Potential Funding Sources:	Grants

2018 Analysis:

Defer Action – Progress has been made, but not complete yet. Action will be included in the 2018 Plan Update.

City of Abilene ((Past Action) – 2

	Proposed Action:	Indoor/outdoor warning system (sirens) for large gathering places.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Thunderstorm, Flood, Tornado
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$5,000,000 - \$7,000,000
Implementation Schedule:	2013-2015
Coordinating Agency:	City of Abilene
Potential Funding Sources:	Grants

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update. Reduce the estimated cost to \$1 million. Implementation Schedule: 2018-2022.

SECTION 18: PREVIOUS ACTIONS

City of Abilene (Past Action) – 3

	Proposed Action:	Install automated creek rain gauges and automated barriers for flooded road ways.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$136,000
Implementation Schedule:	2012-2015
Coordinating Agency:	City of Abilene
Potential Funding Sources:	Grants

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update. Change cost to \$150,000. Implementation Schedule to 2018-2022.

City of Abilene (Past Action) – 4

	Proposed Action:	Establish a public awareness program regarding availability of flood insurance by disseminating brochures in public places, such as City Hall.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012
Coordinating Agency:	Public Works Department
Potential Funding Sources:	Local revenues

2018 Analysis:

Defer Action – Action will be completed in the 2018 Plan Update. Change cost to \$1,000. Implementation Schedule to 2022.

TOWN OF BUFFALO GAP

Town of Buffalo Gap (Past Action) – 1

	Proposed Action:	Implement a wildfire education program in the schools to teach the youth and faculty about the importance of safe fire practices.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Wildfire, Flood
Effect on new/existing buildings:	N/A
Priority:	High
Estimated Cost:	\$1,000
Implementation Schedule:	Ongoing
Coordinating Agency:	Fire Department
Potential Funding Sources:	Grants

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

Town of Buffalo Gap (Past Action) – 2

	Proposed Action:	Clear out brush and downed trees from roadside culverts and utility right of ways which back up during flash flooding and cause minor flooding in town.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	High
Estimated Cost:	\$30,000
Implementation Schedule:	Ongoing
Coordinating Agency:	Fire Department
Potential Funding Sources:	Grants

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

Town of Buffalo Gap (Past Action) – 3		
	Proposed Action:	Establish a public awareness program regarding availability of flood insurance by disseminating brochures in public places, such as City Hall and continue flood awareness program in local schools.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012
Coordinating Agency:	Public Works Department
Potential Funding Sources:	Local revenues

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

TOWN OF LAWN

Town of Lawn (Past Action) – 1

	Proposed Action:	Implement a tree trimming program that routinely clears limbs and trees from right of way and utility easements.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Flood, Winter Storm, Tornado
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$5,000
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	Public Works Department
Potential Funding Sources:	Grants

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

Town of Lawn (Past Action) – 2

	Proposed Action:	Develop a public awareness program to make sure citizens know about the availability of flood insurance and create library of brochures in City Hall.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	Minimal
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	Public Works Department
Potential Funding Sources:	Local revenues

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

Town of Lawn (Past Action) – 3		
	Proposed Action:	Develop and implement a public awareness program to inform the public about wildfire, drought, and extreme heat dangers.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire, Drought, Extreme Heat
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	Upon funding
Coordinating Agency:	Town of Lawn
Potential Funding Sources:	Local revenues

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

Town of Lawn (Past Action) – 4		
	Proposed Action:	Install outdoor warning siren and system and implement response plan for severe weather events.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Winter Storm, Tornado, Thunderstorm
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$30,000
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	Public Works Department/EMC
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

TOWN OF MERKEL

Town of Merkel (Past Action) – 1

	Proposed Action:	Develop a warning system to use during disasters.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Tornado
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$10,000
Implementation Schedule:	Upon funding
Coordinating Agency:	Town of Merkel Management, Public Works Department
Potential Funding Sources:	Grants, city funds

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

Town of Merkel (Past Action) – 2

	Proposed Action:	Reduce wind damage by identifying problems such as large trees, trees in high line wires, and buildings that can block roadways following severe weather events.
--	-------------------------	--

MITIGATION ACTION DETAILS

Hazard Addressed:	Thunderstorm, Tornado
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$10,000 annually
Implementation Schedule:	Upon funding
Coordinating Agency:	Town of Merkel Management, Public Works Department
Potential Funding Sources:	General revenues

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

Town of Merkel (Past Action) – 3		
	Proposed Action:	Upgrade and elevate streets to allow adequate runoff and water to flow freely to roadside ditches and waterways.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	High
Estimated Cost:	\$1,500,000
Implementation Schedule:	Upon funding
Coordinating Agency:	Town of Merkel
Potential Funding Sources:	Grants, city funds

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

Town of Merkel (Past Action) – 4		
	Proposed Action:	Establish a public awareness program regarding availability of flood insurance by disseminating brochures in public places, such as City Hall.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	Public Works Department
Coordinating Agency:	Local revenues
Potential Funding Sources:	2012

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

TOWN OF TRENT

Town of Trent (Past Action) – 1

	Proposed Action:	Implement a tree trimming program that routinely clears limbs and trees from right of way and utility easements.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Flood, Tornado, Thunderstorm, Winter Storm
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$10,000
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	Public Works Department
Potential Funding Sources:	Grants, local revenues

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

Town of Trent (Past Action) – 2

	Proposed Action:	Implement a public awareness program to address dangers of driving into flooded roadways through “Turn Around Don’t Drown.” Materials will be distributed to residents and in schools.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$500
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	Public Works Department
Potential Funding Sources:	Local revenues

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

Town of Trent (Past Action) – 3		
	Proposed Action:	Develop and implement a public awareness program to inform residents about wildfire, drought, and extreme heat dangers.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire, Drought, Extreme Heat
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	Upon funding
Coordinating Agency:	Town of Trent
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

CITY OF TUSCOLA

City of Tuscola (Past Action) – 1

	Proposed Action:	Implement a program to clear debris from drainage ditches and waterways to minimize flooding out of banks.
--	-------------------------	--

MITIGATION ACTION DETAILS

Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$500
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	Public Works Department
Potential Funding Sources:	Grants

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update. Increase estimated cost.

City of Tuscola (Past Action) – 2

	Proposed Action:	Develop a public awareness program to address dangers of flooding through materials distributed to residents and in schools.
--	-------------------------	--

MITIGATION ACTION DETAILS

Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$500
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	Public Works Department
Potential Funding Sources:	Local revenues

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

CITY OF TYE

City of Tye (Past Action) – 1

	Proposed Action:	Identify sites where minor flooding occurs and determine the project to minimize flooding to streets and homes.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Flood
Effect on new/existing buildings:	Would minimize damage from flooding
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	Upon funding
Coordinating Agency:	City of Tye
Potential Funding Sources:	Grants

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

City of Tye (Past Action) – 2

	Proposed Action:	Implement a community action program regarding wildfire dangers for identified risk areas.
--	-------------------------	--

MITIGATION ACTION DETAILS

Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	High
Estimated Cost:	To be determined
Implementation Schedule:	Upon funding
Coordinating Agency:	Fire Department
Potential Funding Sources:	Grants

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

City of Tye (Past Action) – 3		
	Proposed Action:	Establish a public awareness program regarding availability of flood insurance by disseminating brochures in public places, such as City Hall.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012
Coordinating Agency:	Public Works Department
Potential Funding Sources:	Local revenues

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

City of Tye (Past Action) – 4		
	Proposed Action:	Promote flood safety with brochures and outreach for “Turn Around Don’t Drown.”

MITIGATION ACTION DETAILS	
Hazard Addressed:	Flood
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	Upon funding
Coordinating Agency:	City of Tye
Potential Funding Sources:	General revenues

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

WEST CENTRAL TEXAS COUNCIL OF GOVERNMENTS

WCTCOG (Past Action) – 1

	Proposed Action:	Develop and implement a public awareness program for severe winter storms through COG planning meetings at various public events.
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MITIGATION ACTION DETAILS

Hazard Addressed:	Winter Storm
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$5,000
Implementation Schedule:	2012
Coordinating Agency:	WCTCOG 9-1-1 Director
Potential Funding Sources:	Grants

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

WCTCOG (Past Action) – 2

	Proposed Action:	Develop and implement a public awareness program for hail through COG planning meetings and at various public events.
--	-------------------------	---

MITIGATION ACTION DETAILS

Hazard Addressed:	Hail
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	\$5,000
Implementation Schedule:	2012
Coordinating Agency:	WCTCOG 9-1-1 Director
Potential Funding Sources:	Grants

2018 Analysis:

Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

WCTCOG (Past Action) – 3		
	Proposed Action:	Implement a Home Shelter program for the 19-county COG Region based on 50/50 match.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Thunderstorm, Tornado
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012
Coordinating Agency:	WCTCOG 9-1-1 Director
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

WCTCOG (Past Action) – 4		
	Proposed Action:	Improve wildfire fighting water delivery capabilities by the purchase of one large, mobile fifth-wheel water trailer to be strategically placed around the region.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire, Drought
Effect on new/existing buildings:	Minimize fire damage to all structures
Priority:	High
Estimated Cost:	\$150,000 - \$175,000
Implementation Schedule:	Upon funding
Coordinating Agency:	VFD and regular Fire Departments within COG Region
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

WCTCOG (Past Action) – 5		
	Proposed Action:	Assist communities in implementing development of a plan to relocate repetitive flood loss structures out of Special Flood Hazard Areas (SFHAs) to minimize flooding of structures and restore natural floodplain areas.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Flood
Effect on new/existing buildings:	Eliminate flooding of repetitive flood loss structures
Priority:	High
Estimated Cost:	TBD (BCR)
Implementation Schedule:	Upon funding
Coordinating Agency:	COG jurisdictions
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

WCTCOG (Past Action) – 6		
	Proposed Action:	Implement a program to increase building standards for construction of low-income, manufactured, or other residential and commercial structures through adoption and enforcement of improved building codes.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Tornado, Thunderstorm
Effect on new/existing buildings:	Harden new construction
Priority:	High
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	COG jurisdictions
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

WCTCOG (Past Action) – 7		
	Proposed Action:	Develop and implement a cloud-seeding program as an integral part of overall long-term water management strategy to maximize supply of fresh water and reduce economic agricultural impact of drought and hail damage in the region.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Drought, Hail
Effect on new/existing buildings:	N/A
Priority:	High
Estimated Cost:	\$275,000-\$450,000
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	WCTCOG 9-1-1 Director along with participating jurisdictions
Potential Funding Sources:	Grants

2018 Analysis:
Delete Action. They are no longer participating in this action.

WCTCOG (Past Action) – 8		
	Proposed Action:	Purchase a mobile recovery trailer for first responders to utilize during regional disasters. Trailer will disseminate first aid, water and other supplies.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Flood, Extreme Heat
Effect on new/existing buildings:	N/A
Priority:	High
Estimated Cost:	TBD
Implementation Schedule:	2012 - 2013
Coordinating Agency:	WCTCOG 9-1-1 Director
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

WCTCOG (Past Action) – 9		
	Proposed Action:	Designate area(s) and construct multi-purpose community shelter(s) to accommodate area residents during disasters and severe weather events in the COG region.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Hail, Winter Storm, Tornado, Thunderstorm
Effect on new/existing buildings:	N/A
Priority:	High
Estimated Cost:	\$1 Million - \$1.3 Million
Implementation Schedule:	Within two years of funding
Coordinating Agency:	WCTCOG 9-1-1 Director
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

WCTCOG (Past Action) – 10		
	Proposed Action:	Develop a program for rural residences in the 19-county region to ensure all structures have visible addresses that can be seen from county roads and highways both day and night in order to aid first responders during wildfire events.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	Increase response to minimize structural damage due to fire
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	911
Potential Funding Sources:	911 Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

WCTCOG (Past Action) – 11		
	Proposed Action:	Initiate a program to locate and map all water resources (commercial, flush hydrants, stock ponds, lakes and waterways) using GPS.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	WCTCOG 9-1-1 Director, Forest Service
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

WCTCOG (Past Action) – 12		
	Proposed Action:	Develop local agreements with landowners to cut fences both for access to wildfires, and to free trapped livestock. Include landowners who will be willing to take control and move livestock to safe areas for care and feeding.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	WCTCOG 9-1-1 Director, USDA
Potential Funding Sources:	USDA, Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

WCTCOG (Past Action) – 13		
	Proposed Action:	Initiate and promote legislation for control of Conservation Reserve program (CRP) fields to include fire breaks around CRP fields and allow grazing.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	WCTCOG 9-1-1 Director, USDA
Potential Funding Sources:	USDA, Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

WCTCOG (Past Action) – 14		
	Proposed Action:	Develop and implement a program to aid in additional training for ICS/NIMS for coordinating firefighting efforts involving all firefighters, law enforcement and community officials, and other agencies utilized during a wildfire incident.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	WCTCOG 9-1-1 Director, FEMA
Potential Funding Sources:	Grants

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

WCTCOG (Past Action) – 15		
	Proposed Action:	Secure additional funding for Volunteer Fire Departments.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	High
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	WCTCOG 9-1-1 Director, Counties
Potential Funding Sources:	Texas Forest Service, other grant programs, Insurance companies, Emergency Service Districts

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

WCTCOG (Past Action) – 16		
	Proposed Action:	Implement a program to educate residents about landscaping with gravel and similar materials as opposed to plantings and other types of vegetation to reduce the fuel source around structures.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire, Drought
Effect on new/existing buildings:	N/A
Priority:	Low/Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	WCTCOG 9-1-1 Director, counties
Potential Funding Sources:	Local funds, donations from area businesses

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

WCTCOG (Past Action) – 17		
	Proposed Action:	Promote a program to increase roadways, driveways, and fence openings where access is necessary to 12' minimum width and vertical clearance of 15' to allow full clearance of fire trucks.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Low/Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	WCTCOG 9-1-1 Director, counties, cities
Potential Funding Sources:	TBD

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

WCTCOG (Past Action) – 18		
	Proposed Action:	Coordinate communication efforts throughout the COG area for uniform evacuation process and warning of residents during wildfire.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	WCTCOG 9-1-1 Director, counties, cities
Potential Funding Sources:	Counties

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

WCTCOG (Past Action) – 17		
	Proposed Action:	Promote a program to increase roadways, driveways, and fence openings where access is necessary to 12' minimum width and vertical clearance of 15' to allow full clearance of fire trucks.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Low/Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	WCTCOG 9-1-1 Director, counties, cities
Potential Funding Sources:	TBD

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

WCTCOG (Past Action) – 18		
	Proposed Action:	Coordinate communication efforts throughout the COG area for uniform evacuation process and warning of residents during wildfire.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	WCTCOG 9-1-1 Director, counties, cities
Potential Funding Sources:	Counties

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

WCTCOG (Past Action) – 19		
	Proposed Action:	Implement a public awareness program to promote “GO KIT” to residents throughout the COG region. The kit provides residents information on pre-planning for keeping important papers, medications and other essential items together in the event of disaster and evacuation of their home.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire, Flood
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	WCTCOG 9-1-1 Director, counties, cities, individuals
Potential Funding Sources:	TBD

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

WCTCOG (Past Action) – 20		
	Proposed Action:	Promote a program to encourage landowners to maintain home sites in a fire-defensible condition including xeriscaping and at a minimum of 100’ away from the structure, use of gravel instead of vegetative cover, and keeping brush cut and trimmed.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	Counties
Potential Funding Sources:	Counties

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

WCTCOG (Past Action) – 21		
	Proposed Action:	Promote a public awareness program to warn motorists not to drive into dense smoke caused by wildfire.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	Counties
Potential Funding Sources:	Counties

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

WCTCOG (Past Action) – 22		
	Proposed Action:	Publicize escape routes and evacuation routes for all residents to use during severe weather and other disaster events.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	Counties
Potential Funding Sources:	Counties

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

WCTCOG (Past Action) – 23		
	Proposed Action:	Implement a program to secure power lines in rural areas when transmission lines, due to severe thunderstorm, wind, ice, and other weather events may spark a fire, which may go un-noticed, resulting in urban and rural fire.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire, Winter Storm, Thunderstorm
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	Counties
Potential Funding Sources:	Counties, power companies

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

WCTCOG (Past Action) – 24		
	Proposed Action:	Coordinate mutually-agreed upon fire strategies with ranchers and landowners, both offensive and defensive, to minimize possible fire injuries and loss of life during wildfire events.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Moderate
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	Counties
Potential Funding Sources:	Counties, power companies

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 18: PREVIOUS ACTIONS

WCTCOG (Past Action) – 25		
	Proposed Action:	Post burn ban signs on all major highways.

MITIGATION ACTION DETAILS	
Hazard Addressed:	Wildfire
Effect on new/existing buildings:	N/A
Priority:	Low
Estimated Cost:	TBD
Implementation Schedule:	2012 and ongoing
Coordinating Agency:	Counties
Potential Funding Sources:	Counties

2018 Analysis:
Defer Action – Action will be included in the 2018 Plan Update.

SECTION 19: MITIGATION ACTIONS

Summary	1
West Central Texas Council of Governments	3
Taylor County-wide	29
Taylor County	35
City of Abilene	74
Town of Buffalo Gap	98
Town of Lawn	117
Town of Merkel	132
Town of Trent	146
City of Tuscola	153
City of Tye	174

SUMMARY

As discussed in Section 2, at the mitigation workshop the planning team and stakeholders met to develop mitigation actions for each of the natural hazards included in the Plan. Each of the actions in this section were prioritized based on FEMA’s Social, Technical, Administrative, Political, Legal, Economic, and Environmental (STAPLEE) criteria necessary for the implementation of each action.

As part of the economic evaluation of the STAPLEE analysis, jurisdictions analyzed each action in terms of the overall costs, measuring whether the potential benefit to be gained from the action outweighed costs associated with it. As a result of this exercise, priority was assigned to each mitigation action by marking them as High (H), Moderate (M), or Low (L). An action that is ranked as “High” indicates that the action will be implemented as soon as funding is received. A “Moderate” action is one that may not be implemented right away depending on the cost and number of citizens served by the action. Actions ranked as “Low” indicate that they will not be implemented without first seeking grant funding and after “High” and “Moderate” actions have been completed.

All mitigation actions created by Planning Team members are presented in this section in the form of Mitigation Action Worksheets. More than one hazard is sometimes listed for an action, if appropriate. Actions presented in this section represent a comprehensive range of mitigation actions per current State and FEMA Guidelines, including two actions, per hazard, and of two different types for each participating jurisdiction. The term county-wide refers to Taylor County and all participating jurisdictions, except for WCTCOG.

SECTION 19: MITIGATION ACTIONS

Table 19-1. Planning Area 1 Mitigation Action Matrix

TYPE OF ACTION	
Action #1 – Plans/Regulations (Blue)	Action #4 – Structural (Orange)
Action #2 – Education/Awareness (Red)	Action #5 – Preparedness/Response (Black)
Action #3 – Natural Resources (Green)	

Jurisdiction	Thunderstorm Wind	Extreme Heat	Hail	Drought	Lightning	Wildfire	Tornado	Flood	Winter Storm	Expansive Soils	Earthquake	Dam Failure
WCTCOG	XXXX	XXX	XXX	XX	XXX	XXXX	XXXX	XXXX	XXX	XXX	XXXX	N/A
Taylor County	XXXX	XXXXX	XXX	XXXX	XXX	XXXXX	XXXX	XXXXX	XXX	XXX	XXX	XXXX
City of Abilene	XXXX	XXXXX	XXX	XXXX	XXX	XXXX	XXX	XXXXX	XXX	XXX	XXX	XXXX
Town of Buffalo Gap	XXXX	XXXX	XXX	XXX	XXX	XXXX	XXXX	XXXXX	XXX	XXX	XXXX	N/A
Town of Lawn	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXX	XXX	XXX	XXX	XXXX	N/A
Town of Merkel	XXXX	XXXX	XXX	XXX	XXX	XXXX	XXXX	XXX	XXX	XXX	XXX	N/A
Town of Trent	XXXX	XXXX	XXX	XXX	XXX	XXXX	XXXX	XXX	XXX	XXX	XXXX	N/A
City of Tuscola	XXXX	XXXXX	XXX	XXXX	XXX	XXXX	XXXX	XXXXX	XXX	XXX	XXXX	N/A
City of Tye	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXX	XXXXX	XXXX	XXX	XXXX	N/A

WEST CENTRAL TEXAS COUNCIL OF GOVERNMENTS

WCTCOG – Action #1	
Proposed Action:	Implement education and awareness program utilizing media, social media, bulletins, flyers, etc. throughout the WCTCOG nineteen county region; Educate employees and citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages.
BACKGROUND INFORMATION	
Jurisdiction/Location:	West Central Texas Council of Governments employees and nineteen county service area
Risk Reduction Benefit (Current Cost/Losses Avoided):	Promote hazard awareness and protect employees and citizens from potential injuries and damages through all hazards mitigation education.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Earthquake, Extreme Heat, Expansive Soils, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$20,000
Potential Funding Sources:	Local Funding, HMA Grants
Lead Agency/Department Responsible:	WCTCOG Community Program Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Standard Operations Plan

COMMENTS
The effort will be in coordination with regional and local Emergency Management officials, mayors, judges, and City managers to present information to the local communities they serve. Events will be hosted internally for WCTCOG employees as well as at local area facilities open to the public.

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #2	
Proposed Action:	Harden/retrofit WCTCOG facility to hazard-resistant levels against natural hazards; Acquire and install generator with permanent hard wired quick connections to facility.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG facility
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages at facility; ensure continuity of services during and after event; reduce risk of injury to personnel.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Earthquake, Expansive Soils, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$100,000
Potential Funding Sources:	Local Revenue, HMA Grants, Other State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG Maintenance Services
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Capital Improvement Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #3	
Proposed Action:	Plant drought tolerant landscaping around WCTCOG facility; Plant additional trees near building, sidewalk and parking lot to reduce heat island effect on facility and provide shade for employees.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG facility
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce water usage through drought tolerant landscaping; reduce risk to employees by providing shaded areas; reduce extreme heat impacts on building and infrastructure.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Extreme Heat, Drought
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Low
Estimated Cost:	\$5,000
Potential Funding Sources:	General Funds
Lead Agency/Department Responsible:	WCTCOG Maintenance Services
Implementation Schedule:	Within 48 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #4	
Proposed Action:	Develop and implement a public awareness program for severe winter storms through WCTCOG planning meetings internally for employees and at various public events for citizens in the service area.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions, including ISDs within those jurisdictions
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce property loss and risk of injuries.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Operating Budget (staff time), State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #5	
Proposed Action:	Develop and implement a public awareness program for hail through WCTCOG planning meetings internally for employees and at various public events for citizens in the service area.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions, including ISDs within those jurisdictions
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce property loss and risk of injuries through public education program.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Hail
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Operating Budget (staff time), State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #6	
Proposed Action:	Implement a Home Shelter program for the nineteen county WCTCOG Region based on a 50/50 match.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of injuries and/or fatalities through residential safe room installations.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Thunderstorm Wind, Tornado
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Operating Budget (staff time), State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #7	
Proposed Action:	Improve wildfire fighting water delivery capabilities by the purchasing of one large, mobile fifth-wheel water trailer to be strategically placed around the region.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure - Preparedness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to existing structures
Priority (High, Moderate, Low):	High
Estimated Cost:	\$150,000-\$175,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #8	
Proposed Action:	Develop and implement a plan to relocate repetitive flood loss structures out of Special Flood Hazard Areas (SFHAs) to minimize flooding of structures and restore natural floodplain areas (in coordination with jurisdictions).
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce property loss and risk of injuries; reduce community recovery time.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to existing structures
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000,000
Potential Funding Sources:	State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG Economic Development Director
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #9	
Proposed Action:	Implement a program to increase building standards for construction of low-income, manufactured, or other residential and commercial structures through adoption and enforcement of improved building codes.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries through improved construction practices.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Tornado, Thunderstorm Wind, Hail, Wildfire, Earthquake, Expansive Soils, Flood, Lightning, Winter Storm
Effect on New/Existing Buildings:	Reduce risk to new structures
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funding (staff time)
Lead Agency/Department Responsible:	WCTCOG Economic Development Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #10	
Proposed Action:	Purchase a mobile recovery trailer for first responders to utilize during regional disasters. Trailer will disseminate first aid, water and other supplies.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of injuries
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Preparedness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Extreme Heat, Wildfire, Thunderstorm Wind, Tornado, Earthquake
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$250,000
Potential Funding Sources:	Local Funding, State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Emergency Response Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #11	
Proposed Action:	Designate area(s) and construct multi-purpose community shelter(s) to accommodate area residents during disasters and severe weather events in the WCTCOG region. Utilize shelters during extreme temperatures to protect vulnerable populations. Disseminate location and operations of shelters to area residents.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce risk of injuries to area residents.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Structure and Infrastructure Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm, Tornado, Thunderstorm Wind, Extreme Heat, Flood, Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$1 Million - \$1.3 Million
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director
Implementation Schedule:	Within 12-24 months
Incorporation into Existing Plans:	Emergency Operations Plans

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #12	
Proposed Action:	Develop a program for rural residences in the nineteen-county region to ensure all structures have visible addresses that can be seen from county roads and highways both day and night in order to aid first responders during wildfire events.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce property loss and risk of injuries.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Local Plans and Regulations - Preparedness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to existing structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$20,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #13	
Proposed Action:	Initiate a program to locate and map all water resources (commercial, flush hydrants, stock ponds, lakes and waterways) using GPS.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations - Preparedness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director, Forest Service
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #14	
Proposed Action:	Develop local agreements with landowners to cut fences both for access to wildfires and to free trapped livestock. Include landowners who will be willing to take control and move livestock to safe areas for care and feeding.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations - Preparedness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time), USDA, State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director, USDA
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #15	
Proposed Action:	Develop and implement a program to aid in additional training for ICS/NIMS for coordinating firefighting efforts involving all firefighters, law enforcement and community officials, and other agencies utilized during a wildfire incident.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director, FEMA
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #16	
Proposed Action:	Secure additional funding for Volunteer Fire Departments.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Provide additional resources to fire departments for critical equipment and training.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Preparedness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funding (staff time)
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director, Counties
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #17	
Proposed Action:	Implement a program to educate employees and residents about landscaping with gravel and similar materials opposed to plantings and other types of vegetation to reduce the fuel source around structures.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries; reduce risk and spread of wildfire; reduce depletion of ground water resources.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire, Drought
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time), Donations from area businesses
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director, Counties
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #18	
Proposed Action:	Educate jurisdictions on the value of building codes requiring increased roadways, driveways, and fence openings where access is necessary to 12' minimum width and vertical clearance of 15' to allow full clearance of fire trucks.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries; ensure adequate access for facilities and/or neighborhoods during wildfires.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Low
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director, Counties, Cities
Implementation Schedule:	Within 36-48 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #19	
Proposed Action:	Coordinate communication efforts throughout the WCTCOG area for uniform evacuation process and warning of residents during wildfire.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries; increase efficiency of evacuations.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness - Preparedness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director, Counties, Cities
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Emergency Operations Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #20	
Proposed Action:	Implement a public awareness program to promote “GO KIT” to residents and WCTCOG employees throughout the WCTCOG region. The kit provides residents information on pre-planning for keeping important papers, medications and other essential items together in the event of a disaster and evacuation of their home.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce risk of injuries.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness - Preparedness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire, Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #21	
Proposed Action:	Promote a program to encourage landowners to maintain home sites in a fire-defensible condition including xeriscaping and at a minimum of 100' away from the structure, use of gravel instead of vegetative cover, and keeping brush cut and trimmed.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of injuries and damage to property.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #22	
Proposed Action:	Promote a public awareness program to warn motorists (including area residents and WCTCOG employees) not to drive into dense smoke caused by wildfire.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce risk of injuries.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #23	
Proposed Action:	Publicize escape routes and evacuation routes for all residents to use during severe weather and other disaster events.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire, Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	WCTCOG 9-1-1 Director
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #24	
Proposed Action:	Implement a program to secure power lines in rural areas when transmission lines, due to severe thunderstorm, wind, ice, and other weather events, may spark a fire, which may go unnoticed resulting in urban and rural fire.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce risk of injuries and damage to property; reduce risk of wildfires.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire, Winter Storm, Thunderstorm Wind, Hail
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG Economic Development Director
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #25	
Proposed Action:	Coordinate mutually-agreed upon fire strategies with ranchers and landowners, both offensive and defensive, to minimize possible fire injuries and loss of life during wildfire events.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce risk of injuries
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	WCTCOG Administration
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

WCTCOG – Action #26	
Proposed Action:	Post burn ban signs on all major highways.
BACKGROUND INFORMATION	
Jurisdiction/Location:	WCTCOG and all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of injuries and property damage.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Low
Estimated Cost:	\$250,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	WCTCOG Economic Development Director
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

TAYLOR COUNTY-WIDE

Taylor County-Wide – Action #1	
Proposed Action:	Implement education and awareness program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages.
BACKGROUND INFORMATION	
Jurisdiction/Location:	County-Wide, including all participating jurisdictions
Risk Reduction Benefit (Current Cost/Losses Avoided):	Promote hazard awareness and protect citizens from potential injuries and damages.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure (Taylor County and Abilene only), Drought, Earthquake, Extreme Heat, Expansive Soils, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds (staff time), State and Federal Grants
Lead Agency/Department Responsible:	County and Local Emergency Management Coordinators, City of Abilene, County Judge & County Administration
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County-Wide – Action #2	
Proposed Action:	Acquire and install generators with hard wired quick connections at all critical facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	County-wide critical facilities, including all participating jurisdictions
Risk Reduction Benefit (Current Cost/Losses Avoided):	Provide power for critical facilities during power outages and ensure continuity of critical services.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure (Taylor County and Abilene only), Earthquake, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County and Local Emergency Management Coordinators, City of Abilene, County Judge and County Administration
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County-Wide – Action #3	
Proposed Action:	Harden/retrofit critical facilities to hazard-resistant levels.
BACKGROUND INFORMATION	
Jurisdiction/Location:	County-wide critical facilities, including all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages at critical facilities; ensure continuity of critical services during and after events; reduce risk of injury to emergency and critical personnel.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure (Taylor County and Abilene only), Drought, Earthquake, Expansive Soils, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	Reduce risk to existing structures
Priority (High, Moderate, Low):	High
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County and local Emergency Management Coordinators, City of Abilene, County Judge and County Administration
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan, Capital Improvement Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County-Wide – Action #4	
Proposed Action:	Incorporate higher standards for hazard resistance in local application of the building code.
BACKGROUND INFORMATION	
Jurisdiction/Location:	County-wide, including all participating jurisdictions
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages to structures through improved construction techniques; reduce recovery efforts for the community after an event.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure (Taylor County and Abilene only), Earthquake, Expansive Soils, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	Reduce risk to new structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds (staff time), State Grants
Lead Agency/Department Responsible:	County and Local Emergency Management Coordinators, City of Abilene, County Judge and County Administration
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County-Wide – Action #5	
Proposed Action:	Adopt a landscape ordinance (selection and planting guidelines).
BACKGROUND INFORMATION	
Jurisdiction/Location:	County-wide, including all participating jurisdictions
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce impact on groundwater; minimize impacts of expansive soils; reduce rainfall runoff volume and risk of flooding; reduce risk and spread of wildfires.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Flood, Wildfire, Expansive Soils
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	County and Local Emergency Management Coordinators, City of Abilene, County Judge and County Administration
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County-Wide – Action #6	
Proposed Action:	Complete an updated soil survey for the entire county.
BACKGROUND INFORMATION	
Jurisdiction/Location:	County-wide, including all participating jurisdictions
Risk Reduction Benefit (Current Cost/Losses Avoided):	Enhance the risk assessment for expansive soils; Inform future development decisions by identifying area with high plasticity index ranges; Reduce future losses due to expansive soils.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Expansive Soils
Effect on New/Existing Buildings:	Reduce risk to new structures and infrastructure
Priority (High, Moderate, Low):	Low
Estimated Cost:	\$50,000
Potential Funding Sources:	Local Funds, State and Federal Grants, USGS
Lead Agency/Department Responsible:	County and Local engineers, City of Abilene, County Judge and County Administration
Implementation Schedule:	Within 36 months of plan adoption
Incorporation into Existing Plans:	Capital Improvement Plan

COMMENTS

TAYLOR COUNTY

Taylor County – Action #1	
Proposed Action:	Implement education and awareness program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce property loss and risk of injuries through risk awareness and mitigation education.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure, Drought, Earthquake, Expansive Soils, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$2,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #2	
Proposed Action:	Acquire and distribute NOAA weather radios.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries through risk awareness and mitigation education.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure, Earthquake, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Emergency Operations Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #3	
Proposed Action:	Acquire and install generators with hard wired quick connections at all critical facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of injuries; ensure continuity of services
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure, Earthquake, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$500,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Emergency Operations Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #4	
Proposed Action:	Obtain certification in the National Weather Service StormReady Program.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries through risk awareness and mitigation education.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Thunderstorm Wind, Winter Storm, Tornado, Hail
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Emergency Response Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #5	
Proposed Action:	Harden/retrofit critical facilities to hazard-resistant levels.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries; ensure continuity of services.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure, Drought, Earthquake, Expansive Soils, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	Reduce risk to existing structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funding, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #6	
Proposed Action:	Trim trees along electric power lines.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries; reduce damages to infrastructure; reduce length and number of power outages; ensure continuity of services.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Hail, Lightning, Thunderstorm Wind, Tornado, Winter Storm
Effect on New/Existing Buildings:	Reduce risk to existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #7	
Proposed Action:	Adopt and implement on-site retention basin program in conjunction with development to address excessive stormwater / firefighting water source.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure, Flood, Wildfire
Effect on New/Existing Buildings:	Reduce risk to existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Drainage Plan, CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #8	
Proposed Action:	Create, implement and enhance an area-wide telephone Emergency Notification System (“Reverse 911”).
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries through risk awareness and mitigation education.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure, Earthquake, Flood, Tornado, Winter Storm, Thunderstorm Wind, Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Emergency Operations Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #9	
Proposed Action:	Develop alternate evacuation routes/plans and designate emergency thoroughfares, particularly in areas with limited capacity. Educate citizens on evacuation routes and procedures.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure, Wildfire, Earthquake, Flood, Tornado
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Emergency Operations Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #10	
Proposed Action:	Adopt smart growth initiatives. Incorporate a formal hazard mitigation plan in long-term community development planning activities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk in high hazard areas by promoting and incentivizing development in low risk areas; build resiliency within the community; reduce risk of damages through improved planning and construction practices.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure, Flood, Wildfire, Drought, Extreme Heat
Effect on New/Existing Buildings:	Reduce risk to new structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Community Development Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #11	
Proposed Action:	Establish, adopt, and implement a “green infrastructure” program for parks, nature preserves, greenbelts, etc.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce impacts of flood through expanded greenspace and restoration of floodplains and wetlands, reduce impacts of drought through green infrastructure that works to replenish groundwater reserves; reduce impacts of Urban Island Heat effect in densely populated areas through tree planting.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Natural Systems Protection

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Drought, Extreme Heat
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Community Development Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #12	
Proposed Action:	Create, adopt and implement a program for clearing debris from bridges, drains and culverts.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages caused by flooding by maintaining or restoring drainage capacity.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$50,000 (annually)
Potential Funding Sources:	Local Funds / Annual Budget
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Drainage Plan, Local Ordinance

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #13	
Proposed Action:	Identify flood-prone and repetitive loss properties through the Texas Water Development Board. Identify and implement actions to reduce or eliminate flooding at identified properties.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County-wide high flood risk properties and repetitive loss properties.
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages or injuries through flood mitigation at high risk structures; reduce the need for emergency response in high risk areas; reduce repetitive flood losses/claims; reduce community recovery efforts and costs.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to existing structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Flood Mitigation Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #14	
Proposed Action:	Undertake a comprehensive study of flood risk and reduction alternatives, with the assistance of the US Army Corps of Engineers. Implement feasible alternative for flood reduction. Revise flood damage prevention ordinance to include flood risk areas identified in the study. This study will cover all incorporated and unincorporated areas of the county that currently have limited studies with no determined base flood elevations.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County-wide flood hazard areas
Risk Reduction Benefit (Current Cost/Losses Avoided):	Improve risk assessment; reduce risk of damages or injuries through drainage improvements; reduce risk of damages and injuries.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Structure and Infrastructure Local Plans and Regulations (for unmapped areas)

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$2,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County judge
Implementation Schedule:	Within 12-36 months of plan adoption
Incorporation into Existing Plans:	Drainage Plan, Flood Damage Prevention Ordinance

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #15	
Proposed Action:	Join the Community Rating System program.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce flood insurance premiums for local residents; reduce flood risk and build resiliency.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Local Floodplain Administrator / County Judge
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Flood Damage Prevention Ordinance, Floodplain Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #16	
Proposed Action:	Upgrade undersized stormwater drains.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County-wide drainage system
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of flood damages through improved drainage capacity; reduce risk of injuries to citizens; reduce burden on emergency services during and after a flood event.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 12-48 months of plan adoption
Incorporation into Existing Plans:	Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #17	
Proposed Action:	Create and implement a flood awareness program by providing FEMA/NFIP materials to mortgage lenders, real estate agents and insurance agents and place them in local libraries.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce flood risk through education and awareness; increase flood insurance coverage.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #18	
Proposed Action:	Require standard tie-downs of propane tanks.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages to structures and infrastructure; reduce risk of hazardous material release and potential fires; reduce risk of injuries or fatalities; reduce risk of flood water contamination.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Thunderstorm Wind, Tornado, Dam Failure, Flood
Effect on New/Existing Buildings:	Reduce risk to existing and future structure and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Flood Damage Prevention Court Order

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #19	
Proposed Action:	Educate community on the dangers of low water crossings through the installation of warning signs and promotion of “Turn Around, Don’t Drown” Program.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of injuries, fatalities and damages through education and awareness.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #20	
Proposed Action:	Create and implement stream restoration / channelization program to ensure adequate drainage / diversion of stormwater.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of flood damages through improved drainage capacity / stormwater diversion; reduce risk of injuries to citizens; reduce burden on emergency services during and after a flood event.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #21	
Proposed Action:	Conduct public education program on fire risks and wildland fire mitigation, with the assistance of the Texas Forest Service.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through education and awareness programs; reduce risk of damages and injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to existing and future buildings
Priority (High, Moderate, Low):	High
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #22	
Proposed Action:	Evaluate access and road conditions for response vehicles. Develop and implement options to improve access and/or add redundant access routes in high risk areas.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through maintained and redundant access routes in high risk areas; improve response time for emergency services; reduce risk of injury or damages; provide additional ingress / egress routes through high risk areas to prevent loss of life and avoid rescue efforts.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire, Flood
Effect on New/Existing Buildings:	Reduce risk to new or existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	CWPP, Capital Improvement Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #23	
Proposed Action:	Work with state and local agencies to determine locations to reduce fuel on public and private lands. Implement fuels reduction program.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of wildfires and the spread of wildfires through targeted fuels reduction programs.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Natural Systems Protection

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$500,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #24	
Proposed Action:	Create, adopt and implement routine fire hydrant maintenance.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through routine maintenance of fire hydrants; reduce risk of injury or damages.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to new or existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #25	
Proposed Action:	Allow no vegetation in easements or require fire-resistant landscaping.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of wildfires and the spread of wildfire through improved development practices and building requirements / restrictions.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	CWPP, Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #26	
Proposed Action:	Install fire danger rating / burn ban signs.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through education and awareness programs; reduce risk of damages and injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #27	
Proposed Action:	Implement a community education program regarding fire dangers for identified risk areas; Distribute pamphlets through neighborhood associations or insert flyers in water bills to make residents aware of wildfire hazard areas and fire protection measures for homes and yards.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through education and awareness programs; reduce risk of damages and injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #28	
Proposed Action:	Adopt and implement a routine tree trimming program that clears tree limbs hanging in right-of-way; Remove dead trees from right-of-way and drainage systems on a scheduled basis.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages to infrastructure; ensure continuity of services during and after event; reduce damages associated with power outages; reduce risk of injuries or fatalities to vulnerable populations.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Thunderstorm Wind, Hail, Lightning, Tornado, Winter Storm, Wildfire
Effect on New/Existing Buildings:	Reduce risk to existing and future structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$100,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	CWPP, Drainage Plan, Maintenance Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #29	
Proposed Action:	Require “safe rooms” to be added when constructing new schools, daycares, rest homes and critical care facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens by providing shelter in new critical facilities during extreme weather events.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Planning and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Tornado, Thunderstorm Wind
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #30	
Proposed Action:	Implement measures to secure traffic lights and traffic controls from high wind damage.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages to structures and infrastructure; reduce risk of injuries or fatalities.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Thunderstorm Wind, Tornado
Effect on New/Existing Buildings:	Reduce risk to existing and future structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #31	
Proposed Action:	Install warning signs at hazardous bridges and roadways subject to ice.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages and injuries on roadways and bridges during winter storm events through education and awareness programs; reduce demand on emergency response during winter storms.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #32	
Proposed Action:	Educate citizens on mitigation measures to prevent frozen pipes; educate homeowners on carbon monoxide monitors / alarms.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages and injuries through mitigation education and awareness.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$25,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #33	
Proposed Action:	Adopt and implement program to insulate outdoor pipes at public buildings.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages at public buildings resulting from freezing temperatures; ensure continuity of public services.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm
Effect on New/Existing Buildings:	Reduce risk to existing structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Administration / County Judge
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #34	
Proposed Action:	Annual dam inspection, partner with SWCD to help fund repairs and maintenance, partner with property owners to report new damage or erosion, and patrol for illegal dumping at dams.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County dams
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations - Preparedness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000 per dam annually
Potential Funding Sources:	USDA / NRCS
Lead Agency/Department Responsible:	Taylor County Commissioners
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #35	
Proposed Action:	Establish a public awareness program regarding availability of flood insurance by disseminating brochures in public places, such as the County Courthouse and area City Halls.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	County Administration and County Judge
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #36	
Proposed Action:	Develop Community Wildfire Protection Plan (CWPP).
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations - Preparedness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$50,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Emergency Management Office and County Administration
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #37	
Proposed Action:	Upgrade and elevate roads to Higher Regulatory standards (above 500-year flood levels) to provide emergency access to critical facilities during flooding events.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Taylor County Judge and County Administration
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #38	
Proposed Action:	Construct safe room or shelter at public facility or school to house residents in the County during times of disaster, severe weather events, and as a cooling/heating center during extreme temperatures.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce risk of injuries.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Tornado, Flood, Extreme Heat, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$6,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Emergency Management Office and County Administration
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Emergency Operations Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Taylor County – Action #39	
Proposed Action:	Implement a program to secure power lines in rural areas when transmission lines, due to extreme weather events which could spark a fire that may go unnoticed, resulting in urban and rural wildfires.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Taylor County
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of injuries and property damage.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire, Winter Storm, Thunderstorm Wind, Hail, Lightning
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$250,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	County Emergency Management Office / Power Companies and County Administration
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

CITY OF ABILENE

City of Abilene – Action #1	
Proposed Action:	Acquire and distribute NOAA weather radios.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City of Abilene critical facilities
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce risk to citizens through improved communications and early warning.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure, Earthquake, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$50,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Emergency Management Coordinator
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #2	
Proposed Action:	Acquire and install generators with hard wired quick connections at all critical facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City of Abilene critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Provide power for critical facilities during power outages and ensure continuity of services.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure, Earthquake, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City of Abilene Facilities and Capital improvements Dept.
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #3	
Proposed Action:	Adopt on-site retention basin program in conjunction with development to address excessive stormwater / firefighting water source.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Require developers to implement on-site retention basin for new developments will prevent downstream impacts, reduce impacts to floodplain and provide additional potential water sources for firefighting uses.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure, Flood, Wildfire
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$2,500
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City of Abilene Public Works Storm Water
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #4	
Proposed Action:	Prohibit animal shelters in known hazard areas.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to shelters and animals by requiring development outside of hazardous areas; reduce burden on emergency response.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Wildfire
Effect on New/Existing Buildings:	Reduce risk to new structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$2,500
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City of Abilene Animal Services
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #5	
Proposed Action:	Develop alternative evacuation routes / plans and designate emergency thoroughfares, particularly in areas with limited capacity. Educate citizens on evacuation routes and procedures.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to residents through improved evacuation alternatives and awareness efforts.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations – Preparedness Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure, Flood, Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Emergency Management Coordinator
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #6	
Proposed Action:	Provide / construct additional means of access into single-entry neighborhoods; Update subdivision codes for a higher level of ingress and egress.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to residents through improved evacuation alternatives; improve firefighting capabilities through improved access alternatives.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Dam Failure, Flood, Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$250,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City of Abilene Planning and Development Services
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances; Capital Improvement Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #7	
Proposed Action:	Establish, adopt and implement a “green infrastructure” program for parks, nature preserves, greenbelts, etc.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce impacts of flood through expanded greenspace and restoration of floodplains and wetlands; reduce impacts of drought through green infrastructure that works to replenish groundwater reserves.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Natural Systems Protection Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Drought, Extreme Heat
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Low
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City of Abilene Parks
Implementation Schedule:	Within 36 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances, Floodplain Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #8	
Proposed Action:	Identify flood-prone and repetitive loss properties through the Texas Water Development Board. Identify and implement actions to reduce or eliminate flooding at identified properties.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages or injuries through flood mitigation at high risk structures; reduce the need for emergency response at high risk areas.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City of Abilene Public Works
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Floodplain Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #9	
Proposed Action:	Undertake a comprehensive study of flood risk and reduction alternatives, with the assistance of the US Army Corps of Engineers. Implement feasible alternatives for flood reduction.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide flood hazard areas
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Improve risk assessment; reduce risk of damages or injuries through drainage improvements; reduce risk of damages and injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure Local Plans and Regulations (for unmapped areas)

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City of Abilene Public Works
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #10	
Proposed Action:	Join the Community Rating System program.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce flood insurance premiums for local residents; reduce flood risk and build resiliency.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City of Abilene Public Works
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Floodplain Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #11	
Proposed Action:	Increase freeboard requirements for permitting structures in the SFHA; Adopt a “no-rise” in BFE in the 100-year floodplain; Update local flood ordinance to prohibit granting of variance in SFHA; Include “cumulative damage” provisions in local floodplain management ordinance.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce flood damages through improved construction requirements in flood-prone areas.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City of Abilene Public Works
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Flood Damage Prevention Ordinance

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #12	
Proposed Action:	Implement a flood awareness program by providing FEMA/NFIP materials to mortgage lenders, real estate agents and insurance agents and place them in local libraries.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce flood risk through education and expanded flood insurance coverage.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City of Abilene Public Works
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #13	
Proposed Action:	Educate community on the dangers of low water crossings through the installation of warning signs and promotion of “Turn Around, Don’t Drown” Program.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce flood risk through education and awareness.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$7,500
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City of Abilene Public Works
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #14	
Proposed Action:	Increase drainage capacity; Add stormwater detention and/or retention basins as deemed necessary to reduce flood risk.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce flood risk through improved drainage capacity; reduce risk of damages and injuries; reduce emergency response needs.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000,000
Potential Funding Sources:	Local Funds, HMGP, CDBG
Lead Agency/Department Responsible:	City of Abilene Public Works
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #15	
Proposed Action:	Conduct public education program on fire risks and wildland fire mitigation, with the assistance of the Texas Forest Service.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens through education and awareness programs; reduce risk of human caused wildfires.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$2,500
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City of Abilene Fire Dept.
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #16	
Proposed Action:	Install a network of dry hydrants in stock ponds, creeks, and small lakes to increase the supply of water for fire protection.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of wildfires and the spread of wildfire by increasing water access and firefighting capabilities.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$500,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City of Abilene Fire Dept.
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #17	
Proposed Action:	Adopt construction regulations for fire-resistant roofing materials, smoke alarm systems, sprinkler systems, cisterns, escape roads, fuels management requirements, and boxing of eaves, overhangs, and decks; Require fire extinguishers for all homes and businesses; Require large side yards between adjacent buildings in residential and commercial areas.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce risk of wildfires and the spread of wildfire through improved construction practices and building requirements.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City Emergency Management Coordinator
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	CWPP / Local Building Codes

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #18	
Proposed Action:	Require “safe rooms” to be added when constructing new schools, daycares, rest homes and critical care facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens by providing shelter in new critical facilities during extreme weather events.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Tornado, Thunderstorm Wind
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City Emergency Management Coordinator
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #19	
Proposed Action:	Build safe room shelters at mobile home parks so that all park residents can reach shelter in less than five minutes.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens by providing shelter in high risk areas during extreme weather events.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Tornado, Thunderstorm Wind
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Low
Estimated Cost:	\$500,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Emergency Management Coordinator
Implementation Schedule:	Within 48 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #20	
Proposed Action:	Install warning signs at hazardous bridges and roadways subject to ice; Educate citizens on mitigation measures to prevent frozen pipes; Educate homeowners on carbon monoxide monitors / alarms.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens by posting warning signage at high risk bridges and roadways; reduce risk of damages and injuries through mitigation education and awareness.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$25,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City of Abilene
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #21	
Proposed Action:	Develop regional water source – Cedar Ridge.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City of Abilene – dam site (proposed, exact location to be determine)
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Provide additional / redundant water source; reduce risk and spread of wildfires; provide additional flood protection to area residents.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure
MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Flood, Wildfire, Dam Failure
Effect on New/Existing Buildings:	Reduce risk to new and existing structures
Priority (High, Moderate, Low):	High
Estimated Cost:	\$25,000,000
Potential Funding Sources:	Local Funding, State and Federal Grants
Lead Agency/Department Responsible:	City of Abilene Water
Implementation Schedule:	Within 12-48 months of plan adoption
Incorporation into Existing Plans:	Water Plan, Drainage Plan, Capital Improvements Plan
COMMENTS	
The permitting for this project is in progress but construction has not started.	

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #22	
Proposed Action:	Indoor / Outdoor warning system (sirens) for large gathering areas.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City of Abilene – area venues
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of injuries or fatalities through early warning.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Thunderstorm Wind, Flood, Tornado, Hail, Dam Failure, Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City of Abilene Public Works
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Emergency Operations Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #23	
Proposed Action:	Install automated creek rain gauges and automated barriers for flooded roadways.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City of Abilene – major creeks (Elm, Cedar, Catclaw) and selected crossing roads
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of injuries and/or fatalities at low water crossings; improve risk assessment and advanced warning times.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$150,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City of Abilene Public Works
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Emergency Operations Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Abilene – Action #24	
Proposed Action:	Establish a public awareness program regarding availability of flood insurance by disseminating brochures in public places, such as City Hall.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Increase risk awareness; increase flood insurance coverage; reduce burden on residents and community during recovery; reduce burden on the NFIP.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City of Abilene Public Works
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

TOWN OF BUFFALO GAP

Town of Buffalo Gap – Action #1	
Proposed Action:	Implement education and awareness program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (Current Cost/Losses Avoided):	Promote hazard awareness and protect citizens from potential injuries and damages.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Earthquake, Extreme Heat, Expansive Soils, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time), State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #2	
Proposed Action:	Acquire and distribute NOAA weather radios.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens through improved communications and early warning.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Earthquake, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$50,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #3	
Proposed Action:	Acquire and install generators with hard wired quick connections at all critical facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Provide power for critical facilities during power outages and ensure continuity of critical services.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Earthquake, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$100,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #4	
Proposed Action:	Obtain certification in the National Weather Service StormReady Program.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Thunderstorm Wind, Winter Storm, Tornado, Hail
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time), State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #5	
Proposed Action:	Harden / retrofit critical facilities to hazard-resistant levels.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages at critical facilities; ensure continuity of critical services during and after event; reduce risk of injury to emergency and critical personnel.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Earthquake, Expansive Soils, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	Reduce risk to existing structures
Priority (High, Moderate, Low):	High
Estimated Cost:	\$100,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan; capital Improvement Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #6	
Proposed Action:	Create, adopt and implement a routine tree trimming program that clears tree limbs hanging in right-of-way; Remove dead trees from right-of-way and drainage systems on a scheduled basis.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages to infrastructure; ensure continuity of services during and after event; reduce damages associated with power outages; reduce risk of injuries or fatalities to vulnerable populations.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Thunderstorm Wind, Hail, Lightning, Tornado, Winter Storm, Wildfire
Effect on New/Existing Buildings:	Reduce risk to existing and future structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$20,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Maintenance Plan, CWPP, Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #7	
Proposed Action:	Incorporate higher standards for hazard resistance in local application of the building code.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages to structures through improved construction techniques; Reduce recovery efforts for the community after an event.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Earthquake, Expansive Soils, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	Reduce risk to new structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #8	
Proposed Action:	Install irrigation systems and adopt / implement watering schedule at public buildings and critical facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community public buildings and critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to structures and infrastructure due to expansive soils by maintaining adequate soil moisture; reduce risk and spread of wildfire.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Expansive Soils, Wildfire
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$25,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances, CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #9	
Proposed Action:	Require “safe rooms” to be added when constructing new schools, daycares, rest homes and critical care facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens by providing shelter in new critical facilities during extreme weather events.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Tornado, Thunderstorm Wind
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #10	
Proposed Action:	Evaluate access and road conditions for response vehicles. Develop and implement options to improve access and/or add redundant access routes in high risk areas.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through maintained and redundant access routes in high risk areas; improve response time for emergency services; reduce risk of injury or damages; provide additional ingress/egress routes through high risk areas to prevent loss of life and avoid rescue efforts.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire, Flood
Effect on New/Existing Buildings:	Reduce risk to new or existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$200,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	CWPP, Capital Improvement Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #11	
Proposed Action:	Create, adopt and implement a program for clearing debris from bridges, drains and culverts.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages caused by flooding by maintaining or restoring drainage capacity.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000 (annually)
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #12	
Proposed Action:	Identify flood-prone and repetitive loss properties through the Texas Water Development Board. Identify and implement actions to reduce or eliminate flooding at identified properties.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide high flood risk properties and repetitive loss properties.
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages or injuries through flood mitigation at high risk structures; reduce the need for emergency response in high risk areas; reduce repetitive flood losses/claims; reduce community recovery efforts and costs.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Floodplain Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #13	
Proposed Action:	Undertake a comprehensive study of flood risk and reduction alternatives, with the assistance of the US Army Corps of Engineers. Implement feasible alternatives for flood reduction.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide flood hazard areas
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Improve risk assessment; reduce risk of damages or injuries through drainage improvements; reduce risk of damages and injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure Local Plans and Regulations (for unmapped areas)

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$500,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #14	
Proposed Action:	Require sedimentation controls for new construction; Include on-site sediment retention as a development requirement.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of flood damages due to erosion or scour during flood events.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Flood Damage Prevention Ordinance

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #15	
Proposed Action:	Conduct public education program on fire risks and wildland fire mitigation, with the assistance of the Texas Forest Service.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through education and awareness programs; reduce risk of damages and injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #16	
Proposed Action:	Establish the Buffalo Gap Community Center as a cooling/heating center for vulnerable populations during extreme temperatures. Educate area residents on the location and operation times of the center.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Buffalo Gap Community Center
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens by providing designated location to escape the effects of extreme temperatures.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Extreme Heat, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$2,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #17	
Proposed Action:	Implement a wildfire education program in the schools to teach the youth and faculty about the importance of safe fire practices.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Town of Buffalo Gap – schools and public places
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire, Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$1,000
Potential Funding Sources:	Local Funding, State and Federal Grants
Lead Agency/Department Responsible:	Fire Department
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #18	
Proposed Action:	Clear out brush and downed trees from roadside culverts and utility right-of-ways which back up during flash flooding and cause minor flooding in town.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Natural Systems Protection

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$30,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Fire Department
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Buffalo Gap – Action #19	
Proposed Action:	Establish a public awareness program regarding availability of flood insurance by disseminating brochures in public places, such as City Hall and continue flood awareness program in local schools.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce property loss and risk of injuries
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Buffalo Gap Public Works
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

TOWN OF LAWN

Town of Lawn – Action #1	
Proposed Action:	Implement education and awareness program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (Current Cost/Losses Avoided):	Promote hazard awareness and protect citizens from potential injuries and damages.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Earthquake, Extreme Heat, Expansive Soils, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$2,000
Potential Funding Sources:	Local Funds (staff time), State and Federal Grants
Lead Agency/Department Responsible:	Lawn City Council
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #2	
Proposed Action:	Acquire and distribute NOAA weather radios.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community critical facilities
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce risk to citizens through improved communications and early warning.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Earthquake, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Lawn Council Member
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #3	
Proposed Action:	Acquire and install generators with hard wired quick connections at all critical facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community critical facilities
Risk Reduction Benefit (Current Cost/Losses Avoided):	Provide power for critical facilities during power outages and ensure continuity of critical services.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Earthquake, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$100,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Lawn Council Member
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #4	
Proposed Action:	Create, adopt and implement a program for clearing debris from bridges, drains, and culverts.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages caused by flooding by maintaining or restoring drainage capacity.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000 (annually)
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Lawn Council Member
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #5	
Proposed Action:	Upgrade undersized stormwater drains and culverts.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide drainage system
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of flood damages through improved drainage capacity; reduce risk of injuries to citizens; reduce burden on emergency services during and after a flood event.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$500,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Lawn Council Member
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Floodplain Management Plan, Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #6	
Proposed Action:	Conduct public education program on fire risks and wildland fire mitigation, with the assistance of the Texas Forest Service.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through education and awareness programs; reduce risk of damages and injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$2,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Lawn Council Member
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #7	
Proposed Action:	Create, adopt and implement routine fire hydrant maintenance plan.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through routine maintenance of fire hydrants; reduce risk of injury or damages.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to new or existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Lawn Council Member
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #8	
Proposed Action:	Cut firebreaks into public wooded areas according to risk factors.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of wildfires and the spread of wildfire through targeted fire breaks.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Natural Systems Protection

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$200,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Lawn Council Member
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #9	
Proposed Action:	Install fire danger rating / burn ban signs.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through education and awareness programs; reduce risk of damages and injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Lawn Council Member
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #10	
Proposed Action:	Require “safe rooms” to be added when constructing new schools, daycares, rest homes and critical care facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens by providing shelter in new critical facilities during extreme weather events.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Tornado, Thunderstorm Wind
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Lawn Council Member
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #11	
Proposed Action:	Build safe room shelters at manufactured home parks so that all park residents can reach shelter in less than five minutes.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community manufactured home parks
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens by providing shelter in high risk areas during extreme weather events.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Tornado, Thunderstorm Wind
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Low
Estimated Cost:	\$200,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Lawn Council Member
Implementation Schedule:	Within 48 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan; Capital Improvement Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #12	
Proposed Action:	Implement a tree trimming program that routinely clears limbs and trees from right-of-way and utility easements.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries; reduce risk of power outages and associated damages.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Winter Storm, Tornado, Hail, Lightning, Thunderstorm Wind
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #13	
Proposed Action:	Develop a flood awareness program to educate citizens about availability of flood insurance and create library of brochures in City Hall for public use.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries; increase flood insurance coverage; reduce burden on citizens during recovery.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #14	
Proposed Action:	Develop and implement a public awareness program to inform the public about wildfire, drought and extreme heat dangers.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire, Drought, Extreme Heat
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Lawn Council Member
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Lawn – Action #15	
Proposed Action:	Install outdoor warning siren and system and implement response plan for severe weather events.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm, Tornado, Thunderstorm Wind
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$30,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Lawn Council Member
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Emergency Operations Plan

COMMENTS

TOWN OF MERKEL

Town of Merkel – Action #1	
Proposed Action:	Implement education and awareness program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (Current Cost/Losses Avoided):	Promote hazard awareness and protect citizens from potential injuries and damages.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Earthquake, Extreme Heat, Expansive Soils, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time), State and Federal Grants
Lead Agency/Department Responsible:	City Manager
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Merkel – Action #2	
Proposed Action:	Acquire and distribute NOAA weather radios.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens through improved communications and early warning.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Earthquake, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$20,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Manager
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Merkel – Action #3	
Proposed Action:	Implement and enhance an area-wide telephone Emergency Notification System (“Reverse 911”).
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens through improved communication and early warning.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Earthquake, Flood, Thunderstorm Wind, Winter Storm, Tornado, Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Manager
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Emergency Response Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Merkel – Action #4	
Proposed Action:	Install irrigation systems and adopt / implement water schedule at public buildings and critical facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community public buildings and critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to structures and infrastructure due to expansive soils by maintaining adequate soil moisture; reduce risk and spread of wildfire.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Expansive Soils, Wildfire
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$200,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Manager
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances, CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Merkel – Action #5	
Proposed Action:	Require standards for burial of electrical, telephone, cable lines and other utilities in new developments.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages to infrastructure; ensure continuity of critical services during and after event; reduce damages associated with power outages; reduce risk of injuries or fatalities to vulnerable populations.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Thunderstorm Wind, Tornado, Flood, Hail, Lightning, Winter Storm, Wildfire
Effect on New/Existing Buildings:	Reduce risk to existing and future structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City Manager
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Merkel – Action #6	
Proposed Action:	Create, adopt and implement a program for clearing debris from bridges, drains and culverts.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages caused by flooding by maintaining or restoring drainage capacity.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$20,000 (annually)
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Manager
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Merkel – Action #7	
Proposed Action:	Install fire danger rating / burn ban signs.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through education and awareness programs; reduce risk of damages and injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Manager
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Merkel – Action #8	
Proposed Action:	Install warning signs at hazardous bridges and roadways subject to ice.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages and injuries on roadways and bridges during winter storm events through education and awareness programs; reduce demand on emergency response during winter storms.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Manager
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Merkel – Action #9	
Proposed Action:	Educate citizens on mitigation measures to prevent frozen pipes; educate homeowners on carbon monoxide monitors / alarms.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages and injuries through mitigation education and awareness.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Manager
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Merkel – Action #10	
Proposed Action:	Adopt and implement program to insulate outdoor pipes at public buildings.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community public facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages at public buildings resulting from freezing temperatures; ensure continuity of public services.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm
Effect on New/Existing Buildings:	Reduce risk to existing structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Manager
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Merkel – Action #11	
Proposed Action:	Develop and implement a warning system to use during disasters.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Tornado
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Manager
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Merkel – Action #12	
Proposed Action:	Reduce wind damage by identifying problems, such as large trees, trees in high line wires, and buildings that can block roadways following severe weather events and implementing a program to reduce or eliminate obstructions in easements.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries; reduce risk of power outages and associated damages.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Thunderstorm Wind, Tornado, Hail, Lightning, Winter Storm
Effect on New/Existing Buildings:	Reduce risk to existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000 (annually)
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Manager
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Merkel – Action #13	
Proposed Action:	Upgrade and elevate streets to allow adequate runoff and water to flow freely to roadside drainage ditches and waterways.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$1,500,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Manager
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Merkel – Action #14	
Proposed Action:	Establish a public awareness program regarding availability of flood insurance by disseminating brochures in public places, such as City Hall.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Public Works
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

TOWN OF TRENT

Town of Trent – Action #1	
Proposed Action:	Implement education and awareness program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (Current Cost/Losses Avoided):	Promote hazard awareness and protect citizens from potential injuries and damages.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Earthquake, Extreme Heat, Expansive Soils, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$2,000
Potential Funding Sources:	Local Funds (staff time), State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Trent – Action #2	
Proposed Action:	Acquire and install generators with hard wired quick connections at all critical facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Provide power for critical facilities during power outages and ensure continuity of critical services.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Earthquake, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$200,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Trent – Action #3	
Proposed Action:	Harden/retrofit critical facilities to hazard-resistant levels.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages at critical facilities; ensure continuity of critical services during and after event; reduce risk of injury to emergency and critical personnel.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Earthquake, Expansive Soils, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	Reduce risk to existing structures
Priority (High, Moderate, Low):	High
Estimated Cost:	\$100,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan, Capital Improvement Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Trent – Action #4	
Proposed Action:	Incorporate higher standards for hazard resistance in local application of the building code.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages to structures through improved construction techniques; reduce recovery efforts for the community after an event.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Earthquake, Expansive Soils, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	Reduce risk to new structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$2,000
Potential Funding Sources:	Local Funds (staff time), State Grants
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Trent – Action #5	
Proposed Action:	Adopt a landscape ordinance (selection and planting guidelines).
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce impact on groundwater; minimize impacts of expansive soils; reduce rainfall runoff volume and risk of flooding; reduce risk and spread of wildfire.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Flood, Wildfire, Expansive Soils
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	City Secretary
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Trent – Action #6	
Proposed Action:	Adopt and implement a routine tree trimming program that clears tree limbs hanging in right-of-way; remove dead trees from right-of-way and drainage systems on a scheduled basis.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages to infrastructure; ensure continuity of services during and after event; reduce damages associated with power outages; reduce risk of injuries or fatalities to vulnerable populations.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Thunderstorm Wind, Hail, Lightning, Tornado, Winter Storm, Wildfire
Effect on New/Existing Buildings:	Reduce risk to existing and future structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Public Works Department
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Maintenance Plan, CWPP, Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

Town of Trent – Action #7	
Proposed Action:	Educate community on the dangers of low water crossings through the installation of warning signs and promotion of “Turn Around, Don’t Drown” Program.
BACKGROUND INFORMATION	
Jurisdiction/Location:	Community-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of injuries, fatalities and damages through education and awareness.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Public Works Department
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

CITY OF TUSCOLA

City of Tuscola – Action #1	
Proposed Action:	Implement education and awareness program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (Current Cost/Losses Avoided):	Promote hazard awareness and protect citizens from potential injuries and damages.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Earthquake, Extreme Heat, Expansive Soils, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time), State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #2	
Proposed Action:	Acquire and install generators with hard wired quick connections at all critical facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Provide power for critical facilities during power outages and ensure continuity of services.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Earthquake, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #3	
Proposed Action:	Harden/retrofit critical facilities to hazard-resistant levels.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages at critical facilities; ensure continuity of critical services during and after event; reduce risk of injury to emergency and critical personnel.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Earthquake, Expansive Soils, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	Reduce risk to existing structures
Priority (High, Moderate, Low):	High
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 12-24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #4	
Proposed Action:	Implement a tree trimming program that routinely clears tree limbs hanging in right-of-way; routinely remove dead trees from right-of-way and drainage systems.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages to infrastructure; ensure continuity of services during and after event; reduce damages associated with power outages; reduce risk of injuries or fatalities to vulnerable populations.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Hail, Lightning, Thunderstorm Wind, Tornado, Winter Storm, Flood, Wildfire
Effect on New/Existing Buildings:	Reduce risk to existing and future structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$100,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Maintenance Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #5	
Proposed Action:	Adopt on-site retention basin program in conjunction with development to address excessive stormwater / firefighting water source.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Requiring developers to implement on-site retention basin for new developments will prevent downstream impacts, reduce impacts to floodplain and provide additional potential water sources for firefighting uses.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Wildfire
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$2,500
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #6	
Proposed Action:	Implement and enhance an area-wide telephone Emergency Notification System (“Reverse 911”).
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens through improved communication and early warning.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Earthquake, Flood, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Emergency Response Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #7	
Proposed Action:	Adopt a landscape ordinance (selection and planting guidelines).
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce impact on groundwater; minimize impacts of expansive soils; reduce rainfall runoff volume and risk of flooding; reduce risk and spread of wildfire.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Flood, Wildfire, Expansive Soils
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #8	
Proposed Action:	Install irrigation systems and adopt / implement watering schedule at public buildings and critical facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City public buildings and critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to structures and infrastructure due to expansive soils through maintenance of moisture in soil; reduce risk and spread of wildfires.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Expansive Soils, Wildfire
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$200,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances, CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #9	
Proposed Action:	Establish, adopt, and implement a “green infrastructure” program for parks, nature preserves, greenbelts, etc.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce impacts of flood through expanded greenspace and restoration of floodplains and wetlands; reduce impacts of drought through green infrastructure that works to replenish groundwater reserves.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Natural Systems Protection Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Drought, Extreme Heat
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #10	
Proposed Action:	Create, adopt and implement a program for clearing debris from bridges, drains and culverts.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages caused by flooding by maintaining or restoring drainage capacity.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$50,000 (annually)
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #11	
Proposed Action:	Develop a land acquisition program in flood hazard areas. Acquire and demolish repetitive loss properties. Acquire high risk vacant land and maintain as open space.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide flood risk areas
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Eliminate risk of flood damages to high risk structures and prevent future losses in high risk flood hazard areas; reduce downstream impacts associated with development in the floodplain; reduce risk of injuries to citizens; reduce burden on emergency services during and after a flood event.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Floodplain Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #12	
Proposed Action:	Upgrade undersized stormwater drains.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide drainage system
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of flood damages through improved drainage capacity; reduce risk of injuries to citizens; reduce burden on emergency services during and after a flood event.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Floodplain Management Plan, Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #13	
Proposed Action:	Equip sewer manholes with watertight covers and inflow guards.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of flood water contamination; reduce risk of surface water infiltration and sewage backup; ensure continuity of critical services.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$25,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Wastewater Management plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #14	
Proposed Action:	Raise electrical components of sewage lift stations above the Base Flood Elevation (BFE).
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of floodwater contamination; reduce risk of surface water infiltration and sewage backup; ensure continuity of critical services.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$250,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Wastewater Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #15	
Proposed Action:	Construct public education program on fire risks and wildland fire mitigation, with the assistance of the Texas Forest Service. Install fire danger rating / burn ban signs in high risk areas.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through education and awareness programs.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #16	
Proposed Action:	Evaluate access and road conditions for response vehicles and formulate / implement options to improve access and/or additional access routes.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through maintained and redundant access routes in high risk areas; improve response time for emergency services; reduce risk of injury or damages.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to new or existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$250,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #17	
Proposed Action:	Create, adopt and implement routine fire hydrant maintenance plan.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through routine maintenance of fire hydrants; reduce risk of injury or damages.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to new or existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #18	
Proposed Action:	Install warning signs at hazardous bridges and roadways subject to ice.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages and injuries on roadways and bridges during winter storm events through education and awareness programs.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #19	
Proposed Action:	Add building insulation to walls and attics at public facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide public facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages at public buildings resulting from freezing temperatures; reduce energy consumption and costs during extreme temperatures.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm
Effect on New/Existing Buildings:	Reduce risk to existing structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$250,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Tuscola Public Works Director
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #20	
Proposed Action:	Create and implement a program to clear debris from drainage ditches and waterways to minimize flooding out of banks.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$2,500 (annually)
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Public Works Department
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tuscola – Action #21	
Proposed Action:	Develop a public awareness program to address dangers of flooding through materials distributed to residents and in schools.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$500
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Public Works Department
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

CITY OF TYE

City of Tye – Action #1	
Proposed Action:	Implement education and awareness program utilizing media, social media, bulletins, flyers, etc. to educate citizens of hazards that can threaten the area and mitigation measures to reduce injuries, fatalities, and property damages.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (Current Cost/Losses Avoided):	Promote hazard awareness and protect citizens from potential injuries and damages.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Drought, Earthquake, Extreme Heat, Expansive Soils, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time), State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #2	
Proposed Action:	Acquire and distribute NOAA weather radios.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens through improved communications and early warning.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Earthquake, Extreme Heat, Flood, Hail, Lightning, Thunderstorm Wind, Tornado, Wildfire, Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$50,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #3	
Proposed Action:	Obtain certification in the National Weather Service StormReady Program.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens by educating the public on how to prepare for hazards and disasters.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Thunderstorm Wind, Winter Storm, Tornado, Hail
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds (staff time), State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #4	
Proposed Action:	Create, adopt and implement a routine tree trimming program that clears tree limbs hanging in right-of-way; Remove dead trees from right-of-way and drainage systems on a scheduled basis.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages to infrastructure; ensure continuity of services during and after event; reduce damages associated with power outages; reduce risk of injuries or fatalities to vulnerable populations.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Thunderstorm Wind, Hail, Lightning, Tornado, Winter Storm, Wildfire
Effect on New/Existing Buildings:	Reduce risk to existing and future structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$100,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Maintenance Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #5	
Proposed Action:	Provide / construct additional means of access into single-entry neighborhoods; Update subdivision codes for a higher level of ingress and egress.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to residents through improved evacuation alternatives; improve firefighting capabilities through improved access alternatives.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$250,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes / Ordinances, Capital Improvement Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #6	
Proposed Action:	Install irrigation system and adopt / implement water schedule at public buildings and critical facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City public buildings and critical facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to structures and infrastructure due to drought or expansive soils by maintaining adequate soil moisture; reduce risk and spread of wildfire.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Expansive Soils, Wildfire, Drought
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$200,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances, CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #7	
Proposed Action:	Equip sewer manholes with watertight covers and inflow guards.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of flood water contamination; reduce risk of surface water infiltration and sewage backup; ensure continuity of critical services.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$100,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Wastewater Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #8	
Proposed Action:	Require “safe rooms” to be added when constructing new schools, daycares, rest homes and critical care facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens by providing shelter in new critical facilities during extreme weather events.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Tornado, Thunderstorm Wind
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #9	
Proposed Action:	Build safe room shelters at manufactured home parks so that all park residents can reach shelter in less than five minutes.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City manufactured home parks
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk to citizens by providing shelter in high risk areas during extreme weather events.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Tornado, Thunderstorm Wind
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Low
Estimated Cost:	\$500,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 48 months of plan adoption
Incorporation into Existing Plans:	Emergency Management Plan, Capital Improvement Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #10	
Proposed Action:	Require standards for burial of electrical, telephone, cable lines and other utilities in new developments.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages to infrastructure; ensure continuity of critical services during and after event; reduce damages associated with power outages; reduce risk of injuries or fatalities to vulnerable populations.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Thunderstorm Wind, Tornado, Flood, Hail, Lightning, Winter Storm, Wildfire
Effect on New/Existing Buildings:	Reduce risk to existing and future structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #11	
Proposed Action:	Create and adopt and implement a program for clearing debris from bridges, drains and culverts.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce damages caused by flooding by maintaining or restoring drainage capacity.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$50,000 (annually)
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #12	
Proposed Action:	Develop a land acquisition program in flood hazard areas. Acquire and demolish repetitive loss properties. Acquire high risk vacant land and maintain as open space.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide flood risk areas
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Eliminate risk of flood damages to high risk structures and prevent future losses in high risk flood hazard areas; reduce downstream impacts associated with development in the floodplain; reduce risk of injuries to citizens; reduce burden on emergency services during and after a flood event.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure Natural Systems Protection (vacant land)

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Floodplain Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #13	
Proposed Action:	Adopt wetlands development regulations; Implement a Comprehensive Watershed Ordinance for new development.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Preserve / restore the natural function of the floodplain; reduce flood damages and risk of injuries or fatalities through comprehensive development standards.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations Natural Systems Protection

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Local Floodplain Administrator
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	Flood Damage Prevention Ordinance

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #14	
Proposed Action:	Upgrade undersized stormwater drains.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide drainage system
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of flood damages through improved drainage capacity; reduce risk of injuries to citizens; reduce burden on emergency services during and after a flood event.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$3,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Floodplain Management Plan, Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #15	
Proposed Action:	Acquire and preserve open spaces adjacent to floodplain areas.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide flood risk fringe areas.
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce flood risk to structures and infrastructure in and near the floodplain; reduce downstream impacts associated with development in the floodplain; reduce risk of injuries to citizens; reduce burden on emergency services during and after a flood event.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Natural Systems Protection

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Floodplain Management Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #16	
Proposed Action:	Conduct public education program on fire risks and wildland fire mitigation, with the assistance of the Texas Forest Service.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through education and awareness programs; reduce risk of damages and injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #17	
Proposed Action:	Work with state and local agencies to determine locations to reduce fuel on public and private lands. Implement fuels reduction program.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of wildfires and the spread of wildfire through targeted fuels reduction programs.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Natural Systems Protection

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$500,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #18	
Proposed Action:	Create, adopt and implement routine fire hydrant maintenance plan.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through routine maintenance of fire hydrants; reduce risk of injury or damages.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to new or existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #19	
Proposed Action:	Cut firebreaks into public wooded areas according to risk factors.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of wildfires and the spread of wildfire through targeted fire breaks.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Natural Systems Protection

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$500,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #20	
Proposed Action:	Adopt construction regulations for fire-resistant roofing materials, smoke alarm systems, sprinkler systems, cisterns, escape roads, fuels management requirements, and boxing of eaves, overhangs, and decks; Require fire extinguishers for all homes and businesses; Require large side yards between adjacent buildings in residential and commercial areas.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce risk of wildfires and the spread of wildfire through improved construction practices and building requirements.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	Reduce risk to new and existing structures and infrastructure
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	CWPP, Local Building Codes

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #21	
Proposed Action:	Install fire danger rating / burn ban signs.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through education and awareness programs; reduce risk of damages and injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #22	
Proposed Action:	Implement a community education program regarding fire dangers for identified risk areas; Distribute pamphlets through neighborhood associations or insert flyers in water bills to make residents aware of wildfire hazard areas and fire protection measures for homes and yards.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk and spread of wildfires through education and awareness programs; reduce risk of damages and injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 12 months of plan adoption
Incorporation into Existing Plans:	CWPP

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #23	
Proposed Action:	Educate citizens on mitigation measures to prevent frozen pipes; Educate homeowners on carbon monoxide monitors / alarms.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages and injuries through mitigation education and awareness.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$25,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #24	
Proposed Action:	Create, adopt and implement program to insulate outdoor pipes at public buildings.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City public facilities
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce risk of damages at public buildings resulting from freezing temperatures; ensure continuity of public services.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure Local Plans and Regulations

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm
Effect on New/Existing Buildings:	Reduce risk to existing structures
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Local Building Codes/Ordinances

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #25	
Proposed Action:	Develop shelter program to accommodate storm evacuees the city receives off i-20 during significant events. Designate shelters and equip with cots, blankets, food, water, and generators for use during extreme events.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City public facilities – TBD
Risk Reduction Benefit (Current Cost/Losses Avoided):	Provide protection and accommodations to evacuees during extreme weather events.
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Local Plans and Regulations – Emergency Response / Preparedness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Winter Storm, Earthquake, Flood, Wildfire, Tornado
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24 months of plan adoption
Incorporation into Existing Plans:	Emergency Response Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #26	
Proposed Action:	Identify sites where minor flooding occurs and determine the project to minimize flooding to streets and homes. Clean and clear culverts and drainage ditches on a regular basis.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide, Lanyey Homestead
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries; reduce flood losses; increase / maintain maximum drainage capacity.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Structure and Infrastructure

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	Reduce risk to existing structures and infrastructure
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$100,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Drainage Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #27	
Proposed Action:	Implement a community action program to educate citizens on mitigation measures to reduce risk and spread of wildfires. Construct additional Fire Station on the south side of the railroad tracks.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City – between Sprinks Road and FM 707 along Airbase Road, Market Street and Indian Creek Road
Risk Reduction Benefit (Current Cost/Losses Avoided):	Reduce property loss and risk of injuries
Type of Action (Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness)	Structure and Infrastructure Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Wildfire
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	High
Estimated Cost:	\$5,000,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Fire Department
Implementation Schedule:	Within 12-48 months of plan adoption
Incorporation into Existing Plans:	Capital Improvement Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #28	
Proposed Action:	Establish a public awareness program regarding availability of flood insurance by disseminating brochures in public places, such as City Hall. Purchase and distribute NOAA weather radios to critical facilities.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood, Thunderstorm Wind, Tornado, Wildfire, Hail, Earthquake
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$10,000
Potential Funding Sources:	Local Funds, State and Federal Grants
Lead Agency/Department Responsible:	Public Works Department
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	Emergency Response Plan

COMMENTS

SECTION 19: MITIGATION ACTIONS

City of Tye – Action #29	
Proposed Action:	Promote flood safety with brochures and outreach for “Turn Around, Don’t Drown”.
BACKGROUND INFORMATION	
Jurisdiction/Location:	City-wide
Risk Reduction Benefit (<i>Current Cost/Losses Avoided</i>):	Reduce property loss and risk of injuries.
Type of Action (<i>Local Plans and Regulations, Structure and Infrastructure projects, Natural System Protection, or Education and Awareness</i>)	Education and Awareness

MITIGATION ACTION DETAILS	
Hazard(s) Addressed:	Flood
Effect on New/Existing Buildings:	N/A
Priority (High, Moderate, Low):	Moderate
Estimated Cost:	\$1,000
Potential Funding Sources:	Local Funds (staff time)
Lead Agency/Department Responsible:	Mayor
Implementation Schedule:	Within 24-36 months of plan adoption
Incorporation into Existing Plans:	N/A

COMMENTS

SECTION 20: PLAN MAINTENANCE

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PLAN MAINTENANCE PROCEDURES

The following is an explanation of how the participating jurisdictions within Planning Area 1, and the general public will be involved in implementing, evaluating, and enhancing the Plan over time. When the plan is discussed in all maintenance procedures it includes mitigation actions and hazard assessments. The sustained hazard mitigation planning process consists of four main parts:

- Incorporation
- Monitoring and Evaluation
- Updating
- Continued Public Involvement

INCORPORATION

Participating jurisdictions within Planning Area 1 will be responsible for further development and implementation of mitigation actions. Each action has been assigned to a specific department within the participating jurisdictions. The following describes the process by which Planning Area 1 will incorporate elements of the mitigation plan into other planning mechanisms.

PROCESS OF INCORPORATION

Once the Plan Update is adopted, participating jurisdictions within Planning Area 1 will implement actions based on priority and the availability of funding. The Planning Area currently implements policies and programs to reduce loss to life and property from hazards. The mitigation actions developed for this Plan Update enhance this ongoing effort and will be implemented through other program mechanisms where possible.

SECTION 20: PLAN MAINTENANCE

The potential funding sources listed for each identified action may be used when the jurisdiction seeks funds to implement actions. An implementation time period or a specific implementation date has been assigned to each action as an incentive for completing each task and gauging whether actions are implemented in a timely manner.

Planning Area 1 will integrate implementation of their mitigation actions with other plans and policies such as construction standards and emergency management plans, and ensure that these actions, or proposed projects, are reflected in other planning efforts. Coordinating and integrating components of other plans and policies into goals and objectives of the Plan Update will further maximize funding and provide possible cost-sharing of key projects, thereby reducing loss of lives and property and mitigating hazards affecting the area.

Upon formal adoption of the Plan Update, planning team members from each participating jurisdiction will work to integrate the hazard mitigation strategies into other plans and codes as they are developed. Participating team members will conduct periodic reviews of plans and policies, once per year at a minimum, and analyze the need for amendments in light of the approved Plan Update. The planning team will review all comprehensive land use plans, capital improvement plans, annual budget reviews, emergency operations or management plans, transportation plans, and any building codes to guide and control development. Participating jurisdictions will ensure that capital improvement planning in the future will also contribute to the goals of this hazard mitigation Plan Update to reduce the long-term risk to life and property from all hazards. Within one year of formal adoption of the hazard mitigation Plan Update, existing planning mechanisms will be reviewed by each jurisdiction.

Planning Area 1 is committed to supporting the cities, communities, and participating jurisdictions as they implement their mitigation actions. Planning team members will review and revise, as necessary, the long-range goals and objectives in strategic plan and budgets to ensure that they are consistent with this mitigation action plan. Additionally, the Planning Area will work to advance the goals of this hazard mitigation plan through its routine, ongoing, long-range planning, budgeting, and work processes.

Table 20-1 identifies types of planning mechanisms and examples of methods for incorporating the Plan Update into other planning efforts. The team members, listed in Table 20-2 below, will be responsible for the review of these planning mechanisms and their incorporation of the plan, with the exception of the Floodplain Management Plans; the jurisdictions who have a Floodplain Administrator on staff will be responsible for incorporating the plan when floodplain management plans are updated or new plans are developed.

Table 20-1. Methods of Incorporation of the Plan

PLANNING MECHANISM	DEPARTMENT / TITLE RESPONSIBLE	INCORPORATION OF PLAN
Annual Budget Review	Taylor County: EMC City of Abilene: EMC Town of Buffalo Gap: City Secretary Town of Lawn: City Secretary Town of Merkel: City Manager Town of Trent: EMC	Various departments and key personnel that participated in the planning process for Planning Area 1 will review the Plan and mitigation actions therein when conducting their annual budget review. The planning team will recommend funding in the annual

SECTION 20: PLAN MAINTENANCE

PLANNING MECHANISM	DEPARTMENT / TITLE RESPONSIBLE	INCORPORATION OF PLAN
	City of Tuscola: EMC City of Tye: City Secretary	budget to be allocated as potential matching funds in accordance with grant applications sought and HMAP mitigation actions that will be undertaken, according to the implementation schedule of the specific action.
Capital Improvement Plans	Taylor County: EMC City of Abilene: EMC Town of Buffalo Gap: City Secretary Town of Lawn: City Secretary Town of Merkel: City Manager Town of Trent: EMC City of Tuscola: EMC City of Tye: City Secretary	Participating jurisdictions within Planning Area 1 have a Capital Improvement Plan (CIP) in place. Prior to any revisions to the CIP, County and City departments will review the risk assessment and mitigation strategy sections of the HMAP, as limiting public spending in hazardous zones is one of the most effective long-term mitigation actions available to local governments. The planning team will include information from the risk assessment in the updated plan and enhance identified projects to include mitigation elements where natural hazards pose a risk. The team will establish goals in the updated plan to site new projects outside of known hazard areas as identified in the HMAP when possible.
Comprehensive Plans	Taylor County: EMC City of Abilene: EMC Town of Buffalo Gap: City Secretary Town of Lawn: City Secretary Town of Merkel: City Manager Town of Trent: EMC City of Tuscola: EMC City of Tye: City Secretary	Participating jurisdictions within Planning Area 1 have a Long-term Comprehensive Development Plan in place. Since comprehensive plans involve developing a unified vision for a community, the mitigation vision and goals of the Plan Update will be reviewed and incorporated in the development or revision of a Comprehensive Plan.
Floodplain Management Plans	Taylor County: Floodplain Administrator City of Abilene: Floodplain Administrator Town of Buffalo Gap: Floodplain Administrator Town of Lawn: Mayor Town of Merkel: City Manager Town of Trent: Floodplain Administrator	Floodplain management plans include preventative and corrective actions to address the flood hazard. Therefore, the actions for flooding, and information found in Section 12 of this Plan discussing the people and property at risk to flood, will be reviewed and revised when participating jurisdictions within Planning Area 1 update

SECTION 20: PLAN MAINTENANCE

PLANNING MECHANISM	DEPARTMENT / TITLE RESPONSIBLE	INCORPORATION OF PLAN
	City of Tuscola: Floodplain Administrator City of Tye: Mayor	their management plans or develop new plans. The goals and objectives of the new or updated plan will be developed to be consistent with the goals and objectives of the HMAP with regard to floodplain management.
Grant Applications	Taylor County: EMC City of Abilene: EMC Town of Buffalo Gap: City Secretary Town of Lawn: City Secretary Town of Merkel: City Manager Town of Trent: EMC City of Tuscola: EMC City of Tye: City Secretary	The Plan will be evaluated by participating jurisdictions within Planning Area 1 when grant funding is sought for mitigation projects. If a project is not in the Plan Update, an amendment may be necessary to include the action in the Plan.
Regulatory Plans	Taylor County: EMC City of Abilene: EMC Town of Buffalo Gap: City Secretary Town of Lawn: City Secretary Town of Merkel: City Manager Town of Trent: EMC City of Tuscola: EMC City of Tye: City Secretary	Currently, participating jurisdictions within Planning Area 1 have regulatory plans in place, such as Emergency Management Plans, Continuity of Operations Plans, Economic Development, and Evacuation Plans. The Plan Update will be consulted when County and City departments review or revise their current regulatory planning mechanisms, or in the development of regulatory plans that are not currently in place. The planning team will include information on natural hazards in the updated plan and enhance identified projects to include mitigation elements where natural hazards pose a risk. The planning team will work with local officials when building code or ordinance updates are in progress to ensure that development regulations include mitigation measures.

MONITORING AND EVALUATION

Periodic revisions of the Plan are required to ensure that goals, objectives, and mitigation actions are kept current. When the plan is discussed in these sections it includes the risk assessment and mitigation actions as a part of the monitoring, evaluating, updating and review process. Revisions may be required to ensure the Plan is in compliance with federal and state statutes and regulations. This section outlines the procedures for

SECTION 20: PLAN MAINTENANCE

completing Plan revisions, updates, and review. Table 20-2 indicates the department and title of the party responsible for Plan monitoring, updating, and review of the Plan.

Table 20-2. Team Members Responsible for Plan Monitoring, Evaluating, Updating, and Review of the Plan

JURISDICTION	TITLE
Taylor County	Emergency Management Coordinator
City of Abilene	Emergency Management Coordinator
Town of Buffalo Gap	City Secretary
Town of Lawn	City Secretary
Town of Merkel	City Manager
Town of Trent	Emergency Management Coordinator
City of Tuscola	Emergency Management Coordinator
City of Tye	City Secretary
WCTCOG	Hazard Mitigation Project Director

MONITORING

Designated Planning Team members are responsible for monitoring, evaluating, updating, and reviewing the Plan, as shown in Table 20-2. Individuals holding the title listed in Table 20-2 will be responsible for monitoring the Plan on an annual basis. Plan monitoring includes reviewing and incorporating into the Plan other existing planning mechanisms that relate or support goals and objectives of the Plan; monitoring the incorporation of the Plan into future updates of other existing planning mechanisms as appropriate; reviewing mitigation actions submitted and coordinating with various County and City departments to determine if mitigation actions need to be re-evaluated and updated; evaluating and updating the Plan as necessary; and monitoring plan maintenance to ensure that the process described is being followed, on an annual basis, throughout the planning process. The Planning Team will develop a brief report that identifies policies and actions in the plan that have been successfully implemented and any changes in the implementation process needed for continued success. A summary of meeting notes will report the particulars involved in developing an action into a project. In addition to the annual monitoring, the Plan will be similarly reviewed immediately after extreme weather events include but not limited to state and federally declared disasters.

EVALUATION

SECTION 20: PLAN MAINTENANCE

As part of the evaluation process, the Planning Team will assess changes in risk; determine whether the implementation of mitigation actions is on schedule; determine whether there are any implementation problems, such as technical, political, legal, or coordination issues; and identify changes in land development or programs that affect mitigation priorities for each respective department or organization.

The Planning Team will meet on an annual basis to evaluate the Plan and identify any needed changes, and assess the effectiveness of the plan achieving its stated purpose and goals. The team will evaluate the number of mitigation actions implemented along with the loss-reduction associated with each action. Actions that have not been implemented will be evaluated to determine if any social, political or financial barriers are impeding implementation and if any changes are necessary to improve the viability of an action. The team will evaluate changes in land development and/or programs that affect mitigation priorities in their respective jurisdictions. The annual evaluation process will help to determine if any changes are necessary. In addition, the Plan will be similarly evaluated immediately after extreme weather events including but not limited to state and federally declared disasters.

UPDATING

PLAN AMENDMENTS

At any time, minor technical changes may be made to update the WCTCOG Regional Hazard Mitigation Plan Update 2018 for Planning Area 1. Material changes to mitigation actions or major changes in the overall direction of the Plan or the policies contained within it, must be subject to formal adoption by the participating jurisdictions.

The WCTCOG will review proposed amendments and vote to accept, reject, or amend the proposed change. Upon ratification, the amendment will be transmitted to TDEM.

In determining whether to recommend approval or denial of a Plan amendment request, participating jurisdictions will consider the following factors:

- Errors or omissions made in the identification of issues or needs during the preparation of the Plan Update;
- New issues or needs that were not adequately addressed in the Plan Update; and
- Changes in information, data, or assumptions from those on which the Plan Update was based.

FIVE (5) YEAR REVIEW

The Plan will be thoroughly reviewed by the Planning Team at the end of three years from the approval date, to determine whether there have been significant changes in the planning area that necessitate changes in the types of mitigation actions proposed. Factors that may affect the content of the Plan include new development in identified hazard areas, increased exposure to hazards, disaster declarations, increase or decrease in capability to address hazards, and changes to federal or state legislation.

The Plan review process provides the participating jurisdictions within Planning Area 1 an opportunity to evaluate mitigation actions that have been successful, identify losses avoided due to the implementation of

SECTION 20: PLAN MAINTENANCE

specific mitigation measures, and address mitigation actions that may not have been successfully implemented as assigned.

It is recommended that the full Executive and Advisory Planning Team (Section 2, Tables 2-1 and 2-2) meet to review the Plan at the end of three years because grant funds may be necessary for the development of a five-year update. Reviewing planning grant options in advance of the five-year Plan update deadline is recommended considering the timelines for grant and planning cycles can be in excess of a year.

Following the Plan review, any revisions deemed necessary will be summarized and implemented according to the reporting procedures and Plan amendment process outlined herein. Upon completion of the review, update, and amendment process the revised Plan will be submitted to TDEM for final review and approval in coordination with FEMA.

CONTINUED PUBLIC INVOLVEMENT

Public input was an integral part of the preparation of this Plan and will continue to be essential for Plan updates. The Public will be directly involved in the annual evaluation, monitoring and cyclical updates. Changes or suggestions to improve or update the Plan will provide opportunities for additional public input.

The public can review the Plan on the WCTCOG's or participating jurisdictions' websites, or at the WCTCOG building, where officials and the public are invited to provide ongoing feedback, via email.

The Planning Team may also designate voluntary citizens from the planning area or willing stakeholder members from the private sector businesses that were involved in the Plan's development to provide feedback on an annual basis. It is important that stakeholders and the immediate community maintain a vested interest in preserving the functionality of the planning area as it pertains to the overall goals of the mitigation plan. The Planning team is responsible for notifying stakeholders and community members on an annual basis and maintaining the Plan.

Media, including local newspaper and radio stations, will be used to notify the public of any maintenance or periodic review activities during the implementation, monitoring, and evaluation phases. Additionally, local news media will be contacted to cover information regarding Plan updates, status of grant applications, and project implementation. Local and social media outlets, such as Facebook and Twitter, will keep the public and stakeholders apprised of potential opportunities to fund and implement mitigation projects identified in the Plan.

APPENDIX A: PLANNING TEAM

Planning Team Members	1
Stakeholders	4

PLANNING TEAM MEMBERS

The WCTCOG Regional Plan was organized using a direct representative model. An Executive Planning Team from the participating jurisdictions, shown in Table A-1, was formed to coordinate planning efforts and request input and participation in the planning process. Table A-2 reflects the Advisory Planning Team, consisting of area organizations and departments that participated throughout the planning process. Table A-3 is comprised of stakeholders who were invited to provide Plan input. Public outreach efforts and meeting documentation is provided in Appendix E.

Table A-1. Executive Planning Team

ORGANIZATION / DEPARTMENT	TITLE
WCTCOG	Executive Director
WCTCOG	Hazard Mitigation Project Director
Taylor County	Admin to County Clerk
Taylor County	Emergency Management Coordinator
Taylor County	Judge
City of Abilene	City Secretary
City of Abilene	Deputy Emergency Management Coordinator
City of Abilene	Emergency Management Coordinator
City of Abilene	Mayor
Town of Buffalo Gap	City Secretary
Town of Buffalo Gap	EMC – Fire Chief
Town of Buffalo Gap	EMC
Town of Lawn	City Secretary
Town of Lawn	Mayor
Town of Merkel	City Manager

APPENDIX A: PLANNING TEAM

ORGANIZATION / DEPARTMENT	TITLE
Town of Merkel	City Secretary
Town of Trent	City Secretary
Town of Trent	Emergency Management Coordinator
Town of Trent	Mayor
City of Tuscola	City Secretary
City of Tuscola	Emergency Management Coordinator
City of Tye	City Secretary
City of Tye	Mayor
City of Tye	Police Chief

Table A-2. Advisory Planning Team

ORGANIZATION / DEPARTMENT	TITLE
WCTCOG	9-1-1 Director
Taylor County	Treasurer
Taylor County	County Clerk
Taylor County, Precinct 1	Commissioner
Taylor County, Precinct 2	Commissioner
Taylor County, Precinct 4	Commissioner
Taylor County, LEPC	Chairman
Taylor County, LEPC	Treasurer
City of Abilene	City Manager
City of Abilene	Stormwater Administrator
City of Abilene	City Intern
City of Abilene	Deputy Fire Chief
City of Abilene, Public Works	Director of Public Works
City of Abilene, Public Works	Engineer Tech
City of Abilene, HDR Engineering	Project Manager

APPENDIX A: PLANNING TEAM

ORGANIZATION / DEPARTMENT	TITLE
City of Abilene	Traffic Engineer
City of Abilene	Director of Community Services
City of Abilene	Solid Waste Manager
City of Abilene	Council Member
City of Abilene	Council Member
City of Abilene	Council Member
City of Abilene	Council Member
City of Abilene	Council Member
City of Abilene	Council Member
Town of Buffalo Gap	Mayor
Town of Buffalo Gap	Council Member
Town of Buffalo Gap	Council Member
Town of Buffalo Gap	Council Member
Town of Buffalo Gap	Council Member
Town of Buffalo Gap	Council Member
Town of Lawn	Council Member
Town of Lawn	Council Member
Town of Lawn	Council Member
Town of Lawn	Council Member
Town of Lawn	Council Member
Town of Merkel	Mayor
Town of Merkel	Council Member
Town of Merkel	Council Member
Town of Merkel	Council Member
Town of Merkel	Council Member
Town of Merkel	Council Member
Town of Trent	Council Member

APPENDIX A: PLANNING TEAM

ORGANIZATION / DEPARTMENT	TITLE
Town of Trent	Council Member
Town of Trent	Council Member
Town of Trent	Council Member
Town of Trent	Council Member
City of Tuscola, Jim Ned Volunteer Fire Dept.	Fire Chief
City of Tuscola	Mayor Pro-Tem
City of Tuscola	Council Member
City of Tuscola	Council Member
City of Tuscola	Council Member
City of Tuscola	Council Member
City of Tye	Code Officer
City of Tye	Council member
City of Tye	Council member
City of Tye	Council member
City of Tye	Council member
City of Tye	Council member
City of Tye	Council member

STAKEHOLDERS

The following groups listed in Table A-3 represent a list of organizations invited to stakeholder meetings, public meetings, and workshops throughout the planning process and include: non-profit organizations, private businesses, universities, and legislators. The public were also invited to participate via e-mail throughout the planning process. Many of the invited organizations and stakeholders participated and were integral to providing comments and data for the Plan. For a list of attendees at meetings, please see Appendix E¹.

¹ Information contained in Appendix E is exempt from public release under the Freedom of Information Act (FOIA).

Table A-3. Stakeholders

AGENCY	TITLE
Abilene Chamber of Commerce	President / CEO
Abilene Christian University	Administrator – Chancellor’s Office
Abilene ISD	President of Board of Trustees
Abilene ISD	Superintendent
Abilene MPO	Executive Director
Abilene MPO	Transportation Planner
Brown County	Emergency Management Coordinator
Callahan County	Judge
Coleman County	Emergency Management Coordinator
Comanche County	Emergency Management Coordinator
Fisher County	Judge
Generations Home Health	Emergency Preparedness
Hardin-Simmons University	President
Haskell County	Judge
HDR Engineering Firm	North Texas Water Resources Program Manager
Jim Ned CISD	Superintendent
Jones County	Emergency Management Coordinator
Kent County	Judge/EMC
Knox County	Judge/EMC
McMurry University	President
Merkel ISD	Superintendent
Middle Clear Fork SWCD	Chairman of the Board of Directors
Mitchell County	Judge/EMC
Nolan County	Judge
Runnels County	Judge/EMC
Scurry County	Judge

APPENDIX A: PLANNING TEAM

AGENCY	TITLE
Shackelford County	Sheriff/EMC
Stephens County	Judge
Stonewall County	Judge/EMC
Taylor County Sheriff	Sheriff
Taylor County Sheriff	Taylor County Rural Fire
Throckmorton County	Judge
Trent ISD	Superintendent
United Way of Abilene	211 Program Director
West Central Texas MWD	GIS Specialist
West Central Texas MWD	President – Albany
Wylie ISD	Superintendent

APPENDIX B: PUBLIC SURVEY RESULTS

Overview	1
Public Survey Results	3

OVERVIEW

The WCTCOG prepared a public survey that requested public opinion on a wide range of questions relating to natural hazards. The survey was made available via their websites to all of the participating jurisdictions, which has been split into 6 planning areas, as seen in Table B-1. This survey link was also distributed at public meetings and stakeholder events throughout the planning process.

A total of 55 surveys were collected, the results of which are analyzed in Appendix B. The purpose of the survey was twofold: 1) to solicit public input during the planning process, and 2) to help the jurisdictions identify any potential actions or problem areas.

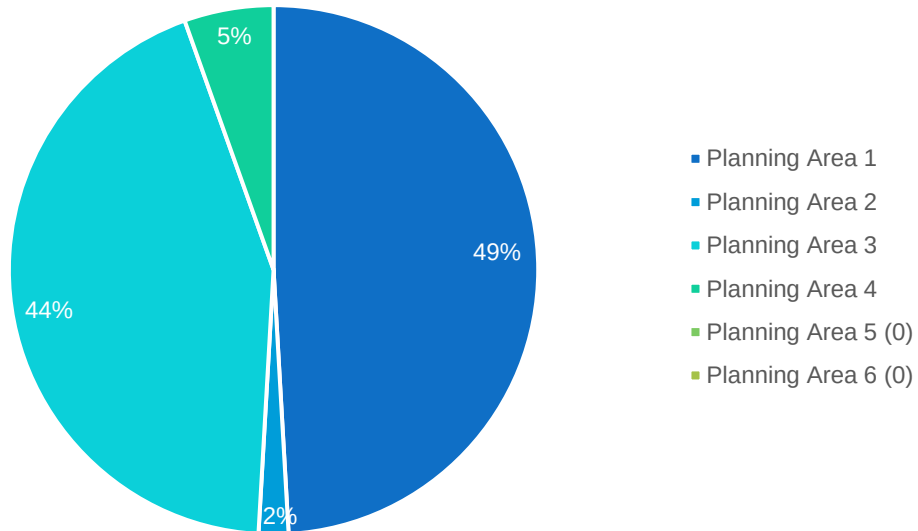
The following survey results depict the percentage of responses for each answer. Similar responses have been summarized for questions that did not provide a multiple-choice answer or that required an explanation.

Table B-1. Participating Jurisdictions by Planning Area

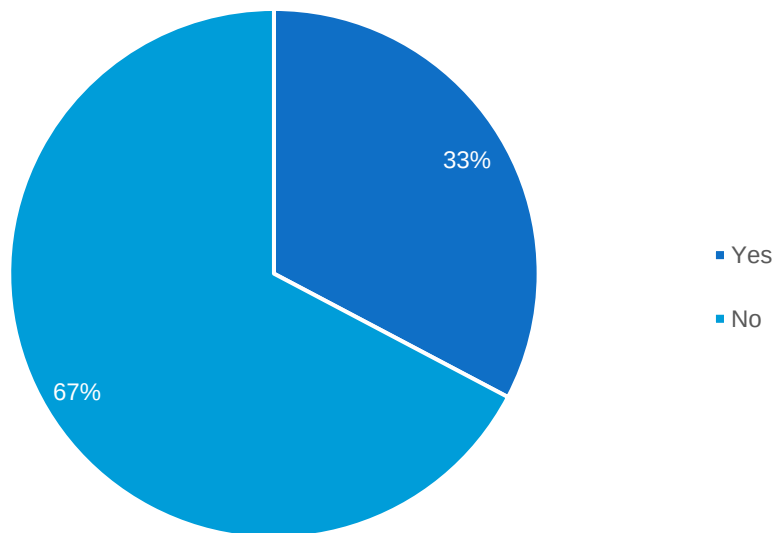
Planning Area 1	Planning Area 4
WCTCOG	Haskell County
Taylor County	City of Haskell
City of Abilene	City of O'Brien
Town of Buffalo Gap	Town of Rochester
Town of Lawn	Town of Rule
Town of Merkel	City of Weinert
Town of Trent	Kent County
City of Tuscola	City of Jayton
City of Tye	Knox County
Planning Area 2	City of Benjamin
Callahan County	City of Goree
City of Baird	City of Knox City
City of Clyde	City of Munday
Town of Cross Plains	Stonewall County
Town of Putnam	Town of Aspermont
Jones County	Throckmorton County
City of Anson	Town of Throckmorton
City of Hamlin	Town of Woodson
City of Hawley	Planning Area 5
City of Lueders	Comanche County
City of Samford	City of Comanche
Shackelford County	City of DeLeon
City of Albany	Town of Gustine
City of Moran	Stephens County
Planning Area 3	City of Breckenridge
Fisher County	Planning Area 6
City of Roby	Brown County
City of Rotan	City of Bangs
Mitchell County	City of Blanket
City of Colorado City	City of Early
Town of Loraine	Coleman County
City of Westbrook	City of Coleman
Nolan County	City of Novice
City of Blackwell	Town of Santa Anna
City of Roscoe	Runnels County
City of Sweetwater	Town of Ballinger
Scurry County	City of Miles
City of Snyder	City of Winters

PUBLIC SURVEY RESULTS

1. Please state the jurisdiction (city and community) where you reside.

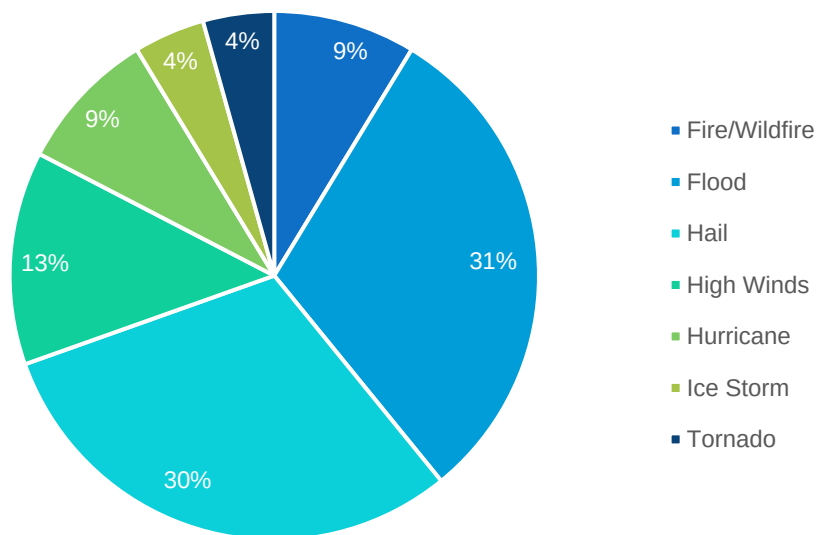


2. A. Have you ever experienced or been impacted by a disaster?

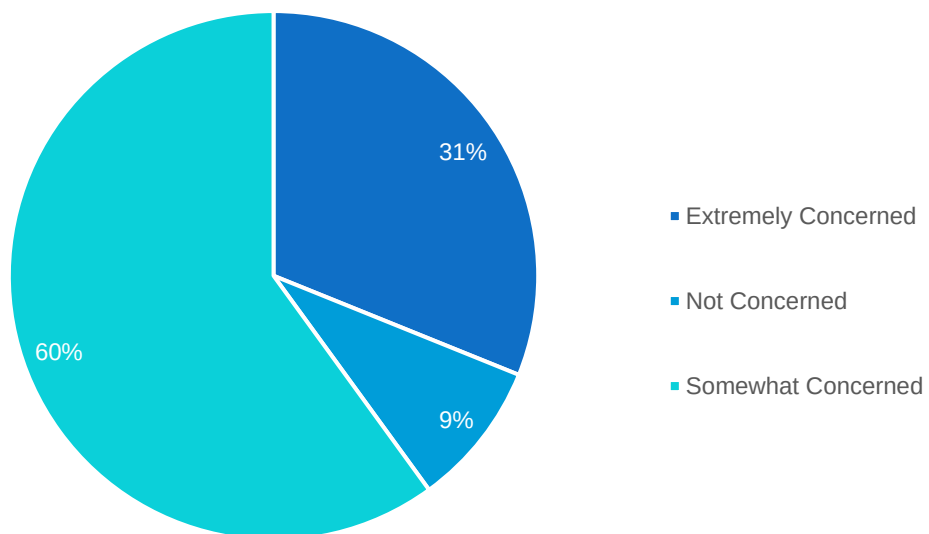


APPENDIX B: PUBLIC SURVEY RESULTS

2. B. If “Yes”, please explain:

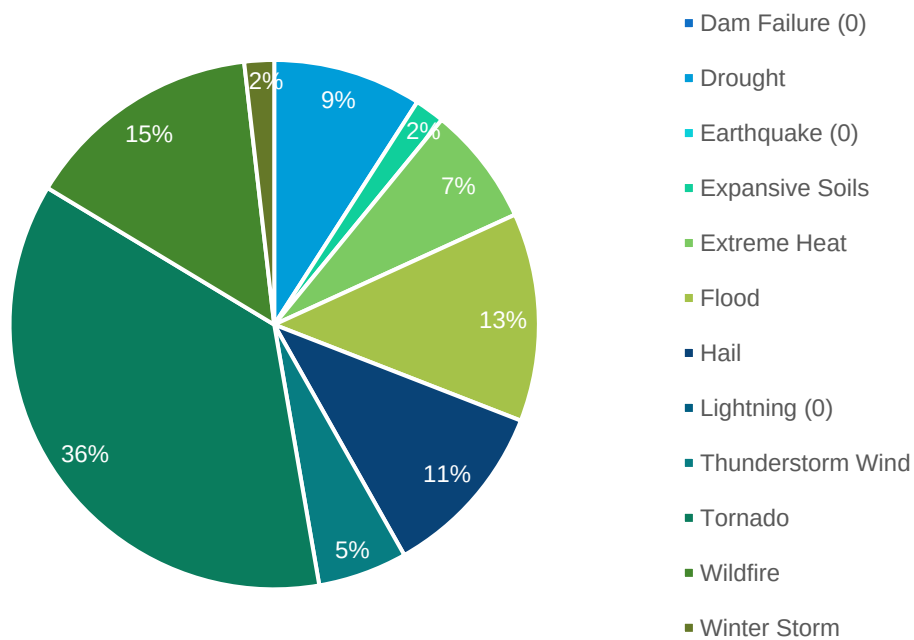


3. How concerned are you about the possibility of your community being impacted by a disaster?

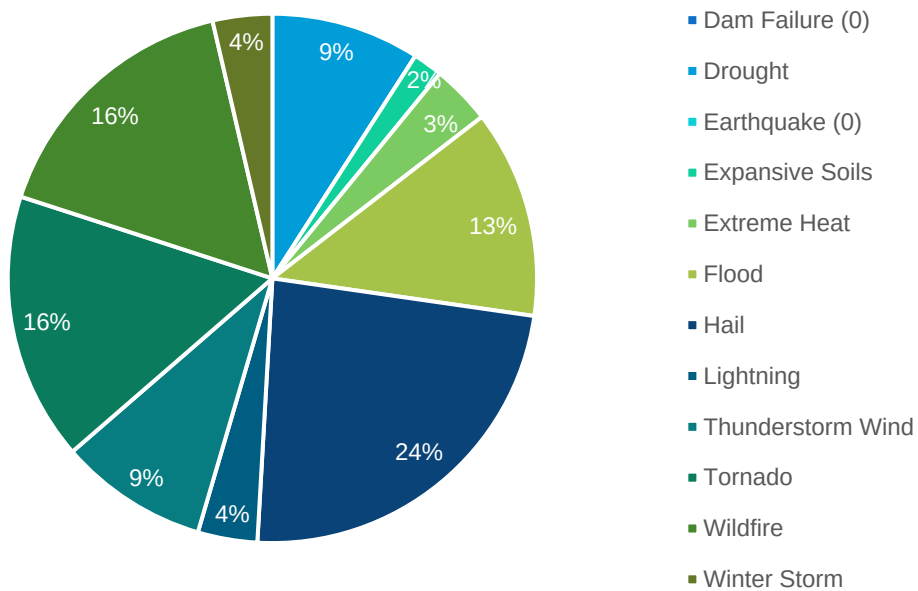


APPENDIX B: PUBLIC SURVEY RESULTS

4. Please select the one hazard you think is the highest threat to your neighborhood:

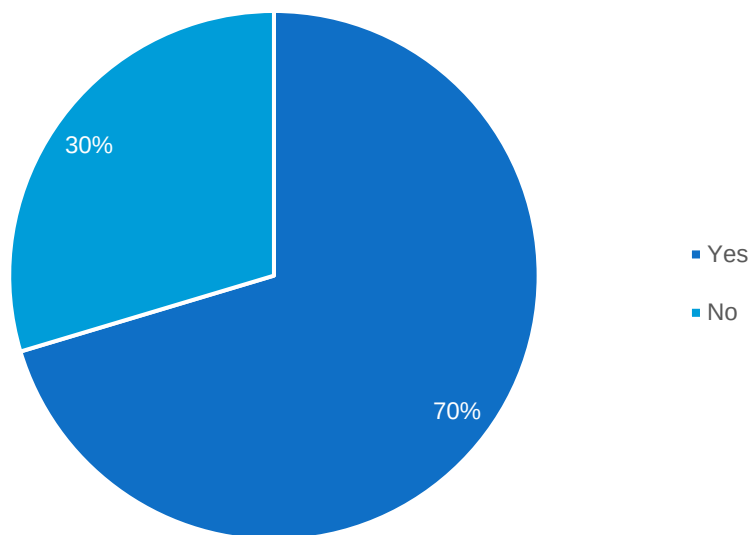


5. Please select the one hazard you think is the second highest threat to your neighborhood:

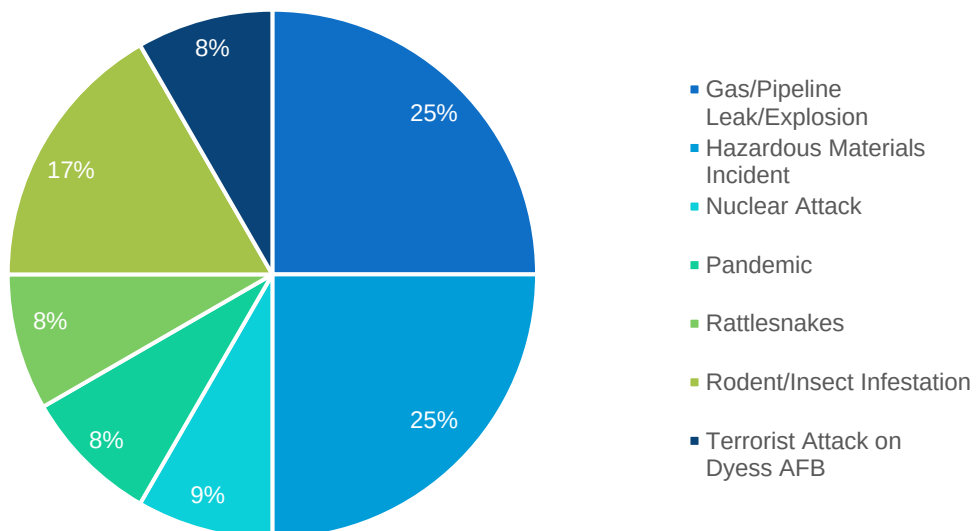


APPENDIX B: PUBLIC SURVEY RESULTS

6. A. Are there hazards not listed above that you think are a wild-scale threat to your neighborhood?

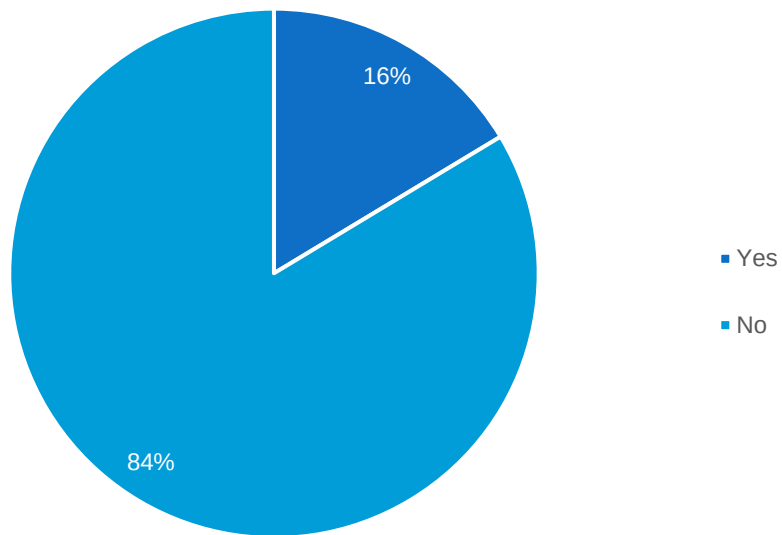


6. B. If "Yes", please explain:

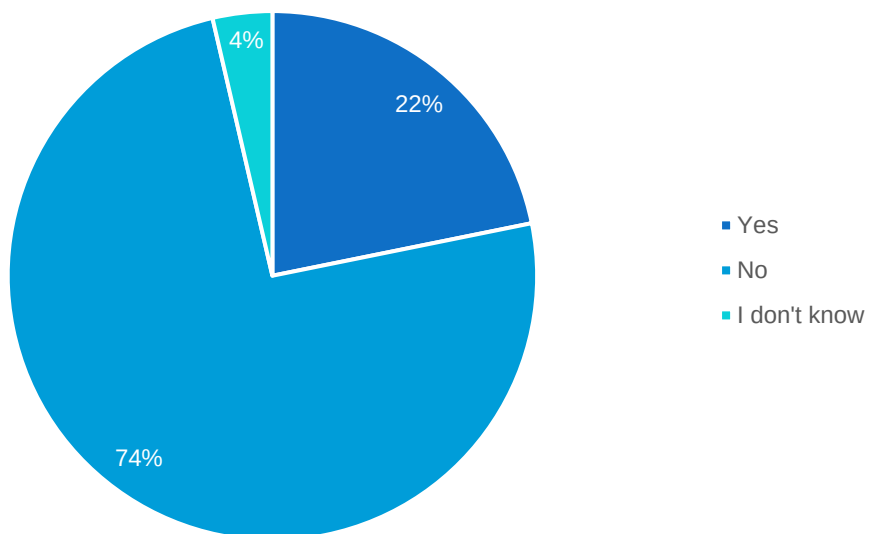


APPENDIX B: PUBLIC SURVEY RESULTS

7. Is your home located in a floodplain?

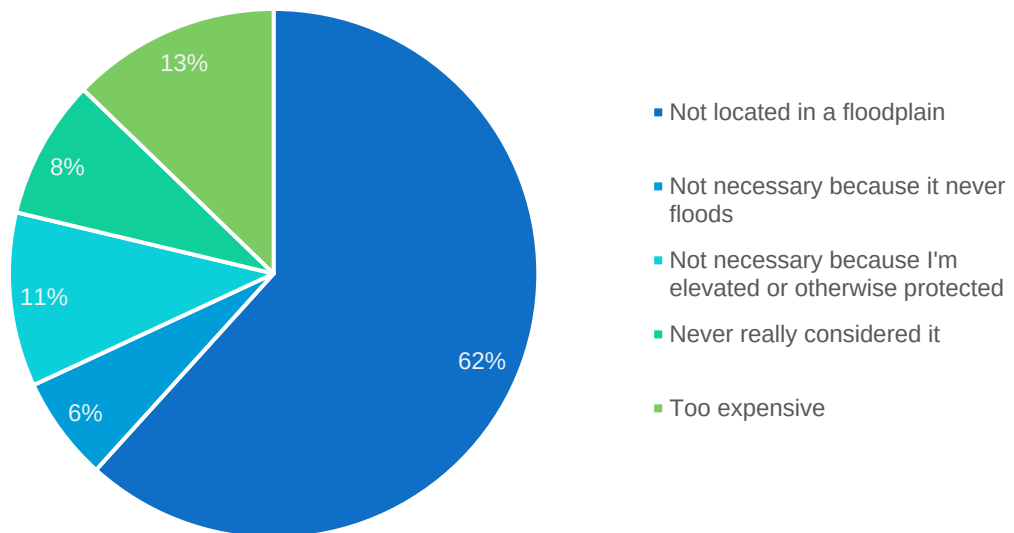


8. Do you have flood insurance?

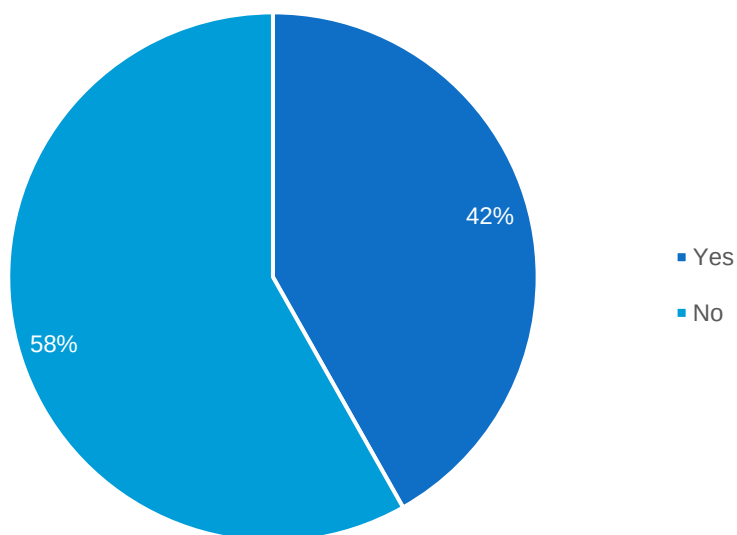


APPENDIX B: PUBLIC SURVEY RESULTS

9. If you do not have flood insurance, why not?

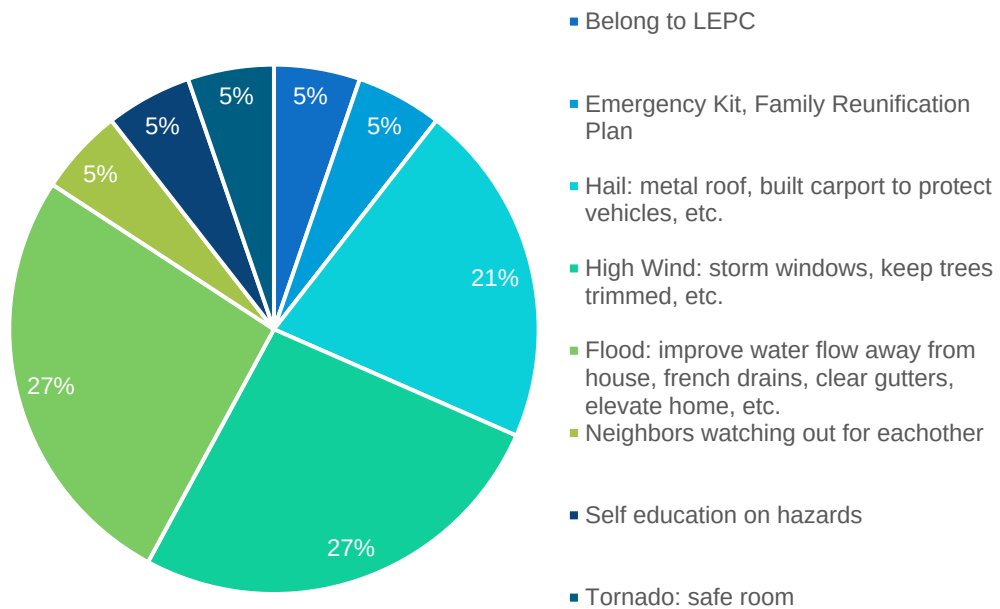


10. A. Have you taken any actions to make sure your home or neighborhood is more resistant to hazards?

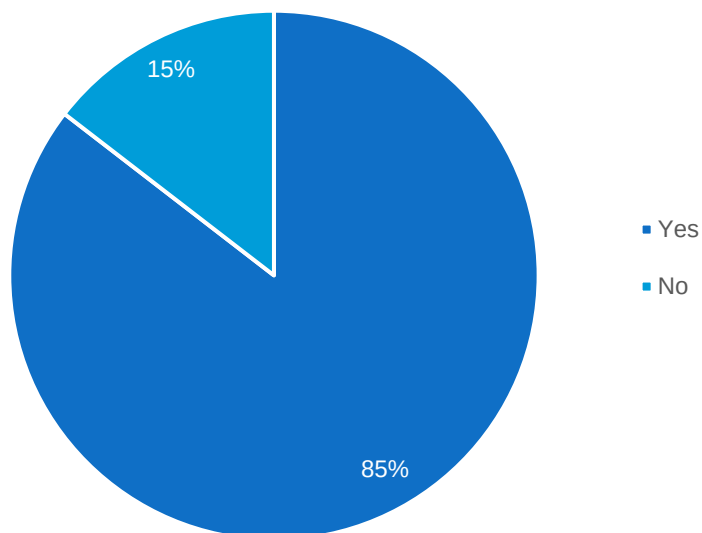


APPENDIX B: PUBLIC SURVEY RESULTS

10. B. What have you done?

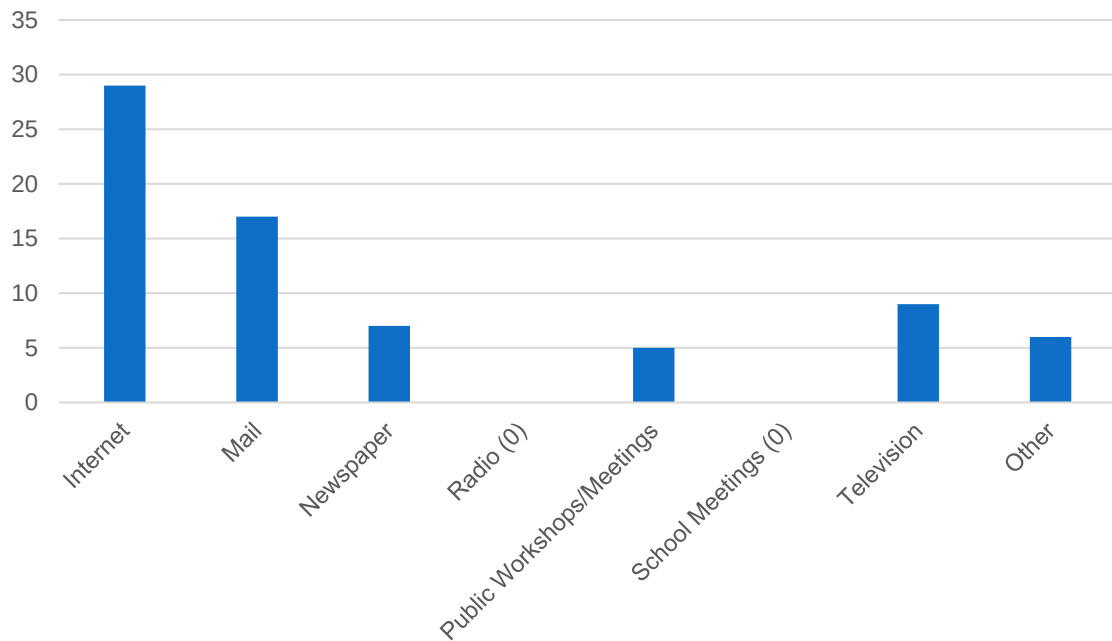


11. Are you interested in making your home or neighborhood more resistant to hazards?

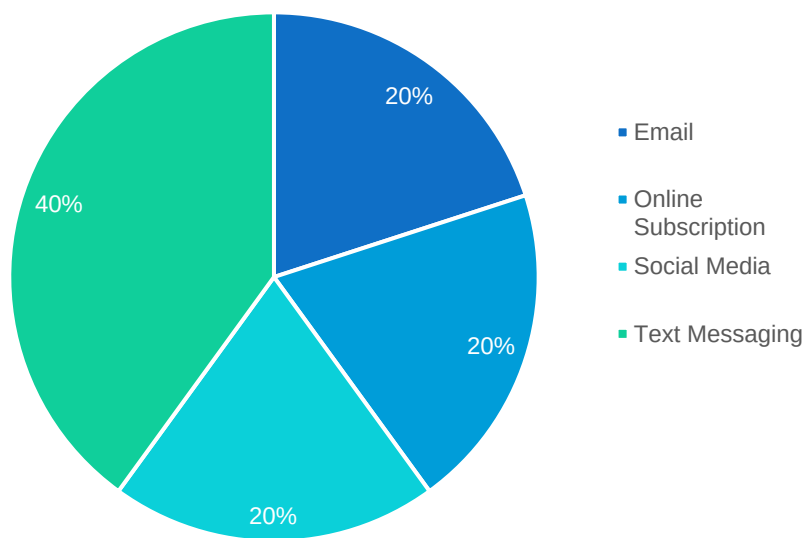


APPENDIX B: PUBLIC SURVEY RESULTS

12. A. What is the most effective way for you to receive information about how to make your home or neighborhood more resistant to hazards?

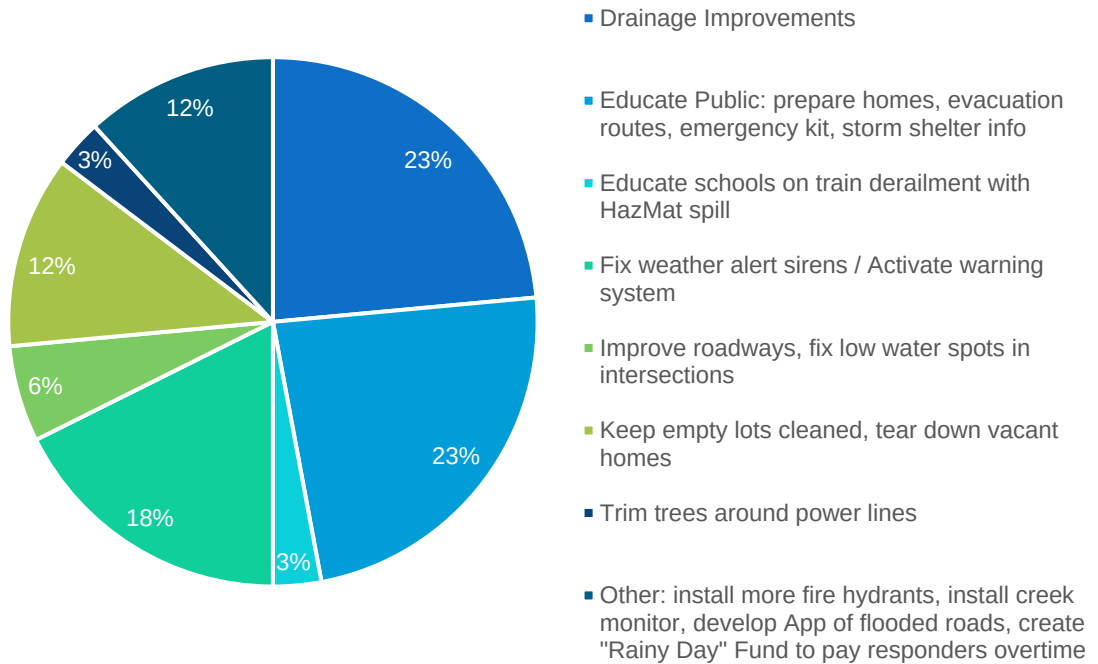


12. B. If "Other", please specify.

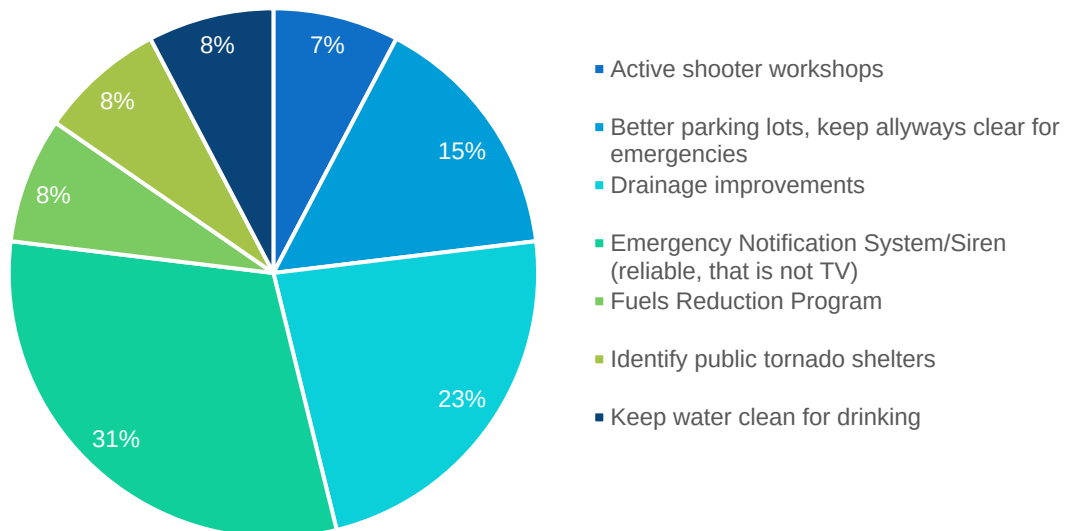


APPENDIX B: PUBLIC SURVEY RESULTS

13. In your opinion, what are some steps your local government could take to reduce or eliminate the risk of future hazard damages in your neighborhood?

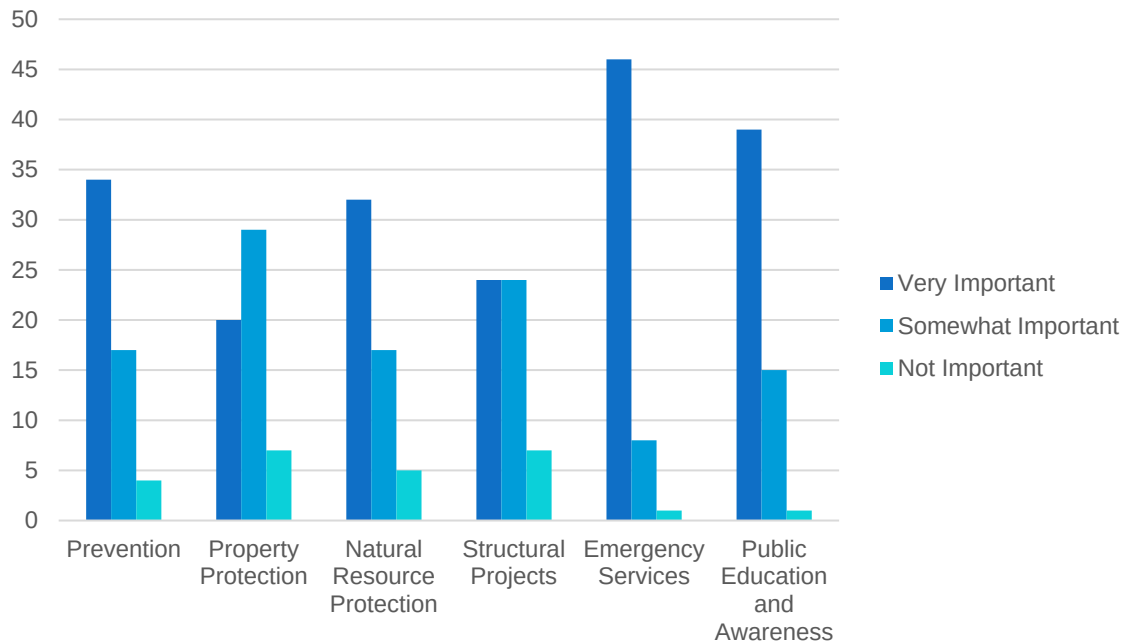


14. Are there any other issues regarding the reduction of risk and loss associated with hazards or disasters in the community that you think are important?



APPENDIX B: PUBLIC SURVEY RESULTS

15. A number of community-wide activities can reduce the risk from hazards. In general, these activities fall into one of the following six broad categories. Please tell us how important you think each one is for your community to consider pursuing.



Prevention / Local Plans & Regulations - Administrative or regulatory actions that influence the way land is developed and buildings are built. Examples include planning and zoning, building codes, open space preservation, and floodplain regulations.

Property Protection - Actions that involve the modification of existing buildings to protect them from a hazard or removal from the hazard area. Examples include acquisition, relocation, elevation, structural retrofits, and storm shutters.

Natural Resource Protection - Actions that, in addition to minimizing hazard losses, also preserve or restore the functions of natural systems. Examples include floodplain protection, habitat preservation, slope stabilization, riparian buffers, and forest management.

Structural Projects - Actions intended to lessen the impact of a hazard by modifying the natural progression of the hazard. Examples include dams, levees, seawalls detention / retention basins, channel modification, retaining walls, and storm sewers.

Emergency Services - Actions that protect people and property during and immediately after a hazard event. Examples include warning systems, evacuation planning, emergency response training, and protection of critical facilities or systems.

Public Education and Awareness - Actions to inform citizens about hazards and techniques they can use to protect themselves and their property. Examples include outreach projects, school education programs, library materials, and demonstration events.

APPENDIX C: CRITICAL FACILITIES

Overview	1
Critical Facilities	1

OVERVIEW

This Appendix is **For Official Use Only (FOUO)** and may be exempt from public release under FOIA. Figures C-1 through C-8 locate all critical facilities that were included in the risk assessment. Mapped facilities were provided by Planning Team members. Tables C-1 through C-8 note the critical facilities by type.

CRITICAL FACILITIES

Figure C-1. Critical Facilities in Taylor County

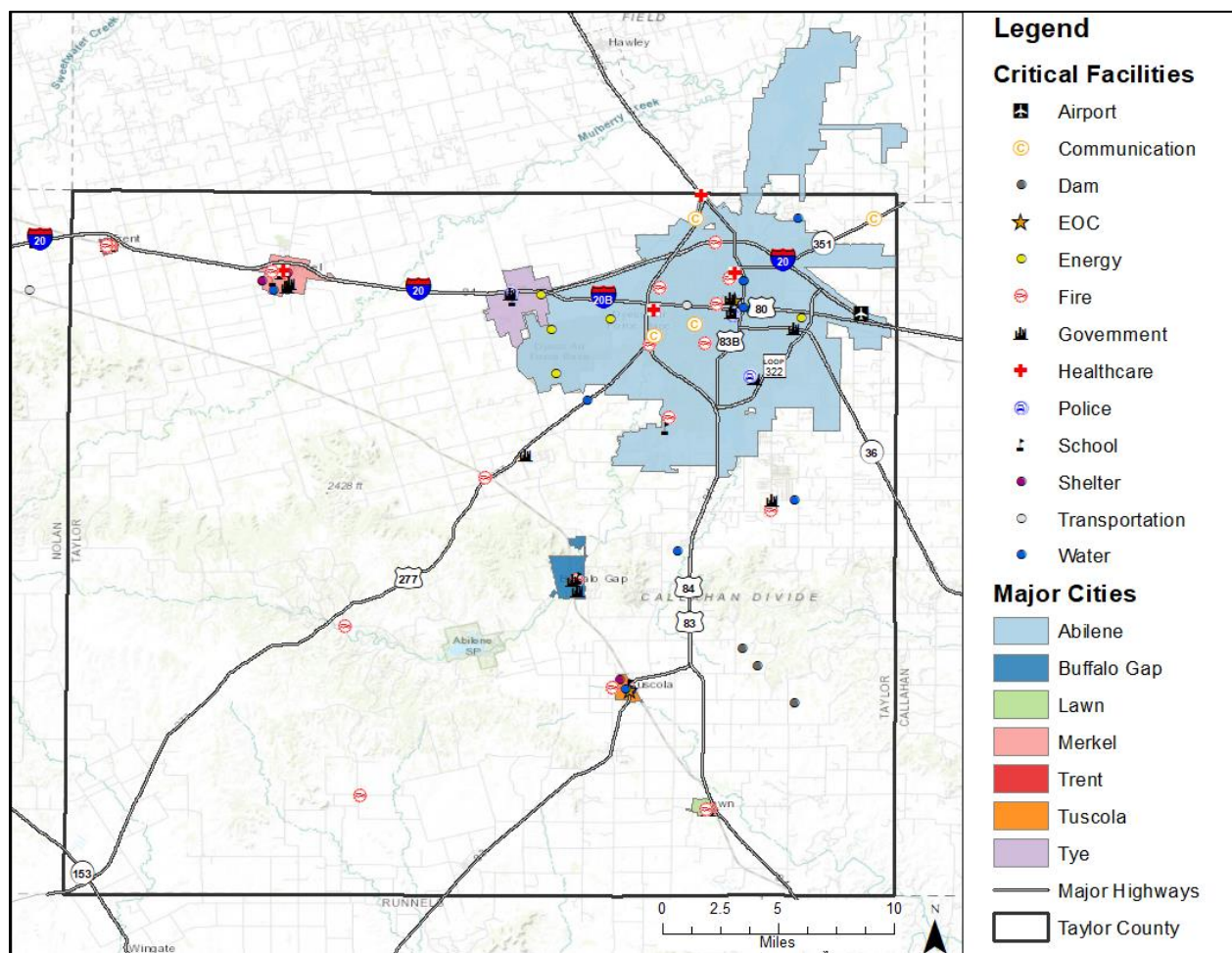


Table C-1. Critical Facilities by Type in Taylor County

TYPE	NUMBER
Airport	1
Chlorine 1 Ton Cylinders	3
Convention Center	1
County Dam	3
County Crew Yard	4
Electrical Service	1
Fire Department	11
Gas – Diesel – Jet Fuel	1
JP8 Fuel	2
Railroad	1
School Facilities	5
Telephone Company	1
TV Station	3
Various TIC/TIM 90 Ton Cylinders	1
Water Supply	5
Water Treatment	1

Figure C-2. Critical Facilities in the City of Abilene, WCTCOG

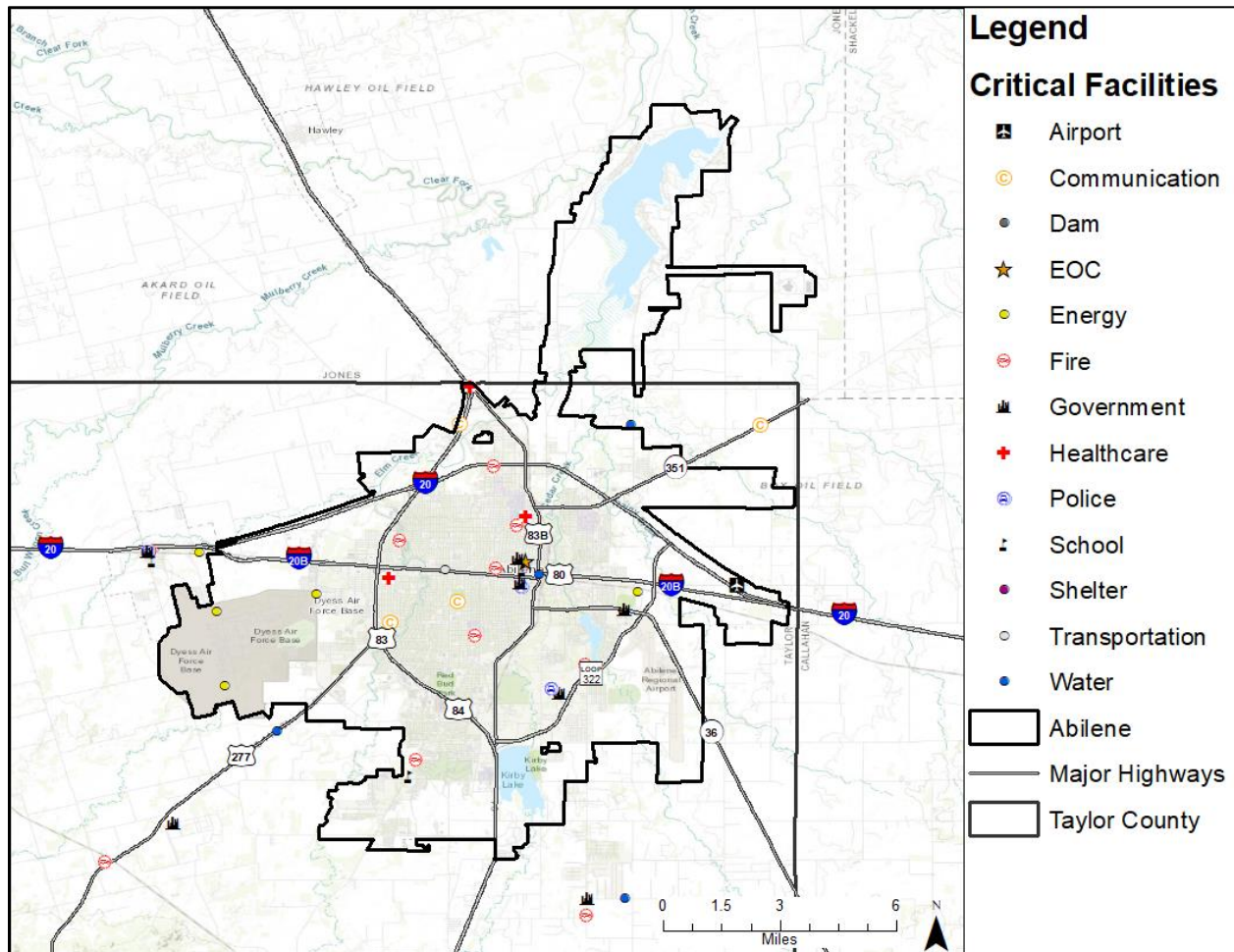


Table C-2. Critical Facilities by Type in the City of Abilene, WCTCOG

TYPE	NUMBER
Ambulance Service	1
Municipal Government	2
Electric Utility	1
Fire Response	8
Gas Utility	1
Hospital	2
Mobile Communications	1
Municipal Center	1

APPENDIX C: CRITICAL FACILITIES

TYPE	NUMBER
Police Response/Dispatch	2
Public School District	2
Water Treatment	3
WCTCOG	1

Figure C-3. Critical Facilities in the Town of Buffalo Gap

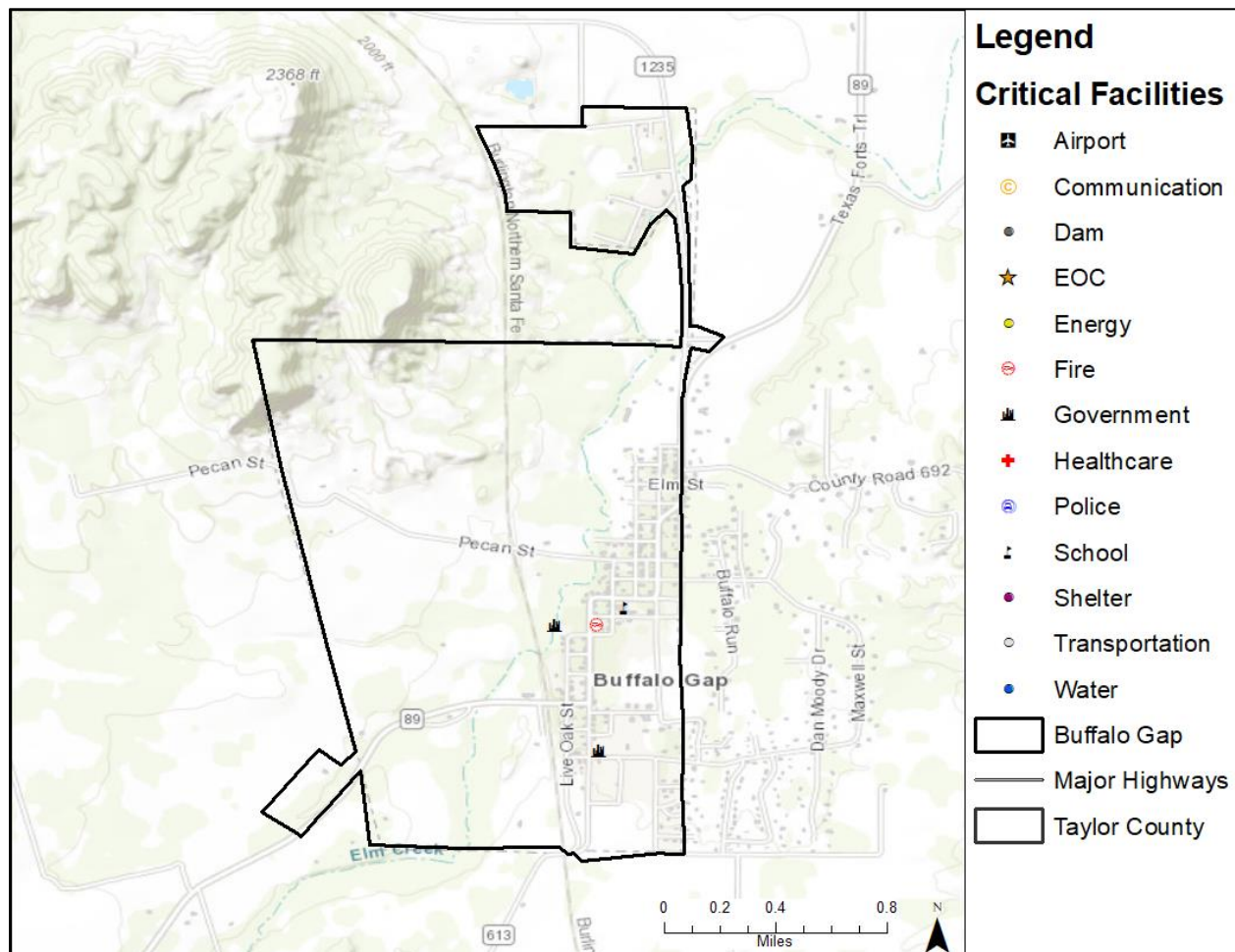


Table C-3. Critical Facilities by Type in the Town of Buffalo Gap

TYPE	NUMBER
County Crew Yard	1
Fire Department/City Hall	1
School Facility	1
Volunteer Fire Department	1

Figure C-4. Critical Facilities in the Town of Lawn

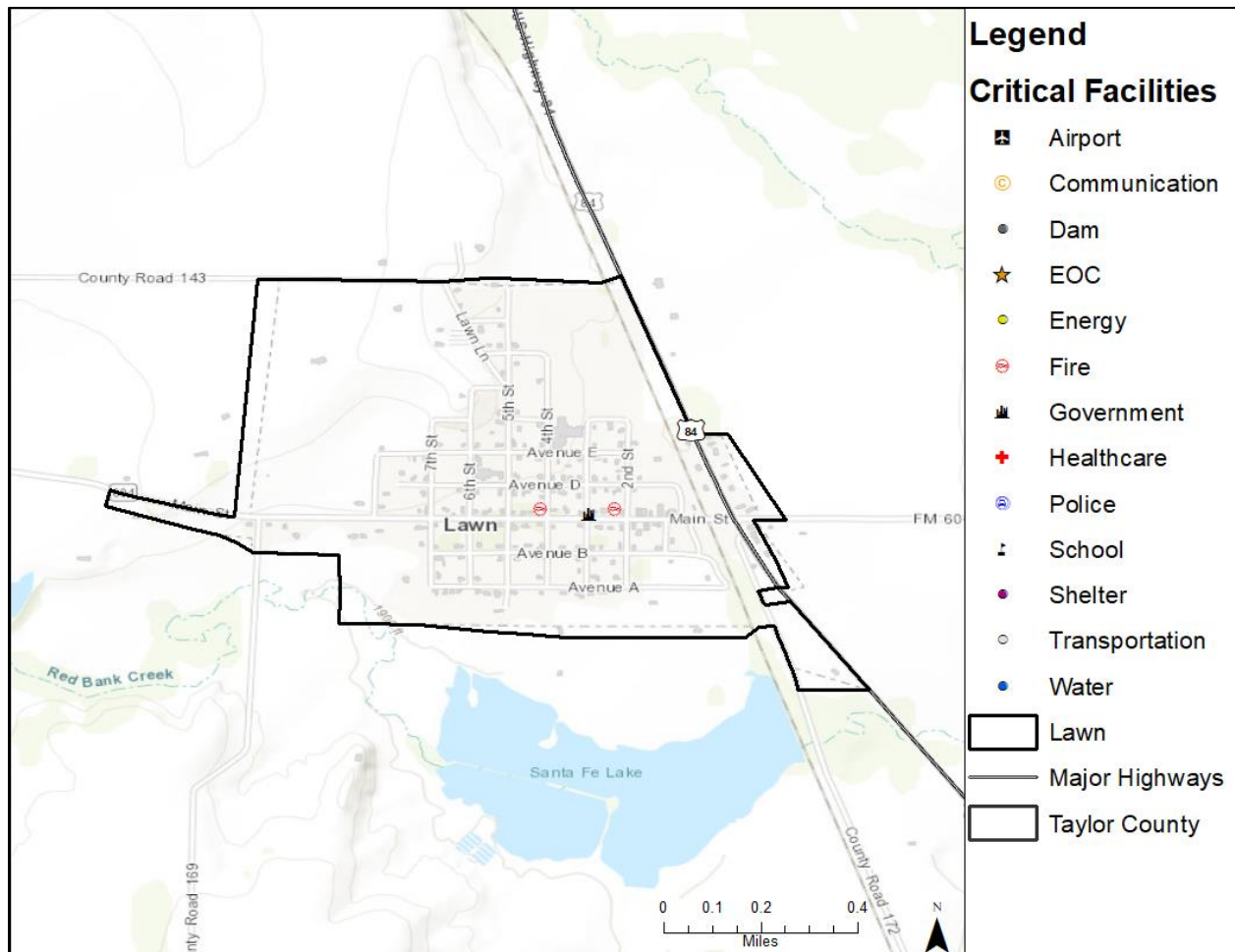


Table C-4. Critical Facilities by Type in the Town of Lawn

TYPE	NUMBER
City Hall	1
Volunteer Fire Department	2

Figure C-5. Critical Facilities in the Town of Merkel

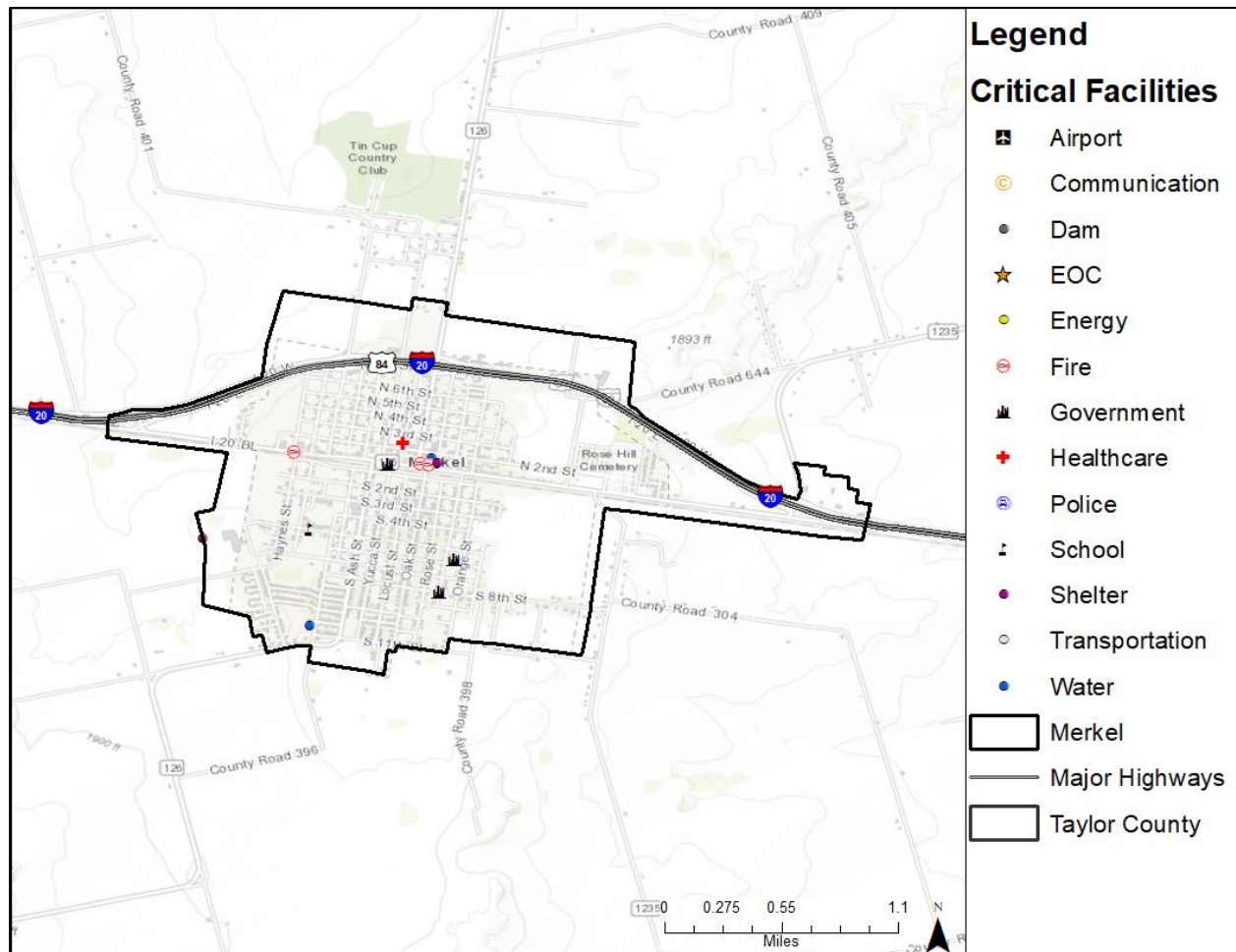


Table C-5. Critical Facilities by Type in the Town of Merkel

TYPE	NUMBER
Above Ground Water Storage	2
Community Center/Shelter	1
Emergency Room	1
Municipal/Police/Dispatch	1
Pump Station	1
Shelter/Gym/Lunchroom	1
State Fire Resource	1
Vehicle/Equipment Storage	2

APPENDIX C: CRITICAL FACILITIES

TYPE	NUMBER
Wastewater Treatment Plant	1

Figure C-6. Critical Facilities in the Town of Trent

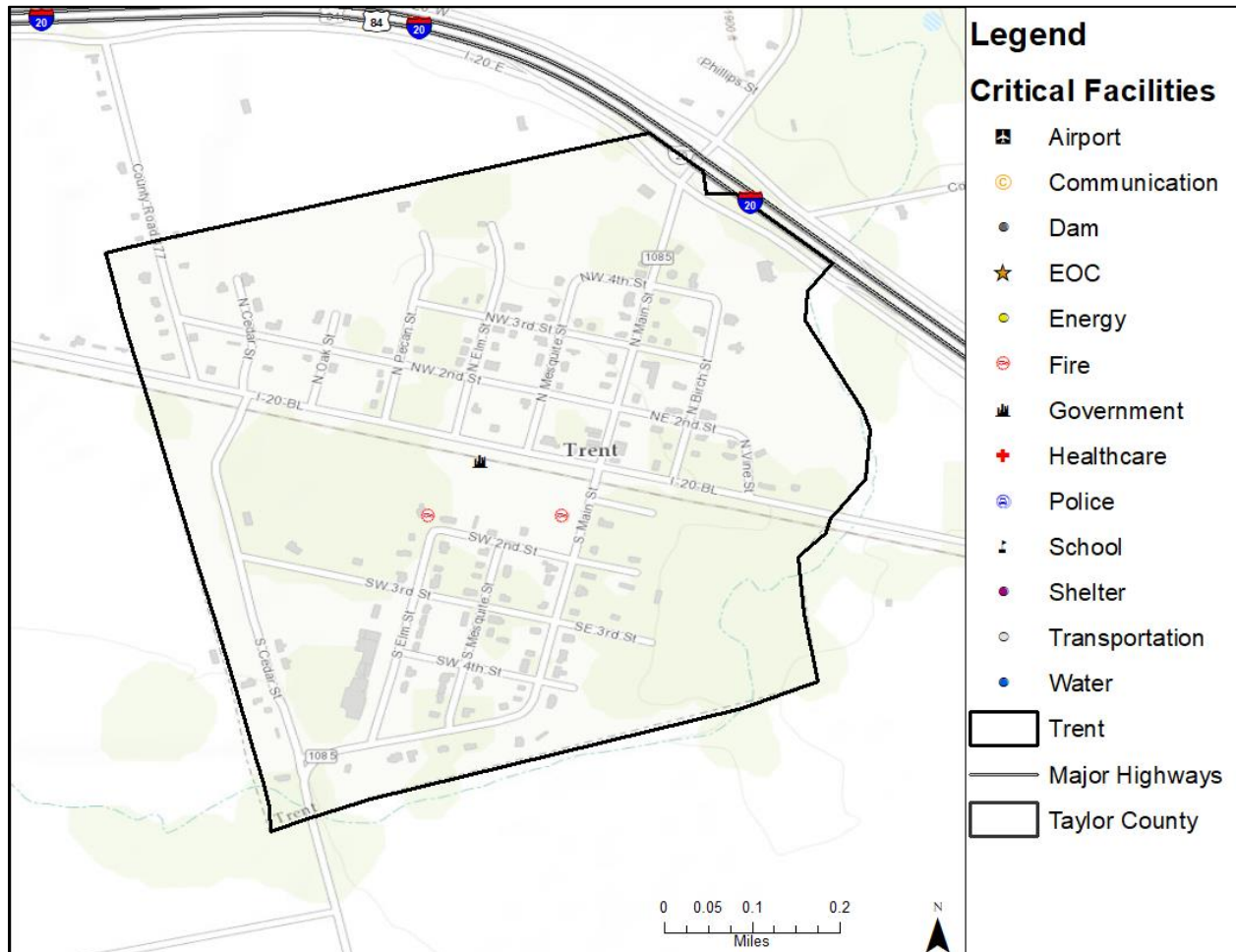


Table C-6. Critical Facilities by Type in the Town of Trent

TYPE	NUMBER
City Hall	1
Volunteer Fire Department	1

Figure C-7. Critical Facilities in the City of Tuscola

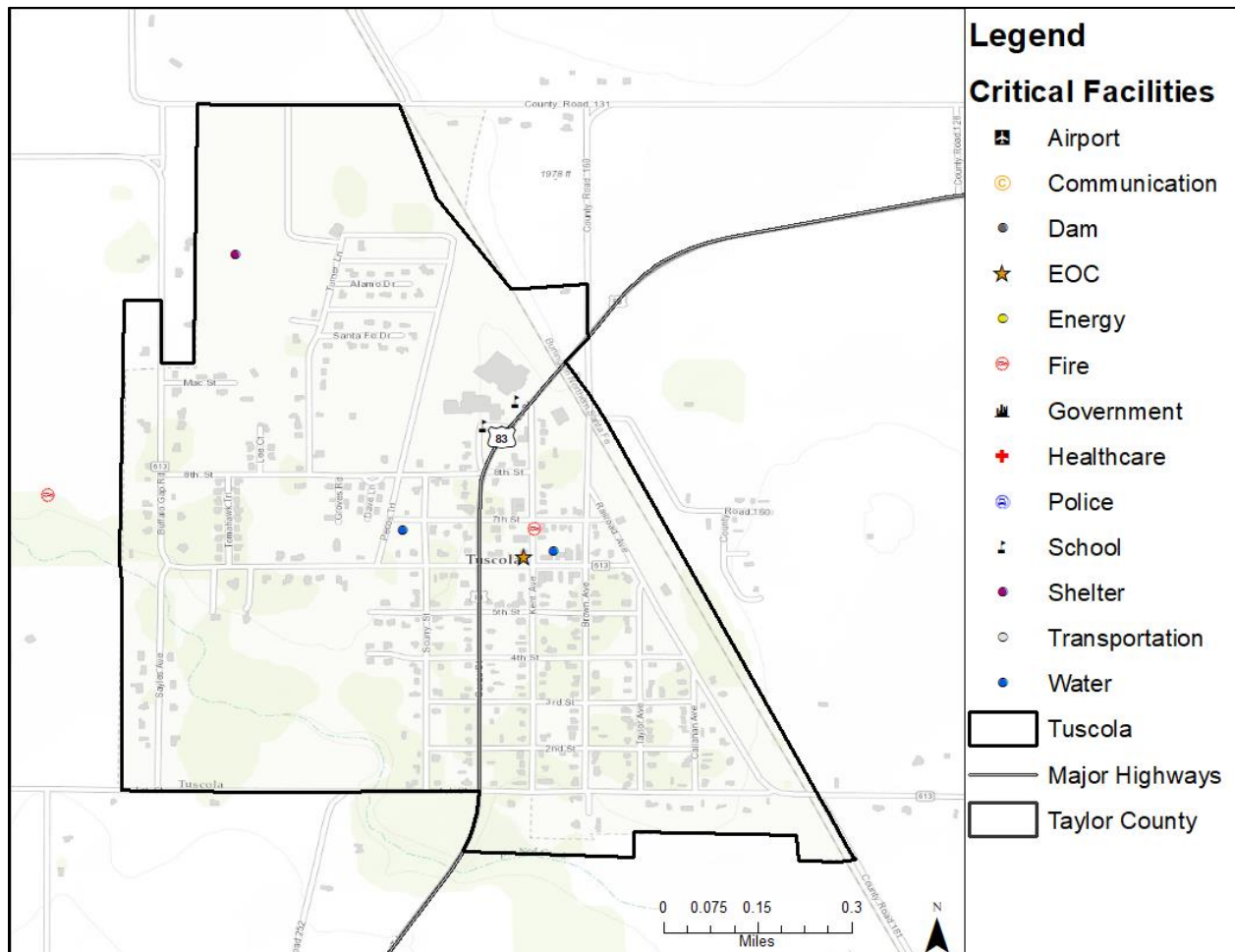


Table C-7. Critical Facilities by Type in the City of Tuscola

TYPE	NUMBER
City Hall/EOC/Communications	1
Emergency Shelter	1
Fire Department	1
Water Supply	1

Figure C-8. Critical Facilities in the City of Tye

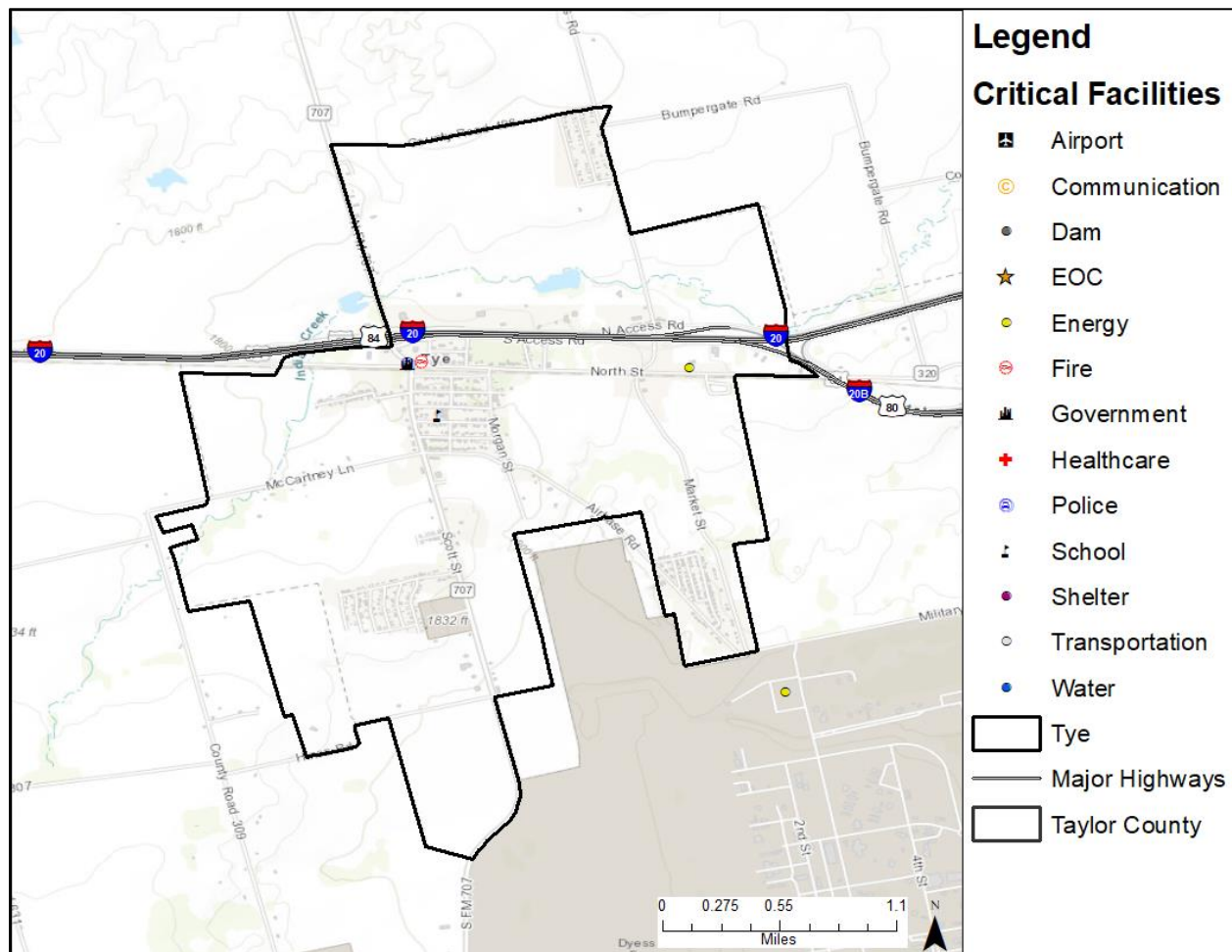


Table C-8. Critical Facilities by Type in the City of Tye

TYPE	NUMBER
Chlorine Tanks	1
City Hall	1
Community Center	1
Fire Department	1
Lift Station	2
Police Department	1
Public Works	1
School	1

APPENDIX C: CRITICAL FACILITIES

TYPE	NUMBER
Sewer Pumps	1
Water Tower	1
Water Pumps	1

APPENDIX D: DAM LOCATIONS

Overview	1
Dam Locations	1

OVERVIEW

Appendix D is **For Official Use Only (FOUO)** and may be exempt from public release under the Freedom of Information Act (FOIA).

DAM LOCATIONS

Table D-1 below reflects all dams that are located in the participating jurisdictions within Planning Area 1 of the West Central Texas Council of Government's Regional Plan. This list includes High, Significant, and Low Hazard Dams. Section 16 of the Plan doesn't profile dams that were deemed to pose no past, current, or future risk to the planning area as no loss of life or impact to critical facilities or infrastructure is expected in the event of a breach. The asterisk denotes those that were profiled in the hazard assessment.

Table D-1. List of Dam Locations and Storage Capacities

JURISDICTION	LATITUDE	LONGITUDE	HEIGHT (Feet)	STORAGE (Acre Feet)
Taylor County	32.10861	-100.1467	22	1,277
Taylor County	32.33005	-99.85589	25	300
Taylor County	32.2016	-99.69379	27	702
Taylor County	32.11466	-99.97943	20	200
Taylor County	32.17375	-100.127	44	1,799
Taylor County	32.20354	-100.1034	35	972
Taylor County	32.16243	-99.88406	22	2,000
Taylor County	32.37333	-100.015	18	230
Taylor County	32.15492	-100.0983	40	2,516
Taylor County	32.18665	-99.82222	31	1,044
Taylor County	32.36631	-99.85373	40	144
Taylor County	32.20933	-100.1476	36	1,386
Taylor County	32.23928	-99.64383	32	756

APPENDIX D: DAM LOCATIONS

JURISDICTION	LATITUDE	LONGITUDE	HEIGHT (Feet)	STORAGE (Acre Feet)
Taylor County	32.14956	-100.0906	30	420
Taylor County	32.26497	-99.63717	27	623
Taylor County	32.08812	-99.93414	25	200
Taylor County	32.11004	-99.65915	72	4,119
Taylor County	32.45881	-99.67559	24	210
Taylor County	32.20445	-100.1355	28	691
Taylor County	32.46982	-99.69865	10	170
Taylor County	32.08933	-99.73008	28	5,218
Taylor County	32.47265	-99.68788	20	144
Taylor County	32.48869	-99.78659	20	120
Taylor County	32.22603	-99.71786	34	1,351
Taylor County	32.35727	-100.1152	20	265
Taylor County	32.14287	-100.0896	30	689
Taylor County	32.25732	-99.64334	29	767
Taylor County	32.09422	-100.0897	28	525
Taylor County	32.11037	-100.0861	32	1,115
Taylor County	32.18799	-100.0972	35.5	1,454
Taylor County	32.12824	-99.741	37	1,000
Taylor County	32.47435	-99.65968	15	120
Taylor County*	32.23434	-99.88897	64	15,990
City of Abilene*	32.43474	-99.70826	30.2	4,375
City of Abilene	32.44136	-99.69399	12	50
City of Abilene	32.38546	-99.72819	50	15,922
City of Abilene	32.44496	-99.69576	12	129
City of Abilene	32.28071	-99.76115	12	97
Town of Lawn	32.23504	-99.72434	22	461
Town of Lawn	32.13243	-99.76424	16	300

APPENDIX E: MEETING DOCUMENTATION

Workshop Documentation	1
Public Meeting Documentation	14
Public Notices	23

WORKSHOP DOCUMENTATION

Appendix E is **For Official Use Only (FOUO)** and may be exempt from public release under the Freedom of Information Act (FOIA).

The West Central Texas Council of Governments held a series of Planning Team workshops in each of the six Planning Areas, as seen in Table E-1. If participants were unable to attend a workshop in their Planning Area, they were encouraged to attend one of the other Planning Area’s workshops. Kickoff Workshops were held between June 12 and June 14, 2017; Risk Assessment Workshops were held between September 11 and September 14, 2017; Mitigation Strategy Workshops were held between November 13 and November 16, 2017.

At each of these workshops members of the Planning Team were informed of the planning process, expressed opinions, and volunteered information. WCTCOG hosted public meetings after each of the workshops. The sign-in sheets for each workshop and public meeting are included below. For more details on the workshops and planning process, see Section 2.

Table E-1. Participating Jurisdictions by Planning Area

Planning Area 1	Planning Area 4
WCTCOG	Haskell County
Taylor County	City of Haskell
City of Abilene	City of O'Brien
Town of Buffalo Gap	Town of Rochester
Town of Lawn	Town of Rule
Town of Merkel	City of Weinert
Town of Trent	Kent County
City of Tuscola	City of Jayton
City of Tye	Knox County
Planning Area 2	City of Benjamin
Callahan County	City of Goree
City of Baird	City of Knox City
City of Clyde	City of Munday
Town of Cross Plains	Stonewall County
Town of Putnam	Town of Aspermont
Jones County	Throckmorton County
City of Anson	Town of Throckmorton
City of Hamlin	Town of Woodson
City of Hawley	Planning Area 5
City of Lueders	Comanche County
City of Samford	City of Comanche
Shackelford County	City of DeLeon
City of Albany	Town of Gustine
City of Moran	Stephens County
Planning Area 3	City of Breckenridge
Fisher County	Planning Area 6
City of Roby	Brown County
City of Rotan	City of Bangs
Mitchell County	City of Blanket
City of Colorado City	City of Early
Town of Loraine	Coleman County
City of Westbrook	City of Coleman
Nolan County	City of Novice
City of Blackwell	Town of Santa Anna
City of Roscoe	Runnels County
City of Sweetwater	Town of Ballinger
Scurry County	City of Miles
City of Snyder	City of Winters

Figure E-1. Planning Area 1 and 2 Kickoff Workshop, 6/12/17



H₂O PARTNERS

WCTCOG HAZARD MITIGATION PLAN UPDATE
Kickoff Workshop
West Central Texas Council of Governments
3702 Loop 322, Abilene, TX 79602
June 12, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Alan Plumlee	City Manager	Stamford, Tx	325-773-2591	alan.plumlee@stamfordtx.net
LEE A. Koger	Disaster Coordinator	USDA-NRCS	325-725-2581	lee.koger@tx.usda.gov
Belinda Huhliatz	City Sec.	Admin Tye	325-692-8588	citysecretary@cityoftye.org
Robby Votaw	Code Off/PW.	Tye	325-692-8588	codeofficer@cityoftye.org
Clyde Harte	Fire Chief	Ballinger	325-365-5737	
Bryan Grimes	City Manager	City of Ballinger	" 3165	City Manager@ballinger.tx.us
Santos Navarrete	Deputy Dir.	City of Abilene	325-437-4608	santos.navarrete@cityofabilene.org
Ray Votaw	Mayor	City of Tye	325-605-6260	mayor@cityoftye.org
Matthew Hitt	City Intern	City of Abilene	341-4058666	matthitt@abilenetx.com
Cande Flores	Deputy Chief	Abilene Fire Dept	325-676-6099	candeflores@abilenetx.com
Tamra Lewis	Admin. Clerk	Taylor County	325-674-1235	lewis@taylorcountytx.us
Michael Rice	Dir. of Public Works	City of Abilene	325-676-6284	michael.rice@abilenetx.com



H₂O PARTNERS

WEST CENTRAL TEXAS COG MITIGATION PLAN UPDATE
Kickoff Workshop
West Central Texas Council of Governments
3702 Loop 322, TX 79602
June 12, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Dale Spurgin	County Judge	Jones Co	325-823-3241	dale.spurgin@co.jones.tx.us
Michael Miller	Engineering Tech.	Public Works-Abilene	325-676-6313	michael.miller@abilenetx.com
Larry Wright	Co. City Engineer	Public Works-CoA	325-676-6282	larrywright@abilenetx.com
Barbara Boon	Deputy EMC	City of Abilene	936-615-4687	barbara.boon@abilenetx.com
Jim Bryan	EMC	"	325-676-6683	jim.bryan@abilenetx.com
Curtis Beitel	PM	HDR Engineering	817-333-2817	curtis.beitel@hdrinc.com
Suzanne Valverde	Stormwater Admin	City of Abilene	325-676-6250	suzanne.valverde@abilenetx.com
DAVID A. BOLLS JR	Co. JUDGE	TAYLOR COUNTY	325-674-1235	bolls@taylorcountytx.us
James M. Rogge	Traffic Eng.	CoA	325-676-6179	James.Rogge@abilenetx.com
Juan Flores Jr	Assistant to City	Water/Wastewater	940-989-3586	
Lorenzo Colonaco	City Administrator	City of Aspermont	940-989-3585	lcolonaco@aspermont.tx.us
Vincent Carr	PLUP coord	City of Abilene	409-723-9125	Vincent.carr@abilenetx.com
Mary Cooksey	2-1-1 Program Dir	United Way of Abilene	325-665-4160	mary@unitedwayabilene.org
Irene Laurance	Project Director	WCTCOG	325-676-1197	ilaurance@westcentralcog.org

Figure E-2. Planning Area 3 Kickoff Workshop, 6/13/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Kickoff Workshop
Nolan County Courthouse
100 E. 3rd St., Sweetwater, TX 79556
June 13, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Irene Lawrence	HAZMIT project director	WCTCOG	385-678-1197	ilawrence@westcentraltexas.org
TERRY WESTMORELAND	Fire/EMC City of Snyder	325-573-6215	westmoreland@ci.snyder.tx.us	
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
KEN HOOT	Fisher County Judge		325-776-2151	fishercountyjudge@yahoo.com
Raymond McShane	Assistant City Sec.		325-728-5331	permut@cityofvictoridocity.org
Whitley May	Nolan County Judge		325-235-2263	Whitley.May@co.nolan.tx.us
TOM K. SMITH	WCTCOG EX DIR		325-672-8544	tsmith@westcentraltexas.org

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Figure E-3. Planning Area 4 Kickoff Workshop, 6/12/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Kickoff Workshop
Haskell County Courthouse
1 Avenue D, Haskell, TX 79521
June 12, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com
Dean W. Hunsman	Sheriff	Kane City S.O.	940-459-2211	whittlew@kane40.org
Sam Watson	City Admin	City of Kerrville	940-668-3333	city@kerrville.org
Carb Sorrells	Fire Chief	City of RVIE	940-256-3517	RVIE@RVIE.org
Tom K. Smith	EX DIRECTOR	WCTCOG	325-672-8544	tsmith@westcentraltexas.org
Bruce Mullen	Sheriff	Stewart Co.	940-256-1200	SRMullen@stewartco.org
Irene Lawrence	Planner	WCTCOG	385-678-1197	ilawrence@westcentraltexas.org
David C. Davis	County Judge	Haskell County	940-864-2857	cojudge@co.haskell.tx.us

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Figure E-4. Planning Area 5 Kickoff Workshop, 6/13/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Kickoff Workshop
Stephens County Law Enforcement Center
210 E. Dyer St., Breckenridge, TX 76424
June 13, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
RAY Helberg	EMC	STAPES	325-356-5905	RAYGUN@stapes.net
William Fleasney	EMC	Stephens County	259-246-1789	Emergency.mgmt@stephenscountytx.gov
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com
Calvin Chamy	Fire Chief	Breckenridge Fire	254-532-5316	breckfire@brenfire.com
GARY FRIER	Judge	STEPHENS County	254-559-0934	Commissioner@stephensco.tx.gov
TOM K. SMITH	EX DIR	WCTCOG	325-672-8544	tsmith@westcentraltex.org

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Figure E-5. Planning Area 6 Kickoff Workshop, 6/14/17



WEST CENTRAL TEXAS COG MITIGATION PLAN UPDATE
Kickoff Workshop
Brown County Courthouse
200 South Broadway St., Brownwood, TX 76801
June 14, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Ernie Laurance	Project Director Haz Mit	WCTCOG	325-672-1191	ilaurance@westcentraltex.org
John Pearce	EMC	Coleman Co	325-214-2441	jpearce@web-access.net
Judy Egolf	Mayor	Blanco	325-748-3171	blankett@blanco.net
Quentin Watkins	Chief of Police	Miles, TX	325-977-2278	quentin.watkins@miles.tx.org
Michael Cox	EMC	Brown County	325-203-3188	michael.cox@browncountytx.org
Tom K. Smith	EX DIR	WCTCOG	325-672-8544	tsmith@westcentraltex.org
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com
Harold Fohlreude	Mayor	CITY OF SANTIAGO	325-349-7228	hfrf@AOL.COM
David Martinez	Asst City Mgr	Coleman	325-320-5770	david.martinez@colemanfire.com

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Figure E-6. Planning Area 1 Risk Assessment Workshop, 9/12/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Workshop
West Central Texas Council of Governments
3702 Loop 322, Abilene, TX 79602
September 12, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Barbara Boen	Deputy EMC	Emergency Mgmt	325-676-5525	barbara.boen@abilenetx.com
Howard Thompson	LEIC, Treasurer	T.C.	325-755-4562	ht1000@gmail.com
Jim Bryan	EMC	Emerg Mgmt	325-676-6683	jim.bryan@abilenetx.com
DAVE BOYLL		LEIC	325-664-5554	BOYLL-DAVID@SCGLORAL.com
Sixinivas Valavala	City Stormwater Administrator	City of Abilene	325-676-6280	Sixinivas.Valavala@abilenetx.com
AD BUSH	EMC	Taylor Co	674-1235	bushad@taylorcountytexas.org
Dana Sawell	EMC	Brewster Co	370-5796	bsawell@brewstertx.com
Joseph Plummer	EMC	Brewster Co	829-2377	bsawell@brewstertx.com
Tamra Lewis	County	County Admin	674-1235	lewist@taylorcountytexas.org
Larry Wright	City of Abilene	Engineering	676-6282	larrywright@abilenetx.com
David Ken	Jim Hays Fire	Fire Dept	864-0279	dken@jimhaysfire.com
Delinda Hohlertz	City of Tye	Admin	325-676-6284	citysecretary@cityoftye.org
Michael Rice	Dir. of Public Works	Public Works	325-676-6284	michael.rice@abilenetx.com

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WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Workshop
West Central Texas Council of Governments
3702 Loop 322, Abilene, TX 79602
September 12, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Michel Miller	Engineering Tech.	Public Works	325-676-6313	michel.miller@abilenetx.com
David Collins	Director	Tuscan Public Works	223-338-8837	Tuscan.PW.D@tylortel.net
Ray Vetaas	Mayor	Tye	325-603-6260	mayor@cityoftye.org
Curtis Beitel	PM	HDR	817-333-2817	curtis.beitel@hdrinc.com
Irene Laurance	Project Dir.	WTECH	389-692-1193	ilaurance@westcentralhous.org
Heidi Watson	Mitigation Specialist	H2O Partners	512-508-2259	heidi@h2opartnersusa.com
Rhonda Murphy	Mitigation Planner	H2O Partners	512-508-2259	rmurphy@h2opartnersusa.com
Tom K. Smith	Ex. Dir.	WCTCOG	325-676-6284	tsmith@wctcog.org

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Figure E-7. Planning Area 2 Risk Assessment Workshop, 9/13/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Workshop
Jones County Law Enforcement Center
404 2nd Street, Anson, TX 79501
September 13, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Buddy Pope	EMC	Jones Co.	325-523-2216	Buddy.Pope@jco-texas.tx.us
Chuck Sheppard	EMC	City of Albany	325-762-3132	EMC-Airport@albaytexas.org
Alan Plumlee	City Manager	City of Stamford	325-773-2591	alan.plumlee@stamfordtx.net
Jarrod Patter	Chief of Police	City of Cross Plains	325-512-1577	jarrod@crossplains.org
Debbie Gansell	City Admin	Cross Plains	325-660-1887	deb@crossplains.org
Brad Wilson	Chief of Police	Hawley Police	325-660-4024	hawley.pd@taylor.tx.net
Edward Miller	Sherrif/EMC	Stockford	325-762-2000	ed.miller@stockfordcounty.org
Tony Smith	EMDIA	WCTCOG	325-672-8544	tsmith@westcentraltx.us
Heidi Watson	Mitigation Specialist	H2O Partners	512-518-2259	heidi@h2opartnersusa.com
Rhonda Murphy	Mitigation Planner	H2O Partners	214-707-0056	rmurphy@h2opartnersusa.com

Figure E-8. Planning Area 3 Risk Assessment Workshop, 9/11/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Workshop
Fisher County Law Enforcement Center Training Room
207 E. North 1st Street, Roby, TX 79543
September 11, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Tony Smith	EMDIA	WCTCOG	325-672-8544	tsmith@westcentraltx.us
Michelle Guelken	Dir of Op	Colorado City	325-728-3444	mguelken@cityofcolorado.org
Lisa McKinney	City Sec	City of Colorado	325-728-2232	lmcinney@cityofcolorado.org
Brad Brown	Deputy Police	City of Snyder	325-573-6715	bbrown@ci.snyder.tx.us
Jerry Westmoreland	EMC/PC	City of Snyder	325-573-6215	jwestmoreland@ci.snyder.tx.us
Ricky Furr	Sr. County Judge	Snyder Co.	325-575-9979	scj@co.snyder.tx.us
Nathan Hipes	Deputy Fire/EMC	City of Snyder	325-573-6215	nhipes@ci.snyder.tx.us
Jay Danno	Dir	Fisher County	325-776-2151	jdanno@fishercounty.com
Rhonda Murphy	Mitigation Planner	H2O		rmurphy@h2opartnersusa.com
Heidi Watson	Mitigation Specialist	H2O Partners	512-518-2259	heidi@h2opartnersusa.com

Figure E-9. Planning Area 4 Risk Assessment Workshop, 9/13/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Workshop
Knox County Courthouse Community Room
100 West Cedar, Benjamin, TX 79505
September 13, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Sarah Eckman	Mayer	City of Knox City	940-207-1089	nicki.eckman@gmail.com
Jim C. White	County Judge	Kent County	806-237-3373	Kencojudge@caprock-spr.com
Exa Lee Smith	City Council Person	City of Munday	940-422-4097	exalee@hatmail.com
Kim Bundy	Assistant City	City of Hockley	940-849-4111	Kim Bundy@hotmail.com
Ronnie Moorhead	County Judge	Stonewall County	940-988-3393	julie.moore@stcw.net
STAN WOSEIK	County Judge	Knox Co.	940-455-2151	SWOSEIK@SBCSOS.org
DAVID TRAVINS	City Administrator	City of Munday	940-421-4331	Citymanager@mundaytx.com
Lina R. Travins	Knox County Attorney	County Attorney	940-459-2241	keatonm@sbcsos.net
Deanna Hornsby	Sheriff	Knox City S.O.	940-459-2211	whiten@402@yahoo.com
JEFF LYLE	COO	HASKELL MEMORIAL HOSPITAL	940-864-2621	jlyle@haskmemh.org
TOM K. SMITH	EX DIR	WESTCENTX COG	325-672-8524	tom@westcentraltx.org
Patricia Moran	City Sec.	City of Weiner	940-203-0808	cityofweiner76388@yahoo.com

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WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Workshop
Knox County Courthouse Community Room
100 West Cedar, Benjamin, TX 79505
September 13, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Paul Stitzel	OPERATOR	CITY OPERATIONS	940-256-2894	
Rhonda Murphy	Mitigation Planning	H2O Partners	512-571-2088	rmurphy@h2opartners.com
Hardi Watson	Mitigation Specialist	H2O Partners	512-568-2259	hardi@h2opartnersusa.com

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Figure E-10. Planning Area 5 Risk Assessment Workshop, 9/14/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Workshop
Comanche County Annex
211 South Austin, Comanche, TX 76442
September 14, 2017

Please print clearly.

Name	Title	Department	Phone	Email
William Flournoy	EMC	Staghers County	254 246 1789	emergency@mitigation.com
Renee Seider	#	Comanche County	325-330-4931	seider7@comanchecountytx.gov
Tricia Ennshaw	ATMC	Comanche County	325-330-2334	triciaennshaw@comanchecountytx.gov
Rhonda Murphy	H2O Partners		214-907-6856	rmurphy@h2opartnersusa.com
Hedi Watson	Mitigation Specialist	H2O Partners	512-568-2259	hedi@h2opartnersusa.com

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Figure E-11. Planning Area 6 Risk Assessment Workshop, 9/12/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Workshop
Santa Anna Fire Department
302 North 2nd Street, Santa Anna, TX 76878
September 12, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Quentin Watkins	Police Chief	Miles PD	325-977-2277	quentin.watkins@miles-tx.org
Harold Fahlender	Mayor	City of Santa Anna	325-398-7228	harold.fahlender@aol.com
Rose Wigham	City Secretary	City of Blanket	325-748-3771	rose789@verizon.net
Nan Billings	City Secretary	City of Binger	325-759-6223	citysec@cityofbinger.org
John Perence	EMT	Coleman Co	325-214-2641	johnperence@web-access.net
Tom K. Smith	WCTCOG EX DIR		325-672-8544	tsmith@westcentraltxcog.org
Hedi Watson	Mitigation Specialist	H2O Partners	512-568-2259	hedi@h2opartnersusa.com
Rhonda Murphy	Mitigation Planner	H2O Partners	512-591-2085	rmurphy@h2opartnersusa.com

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Figure E-12. Planning Area 1 Mitigation Strategy Workshop, 11/15/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Workshop
 West Central Texas Council of Governments
 3702 Loop 322, Abilene, TX 79602
 November 15, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Angie Campbell	Emer Mgmt Coor	Callahan Co.	817-475-6736	angela.campbell@callahancounty.org
Howard Chapman	LEPC Treasurer	LEPC	325-733-4562	hchapman@lepc.org
Gail Nunn	City Adm.	Rochester/Haskell Co	940-742-3411	rochester@src.us
MITCHELL MORIBER	CHAIR	LEPC TAYLOR CNTY	325-338-6441	m.moriber@taylorcountytexas.org
M. MORIBER	P/O	LEPC "	325-338-6441	"
Tamra Lewis	Administrative	TAYLOR Co.	325-675-1235	lewist@taylorcountytexas.org
Bridget Cochran	Asst City Mgr	City of Merkel	325-938-4911	bridget@merkeltx.us
David Collins	Director Public	City of Taylor	325-338-8837	tw3collins@taylorcountytexas.org
Rose Wigham	City Secretary	City of Blanket	325-748-3171	blankett@verizon.net
Dana Seewald	City of Blanket		325-572-3347	
J. Lynn Palmer	Public Works Department		325-669-5634	l.palmer@taylorcountytexas.org

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WCTCOG HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Workshop
 West Central Texas Council of Governments
 3702 Loop 322, Abilene, TX 79602
 November 15, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Irene Laurance	HAZMAT PO	WCTCOG	817-114-1141	ilaurance@westcentraltx.us
Crystal Graham	City Secretary	City of Groes	940-422-5306	cityofgroes@src.us
DeWayne Bush	TC EME	Taylor Co	738-8540	bush@taylorcountytexas.org
Jim Bryan	EMC	Abilene	676-6983	jbryan@abilenetx.com
Barbara Deen	Deputy Eme	Abilene	676-6525	barbara.deen@abilenetx.com
Belinda Hohnertz	City Sec	Tye	325-692-8588	citysecretary@cityoftye.org
Roy Vortaw	Mayor	Tye	325-603-6260	mayor@cityoftye.org
Curtis Beitel	HDR		817-333-2817	cbeitel@hdr.com
David Trevino	City Manager	Munday	940-422-4331	citymanager@mundaytx.us
Heidi Watson	H2O Partners	Mitigation Specialist	512-508-2259	heidi@h2opartnersusa.com

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Figure E-13. Planning Area 2 Mitigation Strategy Workshop, 11/14/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Workshop
Jones County Law Enforcement Center
402 2nd St., Anson, TX 79501
November 14, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Stan Reeves	City Council	Moran, TX	325-945-3441	Moranstan@Zoho.com
STEVE TAGGART	MAYOR	MORAN, TX	325-945-3441	TAGGARTSHARLEY@YAHOO.COM
Exalee Smith	City Council	Munday, TX	940-422-4091	exalees@hotmail.com
Chuck Sheppard	Emergency Services Airport Manager	City of Albany	325-762-3133	eme-airport@albanytexas.org
Teresa Sorrells	City Secretary	City of Rule	940-996-2214	rulecity@svccaccess.net
JEFF SORRELLS	WATER SUPPLY	CITY OF RULE	940-996-2214	" " " "
ALAN PLUMLEE	City Manager	Stamford	325-773-2591	alan.plumlee@stamfordtx.net
Buddy Pop	Emt	Sares Co	325-923-2256	Buddy.Vega@SaresCo.com
Brad Wilson	Chief of Police	Hawley PD	325-587-9311	hawley.pd@taylor-tx.net
Cody Burlison	Court Administrator	Anson City	325-823-2411	Muni.Clk@Anson-TX.us
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com

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Figure E-14. Planning Area 3 Mitigation Strategy Workshop, 11/13/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Workshop
Snyder Fire Department
1911 27th St., Snyder, TX 79549
November 13, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Ken Holt	County Judge	Fisher County	325-776-2151	fishercountyjudge@yahoo.com
Timothy Hines	City Sec	City of Roscoe	325-737-2222	CityofRoscoeTX@gmail.com
Julie Pett	Chief	ROSCOE PD	325-514-8384	ROSCOEpolice@yahoo.com
NATHAN HINES	Fire/EMS	Snyder Fire	325-578-6215	NHines@ci.snyder.tx.us
Pony Westmoreland	FIRE/EMT	Snyder	325-578-6215	ponywestmoreland@ci.snyder.tx.us
Danna Medina	City Secretary	Colorado City	325-728-3464	danna.medina@ci.colorado-city.org
Michelle Gaudin	Asst. of Oper	Colorado City	325-728-3464	dmaddison@ci.colorado-city.org
Grant Madden	Fire Chief/EMT	Sweetwater FD	325-933-0346	Gmadden@Sweetwater.org
Tom K. Smith	EX DIR	WESTCENT TX COG	325-672-8344	tsmith@westcentraltx.org
David Nicholson	IT/Purchasing Director	City of Snyder	325-436-1006	dnicholson@ci.snyder.tx.us
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com

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Figure E-15. Planning Area 4 Mitigation Strategy Workshop, 11/14/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Workshop
Stonewall County Courthouse
123 Broadway St., Aspermont, TX 79502
November 14, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Patricia Hain	City Sec.	City of Weinert	940-203-0808	thain@cityofweinert.com
Susan Cockerell	Admin Asst County Judge Haskell	ADD-Bell-2851	940-866-2851	susan.cockerell@co.haskell.tx.us
Kim Bundy	Assistant City Sec.	City of Throckmorton	940-849-4411	kim Bundy@throckmorton.tx.org
Jim C White	County Judge	County of Kent	806-237-3373	Kencogdg@parrack-spun.com
STAN WOJCIK	COUNTY JUDGE	Knox County	940-459-2191	SWOJCIK@SRAK.com
Sam Watson	City Manager	Knox City/Johnson	940-658-3313	swatson@cityofjohnson.net
Luzara Cokmacu	City Administrator	City of Aspermont	940-989-7585	cityofaspermont@yahoo.com
Reanne Moorhead	County Judge	Stonewall Co.	940-999-7793	judge.stonewall@stx.net
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com
Trey Carrington	County Judge	Throckmorton Co.	940-849-8805	treycarrington@throckmortoncounty.org

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Figure E-16. Planning Area 5 Mitigation Strategy Workshop, 11/16/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Workshop
Stephens County Law Enforcement Center
210 E. Dyer St., Breckenridge, TX 76424
November 16, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Calvin Chaney	Fire Chief	Breckenridge/City	254-522-5216	breckfire@hotmail.com
Bobby Mathews	Mayor	Woodson	940-345-6567	mathews@braggsnet.com
Tom K. Smith	EX DIR	WCT-COG	325-733-3163	tsmith@westcentraltex.org
RAY Helberg	EMC	Colville	254-842-4926	RAY.GUN@co.cl.tx.us
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com

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Figure E-17. Planning Area 6 Mitigation Strategy Workshop, 11/15/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Workshop
Runnels County Courthouse
613 Hutchins Ave., Ballinger, TX 76821
November 15, 2017

Please print clearly.

Name	Title	Department	Phone	Email
John Pearce	EMC	Coleman Co	325-214-2641	j Pearce@web-access.net
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Harold Fehrlender	MAYOR	CITY OF SANTA ANA	325-349-3423	mayor@CITY OF SA ACCOS, TX
LAURA ROZZLE	MAYOR	CITY OF BLACKWELL	385-236-0409	Blackwell.Texas@yahoo.com
Shirley Lemley	City Sec.	"	325-282-2082	"
Lauren Hogan	Code Enforcement	City of Winters	325-754-4424	code@risebroadband.net
Quentin Watkins	Chief of Police	MIKE RD	325-977-2278	quentin.watkins@mike.tx.gov
Sandra Clack	Administrator	Ballinger Healthcaare Rehab	325-365-5766	sandra.clack@dur.com
TOM K. SMITH	EX. DIR. WCT-CCG		325-672-8544	tsmith@westcentraltx.org
SALLY HILLIARD	Runnels Co. Judge		325-365-2633	RCJUDGE@Co.Runnels.TX.US
DAVID MERCER	Chief of Police	Early Police Dept	325-646-5322	dmerc@EARLYTX.NET
Mechail Cox	BC EMC	Brewer County	325-203-3188	mechail.Cox@Brewercountytx.org
Heidi Watson	Mitigation Specialist	H2O Partners	512-983-2259	heidi@h2opartnersusa.com

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PUBLIC MEETING DOCUMENTATION

As discussed in Section 2, a series of public meetings were held in conjunction with each of the workshops. Documentation in the form of sign-in sheets for each of the meetings follows.

Figure E-18. Planning Area 1 and 2 Kickoff Public Meeting, 6/12/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Kickoff Public Meeting
West Central Texas Council of Governments
3702 Loop 322, Abilene, TX 79602
June 12, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Buddy Pope	EMC	Jones Co.	325-455-6235	Buddy.Pope@co.jones.tx.us
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com
GARY B. YOUNG	Chairman	Taylor County Rural Fire	325-669-9110	YOE GARY Y @ aol . com
Irene Lawrence	Project Director	WCTCOG	325-672-1191	ilawrence@westcentraltxcog.org

Figure E-19. Planning Area 3 Kickoff Public Meeting, 6/13/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Kickoff Public Meeting
Nolan County Courthouse
100 E. 3rd St., Sweetwater, TX 79556
June 13, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Chela Horton	City Manager	City of Rotan	305-236-0200	CityofRotan.Office@yahoo.com

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Figure E-20. Planning Area 4 Kickoff Public Meeting, 6/12/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Kickoff Public Meeting
Haskell County Courthouse
1 Avenue D, Haskell, TX 79521
June 12, 2017

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Exa Lee Smith	City Council Woman	City of Munday	940-422-4097	exalees@hotmail.com
Terre Lawrence	Planner	WTHI	335-1118-1197	ilawrence@westunitedkies.org
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com
Susan Cockrell	Admin Asst	Haskell County	940-861-2851	Susan.Cockrell@co.haskell.tx.us

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Figure E-21. Planning Area 5 Kickoff Public Meeting, 6/13/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Kickoff Public Meeting
Stephens County Law Enforcement Center
210 E. Dyer St., Breckenridge, TX 76424
June 13, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Hedi Watson	Mitigation Specialist	H2O Partners	512-568-2259	hedi@h2opartnersusa.com
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Terrell Smith	Ex Dir	WCTCOG	325-672-8514	tsmith@westcentraltx.org
Gray Fuller	Stephens County Judge	Stephens Co.	254-559-0934	Commissioners@stephenscountytx.gov

1

Figure E-22. Planning Area 6 Kickoff Public Meeting, 6/14/17



WCTCOG HAZARD MITIGATION PLAN UPDATE
Kickoff Public Meeting
Brown County Courthouse
200 South Broadway St., Brownwood, TX 76801
June 14, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Hedi Watson	Mitigation Specialist	H2O Partners	512-568-2259	hedi@h2opartnersusa.com
Davis Mercer	Chief	Early Police Dept	325-446-5322	dmerc@earlytx.net
Jessie Acker	SUS Coordinator	Brownwood-Brown County Health Dept	800-9130	jacker@brownwoodtx.gov
	Strategic National Stockpile			

1

Figure E-23. Planning Area 1 Risk Assessment Public Meeting, 9/12/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Public Meeting
West Central Texas Council of Governments
3702 Loop 322, Abilene, TX 79602
September 12, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Ed McElroy	Transportation Planner	Abilene MPO	(325) 437-4542	ed.mcElroy@abilene-tx.com
Elisa Smetana	Exec Director	Abilene MPO	(325) 676-6492	elisa.smetana@abilene-tx.com
Rhonda Murphy	Mitigation Planner	H2O Partners	(512) 571-2089	rmurphy@h2opartnersusa.com
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com

1

Figure E-24. Planning Area 2 Risk Assessment Public Meeting, 9/13/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Public Meeting
Jones County Law Enforcement Center
404 2nd Street, Anson, TX 79501
September 13, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com
Rhonda Murphy	Mitigation Planner	H2O Partners	214-707-0556	rmurphy@h2opartnersusa.com
Buddy Pope	Trainer	Jones Co.	325-823-2210	Buddy.Pope@co.jones.tx.us
Angie Campbell	Asst EMC	Callahan Co.	325-854-5840	angie.campbell@callahancounty.org

1

Figure E-25. Planning Area 3 Risk Assessment Public Meeting, 9/11/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Public Meeting
Fisher County Law Enforcement Center Training Room
207 E. North 1st Street, Roby, TX 79543
September 11, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Hardi Watson	Mitigation Specialist	H2O Partners	512-568-2259	hardi@h2opartnersusa.com
Rhonda Murphy	Mitigation Planner	H2O Partners	512-571-2088	Rmurphy@H2OPartnersUSA.com

1

Figure E-26. Planning Area 4 Risk Assessment Public Meeting, 9/13/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Public Meeting
Knox County Courthouse Community Room
100 West Cedar, Benjamin, TX 79505
September 13, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Troy Parton	Superintendent	Munday CISD	940-422-4321 x1	troy.parton@mundayisd.net
Stan Wozniak	Knox County	Knox Co.	940-459-2191	swozniak@skccesd.net
Hardi Watson	Mitigation Specialist	H2O Partners	512-568-2259	hardi@h2opartnersusa.com
Rhonda Murphy	Mitigation Planner	H2O Partners	512-571-2088	Rmurphy@H2OPartnersUSA.com

1

Figure E-27. Planning Area 5 Risk Assessment Public Meeting, 9/14/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Workshop
Comanche County Annex
211 South Austin, Comanche, TX 76442
September 14, 2017

Please print clearly.

Name	Title	Department	Phone	Email
William Flournoy	EMC	Stephens County	254-246-1789	emergency@stephenscountytx.gov
Bessie Seider	#	Comanche County	325-330-4931	seider7@gmail.com
Tricia Grimsshaw	ATMC	Comanche County	325-330-2334	trishaw@comanchecountytx.com
Rhonda Murphy	H2O Partners		214-907-6056	rmurphy@h2opartnersusa.com
Hadi Watson	Mitigation Specialist	H2O Partners	512-518-2259	hadi@h2opartnersusa.com

Figure E-28. Planning Area 6 Risk Assessment Public Meeting 9/12/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Risk Assessment Public Meeting
Santa Anna Fire Department
302 North 2nd Street, Santa Anna, TX 76878
September 12, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Hadi Watson	Mitigation Specialist	H2O Partners	512-518-2259	hadi@h2opartnersusa.com
Rhonda Murphy	Mitigation Planner	H2O Partners	512-329-6612	rmurphy@h2opartnersusa.com
John Pearce	EMC	Cameron Co	325-214-2641	jpearce@web-access.net
David Robiniett	Superintendent	SAISD	325-214-3093	drobiniett@me.com

Figure E-29. Planning Area 1 Mitigation Strategy Public Meeting, 11/15/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Public Meeting
West Central Texas Council of Governments
3702 Loop 322, Abilene, TX 79602
November 15, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Charles (Chuck) Sparks	Emergency Preparedness - Generations Home Health		325-660-9776	Chuck.Sparks@yahoo.com
Mike Murray	City Administrator	Adm'n	325-893-4234	mmurray@clayco.cityhall.tx.us
Hadi Watson	Mitigation Specialist	H2O Partners	512-568-2259	hadi@h2opartnersusa.com

1

Figure E-30. Planning Area 2 Mitigation Strategy Public Meeting 11/14/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Public Meeting
Jones County Law Enforcement Center
402 2nd St., Anson, TX 79501
November 14, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Hadi Watson	Mitigation Specialist	H2O Partners	512-568-2259	hadi@h2opartnersusa.com

1

Figure E-31. Planning Area 3 Mitigation Strategy Public Meeting, 11/13/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Public Meeting
Snyder Fire Department
1911 27th St., Snyder, TX 79549
November 13, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Clay Cade	Director of Admin Services	Snyder ISD	325-574-3476	ccade@snyderisd.net
Grant Madden	Fire Chief	Sweetwater FD	325-933-0346	gmadden@co.wt.tx.us
Randy Westlund	Fire/DEM	Snyder	325-573-6215	rwestlund@ci.snyder.tx.us
David Nicholson	IT/Purchasing Director	City of Snyder	325-573-9988	dnicholson@ci.snyder.tx.us
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com

1

Figure E-32. Planning Area 4 Mitigation Strategy Public Meeting, 11/14/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Public Meeting
Stonewall County Courthouse
123 Broadway St., Aspermont, TX 79502
November 14, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2O Partners	512-983-0092	rachel@h2opartnersusa.com
Kim Bundy	Assistant City Sec.	City of Throckmorton	940-256-0290	Kimberlyjandundy@hotmail.com
Lozano Alamo	City Administrator	City of Aspermont	940-989-3585	cityofaspermont@yahoo.com
Susan Cokerell	Admin/Est Co Judge	Haskell County	940-864-8851	susan.cokerell@haskell.tx.us
Sam Watson	City Administrator	City of Knox City	940-658-3313	CityKnox@svcc.com
Tracy Carrington	Co Judge	Throckmorton Co	940-844-8805	tracy.carrington@throckmortonco.org
Rebecca Netherland	County Judge	Stonewall Co	940-997-7773	judicial@stonewallco.org
STAN WOTCILE	County Judge	Knox Co	940-459-0151	SWOTCILE@SVCCASSOCIATES.COM
Jim White	County Judge	Knox Co/Jayton	806-237-3373	KnoxCo@Caprock-Spr.com
Heidi Watson	Mitigation Specialist	H2O Partners	512-568-2259	heidi@h2opartnersusa.com

1

Figure E-33. Planning Area 5 Mitigation Strategy Public Meeting, 11/16/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Public Meeting
Stephens County Law Enforcement Center
210 E. Dyer St., Breckenridge, TX 76424
November 16, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Tom K. Smith	WCTCOG EX DIR		325-672-8544	tsmith@westcentraltexas.org
Rachel Andrews	Mitigation Specialist		512-983-0092	rachel@h2opartnersusa.com
Heidi Watson	Mitigation Specialist	H2OPartners	512-518-2259	heidi@h2opartnersusa.com

1

Figure E-34. Planning Area 6 Mitigation Strategy Public Meeting, 11/15/17




WCTCOG HAZARD MITIGATION PLAN UPDATE
Mitigation Strategy Public Meeting
Runnels County Courthouse
613 Hutchins Ave., Ballinger, TX 76821
November 15, 2017

Please print clearly.

Name	Title	Department	Phone	Email
Rachel Andrews	Mitigation Specialist	H2OPartners	512-983-0092	rachel@h2opartnersusa.com
Heidi Watson	Mitigation Specialist	H2OPartners	512-518-2259	heidi@h2opartnersusa.com
Tom K. Smith	WCTCOG EX DIR		325-672-8544	tsmith@westcentraltexas.org
Sherry Hillman	Runnels Co. Judge		325-365-2637	RCJ.VAO@aol.com

1

PUBLIC NOTICES

Public notices to announce WCTCOG's and participating jurisdictions within each Planning Area's participation in the Plan development process were posted on their website, on social media sources including Facebook and Twitter, through the local media, and/or posting the information on bulletin boards in public facilities.¹

Figure E-35. Public Notice, WCTCOG webpage



¹ Due to the number of participating jurisdictions, who also may have posted the notice in more than one location, a sampling of notices have been provided here. Additional screen shots can be provided upon request.

Figure E-36. Public Notice, Planning Area 1, City of Abilene webpage



Figure E-37. Public Notice, Planning Area 2, Jones County Courthouse

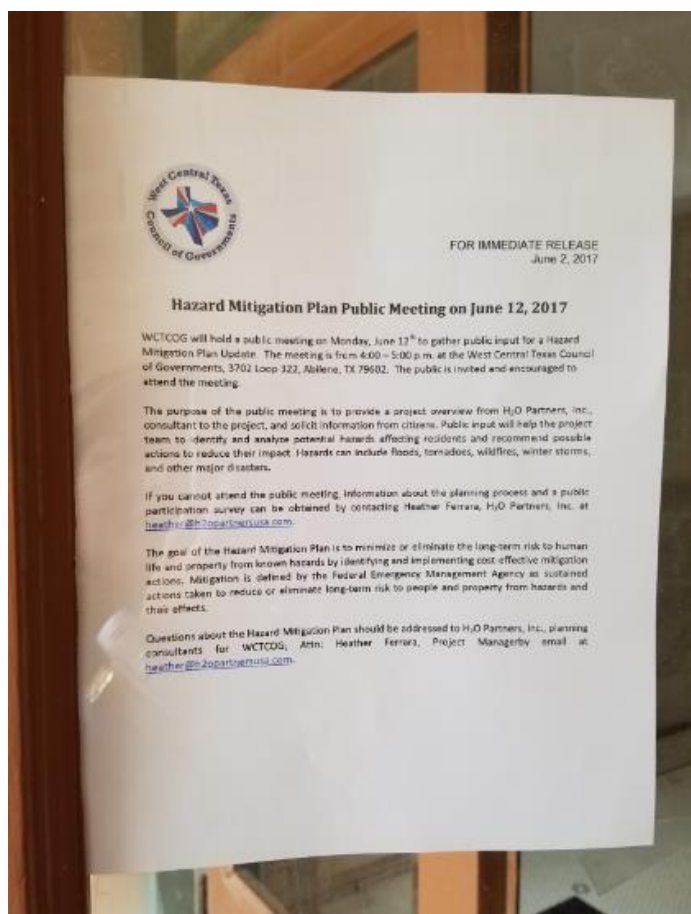


Figure E-38. Public Notice, Planning Area 3, City of Blackwell Facebook page

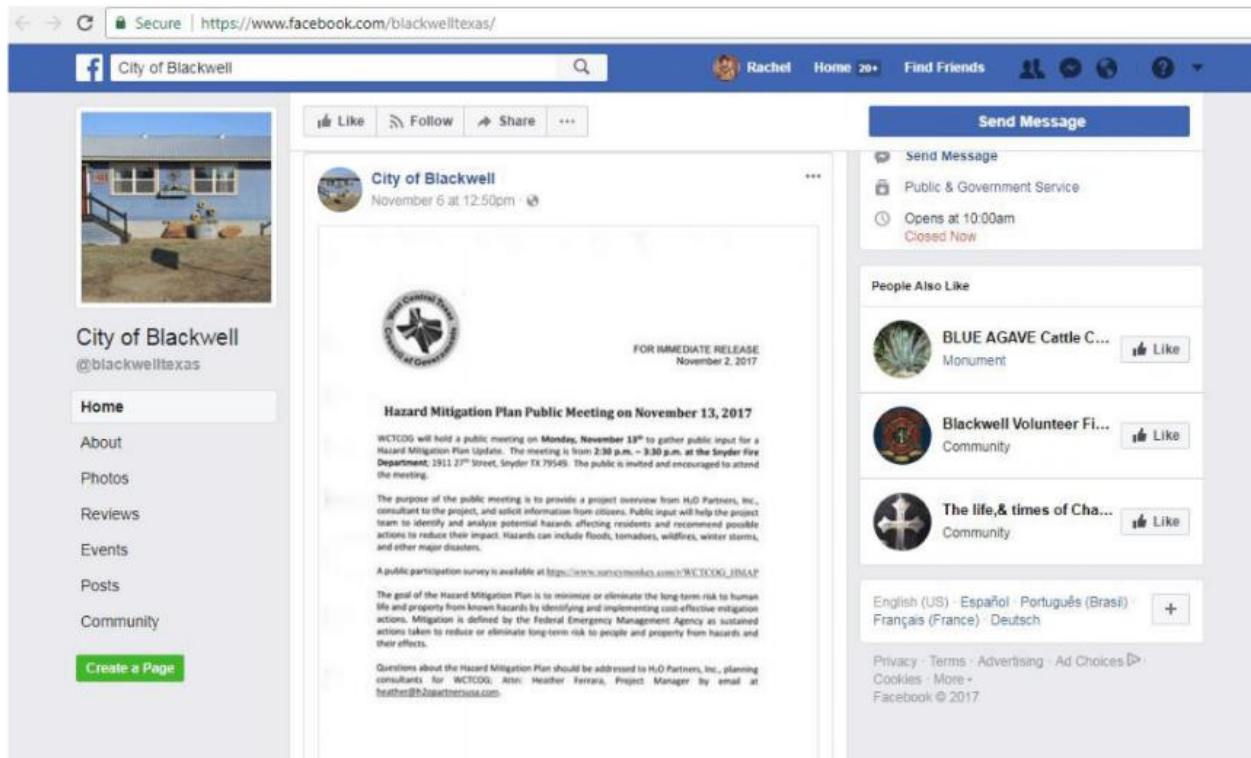


Figure E-39. Public Notice, Planning Area 4, Throckmorton County webpage



Figure E-40. Public Notice, Planning Area 5, Stephens County Courthouse

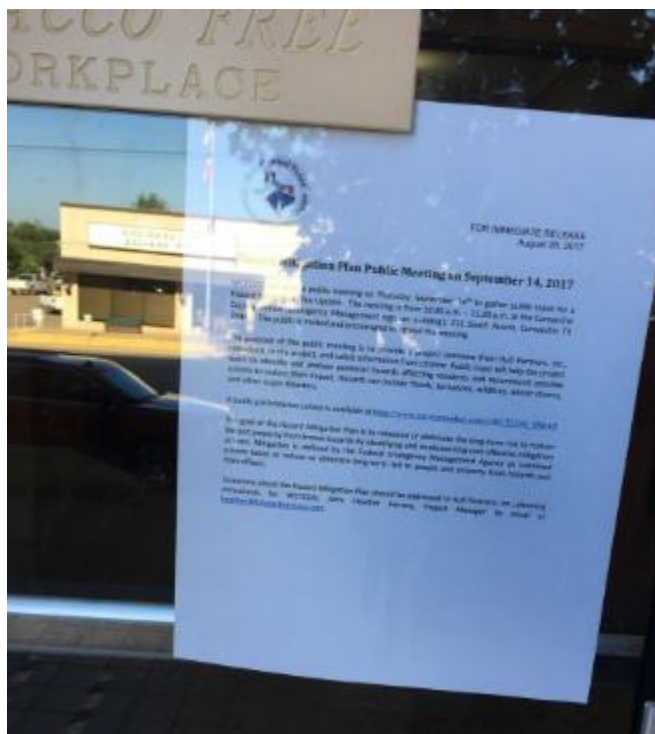
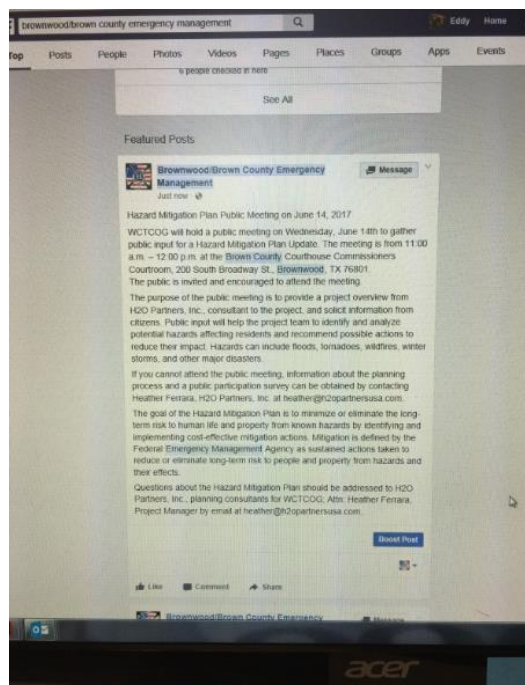


Figure E-41. Public Notice, Planning Area 6, Brown County Emergency Management Facebook page



APPENDIX F: CAPABILITY ASSESSMENT

Overview	1
Community Capability Assessments	2

OVERVIEW

A Community Capability Assessment is an integral component of the Hazard Mitigation Planning Process. It is an invaluable tool in assessing a community's existing planning and regulatory capabilities to support implementation of mitigation strategy objectives.

Beginning on Page 2, a completed Capability Assessment Checklist provides information on existing policies, plans, and regulations in place for Planning Team members at the local level or that may be provided by the County on an as-needed basis. ***Participation is denoted with an "x" on the Checklist.***

COMMUNITY CAPABILITY ASSESSMENTS

COMMUNITY CAPABILITY CHECKLIST	Taylor County	City of Abilene	Town of Buffalo Gap	Town of Lawn	Town of Merkel	Town of Trent	City of Tuscola	City of Tye	WCTCOG
Plans									
Capital Improvements Plan	X	X			X		X	X	
Community Wildfire Protection Plan	X		X				X	X	
Continuity of Operations	X	X					X		
Economic Development Plan	X	X			X				
Emergency Operations Plan	X	X			X	X	X	X	
Evacuation Plan	X	X				X		X	
Hazard Mitigation Plan	X	X						X	
Historic Preservation Plan	X	X							
Land Use Plan	X	X			X			X	
Master or Comprehensive Plan	X	X			X				
Open Space Plan	X	X							
Post-disaster Recovery Plan									
Redevelopment Plan	X	X							
Stormwater Management Plan	X	X						X	
Transportation Plan	X	X							
Watershed Protection Plan	X	X							
Policies/Ordinances									
Building Codes		X			X	X	X	X	
Floodplain Ordinance	X	X	X			X	X	X	

APPENDIX F: CAPABILITY ASSESSMENT

COMMUNITY CAPABILITY CHECKLIST	Taylor County	City of Abilene	Town of Buffalo Gap	Town of Lawn	Town of Merkel	Town of Trent	City of Tuscola	City of Tye	WCTCOG
Property Set-Back Ordinance		X						X	
Real Estate Disclosure Requirements		X							
Site Plan Review Requirements	X	X			X		X	X	
Stormwater Ordinance		X							
Subdivision Regulations	X	X			X			X	
Watershed Ordinance									
Zoning Ordinance/Land Use Restrictions	X	X			X			X	
Programs									
Fire Code		X		X		X		X	
Floodplain Maps/Flood Insurance Studies	X	X				X		X	
Hydrologic/Hydraulic Studies		X							
Mutual Aid Agreement	X	X			X	X	X		
National Flood Insurance Program Participant		X	X		X	X	X		
NFIP Community Rating System Participant		X							
Property Acquisition Program									
Public Education/Awareness Programs	X	X							
Storm Drainage Systems Maintenance Program	X	X			X				
Stream Maintenance Program	X	X							
Staff/Departments									
Building Code Official		X			X	X	X		

APPENDIX F: CAPABILITY ASSESSMENT

COMMUNITY CAPABILITY CHECKLIST	<i>Taylor County</i>	<i>City of Abilene</i>	<i>Town of Buffalo Gap</i>	<i>Town of Lawn</i>	<i>Town of Merkel</i>	<i>Town of Trent</i>	<i>City of Tuscola</i>	<i>City of Tye</i>	<i>WCTCOG</i>
Emergency Manager	X	X			X	X	X		
Engineer/Public Works Official		X							
Environmental Conservation Specialist		X							
Floodplain Administrator	X	X	X			X	X		
GIS Specialist	X	X							
Planner		X			X				
Public Information Official		X			X		X		
Resource Development/Grant Writer									

RESOLUTION NO. 13-2020

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS APPROVING THE WEST CENTRAL TEXAS COUNCIL OF GOVERNMENTS' HAZARD MITIGATION PLAN UPDATE

WHEREAS, natural hazards in the West Central Texas Region historically have caused significant disasters with losses of life and property and natural resources damage; and

WHEREAS, the Federal Disaster Mitigation Act of 2000 and Federal Emergency Management Agency (FEMA) require communities to adopt a hazard mitigation action plan to be eligible for the full range of pre-disaster and post-disaster federal funding for mitigation purposes; and

WHEREAS, FEMA requires that communities update Hazard Mitigation Action Plans every five years in order to be eligible for the full range of pre-disaster and post-disaster federal funding for mitigation purposes; and

WHEREAS, the City of Abilene, through the hazard mitigation planning process, has assessed the community's potential risks and hazards and is committed to planning for a sustainable community and reducing the long-term consequences of natural and man-caused hazards; and

WHEREAS, the West Central Texas Council of Governments (WCTCOG) Hazard Mitigation Plan Update outlines a mitigation vision, goals and objectives; assesses risk from a range of hazards; and identifies risk reduction strategies and actions for hazards that threaten the community.

NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

1. That the West Central Texas Council of Governments' Hazard Mitigation Plan Update is approved in its entirety.
2. That the City of Abilene will pursue available funding opportunities for implementation of the proposals designated therein, and will, upon receipt of such funding or other necessary resources, seek to implement the actions contained in the mitigation strategies.
3. That the City of Abilene vests with the County Judge the responsibility, authority, and means to inform all parties of this action; assure that the Hazard Mitigation Plan Update will be reviewed at least annually; and that any needed adjustments will be presented to the County Commissioners for consideration.
4. That the City of Abilene agrees to take such other action as may be reasonably necessary to carry out the objectives of the Plan Update and report on progress as required by FEMA and the Texas Division of Emergency Management (TDEM).
5. That this Resolution becomes effective immediately upon adoption.

ADOPTED this 23rd day of January, 2020.

ATTEST:


Shawna Atkinson, City Secretary


Anthony Williams, Mayor

APPROVED:


Stanley Smith, City Attorney

FY 2020/2024 Consolidated Plan and One-Year Action Plan

City Council Meeting
October 8, 2020



Consolidated Plan Research Process

- Data analysis
 - Validated sources to identify housing needs and quality.
 - Demographic data from the US Census Bureau and other sources.
- Stakeholder interviews
 - Including one with people representing high-need or other communities facing unique challenges (e.g., low / moderate income households, veterans, people facing disabilities, multi-lingual or monolingual Spanish, and others).
- Community group meetings
 - Held six in-person meetings in low-income neighborhoods.
- Outreach and data exchange with organizations working to address housing needs
 - Examples ... the Abilene Housing Authority, West Texas Homeless Network, United Way of Abilene, and many others.
- Community survey
 - Approximately 232 responses.
 - Diverse demographics – age, gender, race / ethnicity.
- Public Hearing and Comment Period
 - Received feedback from Abilene citizens



Conclusions

- No modifications to the Consolidated Plan have been made except to record the public comments and actions being taken moving forward.
- City Council to vote to approve the 2020-2024 Consolidated Plan and Action Plan today.
- Once approved by the City Council, the Plan will be sent to HUD for final approval.



Questions?





**City Council
Agenda Memo**

City Council Meeting Date: 10/8/2020

TO: Robert Hanna, City Manager

FROM: Rodney Taylor, Director

SUBJECT: **8. Ordinance (First Reading): Receive a Report, Hold a Discussion and Public Hearing, and Take Action on an ordinance amending Chapter 32, "Utilities", Article III, "Industrial Wastes", of the Abilene Municipal Code, by amending certain sections as set out below; proving a severability clause, and declaring a penalty (Rodney Taylor)**

GENERAL INFORMATION

Water Utilities staff is requesting that the Abilene City Council approve on first reading an Ordinance amending Chapter 32 "Utilities", Article III "Industrial Wastes", of the Abilene Municipal Code by amending certain sections of the Article III. The modifications are minor but numerous. The Exhibit A Redlined Version in the agenda packet clearly and accurately details each insertion and deletion modification to the current ordinance language. These amendments are necessary in order to comply with provisions of the National Pretreatment Regulations of the Environmental Protection Agency (EPA).

SPECIAL CONSIDERATIONS

Code of Federal Regulations Title 40, subsection 403.5(c)(1) of the General Pretreatment Regulations requires Publicly Owned Treatment Works (POTW) with approved Pretreatment Programs to continually develop and enforce local limits. The most recent approved local limits revision occurred in 2002. Changes in the number of industries in the City and upgrades to the Hamby Water Reclamation Facility, since that time, made it necessary to submit a Technically Based Local Limits Study, with newly calculated limits, to the TCEQ in 2016. On September 18, 2020 the TCEQ approved the revised local limits that were calculated from the Study. These new limits must be adopted into the City Ordinance to be enforceable as required by federal

regulations.

On October 14, 2005 the EPA published the Pretreatment Streamlining Rule which reduced some pretreatment technical and administrative requirements, but also placed certain new requirements on pretreatment programs. Some of the elements of this Rule require minor revisions to the language of the Industrial Waste Ordinance.

It is the opinion of City staff that the proposed modifications to the Industrial Wastes Ordinance will not result in a significant new burden on compliant industries.

FUNDING/FISCAL IMPACT

N/A

STAFF RECOMMENDATION

Staff recommends that the Abilene City Council approve the ordinance amending Chapter 32, Article III "Industrial Wastes" as described herein.

BOARD OR COMMISSION RECOMMENDATION

ATTACHMENTS:

1. ORDINANCE-Chapter 32 Utilities-Article III Industrial Wastes-10-8-2020
2. Ordinance-Chapter 32 Utilities-Article III Industrial Wastes-Exhibit A-Redline-V3-10-8-2020
3. Ordinance-Chapter 32 Utilities-Article III Industrial Wastes-Exhibit A-Clean-V3-10-8-2020
4. Presentation-Ordinance Chapter 32 Article III Industrial Wastes-First Reading-10-8-2020

ORDINANCE NO. _____

AN ORDINANCE AMENDING CHAPTER 32, “UTILITIES”, ARTICLE III, “INDUSTRIAL WASTES” OF THE ABILENE MUNICIPAL CODE BY AMENDING CERTAIN SECTIONS AS SET OUT BELOW; PROVIDING A SEVERABILITY CLAUSE; DECLARING A PENALTY; AND CALLING FOR A PUBLIC HEARING.

WHEREAS, the City Council of the City of Abilene (City) affirms that the City has an approved Industrial Waste Pretreatment Program that is compliant with all applicable state and federal laws, including the Clean Water Act (33 United States Code §1251 et seq.) and the General Pretreatment Regulations (40 Code of Federal Regulations Part 403) (CFR); and

WHEREAS, the CFR requires that the City periodically review its Technically Based Local Limits (TBLL) to determine compliance, and the major renovation of the Hamby Water Reclamation Facility and observed changes in the number and type of industrial facilities discharging into the City’s Publicly Owned Treatment Works resulted in the need to perform a study of the Technically Based Local Limits and make revisions to the TBLL of the City’s Industrial Waste Ordinance based on those findings; and

WHEREAS, the Pretreatment Streamlining Rule, published by the Environmental Protection Agency in 2005, required that certain procedural changes be implemented into the City’s Pretreatment Program and making certain revisions to the City’s Industrial Wastes Ordinance to ensure compliance and enforceability of the Pretreatment Program; and

WHEREAS, in recognition of the City’s commitment to comply with state and federal regulations and to protect the health and well being of its citizens, it has become necessary to revise and amend the Industrial Wastes Article of the Code of the City of Abilene; and

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

PART 1: That Chapter 32, “Utilities”, Article III “Industrial Wastes” of the City of Abilene Municipal Code, be amended as set out in Exhibit “A”, attached hereto and made a part of this ordinance for all purposes.

PART 2: That if the provisions of any section, subsection, paragraph, subdivision or clause of this ordinance shall be adjudged invalid by a court of competent jurisdiction, such judgment shall not effect or invalidate the remainder of any section, subsection, paragraph, subdivision, or clause of this ordinance.

PART 3: That any person, firm, or corporation violating the provisions of this Ordinance, shall be subject to escalating enforcement actions and schedule of penalties described in this Article III.

Said ordinance, being a penal ordinance, becomes effective ten (10) days after its publication in the newspaper, as provided by Section 19 of the Charter of the City of Abilene.

PASSED ON FIRST READING this 8th day of October, A.D., 2020.

A notice of the time and place, where and when said ordinance would be given a public hearing and considered for final passage was published in the Abilene Reporter-News, a daily newspaper of general circulation in the City of Abilene, said publication being on the 18th day of October, 2020, the same being more than 24 hours prior to a public hearing being held in the Council Chamber of City Hall in Abilene, Texas, at 4:30 p.m. on the 22nd day of October, 2020, to permit the public to be heard.

PASSED ON SECOND AND FINAL READING this 22nd day of October, A.D., 2020.

ATTEST:

City Secretary

Mayor

APPROVED:

City Attorney

EXHIBIT A (REDLINED VERSION)

**CHAPTER 32 UTILITIES
ARTICLE III. INDUSTRIAL WASTES**

Sec. 32-57. General Provisions.

(a) Purpose and Policy. This article sets forth uniform requirements for users of the publicly owned treatment works for the City of Abilene (City) and enables the City to comply with all applicable state and federal laws, including the Clean Water Act (33 United States Code § 1251 et seq.) and the General Pretreatment Regulations (40 Code of Federal Regulations Part 403) (CFR). The objectives of this ordinance are:

- (1) To prevent the introduction of Pollutants into the publicly owned treatment works that will interfere ~~cause Interference~~ with its operation;
- (2) To prevent the introduction of Pollutants into the publicly owned treatment works that will pass through the publicly owned treatment works, inadequately treated, into receiving waters, or otherwise be incompatible with the publicly owned treatment works;
- (3) To protect publicly owned treatment works personnel who may be affected by wastewater and sludge in the courts of their employment and to protect the general public;
- (4) To improve the opportunity to recycle and reclaim wastewater and sludge from the publicly owned treatment works;
- (5) To provide for fees for the equitable distribution of the cost of operation, maintenance, and improvement of the publicly owned treatment works; and
- (6) To enable the City to comply with its national ~~TPDES~~ permit conditions, as issued by the Texas Commission on Environmental Quality (TCEQ), sludge use and disposal requirements, and any other federal or state laws to which the publicly owned treatment works is subject.

This article shall apply to all users of the publicly owned treatment works. The article authorizes the issuance of wastewater discharge permits; authorizes monitoring, compliance, and enforcement activities; establishes administrative review procedures; requires user reporting; and provides for the setting of fees for the equitable distribution of costs resulting from the program established herein.

(b) Administration. Except as otherwise provided herein, the Director shall administer, implement, and enforce the provisions of this article. Any powers granted to or duties imposed upon the Director may be delegated by the Director to other city personnel.

(c) Abbreviations. The following abbreviations when used in this article shall have the designated meanings:

BOD	Biochemical oxygen demand
<u>BMP</u>	<u>Best Management Practices</u>
<u>CFR</u>	Code of Federal Regulations
COD	Chemical oxygen demand
EPA	U.S. Environmental Protection Agency
FOG	Fats, oil, and grease

gpd	gallons per day
L	liter
mg	milligrams
mg/L	milligrams per liter
T NPDES	Texas National Pollutant Discharge Elimination System
POTW	Publicly owned treatment works
QA/QC	Quality assurance/quality control
RCRA	Resource Conservation and Recovery Act
SIC	Standard industrial classification
TCEQ	Texas Commission on Environmental Quality
TOC	Total organic carbon
TPH	Total petroleum hydrocarbons
TSS	Total suspended solids
TWC	Texas Water Commission
-U.S.C.	United States Code

(d) Definitions. Unless a provision explicitly states otherwise, the following terms and phrases, as used in this article, shall have the meanings hereinafter designated.

Abnormal Industrial Waste. Any **permitted** industrial waste having a pollutant content in excess of that found in Normal Waste, but which is otherwise acceptable to a sanitary sewer under the terms of this article.

Act or "the Act." The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. § 1251 et seq.

Approval Authority. ~~The Executive Director of the Texas Commission on Environmental Quality. The regional administrator of EPA Region 6 or, upon approval of a State pretreatment program within a delegated Texas NPDES permit program, the Director of the Texas Water Commission (TWC).~~

Authorized Representative of the User.

(1) If the user is a corporation:

a. The president, secretary, treasurer, or a vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

b. The manager of one or more manufacturing, production, or operation facilities, ~~employing more than two hundred fifty (250) persons or having gross annual sales or expenditures exceeding twenty five million dollars (\$25,000,000.00) (in second quarter 1980 dollars), if provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct the comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for wastewater discharge permit requirements; and where~~ authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

(2) If the user is a partnership or sole proprietorship: a general partner or proprietor, respectively;

(3) If the user is a federal, state, or local governmental facility: a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or their designee.

(4) The individuals described in paragraphs (1) through (3), above, may designate another authorized representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to the Director.

Best Management Practices (BMPs). The schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in Section 32-58 of this Article. BMPs include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage. BMPs also include alternative means (i.e., management plans) of complying with or in place of certain established categorical pretreatment standards and effluent limits.

Biochemical Oxygen Demand (BOD). The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures for five (5) days at 20° centigrade, usually expressed as a concentration [milligrams per liter (mg/L)].

Categorical Pretreatment Standard or Categorical Standard. Any regulation containing pollutant discharge limits promulgated by the U.S. EPA in accordance with Sections 307(b) and (c) of the Act (33 U.S.C. § 1317), which apply to a specific category of users and which appear in 40 CFR Chapter I, Subchapter N, Parts 405–471.

City. The City of Abilene or the City Council of Abilene.

Categorical Industrial User (CIU). An Industrial User subject to a categorical Pretreatment Standard or categorical Standard.

Composite sample. A combination of individual samples of wastewater taken at preselected intervals to minimize the effect of the variability of the individual sample. Individual subsamples may be of equal volume or may be proportional to the flow at the time of sampling.

Control Authority. The City of Abilene.

Daily Average Limit. The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Daily Discharge. The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

Daily Maximum. The arithmetic average of all effluent samples for a pollutant collected during a calendar day.

Daily Maximum Limit. The maximum concentration (or loading) of a pollutant allowed to be discharged into the publicly owned treatment works during a calendar day or any twenty-four (24) hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, it is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations

expressed in other units of measurement, it is calculated as the average measurement of the pollutant over the day.

Director. The Director of the City of Abilene Water Utilities Department, or his/her duly authorized representative.

Domestic Waste (or Domestic Wastewater). Waterborne waste normally discharged from the sanitary conveniences of dwellings (including apartment houses and hotels), office buildings, factories, and institutions, free from stormwater, surface water, and industrial waste.

Environmental Protection Agency (EPA). The U.S. Environmental Protection Agency or, where appropriate, the Regional Water Management Division Director, the Regional Administrator, or other duly authorized official of said agency.

Existing Source. Any source of discharge, the construction or operation of which commenced prior to the publication by EPA of proposed categorical pretreatment standards, which will be applicable to such source if the standard is thereafter promulgated in accordance with Section 307 of the Act.

Grab Sample. A sample which is taken from a wastestream on a onetime basis without regard to the flow in the wastestream and over a period of time not to exceed fifteen (15) minutes.

Hazardous Waste. Any substance which, if disposed of otherwise than by discharge into the POTW, would be identified as a hazardous waste under 40 CFR Part 261.

Hold-haul Tank. A storage tank installed by a user to hold industrial waste, the contents of which are prohibited from being discharged to the sanitary sewer and must be hauled to an approved disposal site.

Industrial User or User. Any person who discharges Industrial Waste into the publicly owned treatment works (POTW), any other source of "Indirect Discharge" as defined herein, and any waste hauler discharging waste or wastewater into the POTW.

Industrial Waste. Water-borne solid, liquid, or gaseous wastes resulting from and discharged, permitted to flow, or escaping from any industrial, manufacturing, or food-processing operation or process, or from the development of any natural resource including oil or gas, or any mixture of these with water or domestic wastewater. (The term is generally synonymous with "nondomestic wastewater" or "nondomestic waste.")

Indirect Discharge or Discharge. The introduction of pollutants into the POTW from any nondomestic source regulated under Section 307(b), (c), or (d) of the Act.

Instantaneous Maximum Allowable Discharge Limit. The maximum concentration (or loading) of a pollutant allowed to be discharged at any time, determined from the analysis of any discrete or composited sample collected, independent of the industrial flow rate and the duration of the sampling event.

Interference. A discharge which alone or in conjunction with a discharge or discharges from other sources inhibits or disrupts the POTW, its treatment processes or operations or its sludge processes, use or disposal; and therefore, is a cause of a violation of the City's ~~T~~^PNPDES permit or of the prevention of sewage sludge use or disposal in compliance with any of the following statutory/regulatory provisions or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Act; the Solid Waste Disposal Act, including Title II commonly referred to as the Resource Conservation and Recovery Act (RCRA); any state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the Solid Waste Disposal

Act; the Clean Air Act; the Toxic Substances Control Act; [and the Marine Protection, Research, and Sanctuaries Act].

Monthly Average Limit. The highest allowable average of “daily discharges” over a calendar month, calculated as the sum of all “daily discharges” measured during a calendar month divided by the number of “daily discharges” measured during that month.

New Source.

(1) Any building, structure, facility, or installation from which there is (or may be) a discharge of Pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307(c) of the Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:

- a. The building, structure, facility, or installation is constructed at a site at which no other source is located; or
- b. The building, structure, facility, or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
- c. The production or wastewater generating processes of the building, structure, facility, or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source, should be considered.

(2) Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility, or installation meeting the criteria of Section (1)(b) or (c) above but otherwise alters, replaces, or adds to existing process or production equipment.

(3) Construction of a new source as defined under this paragraph has commenced if the owner or operator has:

- a. Begun, or caused to begin as part of a continuous onsite construction program
 - (i) Any placement, assembly, or installation of facilities or equipment; or
 - (ii) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
- b. Entered into a binding contractual obligation for the purchase of facilities or equipment, which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

Noncontact Cooling Water. Water used for cooling which does not come into direct contact with any raw material, pollutant, intermediate product, waste product, or finished product.

Normal Waste. Waste from non-industrial sources which, when analyzed, indicates that:

- a. The concentration of BOD in the waste will not exceed two hundred (200) milligrams per liter (mg/L) average over any twenty-four-hour period; and
- b. The concentration of total suspended solids (TSS) in the waste will not exceed two hundred (200) milligrams per liter (mg/L) average over any twenty-four-hour period; and,
- c. The concentration of total organic carbon (TOC) in the waste will not exceed two hundred (200) milligrams per liter (mg/L) average over any twenty-four-period; and
- d. The concentration of free or emulsified animal oil, vegetable oil or grease (FOG) will not exceed one hundred (100) mg/L; and
- e. The concentration of total petroleum hydrocarbons (TPH) will not exceed twenty (20) mg/L; and
- f. The quantity of other pollutants shall be those levels determined in the latest domestic waste survey.

Pass Through. A discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the City's TPDES permit (including an increase in the magnitude or duration of a violation)

Person. Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns. This definition includes all federal, state, and local governmental entities.

pH. The logarithm of the reciprocal of the hydrogen ion activity as measured and calculated in accordance with approved methods.

Pollutant. Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, medical wastes, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, dirt, municipal, agricultural and industrial wastes, and certain characteristics of wastewater [i.e., pH, temperature, TSS, turbidity, color, BOD, chemical oxygen demand (COD), toxicity, or odor].

Pretreatment. The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to (or in lieu of) introducing such pollutants into the POTW. This reduction or alteration can be obtained by physical, chemical, or biological processes; by process changes; or by other means (except by diluting the concentration of the pollutants unless allowed by an applicable pretreatment standard).

Pretreatment Requirements. Any substantive or procedural requirement related to pretreatment imposed on a user, other than a pretreatment standard.

Pretreatment Standards or Standards. Any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the Act, which applies to Industrial Users. This term includes prohibitive discharge limits established pursuant to 40 CFR 403.5.

Process Wastewater. Any water that, during manufacturing or processing, comes into direct contact with or results from production or use of any raw material, intermediate product, finished product, or waste product.

Prohibited Discharge Standards or Prohibited Discharges. Absolute prohibitions against the discharge of certain substances; these prohibitions appear in Section 32-58 of this article.

Publicly Owned Treatment Works (POTW). A "treatment works," as defined by Section 212 of the Act (33 U.S.C. § 1292) which is owned by the City. This definition includes any devices or systems used in the collection, storage, treatment, recycling, and reclamation of sewage or industrial wastes of a liquid nature and any conveyances which convey wastewater to a treatment plant.

Sanitary Sewer. A sewer which carries wastewater to which storm, surface, and ground waters are not intentionally admitted.

Septic Tank Waste. Any sewage from holding tanks such as vessels, chemical toilets, campers, trailers, and septic tanks.

Sewage. Human excrement and gray water (household showers, dishwashing operations, etc.)

~~Shall is a mandatory statement; May is a permissive statement.~~

Significant Industrial User or (SIU).

- (1) A user subject to categorical pretreatment standards; or
- (2) A user that
 - a. Discharges an average of 25,000 gpd or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blowdown wastewater); or
 - b. Contributes a process wastestream which makes up five (5) per cent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or
 - c. Is designated as such by the City on the basis that it has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.
- (3) Upon a finding that a user meeting the criteria in Subsection (2) has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Director may at any time, on his own initiative or in response to a petition received from a user [and in accordance with procedures in 40 CFR 403.8(f)(6)] determine that such user should not be considered a significant industrial user.

Similar Installation. Gasoline dispensing facilities which furnish equipment for or have designated areas for any of the following types of vehicle maintenance service: oil changes, lubrication, mechanical repair, or car wash.

Slug, Slug Load, or Slug Discharge. Any discharge at a flow rate or concentration which could cause a violation of the prohibited discharge standards in Section 32-58 of this article. Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's regulations, Local Limits or permit conditions.

Standard Industrial Classification (SIC) Code. A classification pursuant to the Standard Industrial Classification Manual issued by the United States Office of Management and Budget.

State. The State of Texas.

Storm water. Any flow occurring during or following any form of natural precipitation, and resulting from such precipitation, including snowmelt.

Surcharge. The additional wastewater charge levied against any person for discharging abnormal industrial waste into the POTW.

Suspended Solids. The total suspended matter that floats on the surface of, or is suspended in, water, wastewater, or other liquid, and which is removable by laboratory filtering.

TOC (total organic carbon). The measure of organic carbon present in water, wastewater, industrial waste or other liquid as determined by standard laboratory procedure as specified in 40 CFR Part 136, or as approved by EPA, expressed as milligrams per liter (mg/L).

Treatment Plant Effluent. The discharge from the POTW into waters of the United States.

User. Any person who discharges industrial waste into the POTW, any other source of "Indirect Discharge" as defined herein, and any waste hauler discharging waste or wastewater into the POTW.

Wastewater. Liquid and water-carried industrial wastes and sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated, which are contributed to the POTW.

Wastewater Discharge Permit (or Permit). A permit to discharge pollutants, waste, or wastewater into the POTW that is issued by the City to significant industrial users, waste haulers, and other users as necessary to carry out the purposes of this article.

Wastewater Treatment Plant or Treatment Plant. That portion of the POTW which is designed to provide treatment of municipal sewage and industrial waste.

Waste Hauler. Any person who transports industrial waste or wastewater, chemically-treated human waste, septic tank waste and/or trap waste.

The use of the singular shall be construed to include the plural and the plural shall include the singular as indicated by the context of its use.

(Ord. No. 36-1992, Pt. 1, 9-24-92; Ord. No. 36-2003, pt. 1(Exh.A), 9-25-03)

Sec. 32-58. General Sewer Use Requirements.

(a) Prohibited Discharge Standards.

- (1) *General Prohibitions.* No user shall introduce or cause to be introduced into the POTW any pollutant or wastewater which causes pass through or interference. These general prohibitions apply to all users of the POTW whether or not they are subject to categorical pretreatment standards or any other national, state, or local pretreatment standards or requirements.

(2) *Specific Prohibitions.* No user shall introduce or cause to be introduced into the POTW the following pollutants, substances, or wastewater:

- a. Pollutants which create a fire or explosive hazard in the POTW, including, but not limited to, wastestreams with a closed-cup flashpoint of less than 140°F (60°C) using the test methods specified in 40 CFR 261.21;
- b. Wastewater having a pH less than five ~~and five tenths~~ (5.50) or more than eleven (11), or otherwise causing corrosive structural damage to the POTW or equipment;
- c. Solid or viscous substances in amounts which will cause obstruction of the flow in the POTW resulting in interference, but in no case solids greater than one-half inch in any dimension;
- d. Pollutants, including oxygen-demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which, either singly or by interaction with other pollutants, will cause interference with the POTW;
- e. Wastewater having a temperature which will inhibit biological activity in the treatment plant resulting in interference, but in no case wastewater which causes the temperature at the introduction into the treatment plant to exceed 104°F (40°C);
- f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin, in amounts that will cause interference or pass through;
- g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
- h. Trucked or hauled pollutants, except at discharge points designated by the Director in accordance with Section 32-59(d) of this article;
- i. Noxious or malodorous liquids, gases, solids, or other wastewater which, either singly or by interaction with other wastes, are sufficient to create a public nuisance or a hazard to life, or to prevent entry into the sewers for maintenance or repair;
- j. Wastewater which imparts color which cannot be removed by the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions, which consequently imparts color to the treatment plant's effluent, thereby violating the City's TPDES permit;
- k. Wastewater containing any radioactive wastes or isotopes except as specifically approved by the Director in compliance with applicable state or federal regulations;
- l. Storm water, surface water, ground water, roof runoff, subsurface drainage, swimming pool drainage, condensate, deionized water, noncontact cooling water, and unpolluted wastewater, unless specifically authorized by the Director;
- m. Sludges, screenings, or other residues from the pretreatment of industrial wastes;
- n. Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail a toxicity test;

- o. Detergents, surface-active agents, or other substances which may cause excessive foaming in the POTW.

Pollutants, substances, or wastewater prohibited by this section shall not be processed or stored in such a manner that they could be discharged to the POTW.

(b) Federal Categorical Pretreatment Standards. The National Categorical Pretreatment Standards found at 40 CFR Chapter I, Subchapter N, Parts 403.6 and 405–471 are hereby incorporated.

(c) State Pretreatment Standards. State requirements and limitations on discharges shall apply in any case where they are more stringent than federal requirements and limitations or those in this article.

(d) Local Limits.

(1) The following pollutant limits are established to protect against pass through and interference. No person shall discharge wastewater containing in excess of the following instantaneous maximum allowable discharge limits:

~~0.80~~ 1.00 mg/L ~~arsenic~~ Arsenic
~~10.0~~ mg/L ~~barium~~
~~1.00~~ mg/L ~~beryllium~~
~~0.50~~ 0.40 mg/L ~~cadmium~~
~~0.50~~ 1.30 mg/L ~~chromium~~
~~1.10~~ 4.50 mg/L ~~copper~~
~~0.50~~ mg/L ~~cyanide~~
~~0.80~~ 5.10 mg/L ~~lead~~
~~8.00~~ mg/L ~~manganese~~
~~0.02~~ 0.014 mg/L ~~mercury~~
~~0.70~~ 2.50 mg/L ~~nickel~~
~~0.70~~ 0.71 mg/L ~~selenium~~
~~0.20~~ 0.80 mg/L ~~silver~~
~~1.80~~ 4.20 mg/L ~~zinc~~ Zinc

The above limits apply at the point where the wastewater is discharged to the POTW. All concentrations for metallic substances are for "total" metal unless indicated otherwise. The Director may impose mass limitations in addition to, or in place of, the concentration-based limitations above.

(2) No user shall introduce or cause to be introduced into the POTW wastewater containing any of the following amounts or levels of pollutants or substances:

~~a. Total suspended solids (TSS) in excess of two thousand enty five hundred (2,500) lbs. per day.~~

~~a~~b. True color which passes through the POTW greater than forty (40) color units.

~~c. Biochemical oxygen demand (BOD) greater than two thousand (2,000) lbs. per day, or TOC greater than two thousand (2,000) lbs. per day, or substances causing a chlorine demand greater than the oxygen demand.~~

~~b~~d. Free or emulsified animal or vegetable oil or grease (FOG) exceeding two hundred (200) mg/L instantaneous maximum ~~eight hundred thirty four (834) lbs. per day.~~ Exceedance of the

instantaneous maximum limit is a violation of the City's industrial pretreatment program only if any of the conditions specified below are present.

i. Will solidify or become discernibly viscous at any temperature between 32 degrees Fahrenheit and 90 degrees Fahrenheit;

ii. Deposit grease or oil in the sewer lines in such manner as to clog the sewers;

iii. Overload the user/discharger's skimming and grease handling equipment;

iv. Are not amenable to biological oxidation and will therefore pass to the receiving waters without being affected by normal sewage treatment processes;

v. Have deleterious effects on the treatment process due to the excessive quantities; or

vi. Cause objectionable odors.

ce. Total petroleum hydrocarbons (TPH) exceeding one hundred sixty-seven (167) lbs. per day.

~~(3)—In no case shall a discharge into the POTW have a flow rate and/or concentration of pollutants which exceeds more than five (5) times the average twenty four hour flow and/or concentration in a one hour period.~~

(e) City's Right of Revision. The City reserves the right to establish, by ordinance or in wastewater discharge permits, more stringent standards or requirements on discharges to the POTW.

(f) Special Agreement. The City reserves the right to enter into special agreements with users setting out special terms under which they may discharge to the POTW. A user may request a net gross adjustment to a categorical standard in accordance with 40 CFR 403.15. A user also may request a variance from the categorical pretreatment standard from the approval authority. Such a request will be approved only if the user can prove that factors relating to its discharge are fundamentally different from the factors considered by EPA when establishing that categorical pretreatment standard. A user requesting a fundamentally different factor variance must comply with the procedural and substantive provisions in 40 CFR 403.13.

(g) Dilution. No user shall ever increase the use of process water, or in any way attempt to dilute a discharge, as a partial or complete substitute for adequate treatment to achieve compliance with a discharge limitation unless expressly authorized by an applicable pretreatment standard or requirement. The Director may impose mass limitations on users who are using dilution to meet applicable pretreatment standards or requirements, or in other cases when the imposition of mass limitations is appropriate.

(Ord. No. 36-1992, Pt. 1, 9-24-92; Ord. No. 36-2003, pt. 1(Exh. A), 9-25-03)

Sec. 32-59. Pretreatment of Wastewater.

(a) Pretreatment Facilities. Users shall provide wastewater treatment as necessary to comply with this article and shall achieve compliance with all categorical pretreatment standards, local limits, and the prohibitions set out in Section 32-58(a) of this article within the time limitations specified by the EPA, the state, or the Director, whichever is more stringent. Any facilities necessary for compliance shall be provided, operated, and maintained at the user's expense. Detailed plans describing such facilities and operating procedures shall be submitted to the Director for review, and shall be acceptable to the Director before such facilities are constructed. The review of such plans and operating procedures shall in no way relieve the user

from the responsibility of modifying such facilities as necessary to produce a discharge acceptable to the Director under the provisions of this article.

(b) Traps and Interceptors. Grease, oil and sand traps, catch basins, interceptors or hold-haul tanks; additional pretreatment measures.

(1) Grease, oil and sand traps, catch basins, interceptors or hold-haul tanks shall be provided for the proper handling of waste containing grease in excessive amounts, sand, and other prohibited materials; however, interceptors, traps and catch basins are not required for private living quarters or dwellings. All interceptors, traps and catch basins shall meet the City Plumbing Code as filed in the Code Administration. All fixtures draining to interceptors, traps and/or catch basins shall be rated as specified in the City of Abilene Plumbing Code. The Code may be revised from time to time as necessary. Hold-haul tanks shall not be connected to the sanitary sewer.

a. All interceptors, traps and catch basins shall be located so as to be readily and easily accessible for cleaning and inspection. They shall be of substantial construction and equipped with easily removable covers or grates. Grease and oil interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature.

b. Where installed, all grease, oil and sand traps and/or interceptors shall be maintained by the owner or occupant at his/her own expense and in continuously efficient operation.

c. A facility which generates liquid waste shall have all traps serviced by a licensed transporter at a frequency which ensures the elimination of drain blockages, overflows and emissions of concentrations of contaminants which exceeds discharge limits. The Director may also require traps to be serviced on a single event basis or schedule basis if the Director deems it necessary for proper operation of trap.

d. Materials removed from these facilities shall be either utilized by industry or disposed of at approved locations. The owner(s) shall verify the accuracy of the trip ticket from the transporter and maintain a copy of all trip tickets for a period of five years at the site of generation, unless otherwise approved by the City. The Director may inspect and copy these records at any time.

(2) A generator of liquid waste shall maintain sanitary conditions, free of litter and odors. They shall also immediately report spills and accidents involving liquid waste to the Director. Spills shall be cleaned up immediately and all unsanitary conditions abated, and have materials used for abatement, such as absorbent materials, disposed of by approved means in a timely manner.

(3) Use of hot water, enzymes, chemicals, or other agents or devices for the purpose of causing the oil, grease, or sand to pass through the trap, interceptor, or any other such facility provided is prohibited.

(4) Carwash Facilities, Service Stations and Similar Installations. All wash facilities shall be protected from rain and runoff.

a. *Existing Installations.* Those facilities in operation as of September 1983, having drainage from those areas protected from the rain and runoff and provided with grease, oil, and sand traps as specified in Section 32-59 (b)(1). above, and which are in use, shall be connected to the sanitary sewer.

b. *New Installations.* Facilities constructed after September 1983 shall be provided with grease, oil, and sand traps as specified in Section 32-59 (b)(1). above with discharge into the sanitary sewer.

- (5) Machine Shops, Garages, Special Manufacturing Facilities. Drainage from the work area of machine shops or of any industry that manufactures, rebuilds or overhauls motors, engines, transmissions, hydraulic systems or similar machinery may be discharged to the sanitary sewer only if the effluent can meet all the requirements of this ordinance.
- (6) Steam Cleaning and Chemical Cleaning Facilities. Drainage from steam cleaning and/or chemical cleaning facilities shall not be discharged to the sanitary sewer unless a facility or process is provided that will consistently and constantly produce an effluent containing no hazardous waste or other pollutant that will cause pass through or interference.
- (7) Any sewer line stoppage, damage or restriction of flow caused by an illegal discharge shall be considered a violation of this ordinance and the person or persons responsible will be held liable.
- (8) Whenever deemed necessary, the Director may require users to restrict their discharge during peak flow periods, designate that certain wastewater be discharged only into specific sewers, relocate and/or consolidate points of discharge, separate sewage wastestreams from industrial wastestreams, and such other conditions as may be necessary to protect the POTW and determine the user's compliance with the requirements of this ordinance.
- (9) The Director may require any person discharging into the POTW to install and maintain, on their property and at their expense, a suitable storage and flow-control facility to ensure equalization of flow. A wastewater discharge permit may be issued solely for flow equalization.
- (10) Users with the potential to discharge flammable substances may be required to install and maintain an approved combustible gas detection meter.

(c) Accidental Discharge/Slug Control Plans. ~~At least once every two (2) years~~ The Director shall evaluate whether each Significant Industrial User needs an accidental discharge/slug control plan within one (1) year of being designated an coming a significant industrial SIU. The Director may require any user to develop, submit for approval, and implement such a plan or take such other action that may be necessary to control slug discharges. Alternatively, the Director may develop such a plan for any user. An accidental discharge/slug control plan shall address, at a minimum, the following:

- (1) Description of discharge practices, including nonroutine batch discharges;
- (2) Description of stored chemicals;
- (3) Procedures for immediately notifying the POTW of any accidental or slug discharge, as required by Section 32-62(f) of this article; and
- (4) Procedures to prevent adverse impact from any accidental or slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response.

(d) Hauled Waste and Wastewater.

- (1) No waste hauler may discharge any industrial waste or wastewater, septic tank waste, chemically-treated human waste, and/or any trap waste into the POTW without first obtaining a

wastewater discharge permit from the Director. The Director may prohibit the discharge of any such hauled ~~industrial~~ waste. The Director also may issue wastewater discharge permits to any generators of hauled industrial waste ~~discharged~~. The discharge of hauled waste is subject to all other requirements of this ordinance.

a. Trip tickets. Persons who collect and transport waste subject to control under state rule 30 TAC 312.145 shall maintain a record of each individual collection and deposit. Such records will be in the form of a trip ticket and shall include:

Name, address, telephone, and ~~Texas Commission~~ TCEQ registration number of transporter;

Name, signature, address, and phone number of the person who generated the waste and the date collected;

Type and amount(s) of waste collected or transported;

Name and signature(s) of responsible person(s) collecting, transporting, and depositing the waste;

Date and place where the waste was deposited;

Identification (permit or site registration number, location, and operator) of the facility where the waste was deposited; and;

Name and signature of facility on-site representative acknowledging receipt of the waste and the amount of waste received;

The volume of the grease and grit trap or the septic tank.

b. Records and reporting of trip tickets shall be maintained as follows:

One part of the trip ticket shall have the generator and transporter information completed and given to the generator at the time of waste pickup;

The remaining parts of the trip ticket shall have all required information completely filled out and signed by the appropriate party before distribution of the trip ticket;

One part of the trip ticket shall go to the receiving facility;

One part shall go to the transporter, who shall retain a copy of all trip tickets showing the collection and disposition of waste;

One copy of the trip ticket shall be returned by the transporter to the person who generated the wastes within 15 days after the waste is received at the disposal or processing facility;

Copies of trip tickets shall be retained for five years and be readily available for review by City or be submitted to the City upon request.

(2) Waste haulers may discharge loads only at locations designated by the Director. No load may be discharged without prior consent of the Director. The Director may collect samples of each hauled load

to ensure compliance with applicable standards. The Director may require the waste hauler to provide a waste analysis of any load prior to discharge.

(3) Industrial waste haulers who discharge any industrial waste or wastewater into the POTW must provide a waste-tracking form for every load. This form shall include, at a minimum, the name and address of the industrial waste hauler, permit number, truck identification, names and addresses of sources of waste, and volume and characteristics of waste. The form shall identify the type of industry, known or suspected waste constituents, and whether any wastes are RCRA hazardous wastes. The Director may require such waste-tracking forms to be provided by haulers of nonindustrial trap waste, septic tank waste, or chemically-treated human waste that is discharged into the POTW.

(4) Any person hauling industrial waste or wastewater, septic tank waste chemically-treated human waste, and/or trap waste generated within the Abilene city limits that is not discharged into the POTW must provide written notice of such waste hauling to the Director specifying, at a minimum, the name and address of the waste hauler and the location at which the waste is disposed of. The Director may prohibit disposal within the City of any such hauled waste.

(Ord. No. 36-1992, Pt. 1, 9-24-92; Ord. No. 36-2003, pt. 1(Exh. A), 9-25-03)

Sec. 32-60. Wastewater Discharge Permit ~~Application~~.

(a) Wastewater Survey. When requested by the Director, a User must submit information on the nature and characteristics of its wastewater by completing a wastewater survey within the time specified by the Director. The Director is authorized to prepare a form for this purpose and may periodically require users to update the survey. Failure to complete this survey shall be reasonable grounds for terminating service to the user and shall be considered a violation of this article.

(b) Wastewater Discharge Permit Requirement.

(1) No Significant Industrial User or Waste Hauler shall discharge wastewater into the POTW without first obtaining a wastewater discharge permit from the Director.

(2) The Director may require other users to obtain wastewater discharge permits as necessary to carry out the purposes of this article.

(3) Any violation of the terms and conditions of a wastewater discharge permit shall be deemed a violation of this article and subjects the wastewater discharge permittee to the sanctions set out in Sections 32-66 through 32-68 of this article. Obtaining a wastewater discharge permit does not relieve a permittee of its obligation to comply with all federal and state pretreatment standards or requirements or with any other requirements of federal, state, and local law.

(c) Wastewater Discharge Permitting; Existing Permits. Permits in force at the time of this ordinance passage shall expire at the date specified by the permit.

(d) Wastewater Discharge Permitting; Existing Connections. Any user required to obtain a wastewater discharge permit who was discharging wastewater into the POTW prior to the effective date of this article without a permit and who wishes to continue such discharges in the future, shall, within ninety (90) days after said date, apply to the Director for a wastewater discharge permit in accordance with Section 32-60(f) of this article, and shall not cause or allow discharges to the POTW to continue after one hundred eighty (180) days of

the effective date of this article except in accordance with a wastewater discharge permit issued by the Director.

(e) Wastewater Discharge Permitting; New Connections. Any user required to obtain a wastewater discharge permit who proposes to begin or recommence discharging into the POTW must obtain such permit prior to the beginning or recommencing of such discharge. An application for this wastewater discharge permit, in accordance with Section 32-60(f) of this article, must be filed at least ninety (90) days prior to the date upon which any discharge will begin or recommence.

(f) Wastewater Discharge Permit Application Contents. All users required to obtain a wastewater discharge permit must submit a permit application. The Director may require all users to submit as part of an application the following information:

- (1) All information required by Section 32-62(a)(2) of this article;
- (2) Description of activities, facilities, and plant processes on the premises, including a list of all raw materials and chemicals used or stored at the facility which are, or could accidentally or intentionally be, discharged to the POTW;
- (3) Number and type of employees, hours of operation, and proposed or actual hours of operation;
- (4) Each product produced by type, amount, process or processes, and rate of production;
- (5) Type and amount of raw materials processed (average and maximum per day);
- (6) Site plans, floor plans, mechanical and plumbing plans, and details to show all sewers, floor drains, and appurtenances by size, location, and elevation, and all points of discharge;
- (7) Time and duration of discharges; and
- (8) Any other information as may be deemed necessary by the director to evaluate the wastewater discharge permit application.

Incomplete or inaccurate applications will not be processed and will be returned to the user for revision.

(g) Application Signatories and Certification. All wastewater discharge permit applications and user reports must be signed by an authorized representative of the user and contain the following certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

(h) Accurate Designation of Authorized Representative. ~~Wastewater Discharge Permit Decisions. If the designation of an Authorized Representative is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or overall responsibility for environmental matters for the company, a new written authorization satisfying the requirements of this section must be submitted to the Director prior to or together with any reports to be signed by an Authorized Representative.~~ ~~The director will~~

~~evaluate the data furnished by the user and may require additional information. Within ninety (90) days of receipt of a complete wastewater discharge permit application, the director will determine whether or not to issue a wastewater discharge permit. The director may deny any application for a wastewater discharge permit.~~

(i) Wastewater Discharge Permit Decisions. The Director will evaluate the data furnished by the user and may require additional information. Within ninety (90) days of receipt of a complete wastewater discharge permit application, the Director will determine whether or not to issue a wastewater discharge permit. The Director may deny any application for a wastewater discharge permit.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-61. Wastewater Discharge Permit Issuance~~Process.~~

(a) Wastewater Discharge Permit Duration. A wastewater discharge permit shall be issued for a specified time period, not to exceed five (5) years from the effective date of the permit. A wastewater discharge permit may be issued for a period less than five (5) years, at the discretion of the Director. Each wastewater discharge permit will indicate a specific date upon which it will expire.

(b) Wastewater Discharge Permit Contents. A wastewater discharge permit shall include such conditions as are deemed reasonably necessary by the Director to prevent pass through or interference, protect the quality of the water body receiving the treatment plant's effluent, protect worker health and safety, facilitate sludge management and disposal, and protect against damage to the POTW.

(1) Wastewater discharge permits shall contain the following conditions:

- a. A statement that indicates wastewater discharge permit issuance date, expiration date, effective date, and duration, which in no event shall exceed five (5) years;
- b. A statement that the wastewater discharge permit is nontransferable without prior notification to the City in accordance with Section 32-61(e) of this article, and provisions for furnishing the new owner or operator with a copy of the existing wastewater discharge permit;
- c. Effluent limits, including BMPs, based on applicable pretreatment standards;
- d. Self monitoring, sampling, reporting, notification, and recordkeeping requirements. These requirements shall include an identification of pollutants (or BMPs) to be monitored, sampling location, sampling frequency, and sample type based on federal, state, and local law; and
- e. A statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule. Such schedule may not extend the time for compliance beyond that required by applicable federal, state, or local law.
- f. Requirements to control slug discharge, if determined by the Director to be necessary.

(2) Wastewater discharge permits may contain, but need not be limited to, the following ~~other~~ conditions as deemed appropriate by the Director to ensure compliance with this article, and state and federal laws, rules, and regulations.

- a. Limits on the average and/or maximum rate of discharge, time of discharge, and/or requirements for flow regulation and equalization;

b. Requirements for the installation of pretreatment technology, pollution control, or construction of appropriate containment devices, designed to reduce, eliminate, or prevent the introduction of pollutants into the treatment works;

c. Requirements for the development and implementation of spill control plans or other special conditions including management practices necessary to adequately prevent accidental, unanticipated, or nonroutine discharges;

d. Development and implementation of waste minimization plans to reduce the amount of pollutants discharged to the POTW;

e. The unit charge or schedule of user charges and fees for the management of the wastewater discharged to the POTW;

f. Requirements for installation and maintenance of inspection and sampling facilities and equipment;

g. A statement that compliance with the wastewater discharge permit does not relieve the permittee of responsibility for compliance with all applicable federal and state pretreatment standards, including those which become effective during the term of the wastewater discharge permit; and

h. Other conditions as deemed appropriate by the Director to ensure compliance with this ordinance, and State and Federal laws, rules, and regulations.

(c) Wastewater Discharge Permit Appeals. The Director shall provide public notice ~~of to the user of~~ the issuance, modification, or denial of a wastewater discharge permit. Any affected person, including the user, may petition the Director to reconsider the terms of an issued or modified wastewater discharge permit, or the denial of a permit, within thirty (30) days of notice of its issuance, modification, or denial.

(1) Failure to submit a timely petition for reconsideration shall be deemed to be a waiver of the administrative appeal.

(2) In its petition, the appealing party must indicate the wastewater discharge permit provision(s) objected to, provide a full explanation of the reasons for ~~this the~~ objection(s), and identify the alternative condition(s), if any, it seeks to place in the wastewater discharge permit. ~~Any reasons presented against a permit denial must be fully explained.~~

(3) The effectiveness of the wastewater discharge permit, as issued or modified, shall not be stayed pending the appeal unless the Director expressly so states.

(4) The Director shall respond in writing to any petition for reconsideration within sixty (60) days. In his response, the Director shall indicate his decision whether to affirm or modify the terms of any permit issued or modified, or whether upon reconsideration to deny the permit. If the permit was initially denied, the Director shall indicate his decision whether to affirm the initial denial or to vacate the initial denial and issue the permit upon specified terms. The Director's action upon any petition for reconsideration shall be considered final for purposes of any judicial review.

(5) If the Director fails to act on any petition for reconsideration within sixty (60) days, the petition for reconsideration shall be deemed to be denied. Such deemed denial shall be considered final administrative action for purposes of judicial review.

(6) Aggrieved parties seeking judicial review of the final administrative wastewater discharge permit decision must do so by filing a complaint in a court of competent jurisdiction within the appropriate statute of limitations.

(d) Wastewater Discharge Permit Modification. The Director may modify the wastewater discharge permit for good cause including, but not limited to, the following:

- (1) To incorporate any new or revised federal, state, or local pretreatment standards or requirements;
- (2) To address significant alterations or additions to the user's operation, processes, or wastewater volume or character since the time of wastewater discharge permit issuance;
- (3) A change in the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;
- (4) Information indicating that the permitted discharge poses a threat to the City's POTW, city personnel, or the receiving waters;
- (5) Violation of any terms or conditions of the wastewater discharge permit;
- (6) Misrepresentations or failure to fully disclose all relevant facts in the wastewater discharge permit application or in any required reporting;
- (7) Revision of or a grant of variance from categorical pretreatment standards pursuant to 40 CFR 403.13;
- (8) To correct typographical or other errors in the wastewater discharge permit;
- (9) To reflect a transfer of the facility ownership or operation to a new owner or operator.

(e) Wastewater Discharge Permit Transfer. Wastewater discharge permits may be transferred to a new owner or operator only if the permittee gives at least thirty (30) days advance notice to the Director and the Director approves the wastewater discharge permit transfer. The notice to the Director must include a written certification by the new owner or operator which:

- (1) States that the owner and/or operator has no immediate intent to change the facility's operations and processes;
- (2) Identifies the specific date on which the transfer is to occur; and
- (3) Acknowledges full responsibility for complying with the existing wastewater discharge permit.

Failure to provide advance notice of a transfer renders the wastewater discharge permit voidable as of the date of facility transfer.

(f) Wastewater Discharge Permit Revocation. Wastewater discharge permits may be revoked for, but not limited to, the following reasons:

- (1) Failure to notify the Director of significant changes to the wastewater prior to the changed discharge;
- (2) Failure to provide prior notification to the Director of changed conditions pursuant to Section 32-62(e) of this article;
- (3) Misrepresentation or failure to fully disclose all relevant facts in the wastewater discharge permit application;
- (4) Falsifying self-monitoring reports and certification statements;
- (5) Tampering with monitoring equipment;
- (6) Refusing to allow the Director timely access to the facility premises and records;
- (7) Failure to meet effluent limitations;
- (8) Failure to pay fines;
- (9) Failure to pay sewer charges;
- (10) Failure to meet compliance schedules;
- (11) Failure to complete a wastewater survey or the wastewater discharge permit application;
- (12) Failure to provide advance notice of the transfer of business ownership of a permitted facility;
or
- (13) Violation of any pretreatment standard or requirement, or any terms of the wastewater discharge permit or this article.

A user will be notified of any proposed permit revocation and offered an opportunity to show cause under Section 32-66(c) of this article why the proposed revocation should not occur.

Wastewater discharge permits shall be voidable upon cessation of operations or transfer of business ownership. All wastewater discharge permits issued to a particular user are void upon the issuance of a new wastewater discharge permit to that user.

(g) Wastewater Discharge Permit Reissuance. A user with an expiring wastewater discharge permit shall apply for wastewater discharge permit reissuance by submitting a complete permit application, in accordance with Section 32-60(f) of this article, a minimum of ninety (90) days prior to the expiration of the user's existing wastewater discharge permit.

(h) Regulation of Waste Received from Other Jurisdictions.

- (1) If another municipality, or user located within another municipality, contributes wastewater to the POTW, the City Council shall enter into an intermunicipal agreement with the contributing municipality.

(2) Prior to entering into an agreement required by paragraph (1), above, the Director shall request the following information from the contributing municipality:

- a. A description of the quality and volume of wastewater discharged to the POTW by the contributing municipality;
- b. An inventory of all Industrial Users located within the contributing municipality that are discharging to the POTW; and
- c. Such other information as the Director may deem necessary.

(3) An intermunicipal agreement, as required by paragraph (1) above, shall contain the following conditions:

- a. A requirement for the contributing municipality to adopt a sewer use ordinance which is at least as stringent as this article and local limits including required BMPs, which are at least as stringent as those set out in Section 32-58(d) of this article. The requirement shall specify that such ordinance and limits must be revised as necessary to reflect changes made to the City's ordinance or local limits;
- b. A requirement for the contributing municipality to submit a revised industrial user inventory on at least an annual basis;
- c. A provision specifying which pretreatment implementation activities, including wastewater discharge permit issuance, inspection and sampling, and enforcement, will be conducted by the contributing municipality; which of these activities will be conducted by the Director; and which of these activities will be conducted jointly by the contributing municipality and the Director;
- d. A requirement for the contributing municipality to provide the Director with access to all information that the contributing municipality obtains as part of its pretreatment activities;
- e. Limits on the nature, quality, and volume of the contributing municipality's wastewater at the point where it discharges to the POTW;
- f. Requirements for monitoring the contributing municipality's discharge;
- g. A provision ensuring the Director access to the facilities of users located within the contributing municipality's jurisdictional boundaries for the purpose of inspection, sampling, and any other duties deemed necessary by the Director; and
- h. A provision specifying remedies available for breach of the terms of the intermunicipal agreement.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-62. Reporting Requirements.

- (a) Baseline Monitoring Reports.

(1) Within either one hundred and eighty (180) days after the effective date of a categorical pretreatment standard, or the final administrative decision on a category determination under 40 CFR 403.6(a)(4) (whichever is later) existing Categorical Industrial Users currently discharging to or scheduled to discharge to the POTW, shall be required to submit to the Director a report which contains the information listed in paragraph (2), below. At least ninety (90) days prior to commencement of their discharge, new sources, and sources that become categorical users subsequent to the promulgation of an applicable categorical standard, shall be required to submit to the Director a report which contains the information listed in paragraph (2) below. A new source shall also be required to report the method of pretreatment it intends to use to meet applicable categorical standards. A new source shall also give estimates of its anticipated flow and quantity of pollutants discharged.

(2) Users described above shall submit the information set forth below.

a. *Identifying information.* The name and address of the facility, including the name of the operator and owner.

b. *Environmental permits.* A list of any environmental control permits held by or for the facility.

c. *Description of operations.* A brief description of the nature, average rate of production, and SIC of the operation(s) carried out by such user. This description should include a schematic process diagram which indicates points of discharge to the POTW from the regulated processes.

d. *Flow measurement.* Information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from regulated process streams and other streams, as necessary, to allow use of the combined wastestreams formula set out in 40 CFR 403.6(e).

e. *Measurement of pollutants.*

1. The categorical pretreatment standards applicable to each regulated process.

2. The results of sampling and analysis identifying the nature and concentration and/or mass, where required by the standard or by the Director of regulated pollutants in the discharge from each regulated process. Instantaneous, daily maximum, and long term average concentrations (or mass, where required) shall be reported. The sample shall be representative of daily operations and shall be analyzed in accordance with procedures set out in Section 32-62(j) of this article. Where the standard requires compliance with a BMP or pollution prevention alternative, the User shall submit documentation as required by the Director or the applicable standards to determine compliance with the standard.

3. Sampling must be performed in accordance with procedures set out in Section 32-62(k) of this article.

f. *Certification.* A statement, reviewed by the user's authorized representative and certified by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis, and, if not, whether additional operation and maintenance (O and M) and/or additional pretreatment, is required to meet the pretreatment standards and requirements.

g. *Compliance schedule.* If additional pretreatment and/or O and M will be required to meet the pretreatment standards, the shortest schedule by which the user will provide such additional pretreatment and/or O and M. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard. A compliance schedule pursuant to this section must meet the requirements set out in Section 32-62(b) of this article.

h. *Signature and certification.* All baseline monitoring reports must be signed and certified in accordance with Section 32-60(g) of this article.

(b) Compliance Schedule Progress Reports. The following conditions shall apply to the compliance schedule required by Section 32-62(a)(2)(g) of this article:

(1) The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, beginning and conducting routine operation);

(2) No increment referred to above shall exceed nine (9) months;

(3) The user shall submit a progress report to the Director no later than fourteen (14) days following each date in the schedule and the final date of compliance including, as a minimum, whether or not it complied with the increment of progress, the reason for any delay, and, if appropriate, the steps being taken by the user to return to the established schedule; and,

(4) In no event shall more than nine (9) months elapse between such progress reports to the Director.

(c) Reports on Compliance with Categorical Pretreatment Standard Deadline. Within ninety (90) days following the date for final compliance with applicable categorical pretreatment standards, or in the case of a new source following commencement of the introduction of wastewater into the POTW, any user subject to such pretreatment standards and requirements shall submit to the Director a report containing the information described in Section 32-62(a)(2)d–f of this article. For users subject to equivalent mass or concentration limits established in accordance with the procedures in 40 CFR 403.6(c), this report shall contain a reasonable measure of the user's long-term production rate. For all other users subject to categorical pretreatment standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the user's actual production during the appropriate sampling period. All compliance reports must be signed and certified in accordance with Section 32-60(g) of this article.

(d) Periodic Compliance Reports.

(1) All Significant Industrial Users shall, at a frequency determined by the Director but in no case less than twice per year (in July and January), submit a report indicating the nature and concentration of pollutants in the discharge which are limited by pretreatment standards and the measured or estimated average and maximum daily flows for the reporting period. All periodic compliance reports must be signed and certified in accordance with Section 32-60(g) of this article. In cases where the pretreatment standard requires compliance with a BMP or pollution prevention alternative, the User must submit documentation required by the Director or the pretreatment standard necessary to determine the compliance status of the User.

(2) All wastewater samples must be representative of the user's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and maintained in good working

order at all times. The failure of a user to keep its monitoring facility in good working order shall not be grounds for the user to claim that sample results are unrepresentative of its discharge.

(3) If a user subject to the reporting requirement in this section monitors any pollutant more frequently than required by the Director, using the procedures prescribed in Section 32-62(j) of this article, the results of this monitoring shall be included in the report.

(e) Report of Changed Conditions. Each User must notify the Director of any planned significant changes to the user's operations or system which might alter the nature, decrease the quality, or increase the volume of its wastewater at least ninety (90) days before the change.

(1) The Director may require the user to submit such information as may be deemed necessary to evaluate the changed condition, including the submission of a wastewater discharge permit application under Section 32-60(f) of this article.

(2) The Director may issue a wastewater discharge permit under Section 32-60(h) of this article or modify an existing wastewater discharge permit under Section 32-61(d) of this article in response to changed conditions or anticipated changed conditions.

(3) For purposes of this requirement, significant changes include, but are not limited to, flow increases of twenty-five (25) percent or greater, and the discharge of any previously unreported pollutants.

(f) Reports of Potential Problems.

(1) In the case of any discharge, including, but not limited to, accidental discharges, discharges of a nonroutine, episodic nature, a noncustomary batch discharge, or a slug load, that may cause potential problems for the POTW, the user shall immediately telephone and notify the Director of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume (if known) and corrective actions taken by the user.

(2) Within five (5) days following such discharge, the user shall, unless waived by the Director, submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the user to prevent similar future occurrences. Such notification shall not relieve the user of any expense, loss, damage, or other liability which may be incurred as a result of damage to the POTW, natural resources, or any other damage to person or property; nor shall such notification relieve the user of any fines, penalties, or other liability which may be imposed pursuant to this article.

(3) Failure to notify the Director of potential problem discharges shall be deemed a violation of this article.

(4) A notice shall be permanently posted on the user's bulletin board or other prominent place advising employees who to call in the event of a discharge described in paragraph (1), above. Employers shall ensure that all employees, who may cause such a discharge to occur, are advised of the emergency notification procedure.

(5) Users are required to notify the Director immediately of any changes at its facility affecting the potential for a slug discharge.

(g) Reports from Unpermitted Users. All users not required to obtain a wastewater discharge permit shall provide appropriate reports to the Director as the Director may require.

(h) Notice of Violation/Repeat Sampling and Reporting. If sampling performed by a user indicates a violation, the user must notify the Director within twenty-four (24) hours of becoming aware of the violation. The user shall also repeat the sampling and analysis and submit the results of the repeat analysis to the Director within thirty (30) days after becoming aware of the violation. Resampling by the User is not required if the City performs sampling at the user's facility at least once per month, or if the City performs sampling at the user's facility between the time when the initial sampling was conducted and the time when the user or the City receives the results of this sampling, or if the City has performed the sampling and analysis in lieu of the Industrial User. If the Director performed the sampling and analysis in lieu of the user, the Director will perform the repeat sampling and analysis unless it notifies the user of the violation and requires the user to perform repeat sampling and analysis.

(i) Notification of the Discharge of Hazardous Waste.

(1) Any user who commences the discharge of hazardous waste shall notify the POTW, the EPA Regional Waste Management Division Director, and state hazardous waste authorities, in writing, of any discharge into the POTW of a substance which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR Part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the user discharges more than one hundred (100) kilograms of such waste per calendar month to the POTW, the notification also shall contain the following information to the extent such information is known and readily available to the user: an identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the wastestream discharged during that calendar month, and an estimation of the mass of constituents in the wastestream expected to be discharged during the following twelve (12) months. All notifications must take place no later than one hundred and eighty (180) days after the discharge commences. Any notification under this paragraph need be submitted only once for each hazardous waste discharged. However, notifications of changed conditions must be submitted under Section 32-62(e) of this article. The notification requirement in this section does not apply to pollutants already reported by users subject to categorical pretreatment standards under the self-monitoring requirements of Sections 32-62(a), (c) and (d) of this article.

(2) Dischargers are exempt from the requirements of paragraph (1), above, during a calendar month in which they discharge no more than fifteen (15) kilograms of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e). Discharge of more than fifteen (15) kilograms of nonacute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e), requires a one-time notification. Subsequent months during which the user discharges more than such quantities of any hazardous waste do not require additional notification.

(3) In the case of any new regulations under Section 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the user must notify the Director, the EPA Regional Waste Management Waste Division Director, and state hazardous waste authorities of the discharge of such substance within ninety (90) days of the effective date of such regulations.

(4) In the case of any notification made under this section, the user shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.

(5) This provision does not create a right to discharge any substance not otherwise permitted to be discharged by this article, a permit issued thereunder, or any applicable federal or state law.

(j) Analytical Requirements. All pollutant analyses, including sampling techniques, to be submitted as part of a wastewater discharge permit application or report shall be performed in accordance with the techniques prescribed in 40 CFR Part 136, unless otherwise specified in an applicable categorical pretreatment standard. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, sampling and analyses must be performed in accordance with procedures approved by the Director.

(k) Sample Collection. Samples collected to satisfy reporting requirements must be based on data obtained through appropriate sampling and analysis performed during the period covered by the report, based on data that is representative of conditions occurring during the reporting period.

(1) Except as indicated in Subsections (k)(2) and (3), below, ~~the user must collect~~ wastewater samples must be collected using 24-hour flow-proportional composite ~~sampling collection~~ techniques, unless time-proportional composite sampling is authorized by the Director. Where time-proportional composite sampling or grab sampling is authorized by the Director, the samples must be representative of the discharge. Using protocols (including appropriate preservation) specified in 40 CFR Part 136 and appropriate EPA guidance, multiple grab samples collected during a 24-hour period may be composited prior to the analysis as follows: for cyanide, total phenols, and sulfides the samples may be composited in the laboratory or in the field; for volatile organics and oil and grease, the samples may be composited in the laboratory; total residual chlorine, pH, and temperature samples may not be composited under any circumstances. In the event flow proportional sampling is infeasible, the Director may authorize the use of time proportional sampling or a minimum of four (4) grab samples (either composited or analyzed separately) where the user demonstrates that this will provide a representative sample of the effluent being discharged. Composite samples for other parameters unaffected by the composting procedures as documented in approved EPA methodologies may be authorized by the Director, as appropriate. In addition, grab samples may be required to show compliance with instantaneous discharge limits.

(2) Samples for oil and grease, temperature, pH, cyanide, phenols, sulfides, and volatile organic chemicals must be obtained using grab collection techniques.

(3) For sampling required in support of baseline monitoring and 90-day compliance reports required in Section 32-62(a) and (c) [40 CFR 403.12(b) and (d)], a minimum of four (4) grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide and volatile organic compounds for facilities for which historical sampling data do not exist; for facilities for which historical sampling data are available, the Director may authorize a lower minimum. For reports required by Section 32-66(d) [40 CFR 403.12(e) and (h)], the Industrial User is required to collect the number of grab samples necessary to assess and assure compliance with applicable Pretreatment Standards and Requirements.

~~(3)~~(4) All samples collected for analysis shall be accompanied by a properly completed Chain of Custody.

(l) Timing. Written reports will be deemed to have been submitted on the date postmarked. For reports which are not mailed ~~postage prepaid, into~~through a mail facility serviced by the United States Postal Service, the date of receipt of the report shall govern.

(m) Recordkeeping. Users subject to the reporting requirements of this article shall retain, and make available for inspection and copying, all records of information obtained pursuant to any monitoring activities required by this article and any additional records of information obtained pursuant to monitoring activities undertaken by the user independent of such requirements and documentation associated with BMPs. Records shall include the date, exact place, method, and time of sampling and the name of the person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; the results of such analyses; and all QA/QC data required by permit. These records shall remain available for a period of at least three (3) years. This period shall be automatically extended for the duration of any litigation concerning the user or the City, or where the user has been specifically notified of a longer retention period by the Director.

(n) Fraud and False Statements. The reports and other documents required to be submitted or maintained by local, state, or federal law shall be subject to:

- (1) The provisions of 18 U.S.C. Section 1001 regarding fraud or false statements:
- (2) The provisions of 309(c)(4) of the Act, as amended, governing false statements, representations, or certifications; and
- (3) The provisions in Section 309(c)(6) of the Act regarding responsible corporate officers.

(Ord. No. 36-1992, Pt. 1, 9-24-92; Ord. No. 36-2003, pt. 1(Exh. A), 9-25-03)

Sec. 32-63. Compliance Monitoring.

(a) Right of Entry, Inspection And Sampling. The Director shall have the right to enter the premises of any user to determine whether the user is complying with all requirements of this article, and any wastewater discharge permit or order issued hereunder. The owners and occupants of premises where industrial waste is created or discharged into a sanitary sewer shall allow the Director, his inspectors, agents, and representatives ready access at any time necessary to all parts of such premises for purposes of inspection, sampling, characterizing the waste, setting up and using monitoring equipment, inspecting and copying records, and the performance of any of their duties; and the failure or refusal of such owners or occupants to comply with these provisions shall be grounds for the disconnection of water or sewer service or both.

- (1) Where a user has security measures in force which require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the Director will be permitted to enter without delay for the purposes of performing specific responsibilities.
- (2) The Director shall have the right to set up on the user's property, or require installation of, such devices as are necessary to conduct sampling and/or metering of the user's operations.
- (3) The Director may require the user to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the user at its own expense. All devices used to measure wastewater flow shall be calibrated yearly to ensure their accuracy. Instruments used to measure quality shall be calibrated as per ~~accepted EPA QA/QC protocol~~ the manufacturer's direction.

(4) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the user at the written or verbal request of the Director and shall not be replaced. The costs of clearing such access shall be borne by the user.

(5) Unreasonable delays in allowing the Director access to the user's premises shall be a violation of this article.

(6) Determining the character and concentration of industrial waste. The industrial waste discharged or deposited into a sanitary sewer shall be subject to inspection and sampling as often as may be deemed necessary by the Director, but at least annually. In determining the surcharge to be made, samples shall be collected in such manner as to be representative of the character and concentration of the waste under operational conditions. The laboratory methods used in the examination and analysis of the samples shall be in accordance with the techniques and procedures required by Section 32-62(j) of this article. The sampling schedule for determining the character and concentration of industrial waste shall be made by the Director at such times and on such basis as he may reasonably establish. Should the owner or occupant discharging industrial waste into a sanitary sewer desire that a determination of the quality of such industrial waste be made at some time other than that scheduled by the Director, such special determination may be made by the Director at the expense of the owner or occupant discharging the waste.

(b) Search Warrants. If the Director has been refused access to a building, structure or property, or any part thereof, and is able to demonstrate probable cause to believe that there may be a violation of this article, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the City designed to verify compliance with this article or any permit or order issued hereunder, or to protect the overall public health, safety and welfare of the community, then the Director may seek issuance of a search warrant from any court of competent jurisdiction.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-64. Confidential Information.

Information and data on a user obtained from reports, surveys, wastewater discharge permit application, wastewater discharge permits, and monitoring programs, and from the Director's inspection and sampling activities, shall be available to the public without restriction, unless the user specifically requests, and is able to demonstrate to the satisfaction of the Director, that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets under applicable State law. Any claim of confidentiality must be made at the time of submittal by stamping the words "Confidential Business Information" on each page containing such information. When requested and demonstrated by the user furnishing a report that such information should be held confidential, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public, but shall be made available immediately upon request to governmental agencies for uses related to the ~~TNP~~NPDES program or pretreatment program, and in enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics and other "effluent data" as defined by 40 CFR 2.302 will not be recognized as confidential information and will be available to the public without restriction.

(Ord. No. 36-1992, Pt. 1, 9-24-92; Ord. No. 36-2003, pt. 1(Exh. A), 9-25-03)

Sec. 32-65. Publication of Users in Significant Noncompliance.

The Director shall publish annually, in ~~the largest daily~~ newspaper of general circulation that provides meaningful public notice within the jurisdictions served by the POTW published in the city, a list of the users which, during the previous twelve (12) months, were in significant noncompliance with applicable pretreatment standards and requirements. The term significant noncompliance shall mean:

(~~1a~~) Chronic violations of wastewater discharge limits, defined here as those in which sixty-six (66) percent or more of wastewater measurements taken for the same pollutant parameter taken during a six (6) month period exceed (by any magnitude) a numeric pretreatment standard or requirement, including instantaneous maximum limits defined in Section 32-58 of this article~~the daily maximum limit or average limit for the same pollutant parameter by any amount;~~

(~~2b~~) Technical review criteria (TRC) violations, defined here as those in which thirty-three (33) percent or more of wastewater measurements taken for each pollutant parameter during a six (6) month period equals or exceeds the product of the numeric pretreatment standard or requirement including instantaneous maximum limits, as defined in Section 32-58 of this article,~~daily maximum limit or the average limit~~ multiplied by the applicable criteria (1.4 for BOD, TSS, fats, oils and grease, and 1.2 for all other pollutants except pH);

(~~3c~~) Any other ~~discharge-violation~~ of a pretreatment standard or requirement as defined in Section 32-58 of this article (daily maximum, long-term average, instantaneous maximum limit, or narrative standard) that the ~~director~~Director determines/believes has caused, alone or in combination with other discharges, interference or pass through, including endangering the health of POTW personnel or the general public;

(~~4d~~) Any discharge of pollutants that has caused imminent endangerment to the public or to the environment, or has resulted in the Director's exercise of its emergency authority to halt or prevent such a discharge;

(~~5e~~) Failure to meet, within ninety (90) days of the scheduled date, a compliance schedule milestone contained in a wastewater discharge permit or enforcement order for starting construction, completing construction, or attaining final compliance;

(~~6f~~) Failure to provide within ~~thirty~~ forty-five (45) days after the due date, any required reports, including baseline monitoring reports, reports on compliance with categorical pretreatment standard deadlines, periodic self-monitoring reports, and reports on compliance with compliance schedules;

(~~7g~~) Failure to accurately report noncompliance; or

(~~8h~~) Any other violation(s), which may include violations of a BMP, which the Director determines will adversely affect the operation or implementation of the local pretreatment program.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-66. Administrative Enforcement Remedies.

(a) Notification of Violation. When the Director finds that a user has violated, or continues to violate, any provision of this article, a wastewater discharge permit or order issued hereunder, or any other pretreatment standard or requirement, the Director may serve upon that user a written notice of violation. Within ten (10) days of the receipt of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted by the user to the Director. If the user denies that any violation occurred and/or contends that no corrective action is necessary, an explanation of the basis of any such denial or contention shall be submitted to the Director within ten (10) days of receipt of the notice. Submission of an explanation and/or plan in no way relieves the user of liability for any violations

occurring before or after receipt of the notice of violation. Nothing in this section shall limit the authority of the Director to take any action, including emergency actions or any other enforcement action, without first issuing a notice of violation.

(b) Consent Orders. The Director may enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with any user responsible for noncompliance. Such documents may include specific action to be taken by the user to correct the noncompliance within a time period specified by the document. Such documents shall have the same force and effect as the administrative orders issued pursuant to Sections 32-66(d) and (e) of this article and shall be judicially enforceable.

(c) Show Cause Hearing. The Director may order a user which has violated, or continues to violate, any provision of this article, wastewater discharge permit or order issued hereunder, or any other pretreatment standard or requirement, to appear before the Director and show cause why the proposed enforcement action should not be taken. Notice shall be served on the user specifying the time and place for the meeting, the proposed enforcement action, the reasons for such action, and a request that the user show cause why the proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing. Such notice may be served on any authorized representative of the user. A show cause hearing shall not be a bar against, or prerequisite for, taking any other action against the user.

(d) Compliance Orders. When the Director finds a user has violated, or continues to violate, any provision of this article, a wastewater discharge permit or order issued hereunder, or any other pretreatment standard or requirement, the Director may issue an order to the user responsible for the discharge directing that the user come into compliance within a specified time limit. If the user does not come into compliance within the specified time limit, sewer service may be discontinued unless adequate treatment facilities, devices, or other related appurtenances are installed and properly operated. Compliance orders also may contain other requirements to address the noncompliance, including additional self-monitoring, and management practices designed to minimize the amount of pollutants discharged to the sewer. A compliance order may not extend the deadline for compliance established for a federal pretreatment standard or requirement, nor does a compliance order relieve the user of liability for any violation, including any continuing violation. Issuance of a compliance order shall not be a bar against, or a prerequisite for, taking any other action against the user.

(e) Cease and Desist Orders. When the Director finds that a user has violated, or continues to violate, any provision of this article, a wastewater discharge permit or order issued hereunder, or any other pretreatment standard or requirement, or that the user's past violations are likely to recur, the Director may issue an order to the user directing it to cease and desist all such violations and directing the user to:

- (1) Immediately comply with all requirements; and
- (2) Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and/or terminating the discharge.

Issuance of a cease and desist order shall not be a bar against, or a prerequisite for, taking any other action against the user.

(f) Emergency Suspensions. The Director may immediately suspend a user's discharge, after any reasonable notice to the user that is practical under the circumstances, whenever such suspension is necessary to stop an actual or threatened discharge which reasonably appears to present or cause an imminent or substantial endangerment to the health or welfare of persons. The Director may also immediately suspend a user's discharge, after notice and opportunity to respond, that threatens to interfere with the operation of the POTW, or which presents, or may present, an endangerment to the environment.

(1) Any user notified of a suspension of its discharge shall immediately stop or eliminate its contribution. In the event of a user's failure to immediately comply voluntarily with the suspension order, the Director may take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the POTW, its receiving stream, or endangerment to any individuals. The Director may allow the user to recommence its discharge when the user has demonstrated to the satisfaction of the Director that the period of endangerment has passed, unless the termination proceedings in Section 32-66(g) of this article are initiated against the user.

(2) A user that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful contribution and the measures taken to prevent any future occurrence, to the Director prior to the date of any show cause or termination hearing under Sections 32-66(c) or (g) of this article.

Nothing in this section shall be interpreted as requiring a hearing prior to any emergency suspension under this section.

(g) Termination of Discharge. In addition to the provisions in Section 32-61(f) of this article, any user who violates the following conditions is subject to discharge termination:

- (1) Violation of wastewater discharge permit conditions;
- (2) Failure to accurately report the wastewater constituents and characteristics of its discharge;
- (3) Failure to report significant changes in operations or wastewater volume, constituents and characteristics prior to discharge;
- (4) Refusal of reasonable access to the user's premises for the purpose of inspection, monitoring or sampling; or
- (5) Violation of the pretreatment standards in Section 32-58 of this article.

Such user will be notified of the proposed termination of its discharge and be offered an opportunity to show cause under Section 32-66(c) of this article why the proposed action should not be taken. Exercise of this option by the Director shall not be a bar to, or a prerequisite for, taking any other action against the user.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-67. Judicial Enforcement Remedies.

(a) Injunctive Relief. When the Director finds that a user has violated, or continues to violate, any provision of this article, wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement, the Director may petition any court of competent jurisdiction through the City's attorney for the issuance of a temporary or permanent injunction, as appropriate, which restrains or compels the specific performance of the wastewater discharge permit, order, or other requirement imposed by this article on activities of the user. The Director may also seek such other action as is appropriate for legal and/or equitable relief, including a requirement for the user to conduct environmental remediation. A petition for injunctive relief shall not be a bar against, or a prerequisite for, taking any other action against a user.

(b) Civil Penalties.

(1) A user who has violated, or continues to violate, any provision of this article, a wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement shall be liable to the City for a maximum civil penalty of not more than one thousand dollars (\$1,000.00) per violation, per day. In the case of a monthly or other long-term average discharge limit, penalties shall accrue for each day during the period of the violation.

(2) The City may recover reasonable attorneys' fees, court costs, and other expenses associated with enforcement activities, including sampling and monitoring expenses, and the cost of any actual damages incurred by the City, as well as civil penalties, in any court of competent jurisdiction.

(3) In determining the amount of civil liability, the court shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration of the violation, any economic benefit gained through the user's violation, corrective actions by the user, the compliance history of the user, and any other factor as justice requires.

(4) Filing a suit for civil penalties shall not be a bar against, or a prerequisite for, taking any other action against the user.

(c) Criminal Prosecution.

(1) A user who has willfully or negligently violated any provision of this article, a wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement shall, upon conviction, be guilty of a misdemeanor, punishable by a fine of not more than two thousand dollars (\$2,000.00) per violation, per day.

(2) A user who has willfully or negligently introduced any substance into the POTW which causes personal injury or property damage shall, upon conviction, be guilty of a misdemeanor and be subject to a penalty of not more than two thousand dollars (\$2,000.00) per day of offending discharge. This penalty shall be in addition to any other cause of action for personal injury or property damage available under state law.

(3) A user who knowingly made any false statement, representations, or certifications in any application, record, report, plan, or other documentation filed, or required to be maintained, pursuant to this article, wastewater discharge permit, or order issued hereunder, or who falsified, tampered with, or knowingly rendered inaccurate any monitoring device or method required under this article shall, upon conviction, be punished by a fine of not more than two thousand dollars (\$2,000.00) per violation, per day.

(d) Remedies Nonexclusive. The remedies provided for in this article are not exclusive. The Director may take any, all, or any combination of these actions against a noncompliant user. The Director is empowered to take more than one enforcement action against any noncompliant user. These actions may be taken concurrently.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-68. Supplemental Enforcement Action.

(a) Performance Bonds. The Director may decline to issue or reissue a wastewater discharge permit to any user who has failed to comply with any provision of this article, a previous wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement unless such user first files a satisfactory bond, payable to the City, in a sum not to exceed a value determined by the Director to be necessary to achieve consistent compliance.

(b) Water Supply Severance. Whenever a user has violated or continues to violate any provision of this article, a wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement, water service to the user may be severed. Service will only recommence, at the user's expense, after it has satisfactorily demonstrated its ability to comply.

(c) Public Nuisances. A violation of any provision of this article, a wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement, is hereby declared a public nuisance and shall be corrected or abated as directed by the Director. Any person(s) creating a public nuisance shall be subject to the provisions of the City Code (Chapter 19) governing such nuisances, including reimbursing the City for any costs incurred in removing, abating, or remedying said nuisance.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-69. Affirmative Defenses.

(a) Bypass.

(1) For the purposes of this section,

Bypass means the intentional diversion of wastestreams from any portion of a user's treatment facility.

Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(2) A user may allow any bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of paragraphs (3) and (4) of this section.

(3) If a user knows in advance of the need for a bypass, it shall submit prior notice to the Director, at least ten (10) days before the date of the bypass, if possible.

a. A user shall submit oral notice to the Director of an unanticipated bypass that exceeds applicable pretreatment standards within twenty-four (24) hours from the time it becomes aware of the bypass. A written submission shall also be provided within five (5) days of the time the user becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. The Director may waive the written report on a case-by-case basis if the oral report has been received within twenty-four (24) hours.

- (4) a. Bypass is prohibited, and the Director may take an enforcement action against a user for a bypass, unless:

1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
3. The user submitted notices as required under paragraph (3) of this section.

b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed in paragraph (4)(a) of this section.

(b) Prohibited Discharge Standards. A user shall have an affirmative defense to an enforcement action brought against it for noncompliance with the general prohibitions in Section 32-518(a)(1) of this article or the specific prohibitions in Sections 32-5158(a)(2)c—g and 32-58(a)(2)i—go through (15) of this article if it can prove that it did not know, or have reason to know, that its discharge, alone or in conjunction with discharges from other sources, would cause pass through or interference and that either:

- (1) A local limit exists for each pollutant discharged and the user was in compliance with each limit directly prior to, and during, the pass through or interference; or
- (2) No local limit exists, but the discharge did not change substantially in nature or constituents from the user's prior discharge when the City was regularly in compliance with its TNPDES permit, and in the case of interference, was in compliance with applicable sludge use or disposal requirements.

(c) Act of God. In an action brought in municipal or state court, if a person can establish that an event that would otherwise be a violation of a pretreatment ordinance or a permit issued under this ordinance was caused solely by an act of God, war, strike, riot, or other catastrophe, the event is not a violation of the ordinance or permit.

(Ord. No. 36-1992, Pt. 1, 9-24-92; Ord. No. 36-2003, pt. 1(Exh. A), 9-25-03)

Sec. 32-70. Other Requirements.

(a) Other Sections Applicable. The sections of the City Code dealing with cross connections, items pertaining to safeguarding the water supply, waste traps, and items safeguarding the sanitary system remain applicable.

(b) Compliance with this article does not exempt or excuse a person from complying with provisions of the Texas Water Quality Act and its amendments, the Clean Water Act and its amendments, or the requirements of any applicable waste discharge permit, order, rule or regulation issued by the ~~Texas Water~~ Commission TCEQ and/or the EPA.

(c) No section or clause in this article shall exclude any agreement between the Director and any person to discharge wastewater, which complies with the objectives of this article, for treatment by the City. Said agreements shall provide for reimbursement to the City for any expenses incurred in the treatment and disposal of such wastewater.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-71. Miscellaneous Provisions.

(a) Pretreatment Charges and Fees. The City may adopt reasonable fees for reimbursement of costs of setting up and operating the City's pretreatment program which may include:

- (1) Fees for wastewater discharge permit applications including the cost of processing such applications;
- (2) Fees for monitoring, inspection, and surveillance procedures including the cost of collection and analyzing a user's discharge, and reviewing monitoring reports submitted by users;
- (3) Fees for reviewing and responding to accidental discharge procedures and construction;
- (4) Fees for filing appeals; and
- (5) Other fees as the City may deem necessary to carry out the requirements contained herein. These fees relate solely to the matters covered by this article and are separate from all other fees, fines, and penalties chargeable by the City.

(b) Abnormal Waste Discharge Requirements. Persons generating abnormal industrial waste may discharge the waste into the sanitary sewer provided:

- (1) The waste will not cause interference; and
- (2) The waste will not endanger or be harmful to the operating personnel of the sewer system; and
- (3) The waste will not cause damage to the collection system; and
- (4) The waste will not impair the treatment processes; and
- (5) The waste will not affect sludge quality and/or require modifications in sludge disposal practices; and
- (6) The waste will not have an effect on receiving water quality; and
- (7) The discharge is in compliance with all limitations and requirements in Section 32-58 of this article; and
- (8) The waste shall be assessed a surcharge for any abnormal levels of BOD or TOC, TSS and FOG or TPH. There shall be one surcharge rate for BOD or TOC and FOG or TPH and a separate rate for TSS; and

(9) All required permits are in force and approval in writing has been given by the Director for any waivers or special agreements.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

(c) Computation of Surcharges.

(1) *Computation of the surcharge* for the ~~abnormal~~ industrial waste shall be based on the following formulas:

$$S = V (8.34) [X ((\text{BOD} \text{ or } \text{TOC}) - 200) + Y (\text{TSS} - 200) + Z (\text{FOG} - 100) + Z (\text{TPH} - 20)]$$

S = Surcharge in dollars that will appear on the customer's monthly bill

V = Volume of wastewater discharge from user, in millions of gallons. This volume may be calculated from discharge meter or by a percentage of water consumption, as determined by the Director

8.34 = Pounds per gallon of water

X = Unit charge in dollars per pound of BOD or TOC

BOD = BOD strength in milligrams per liter (mg/L)

TOC = Total organic carbon strength in milligrams per liter (mg/L)

200 = Normal BOD/TOC strength in milligrams per liter (mg/L)

Y = Unit charge in dollars per pound for TSS

TSS = Total suspended solids concentration in milligrams per liter (mg/L)

200 = Normal TSS concentration in milligrams per liter (mg/L)

Z = Unit charge in dollars per pound for FOG and TPH

FOG = Fats, oil, and grease concentration in milligrams per liter (mg/l)

TPH = Total petroleum hydrocarbons in mg/L

100 = Normal FOG concentration in mg/l

20 = Normal TPH concentration in mg/L

X, Y, and Z values shall be set by the City Council from time to time.

(2) If the strength or concentration for BOD, TOC, TSS, FOG or TPH is less than the normal strength for that category, there shall be no surcharge for that category, nor shall there be credit given to the total surcharge if the strength or concentration of all three (3) categories is less than the normal. Surcharges payable under this paragraph shall become due monthly after the effective date of the surcharge.

(3) All BOD, TOC, FOG, TPH and TSS values in determining the surcharge shall be re-evaluated and adjusted to reflect any changes in wastewater characteristics as sampling results deem it necessary.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

(d) Governmental Functions. The inspectors, agents, and representatives of the City charged with the enforcement of this article shall be deemed to be performing a governmental function for the benefit of the general public, and neither the City, the Director, nor the individual inspector, agent or representative shall ever be held liable for any loss or damage, whether real or asserted, caused or alleged to have been caused as a result of the performance of such governmental function.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Secs. 32-72–32-94. Reserved.

EXHIBIT A

CHAPTER 32 UTILITIES ARTICLE III. INDUSTRIAL WASTES

Sec. 32-57. General Provisions.

(a) Purpose and Policy. This article sets forth uniform requirements for users of the publicly owned treatment works for the City of Abilene (City) and enables the City to comply with all applicable state and federal laws, including the Clean Water Act (33 United States Code § 1251 et seq.) and the General Pretreatment Regulations (40 Code of Federal Regulations Part 403) (CFR). The objectives of this ordinance are:

- (1) To prevent the introduction of Pollutants into the publicly owned treatment works that will cause Interference with its operation;
- (2) To prevent the introduction of Pollutants into the publicly owned treatment works that will pass through the publicly owned treatment works, inadequately treated, into receiving waters, or otherwise be incompatible with the publicly owned treatment works;
- (3) To protect publicly owned treatment works personnel who may be affected by wastewater and sludge in the courts of their employment and to protect the general public;
- (4) To improve the opportunity to recycle and reclaim wastewater and sludge from the publicly owned treatment works;
- (5) To provide for fees for the equitable distribution of the cost of operation, maintenance, and improvement of the publicly owned treatment works; and
- (6) To enable the City to comply with its TPDES permit conditions, as issued by the Texas Commission on Environmental Quality (TCEQ), sludge use and disposal requirements, and any other federal or state laws to which the publicly owned treatment works is subject.

This article shall apply to all users of the publicly owned treatment works. The article authorizes the issuance of wastewater discharge permits; authorizes monitoring, compliance, and enforcement activities; establishes administrative review procedures; requires user reporting; and provides for the setting of fees for the equitable distribution of costs resulting from the program established herein.

(b) Administration. Except as otherwise provided herein, the Director shall administer, implement, and enforce the provisions of this article. Any powers granted to or duties imposed upon the Director may be delegated by the Director to other city personnel.

(c) Abbreviations. The following abbreviations when used in this article shall have the designated meanings:

BOD	Biochemical oxygen demand
BMP	Best Management Practices
CFR	Code of Federal Regulations
COD	Chemical oxygen demand
EPA	U.S. Environmental Protection Agency
FOG	Fats, oil, and grease

gpd	gallons per day
L	liter
mg	milligrams
mg/L	milligrams per liter
TPDES	Texas Pollutant Discharge Elimination System
POTW	Publicly owned treatment works
QA/QC	Quality assurance/quality control
RCRA	Resource Conservation and Recovery Act
SIC	Standard industrial classification
TCEQ	Texas Commission on Environmental Quality
TOC	Total organic carbon
TPH	Total petroleum hydrocarbons
TSS	Total suspended solids
U.S.C.	United States Code

(d) Definitions. Unless a provision explicitly states otherwise, the following terms and phrases, as used in this article, shall have the meanings hereinafter designated.

Abnormal Industrial Waste. Any permitted industrial waste having a pollutant content in excess of that found in Normal Waste, but which is otherwise acceptable to a sanitary sewer under the terms of this article.

Act or "the Act." The Federal Water Pollution Control Act, also known as the Clean Water Act, as amended, 33 U.S.C. § 1251 et seq.

Approval Authority. The Executive Director of the Texas Commission on Environmental Quality.

Authorized Representative of the User.

(1) If the user is a corporation:

a. The president, secretary, treasurer, or a vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

b. The manager of one or more manufacturing, production, or operation facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct the comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for wastewater discharge permit requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

(2) If the user is a partnership or sole proprietorship: a general partner or proprietor, respectively;

(3) If the user is a federal, state, or local governmental facility: a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or their designee.

(4) The individuals described in paragraphs (1) through (3), above, may designate another authorized representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to the Director.

Best Management Practices (BMPs). The schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in Section 32-58 of this Article. BMPs include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage. BMPs also include alternative means (i.e., management plans) of complying with or in place of certain established categorical pretreatment standards and effluent limits.

Biochemical Oxygen Demand (BOD). The quantity of oxygen utilized in the biochemical oxidation of organic matter under standard laboratory procedures for five (5) days at 20° centigrade, usually expressed as a concentration [milligrams per liter (mg/L)].

Categorical Pretreatment Standard or Categorical Standard. Any regulation containing pollutant discharge limits promulgated by the U.S. EPA in accordance with Sections 307(b) and (c) of the Act (33 U.S.C. § 1317), which apply to a specific category of users and which appear in 40 CFR Chapter I, Subchapter N, Parts 405–471.

City. The City of Abilene or the City Council of Abilene.

Categorical Industrial User (CIU). An Industrial User subject to a categorical Pretreatment Standard or categorical Standard.

Composite sample. A combination of individual samples of wastewater taken at preselected intervals to minimize the effect of the variability of the individual sample. Individual subsamples may be of equal volume or may be proportional to the flow at the time of sampling.

Control Authority. The City of Abilene.

Daily Average Limit. The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Daily Discharge. The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling.

Daily Maximum. The arithmetic average of all effluent samples for a pollutant collected during a calendar day.

Daily Maximum Limit. The maximum concentration (or loading) of a pollutant allowed to be discharged into the publicly owned treatment works during a calendar day or any twenty-four (24) hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, it is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, it is calculated as the average measurement of the pollutant over the day.

Director. The Director of the City of Abilene Water Utilities Department, or his/her duly authorized representative.

Domestic Waste (or Domestic Wastewater). Waterborne waste normally discharged from the sanitary conveniences of dwellings (including apartment houses and hotels), office buildings, factories, and institutions, free from stormwater, surface water, and industrial waste.

Environmental Protection Agency (EPA). The U.S. Environmental Protection Agency or, where appropriate, the Regional Water Management Division Director, the Regional Administrator, or other duly authorized official of said agency.

Existing Source. Any source of discharge, the construction or operation of which commenced prior to the publication by EPA of proposed categorical pretreatment standards, which will be applicable to such source if the standard is thereafter promulgated in accordance with Section 307 of the Act.

Grab Sample. A sample which is taken from a wastestream on a onetime basis without regard to the flow in the wastestream and over a period of time not to exceed fifteen (15) minutes.

Hazardous Waste. Any substance which, if disposed of otherwise than by discharge into the POTW, would be identified as a hazardous waste under 40 CFR Part 261.

Hold-haul Tank. A storage tank installed by a user to hold industrial waste, the contents of which are prohibited from being discharged to the sanitary sewer and must be hauled to an approved disposal site.

Industrial User or User. Any person who discharges Industrial Waste into the publicly owned treatment works (POTW), any other source of "Indirect Discharge" as defined herein, and any waste hauler discharging waste or wastewater into the POTW.

Industrial Waste. Water-borne solid, liquid, or gaseous wastes resulting from and discharged, permitted to flow, or escaping from any industrial, manufacturing, or food-processing operation or process, or from the development of any natural resource including oil or gas, or any mixture of these with water or domestic wastewater. (The term is generally synonymous with "nondomestic wastewater" or "nondomestic waste.")

Indirect Discharge or Discharge. The introduction of pollutants into the POTW from any nondomestic source regulated under Section 307(b), (c), or (d) of the Act.

Instantaneous Maximum Allowable Discharge Limit. The maximum concentration (or loading) of a pollutant allowed to be discharged at any time, determined from the analysis of any discrete or composited sample collected, independent of the industrial flow rate and the duration of the sampling event.

Interference. A discharge which alone or in conjunction with a discharge or discharges from other sources inhibits or disrupts the POTW, its treatment processes or operations or its sludge processes, use or disposal; and therefore, is a cause of a violation of the City's TPDES permit or of the prevention of sewage sludge use or disposal in compliance with any of the following statutory/regulatory provisions or permits issued thereunder (or more stringent state or local regulations): Section 405 of the Act; the Solid Waste Disposal Act, including Title II commonly referred to as the Resource Conservation and Recovery Act (RCRA); any state regulations contained in any state sludge management plan prepared pursuant to Subtitle D of the Solid Waste Disposal Act; the Clean Air Act; the Toxic Substances Control Act; [and the Marine Protection, Research, and Sanctuaries Act].

Monthly Average Limit. The highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.

New Source.

(1) Any building, structure, facility, or installation from which there is (or may be) a discharge of Pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307(c) of the Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:

- a. The building, structure, facility, or installation is constructed at a site at which no other source is located; or
- b. The building, structure, facility, or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
- c. The production or wastewater generating processes of the building, structure, facility, or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source, should be considered.

(2) Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility, or installation meeting the criteria of Section (1)(b) or (c) above but otherwise alters, replaces, or adds to existing process or production equipment.

(3) Construction of a new source as defined under this paragraph has commenced if the owner or operator has:

- a. Begun, or caused to begin as part of a continuous onsite construction program
 - (i) Any placement, assembly, or installation of facilities or equipment; or
 - (ii) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or
- b. Entered into a binding contractual obligation for the purchase of facilities or equipment, which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

Noncontact Cooling Water. Water used for cooling which does not come into direct contact with any raw material, pollutant, intermediate product, waste product, or finished product.

Normal Waste. Waste from non-industrial sources which, when analyzed, indicates that:

- a. The concentration of BOD in the waste will not exceed two hundred (200) milligrams per liter (mg/L) average over any twenty-four-hour period; and

- b. The concentration of total suspended solids (TSS) in the waste will not exceed two hundred (200) milligrams per liter (mg/L) average over any twenty-four-hour period; and,
- c. The concentration of total organic carbon (TOC) in the waste will not exceed two hundred (200) milligrams per liter (mg/L) average over any twenty-four-period; and
- d. The concentration of free or emulsified animal oil, vegetable oil or grease (FOG) will not exceed one hundred (100) mg/L; and
- e. The concentration of total petroleum hydrocarbons (TPH) will not exceed twenty (20) mg/L; and
- f. The quantity of other pollutants shall be those levels determined in the latest domestic waste survey.

Pass Through. A discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the City's TPDES permit (including an increase in the magnitude or duration of a violation)

Person. Any individual, partnership, co-partnership, firm, company, corporation, association, joint stock company, trust, estate, governmental entity, or any other legal entity; or their legal representatives, agents, or assigns. This definition includes all federal, state, and local governmental entities.

pH. The logarithm of the reciprocal of the hydrogen ion activity as measured and calculated in accordance with approved methods.

Pollutant. Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, medical wastes, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, dirt, municipal, agricultural and industrial wastes, and certain characteristics of wastewater [i.e., pH, temperature, TSS, turbidity, color, BOD, chemical oxygen demand (COD), toxicity, or odor].

Pretreatment. The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to (or in lieu of) introducing such pollutants into the POTW. This reduction or alteration can be obtained by physical, chemical, or biological processes; by process changes; or by other means (except by diluting the concentration of the pollutants unless allowed by an applicable pretreatment standard).

Pretreatment Requirements. Any substantive or procedural requirement related to pretreatment imposed on a user, other than a pretreatment standard.

Pretreatment Standards or Standards. Any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the Act, which applies to Industrial Users. This term includes prohibitive discharge limits established pursuant to 40 CFR 403.5.

Process Wastewater. Any water that, during manufacturing or processing, comes into direct contact with or results from production or use of any raw material, intermediate product, finished product, or waste product.

Prohibited Discharge Standards or Prohibited Discharges. Absolute prohibitions against the discharge of certain substances; these prohibitions appear in Section 32-58 of this article.

Publicly Owned Treatment Works (POTW). A "treatment works," as defined by Section 212 of the Act (33 U.S.C. § 1292) which is owned by the City. This definition includes any devices or systems used in the collection, storage, treatment, recycling, and reclamation of sewage or industrial wastes of a liquid nature and any conveyances which convey wastewater to a treatment plant.

Sanitary Sewer. A sewer which carries wastewater to which storm, surface, and ground waters are not intentionally admitted.

Septic Tank Waste. Any sewage from holding tanks such as vessels, chemical toilets, campers, trailers, and septic tanks.

Sewage. Human excrement and gray water (household showers, dishwashing operations, etc.)

Significant Industrial User or (SIU).

- (1) A user subject to categorical pretreatment standards; or
- (2) A user that
 - a. Discharges an average of 25,000 gpd or more of process wastewater to the POTW (excluding sanitary, noncontact cooling, and boiler blowdown wastewater); or
 - b. Contributes a process wastestream which makes up five (5) per cent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or
 - c. Is designated as such by the City on the basis that it has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.
- (3) Upon a finding that a user meeting the criteria in Subsection (2) has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Director may at any time, on his own initiative or in response to a petition received from a user [and in accordance with procedures in 40 CFR 403.8(f)(6)] determine that such user should not be considered a significant industrial user.

Similar Installation. Gasoline dispensing facilities which furnish equipment for or have designated areas for any of the following types of vehicle maintenance service: oil changes, lubrication, mechanical repair, or car wash.

Slug, Slug Load, or Slug Discharge. Any discharge at a flow rate or concentration which could cause a violation of the prohibited discharge standards in Section 32-58 of this article. Any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the POTW's regulations, Local Limits or permit conditions.

Standard Industrial Classification (SIC) Code. A classification pursuant to the Standard Industrial Classification Manual issued by the United States Office of Management and Budget.

State. The State of Texas.

Storm water. Any flow occurring during or following any form of natural precipitation, and resulting from such precipitation, including snowmelt.

Surcharge. The additional wastewater charge levied against any person for discharging abnormal industrial waste into the POTW.

Suspended Solids. The total suspended matter that floats on the surface of, or is suspended in, water, wastewater, or other liquid, and which is removable by laboratory filtering.

TOC (total organic carbon). The measure of organic carbon present in water, wastewater, industrial waste or other liquid as determined by standard laboratory procedure as specified in 40 CFR Part 136, or as approved by EPA, expressed as milligrams per liter (mg/L).

Treatment Plant Effluent. The discharge from the POTW into waters of the United States.

User. Any person who discharges industrial waste into the POTW, any other source of "Indirect Discharge" as defined herein, and any waste hauler discharging waste or wastewater into the POTW.

Wastewater. Liquid and water-carried industrial wastes and sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated, which are contributed to the POTW.

Wastewater Discharge Permit (or Permit). A permit to discharge pollutants, waste, or wastewater into the POTW that is issued by the City to significant industrial users, waste haulers, and other users as necessary to carry out the purposes of this article.

Wastewater Treatment Plant or Treatment Plant. That portion of the POTW which is designed to provide treatment of municipal sewage and industrial waste.

Waste Hauler. Any person who transports industrial waste or wastewater, chemically-treated human waste, septic tank waste and/or trap waste.

The use of the singular shall be construed to include the plural and the plural shall include the singular as indicated by the context of its use.

(Ord. No. 36-1992, Pt. 1, 9-24-92; Ord. No. 36-2003, pt. 1(Exh.A), 9-25-03)

Sec. 32-58. General Sewer Use Requirements.

(a) Prohibited Discharge Standards.

(1) *General Prohibitions.* No user shall introduce or cause to be introduced into the POTW any pollutant or wastewater which causes pass through or interference. These general prohibitions apply to all users of the POTW whether or not they are subject to categorical pretreatment standards or any other national, state, or local pretreatment standards or requirements.

(2) *Specific Prohibitions.* No user shall introduce or cause to be introduced into the POTW the following pollutants, substances, or wastewater:

- a. Pollutants which create a fire or explosive hazard in the POTW, including, but not limited to, wastestreams with a closed-cup flashpoint of less than 140°F (60°C) using the test methods specified in 40 CFR 261.21;

- b. Wastewater having a pH less than five (5.0) or more than eleven (11), or otherwise causing corrosive structural damage to the POTW or equipment;
- c. Solid or viscous substances in amounts which will cause obstruction of the flow in the POTW resulting in interference, but in no case solids greater than one-half inch in any dimension;
- d. Pollutants, including oxygen-demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which, either singly or by interaction with other pollutants, will cause interference with the POTW;
- e. Wastewater having a temperature which will inhibit biological activity in the treatment plant resulting in interference, but in no case wastewater which causes the temperature at the introduction into the treatment plant to exceed 104°F (40°C);
- f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin, in amounts that will cause interference or pass through;
- g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
- h. Trucked or hauled pollutants, except at discharge points designated by the Director in accordance with Section 32-59(d) of this article;
- i. Noxious or malodorous liquids, gases, solids, or other wastewater which, either singly or by interaction with other wastes, are sufficient to create a public nuisance or a hazard to life, or to prevent entry into the sewers for maintenance or repair;
- j. Wastewater which imparts color which cannot be removed by the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions, which consequently imparts color to the treatment plant's effluent, thereby violating the City's TPDES permit;
- k. Wastewater containing any radioactive wastes or isotopes except as specifically approved by the Director in compliance with applicable state or federal regulations;
- l. Storm water, surface water, ground water, roof runoff, subsurface drainage, swimming pool drainage, condensate, deionized water, noncontact cooling water, and unpolluted wastewater, unless specifically authorized by the Director;
- m. Sludges, screenings, or other residues from the pretreatment of industrial wastes;
- n. Wastewater causing, alone or in conjunction with other sources, the treatment plant's effluent to fail a toxicity test;
- o. Detergents, surface-active agents, or other substances which may cause excessive foaming in the POTW.

Pollutants, substances, or wastewater prohibited by this section shall not be processed or stored in such a manner that they could be discharged to the POTW.

(b) Federal Categorical Pretreatment Standards. The National Categorical Pretreatment Standards found at 40 CFR Chapter I, Subchapter N, Parts 403.6 and 405–471 are hereby incorporated.

(c) State Pretreatment Standards. State requirements and limitations on discharges shall apply in any case where they are more stringent than federal requirements and limitations or those in this article.

(d) Local Limits.

(1) The following pollutant limits are established to protect against pass through and interference. No person shall discharge wastewater containing in excess of the following instantaneous maximum allowable discharge limits:

1.00 mg/L Arsenic

0.40 mg/L Cadmium

1.30 mg/L Chromium

4.50 mg/L Copper

5.10 mg/L Lead

0.014 mg/L Mercury

2.50 mg/L Nickel

0.71 mg/L Selenium

0.80 mg/L Silver

4.20 mg/L Zinc

The above limits apply at the point where the wastewater is discharged to the POTW. All concentrations for metallic substances are for "total" metal unless indicated otherwise. The Director may impose mass limitations in addition to, or in place of, the concentration-based limitations above.

(2) No user shall introduce or cause to be introduced into the POTW wastewater containing any of the following amounts or levels of pollutants or substances:

a. True color which passes through the POTW greater than forty (40) color units.

b. Free or emulsified animal or vegetable oil or grease (FOG) exceeding two hundred (200) mg/L instantaneous maximum. Exceedance of the instantaneous maximum limit is a violation of the City's industrial pretreatment program only if any of the conditions specified below are present.

i. Will solidify or become discernibly viscous at any temperature between 32 degrees Fahrenheit and 90 degrees Fahrenheit;

ii. Deposit grease or oil in the sewer lines in such manner as to clog the sewers;

iii. Overload the user/discharger's skimming and grease handling equipment;

iv. Are not amenable to biological oxidation and will therefore pass to the receiving waters without being affected by normal sewage treatment processes;

v. Have deleterious effects on the treatment process due to the excessive quantities; or

vi. Cause objectionable odors.

c. Total petroleum hydrocarbons (TPH) exceeding one hundred sixty-seven (167) lbs. per day.

(e) City's Right of Revision. The City reserves the right to establish, by ordinance or in wastewater discharge permits, more stringent standards or requirements on discharges to the POTW.

(f) Special Agreement. The City reserves the right to enter into special agreements with users setting out special terms under which they may discharge to the POTW. A user may request a net gross adjustment to a categorical standard in accordance with 40 CFR 403.15. A user also may request a variance from the categorical pretreatment standard from the approval authority. Such a request will be approved only if the user can prove that factors relating to its discharge are fundamentally different from the factors considered by EPA when establishing that categorical pretreatment standard. A user requesting a fundamentally different factor variance must comply with the procedural and substantive provisions in 40 CFR 403.13.

(g) Dilution. No user shall ever increase the use of process water, or in any way attempt to dilute a discharge, as a partial or complete substitute for adequate treatment to achieve compliance with a discharge limitation unless expressly authorized by an applicable pretreatment standard or requirement. The Director may impose mass limitations on users who are using dilution to meet applicable pretreatment standards or requirements, or in other cases when the imposition of mass limitations is appropriate.

(Ord. No. 36-1992, Pt. 1, 9-24-92; Ord. No. 36-2003, pt. 1(Exh. A), 9-25-03)

Sec. 32-59. Pretreatment of Wastewater.

(a) Pretreatment Facilities. Users shall provide wastewater treatment as necessary to comply with this article and shall achieve compliance with all categorical pretreatment standards, local limits, and the prohibitions set out in Section 32-58(a) of this article within the time limitations specified by the EPA, the state, or the Director, whichever is more stringent. Any facilities necessary for compliance shall be provided, operated, and maintained at the user's expense. Detailed plans describing such facilities and operating procedures shall be submitted to the Director for review, and shall be acceptable to the Director before such facilities are constructed. The review of such plans and operating procedures shall in no way relieve the user from the responsibility of modifying such facilities as necessary to produce a discharge acceptable to the Director under the provisions of this article.

(b) Traps and Interceptors. Grease, oil and sand traps, catch basins, interceptors or hold-haul tanks; additional pretreatment measures.

(1) Grease, oil and sand traps, catch basins, interceptors or hold-haul tanks shall be provided for the proper handling of waste containing grease in excessive amounts, sand, and other prohibited materials; however, interceptors, traps and catch basins are not required for private living quarters or dwellings. All interceptors, traps and catch basins shall meet the City Plumbing Code as filed in the Code Administration. All fixtures draining to interceptors, traps and/or catch basins shall be rated as specified

in the City of Abilene Plumbing Code. The Code may be revised from time to time as necessary. Hold-haul tanks shall not be connected to the sanitary sewer.

- a. All interceptors, traps and catch basins shall be located so as to be readily and easily accessible for cleaning and inspection. They shall be of substantial construction and equipped with easily removable covers or grates. Grease and oil interceptors shall be constructed of impervious materials capable of withstanding abrupt and extreme changes in temperature.
 - b. Where installed, all grease, oil and sand traps and/or interceptors shall be maintained by the owner or occupant at his/her own expense and in continuously efficient operation.
 - c. A facility which generates liquid waste shall have all traps serviced by a licensed transporter at a frequency which ensures the elimination of drain blockages, overflows and emissions of concentrations of contaminants which exceeds discharge limits. The Director may also require traps to be serviced on a single event basis or schedule basis if the Director deems it necessary for proper operation of trap.
 - d. Materials removed from these facilities shall be either utilized by industry or disposed of at approved locations. The owner(s) shall verify the accuracy of the trip ticket from the transporter and maintain a copy of all trip tickets for a period of five years at the site of generation, unless otherwise approved by the City. The Director may inspect and copy these records at any time.
- (2) A generator of liquid waste shall maintain sanitary conditions, free of litter and odors. They shall also immediately report spills and accidents involving liquid waste to the Director. Spills shall be cleaned up immediately and all unsanitary conditions abated, and have materials used for abatement, such as absorbent materials, disposed of by approved means in a timely manner.
- (3) Use of hot water, enzymes, chemicals, or other agents or devices for the purpose of causing the oil, grease, or sand to pass through the trap, interceptor, or any other such facility provided is prohibited.
- (4) Carwash Facilities, Service Stations and Similar Installations. All wash facilities shall be protected from rain and runoff.
 - a. *Existing Installations.* Those facilities in operation as of September 1983, having drainage from those areas protected from the rain and runoff and provided with grease, oil, and sand traps as specified in Section 32-59 (b)(1). above, and which are in use, shall be connected to the sanitary sewer.
 - b. *New Installations.* Facilities constructed after September 1983 shall be provided with grease, oil, and sand traps as specified in Section 32-59 (b)(1). above with discharge into the sanitary sewer.
- (5) Machine Shops, Garages, Special Manufacturing Facilities. Drainage from the work area of machine shops or of any industry that manufactures, rebuilds or overhauls motors, engines, transmissions, hydraulic systems or similar machinery may be discharged to the sanitary sewer only if the effluent can meet all the requirements of this ordinance.
- (6) Steam Cleaning and Chemical Cleaning Facilities. Drainage from steam cleaning and/or chemical cleaning facilities shall not be discharged to the sanitary sewer unless a facility or process is provided that will consistently and constantly produce an effluent containing no hazardous waste or other pollutant that will cause pass through or interference.

- (7) Any sewer line stoppage, damage or restriction of flow caused by an illegal discharge shall be considered a violation of this ordinance and the person or persons responsible will be held liable.
- (8) Whenever deemed necessary, the Director may require users to restrict their discharge during peak flow periods, designate that certain wastewater be discharged only into specific sewers, relocate and/or consolidate points of discharge, separate sewage wastestreams from industrial wastestreams, and such other conditions as may be necessary to protect the POTW and determine the user's compliance with the requirements of this ordinance.
- (9) The Director may require any person discharging into the POTW to install and maintain, on their property and at their expense, a suitable storage and flow-control facility to ensure equalization of flow. A wastewater discharge permit may be issued solely for flow equalization.
- (10) Users with the potential to discharge flammable substances may be required to install and maintain an approved combustible gas detection meter.

(c) Accidental Discharge/Slug Control Plans. The Director shall evaluate whether each Significant Industrial User needs an accidental discharge/slug control plan within one (1) year of being designated an SIU. The Director may require any user to develop, submit for approval, and implement such a plan or take such other action that may be necessary to control slug discharges. Alternatively, the Director may develop such a plan for any user. An accidental discharge/slug control plan shall address, at a minimum, the following:

- (1) Description of discharge practices, including nonroutine batch discharges;
- (2) Description of stored chemicals;
- (3) Procedures for immediately notifying the POTW of any accidental or slug discharge, as required by Section 32-62(f) of this article; and
- (4) Procedures to prevent adverse impact from any accidental or slug discharge. Such procedures include, but are not limited to, inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response.

(d) Hauled Waste and Wastewater.

(1) No waste hauler may discharge any industrial waste or wastewater, septic tank waste, chemically-treated human waste, and/or any trap waste into the POTW without first obtaining a wastewater discharge permit from the Director. The Director may prohibit the discharge of any such hauled waste. The Director also may issue wastewater discharge permits to any generators of hauled industrial waste. The discharge of hauled waste is subject to all other requirements of this ordinance.

a. Trip tickets. Persons who collect and transport waste subject to control under state rule 30 TAC 312.145 shall maintain a record of each individual collection and deposit. Such records will be in the form of a trip ticket and shall include:

Name, address, telephone, and TCEQ registration number of transporter;

Name, signature, address, and phone number of the person who generated the waste and the date collected;

Type and amount(s) of waste collected or transported;

Name and signature(s) of responsible person(s) collecting, transporting, and depositing the waste;

Date and place where the waste was deposited;

Identification (permit or site registration number, location, and operator) of the facility where the waste was deposited; and;

Name and signature of facility on-site representative acknowledging receipt of the waste and the amount of waste received;

The volume of the grease and grit trap or the septic tank.

b. Records and reporting of trip tickets shall be maintained as follows:

One part of the trip ticket shall have the generator and transporter information completed and given to the generator at the time of waste pickup;

The remaining parts of the trip ticket shall have all required information completely filled out and signed by the appropriate party before distribution of the trip ticket;

One part of the trip ticket shall go to the receiving facility;

One part shall go to the transporter, who shall retain a copy of all trip tickets showing the collection and disposition of waste;

One copy of the trip ticket shall be returned by the transporter to the person who generated the wastes within 15 days after the waste is received at the disposal or processing facility;

Copies of trip tickets shall be retained for five years and be readily available for review by City or be submitted to the City upon request.

(2) Waste haulers may discharge loads only at locations designated by the Director. No load may be discharged without prior consent of the Director. The Director may collect samples of each hauled load to ensure compliance with applicable standards. The Director may require the waste hauler to provide a waste analysis of any load prior to discharge.

(3) Industrial waste haulers who discharge any industrial waste or wastewater into the POTW must provide a waste-tracking form for every load. This form shall include, at a minimum, the name and address of the industrial waste hauler, permit number, truck identification, names and addresses of sources of waste, and volume and characteristics of waste. The form shall identify the type of industry, known or suspected waste constituents, and whether any wastes are RCRA hazardous wastes. The Director may require such waste-tracking forms to be provided by haulers of nonindustrial trap waste, septic tank waste, or chemically-treated human waste that is discharged into the POTW.

(4) Any person hauling industrial waste or wastewater, septic tank waste chemically-treated human waste, and/or trap waste generated within the Abilene city limits that is not discharged into the POTW must provide written notice of such waste hauling to the Director specifying, at a minimum, the name

and address of the waste hauler and the location at which the waste is disposed of. The Director may prohibit disposal within the City of any such hauled waste.

(Ord. No. 36-1992, Pt. 1, 9-24-92; Ord. No. 36-2003, pt. 1(Exh. A), 9-25-03)

Sec. 32-60. Wastewater Discharge Permit.

(a) Wastewater Survey. When requested by the Director, a User must submit information on the nature and characteristics of its wastewater by completing a wastewater survey within the time specified by the Director. The Director is authorized to prepare a form for this purpose and may periodically require users to update the survey. Failure to complete this survey shall be reasonable grounds for terminating service to the user and shall be considered a violation of this article.

(b) Wastewater Discharge Permit Requirement.

(1) No Significant Industrial User or Waste Hauler shall discharge wastewater into the POTW without first obtaining a wastewater discharge permit from the Director.

(2) The Director may require other users to obtain wastewater discharge permits as necessary to carry out the purposes of this article.

(3) Any violation of the terms and conditions of a wastewater discharge permit shall be deemed a violation of this article and subjects the wastewater discharge permittee to the sanctions set out in Sections 32-66 through 32-68 of this article. Obtaining a wastewater discharge permit does not relieve a permittee of its obligation to comply with all federal and state pretreatment standards or requirements or with any other requirements of federal, state, and local law.

(c) Wastewater Discharge Permitting; Existing Permits. Permits in force at the time of this ordinance passage shall expire at the date specified by the permit.

(d) Wastewater Discharge Permitting; Existing Connections. Any user required to obtain a wastewater discharge permit who was discharging wastewater into the POTW prior to the effective date of this article without a permit and who wishes to continue such discharges in the future, shall, within ninety (90) days after said date, apply to the Director for a wastewater discharge permit in accordance with Section 32-60(f) of this article, and shall not cause or allow discharges to the POTW to continue after one hundred eighty (180) days of the effective date of this article except in accordance with a wastewater discharge permit issued by the Director.

(e) Wastewater Discharge Permitting; New Connections. Any user required to obtain a wastewater discharge permit who proposes to begin or recommence discharging into the POTW must obtain such permit prior to the beginning or recommencing of such discharge. An application for this wastewater discharge permit, in accordance with Section 32-60(f) of this article, must be filed at least ninety (90) days prior to the date upon which any discharge will begin or recommence.

(f) Wastewater Discharge Permit Application Contents. All users required to obtain a wastewater discharge permit must submit a permit application. The Director may require all users to submit as part of an application the following information:

(1) All information required by Section 32-62(a)(2) of this article;

- (2) Description of activities, facilities, and plant processes on the premises, including a list of all raw materials and chemicals used or stored at the facility which are, or could accidentally or intentionally be, discharged to the POTW;
- (3) Number and type of employees, hours of operation, and proposed or actual hours of operation;
- (4) Each product produced by type, amount, process or processes, and rate of production;
- (5) Type and amount of raw materials processed (average and maximum per day);
- (6) Site plans, floor plans, mechanical and plumbing plans, and details to show all sewers, floor drains, and appurtenances by size, location, and elevation, and all points of discharge;
- (7) Time and duration of discharges; and
- (8) Any other information as may be deemed necessary by the director to evaluate the wastewater discharge permit application.

Incomplete or inaccurate applications will not be processed and will be returned to the user for revision.

- (g) Application Signatories and Certification. All wastewater discharge permit applications and user reports must be signed by an authorized representative of the user and contain the following certification statement:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

- (h) Accurate Designation of Authorized Representative. If the designation of an Authorized Representative is no longer accurate because a different individual or position has responsibility for the overall operation of the facility or overall responsibility for environmental matters for the company, a new written authorization satisfying the requirements of this section must be submitted to the Director prior to or together with any reports to be signed by an Authorized Representative.

- (i) Wastewater Discharge Permit Decisions. The Director will evaluate the data furnished by the user and may require additional information. Within ninety (90) days of receipt of a complete wastewater discharge permit application, the Director will determine whether or not to issue a wastewater discharge permit. The Director may deny any application for a wastewater discharge permit.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-61. Wastewater Discharge Permit Issuance.

- (a) Wastewater Discharge Permit Duration. A wastewater discharge permit shall be issued for a specified time period, not to exceed five (5) years from the effective date of the permit. A wastewater discharge permit may be issued for a period less than five (5) years, at the discretion of the Director. Each wastewater discharge permit will indicate a specific date upon which it will expire.

(b) Wastewater Discharge Permit Contents. A wastewater discharge permit shall include such conditions as are deemed reasonably necessary by the Director to prevent pass through or interference, protect the quality of the water body receiving the treatment plant's effluent, protect worker health and safety, facilitate sludge management and disposal, and protect against damage to the POTW.

(1) Wastewater discharge permits shall contain the following conditions:

- a. A statement that indicates wastewater discharge permit issuance date, expiration date, effective date, and duration, which in no event shall exceed five (5) years;
- b. A statement that the wastewater discharge permit is nontransferable without prior notification to the City in accordance with Section 32-61(e) of this article, and provisions for furnishing the new owner or operator with a copy of the existing wastewater discharge permit;
- c. Effluent limits, including BMPs, based on applicable pretreatment standards;
- d. Self monitoring, sampling, reporting, notification, and recordkeeping requirements. These requirements shall include an identification of pollutants (or BMPs) to be monitored, sampling location, sampling frequency, and sample type based on federal, state, and local law; and
- e. A statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule. Such schedule may not extend the time for compliance beyond that required by applicable federal, state, or local law.
- f. Requirements to control slug discharge, if determined by the Director to be necessary.

(2) Wastewater discharge permits may contain, but need not be limited to, the following conditions as deemed appropriate by the Director to ensure compliance with this article, and state and federal laws, rules, and regulations.

- a. Limits on the average and/or maximum rate of discharge, time of discharge, and/or requirements for flow regulation and equalization;
- b. Requirements for the installation of pretreatment technology, pollution control, or construction of appropriate containment devices, designed to reduce, eliminate, or prevent the introduction of pollutants into the treatment works;
- c. Requirements for the development and implementation of spill control plans or other special conditions including management practices necessary to adequately prevent accidental, unanticipated, or nonroutine discharges;
- d. Development and implementation of waste minimization plans to reduce the amount of pollutants discharged to the POTW;
- e. The unit charge or schedule of user charges and fees for the management of the wastewater discharged to the POTW;
- f. Requirements for installation and maintenance of inspection and sampling facilities and equipment;

g. A statement that compliance with the wastewater discharge permit does not relieve the permittee of responsibility for compliance with all applicable federal and state pretreatment standards, including those which become effective during the term of the wastewater discharge permit; and

h. Other conditions as deemed appropriate by the Director to ensure compliance with this ordinance, and State and Federal laws, rules, and regulations.

(c) Wastewater Discharge Permit Appeals. The Director shall provide public notice of the issuance, modification, or denial of a wastewater discharge permit. Any affected person, including the user, may petition the Director to reconsider the terms of an issued or modified wastewater discharge permit, or the denial of a permit, within thirty (30) days of notice of its issuance, modification, or denial.

(1) Failure to submit a timely petition for reconsideration shall be deemed to be a waiver of the administrative appeal.

(2) In its petition, the appealing party must indicate the wastewater discharge permit provision(s) objected to, provide a full explanation of the reasons for the objection(s), and identify the alternative condition(s), if any, it seeks to place in the wastewater discharge permit.

(3) The effectiveness of the wastewater discharge permit, as issued or modified, shall not be stayed pending the appeal unless the Director expressly so states.

(4) The Director shall respond in writing to any petition for reconsideration within sixty (60) days. In his response, the Director shall indicate his decision whether to affirm or modify the terms of any permit issued or modified, or whether upon reconsideration to deny the permit. If the permit was initially denied, the Director shall indicate his decision whether to affirm the initial denial or to vacate the initial denial and issue the permit upon specified terms. The Director's action upon any petition for reconsideration shall be considered final for purposes of any judicial review.

(5) If the Director fails to act on any petition for reconsideration within sixty (60) days, the petition for reconsideration shall be deemed to be denied. Such deemed denial shall be considered final administrative action for purposes of judicial review.

(6) Aggrieved parties seeking judicial review of the final administrative wastewater discharge permit decision must do so by filing a complaint in a court of competent jurisdiction within the appropriate statute of limitations.

(d) Wastewater Discharge Permit Modification. The Director may modify the wastewater discharge permit for good cause including, but not limited to, the following:

(1) To incorporate any new or revised federal, state, or local pretreatment standards or requirements;

(2) To address significant alterations or additions to the user's operation, processes, or wastewater volume or character since the time of wastewater discharge permit issuance;

(3) A change in the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge;

- (4) Information indicating that the permitted discharge poses a threat to the City's POTW, city personnel, or the receiving waters;
- (5) Violation of any terms or conditions of the wastewater discharge permit;
- (6) Misrepresentations or failure to fully disclose all relevant facts in the wastewater discharge permit application or in any required reporting;
- (7) Revision of or a grant of variance from categorical pretreatment standards pursuant to 40 CFR 403.13;
- (8) To correct typographical or other errors in the wastewater discharge permit;
- (9) To reflect a transfer of the facility ownership or operation to a new owner or operator.

(e) Wastewater Discharge Permit Transfer. Wastewater discharge permits may be transferred to a new owner or operator only if the permittee gives at least thirty (30) days advance notice to the Director and the Director approves the wastewater discharge permit transfer. The notice to the Director must include a written certification by the new owner or operator which:

- (1) States that the owner and/or operator has no immediate intent to change the facility's operations and processes;
- (2) Identifies the specific date on which the transfer is to occur; and
- (3) Acknowledges full responsibility for complying with the existing wastewater discharge

permit.

Failure to provide advance notice of a transfer renders the wastewater discharge permit voidable as of the date of facility transfer.

(f) Wastewater Discharge Permit Revocation. Wastewater discharge permits may be revoked for, but not limited to, the following reasons:

- (1) Failure to notify the Director of significant changes to the wastewater prior to the changed discharge;
- (2) Failure to provide prior notification to the Director of changed conditions pursuant to Section 32-62(e) of this article;
- (3) Misrepresentation or failure to fully disclose all relevant facts in the wastewater discharge permit application;
- (4) Falsifying self-monitoring reports and certification statements;
- (5) Tampering with monitoring equipment;
- (6) Refusing to allow the Director timely access to the facility premises and records;
- (7) Failure to meet effluent limitations;

- (8) Failure to pay fines;
- (9) Failure to pay sewer charges;
- (10) Failure to meet compliance schedules;
- (11) Failure to complete a wastewater survey or the wastewater discharge permit application;
- (12) Failure to provide advance notice of the transfer of business ownership of a permitted facility;
or
- (13) Violation of any pretreatment standard or requirement, or any terms of the wastewater discharge permit or this article.

A user will be notified of any proposed permit revocation and offered an opportunity to show cause under Section 32-66(c) of this article why the proposed revocation should not occur.

Wastewater discharge permits shall be voidable upon cessation of operations or transfer of business ownership. All wastewater discharge permits issued to a particular user are void upon the issuance of a new wastewater discharge permit to that user.

(g) Wastewater Discharge Permit Reissuance. A user with an expiring wastewater discharge permit shall apply for wastewater discharge permit reissuance by submitting a complete permit application, in accordance with Section 32-60(f) of this article, a minimum of ninety (90) days prior to the expiration of the user's existing wastewater discharge permit.

(h) Regulation of Waste Received from Other Jurisdictions.

(1) If another municipality, or user located within another municipality, contributes wastewater to the POTW, the City Council shall enter into an intermunicipal agreement with the contributing municipality.

(2) Prior to entering into an agreement required by paragraph (1), above, the Director shall request the following information from the contributing municipality:

- a. A description of the quality and volume of wastewater discharged to the POTW by the contributing municipality;
- b. An inventory of all Industrial Users located within the contributing municipality that are discharging to the POTW; and
- c. Such other information as the Director may deem necessary.

(3) An intermunicipal agreement, as required by paragraph (1) above, shall contain the following conditions:

- a. A requirement for the contributing municipality to adopt a sewer use ordinance which is at least as stringent as this article and local limits including required BMPs, which are at least as stringent as those set out in Section 32-58(d) of this article. The requirement shall specify that such ordinance and limits must be revised as necessary to reflect changes made to the City's ordinance or local limits;

- b. A requirement for the contributing municipality to submit a revised industrial user inventory on at least an annual basis;
- c. A provision specifying which pretreatment implementation activities, including wastewater discharge permit issuance, inspection and sampling, and enforcement, will be conducted by the contributing municipality; which of these activities will be conducted by the Director; and which of these activities will be conducted jointly by the contributing municipality and the Director;
- d. A requirement for the contributing municipality to provide the Director with access to all information that the contributing municipality obtains as part of its pretreatment activities;
- e. Limits on the nature, quality, and volume of the contributing municipality's wastewater at the point where it discharges to the POTW;
- f. Requirements for monitoring the contributing municipality's discharge;
- g. A provision ensuring the Director access to the facilities of users located within the contributing municipality's jurisdictional boundaries for the purpose of inspection, sampling, and any other duties deemed necessary by the Director; and
- h. A provision specifying remedies available for breach of the terms of the intermunicipal agreement.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-62. Reporting Requirements.

(a) Baseline Monitoring Reports.

(1) Within either one hundred and eighty (180) days after the effective date of a categorical pretreatment standard, or the final administrative decision on a category determination under 40 CFR 403.6(a)(4) (whichever is later) existing Categorical Industrial Users currently discharging to or scheduled to discharge to the POTW, shall be required to submit to the Director a report which contains the information listed in paragraph (2), below. At least ninety (90) days prior to commencement of their discharge, new sources, and sources that become categorical users subsequent to the promulgation of an applicable categorical standard, shall be required to submit to the Director a report which contains the information listed in paragraph (2) below. A new source shall also be required to report the method of pretreatment it intends to use to meet applicable categorical standards. A new source shall also give estimates of its anticipated flow and quantity of pollutants discharged.

(2) Users described above shall submit the information set forth below.

- a. *Identifying information.* The name and address of the facility, including the name of the operator and owner.
- b. *Environmental permits.* A list of any environmental control permits held by or for the facility.

c. *Description of operations.* A brief description of the nature, average rate of production, and SIC of the operation(s) carried out by such user. This description should include a schematic process diagram which indicates points of discharge to the POTW from the regulated processes.

d. *Flow measurement.* Information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from regulated process streams and other streams, as necessary, to allow use of the combined wastestreams formula set out in 40 CFR 403.6(e).

e. *Measurement of pollutants.*

1. The categorical pretreatment standards applicable to each regulated process.

2. The results of sampling and analysis identifying the nature and concentration and/or mass, where required by the standard or by the Director of regulated pollutants in the discharge from each regulated process. Instantaneous, daily maximum, and long term average concentrations (or mass, where required) shall be reported. The sample shall be representative of daily operations and shall be analyzed in accordance with procedures set out in Section 32-62(j) of this article. Where the standard requires compliance with a BMP or pollution prevention alternative, the User shall submit documentation as required by the Director or the applicable standards to determine compliance with the standard.

3. Sampling must be performed in accordance with procedures set out in Section 32-62(k) of this article.

f. *Certification.* A statement, reviewed by the user's authorized representative and certified by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis, and, if not, whether additional operation and maintenance (O and M) and/or additional pretreatment, is required to meet the pretreatment standards and requirements.

g. *Compliance schedule.* If additional pretreatment and/or O and M will be required to meet the pretreatment standards, the shortest schedule by which the user will provide such additional pretreatment and/or O and M. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard. A compliance schedule pursuant to this section must meet the requirements set out in Section 32-62(b) of this article.

h. *Signature and certification.* All baseline monitoring reports must be signed and certified in accordance with Section 32-60(g) of this article.

(b) Compliance Schedule Progress Reports. The following conditions shall apply to the compliance schedule required by Section 32-62(a)(2)(g) of this article:

(1) The schedule shall contain progress increments in the form of dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the user to meet the applicable pretreatment standards (such events include, but are not limited to, hiring an engineer, completing preliminary and final plans, executing contracts for major components, commencing and completing construction, beginning and conducting routine operation);

(2) No increment referred to above shall exceed nine (9) months;

(3) The user shall submit a progress report to the Director no later than fourteen (14) days following each date in the schedule and the final date of compliance including, as a minimum, whether or not it complied with the increment of progress, the reason for any delay, and, if appropriate, the steps being taken by the user to return to the established schedule; and,

(4) In no event shall more than nine (9) months elapse between such progress reports to the Director.

(c) Reports on Compliance with Categorical Pretreatment Standard Deadline. Within ninety (90) days following the date for final compliance with applicable categorical pretreatment standards, or in the case of a new source following commencement of the introduction of wastewater into the POTW, any user subject to such pretreatment standards and requirements shall submit to the Director a report containing the information described in Section 32-62(a)(2)d–f of this article. For users subject to equivalent mass or concentration limits established in accordance with the procedures in 40 CFR 403.6(c), this report shall contain a reasonable measure of the user's long-term production rate. For all other users subject to categorical pretreatment standards expressed in terms of allowable pollutant discharge per unit of production (or other measure of operation), this report shall include the user's actual production during the appropriate sampling period. All compliance reports must be signed and certified in accordance with Section 32-60(g) of this article.

(d) Periodic Compliance Reports.

(1) All Significant Industrial Users shall, at a frequency determined by the Director but in no case less than twice per year (in July and January), submit a report indicating the nature and concentration of pollutants in the discharge which are limited by pretreatment standards and the measured or estimated average and maximum daily flows for the reporting period. All periodic compliance reports must be signed and certified in accordance with Section 32-60(g) of this article. In cases where the pretreatment standard requires compliance with a BMP or pollution prevention alternative, the User must submit documentation required by the Director or the pretreatment standard necessary to determine the compliance status of the User.

(2) All wastewater samples must be representative of the user's discharge. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and maintained in good working order at all times. The failure of a user to keep its monitoring facility in good working order shall not be grounds for the user to claim that sample results are unrepresentative of its discharge.

(3) If a user subject to the reporting requirement in this section monitors any pollutant more frequently than required by the Director, using the procedures prescribed in Section 32-62(j) of this article, the results of this monitoring shall be included in the report.

(e) Report of Changed Conditions. Each User must notify the Director of any planned significant changes to the user's operations or system which might alter the nature, decrease the quality, or increase the volume of its wastewater at least ninety (90) days before the change.

(1) The Director may require the user to submit such information as may be deemed necessary to evaluate the changed condition, including the submission of a wastewater discharge permit application under Section 32-60(f) of this article.

(2) The Director may issue a wastewater discharge permit under Section 32-60(h) of this article or modify an existing wastewater discharge permit under Section 32-61(d) of this article in response to changed conditions or anticipated changed conditions.

(3) For purposes of this requirement, significant changes include, but are not limited to, flow increases of twenty-five (25) percent or greater, and the discharge of any previously unreported pollutants.

(f) Reports of Potential Problems.

(1) In the case of any discharge, including, but not limited to, accidental discharges, discharges of a nonroutine, episodic nature, a noncustomary batch discharge, or a slug load, that may cause potential problems for the POTW, the user shall immediately telephone and notify the Director of the incident. This notification shall include the location of the discharge, type of waste, concentration and volume (if known) and corrective actions taken by the user.

(2) Within five (5) days following such discharge, the user shall, unless waived by the Director, submit a detailed written report describing the cause(s) of the discharge and the measures to be taken by the user to prevent similar future occurrences. Such notification shall not relieve the user of any expense, loss, damage, or other liability which may be incurred as a result of damage to the POTW, natural resources, or any other damage to person or property; nor shall such notification relieve the user of any fines, penalties, or other liability which may be imposed pursuant to this article.

(3) Failure to notify the Director of potential problem discharges shall be deemed a violation of this article.

(4) A notice shall be permanently posted on the user's bulletin board or other prominent place advising employees who to call in the event of a discharge described in paragraph (1), above. Employers shall ensure that all employees, who may cause such a discharge to occur, are advised of the emergency notification procedure.

(5) Users are required to notify the Director immediately of any changes at its facility affecting the potential for a slug discharge.

(g) Reports from Unpermitted Users. All users not required to obtain a wastewater discharge permit shall provide appropriate reports to the Director as the Director may require.

(h) Notice of Violation/Repeat Sampling and Reporting. If sampling performed by a user indicates a violation, the user must notify the Director within twenty-four (24) hours of becoming aware of the violation. The user shall also repeat the sampling and analysis and submit the results of the repeat analysis to the Director within thirty (30) days after becoming aware of the violation. Resampling by the User is not required if the City performs sampling at the user's facility at least once per month, or if the City performs sampling at the user's facility between the time when the initial sampling was conducted and the time when the user or the City receives the results of this sampling, or if the City has performed the sampling and analysis in lieu of the Industrial User. If the Director performed the sampling and analysis in lieu of the user, the Director will perform the repeat sampling and analysis unless it notifies the user of the violation and requires the user to perform repeat sampling and analysis.

(i) Notification of the Discharge of Hazardous Waste.

(1) Any user who commences the discharge of hazardous waste shall notify the POTW, the EPA Regional Waste Management Division Director, and state hazardous waste authorities, in writing, of

any discharge into the POTW of a substance which, if otherwise disposed of, would be a hazardous waste under 40 CFR Part 261. Such notification must include the name of the hazardous waste as set forth in 40 CFR Part 261, the EPA hazardous waste number, and the type of discharge (continuous, batch, or other). If the user discharges more than one hundred (100) kilograms of such waste per calendar month to the POTW, the notification also shall contain the following information to the extent such information is known and readily available to the user: an identification of the hazardous constituents contained in the wastes, an estimation of the mass and concentration of such constituents in the wastestream discharged during that calendar month, and an estimation of the mass of constituents in the wastestream expected to be discharged during the following twelve (12) months. All notifications must take place no later than one hundred and eighty (180) days after the discharge commences. Any notification under this paragraph need be submitted only once for each hazardous waste discharged. However, notifications of changed conditions must be submitted under Section 32-62(e) of this article. The notification requirement in this section does not apply to pollutants already reported by users subject to categorical pretreatment standards under the self-monitoring requirements of Sections 32-62(a), (c) and (d) of this article.

(2) Dischargers are exempt from the requirements of paragraph (1), above, during a calendar month in which they discharge no more than fifteen (15) kilograms of hazardous wastes, unless the wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e). Discharge of more than fifteen (15) kilograms of nonacute hazardous wastes in a calendar month, or of any quantity of acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e), requires a one-time notification. Subsequent months during which the user discharges more than such quantities of any hazardous waste do not require additional notification.

(3) In the case of any new regulations under Section 3001 of RCRA identifying additional characteristics of hazardous waste or listing any additional substance as a hazardous waste, the user must notify the Director, the EPA Regional Waste Management Waste Division Director, and state hazardous waste authorities of the discharge of such substance within ninety (90) days of the effective date of such regulations.

(4) In the case of any notification made under this section, the user shall certify that it has a program in place to reduce the volume and toxicity of hazardous wastes generated to the degree it has determined to be economically practical.

(5) This provision does not create a right to discharge any substance not otherwise permitted to be discharged by this article, a permit issued thereunder, or any applicable federal or state law.

(j) Analytical Requirements. All pollutant analyses, including sampling techniques, to be submitted as part of a wastewater discharge permit application or report shall be performed in accordance with the techniques prescribed in 40 CFR Part 136, unless otherwise specified in an applicable categorical pretreatment standard. If 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, sampling and analyses must be performed in accordance with procedures approved by the Director.

(k) Sample Collection. Samples collected to satisfy reporting requirements must be based on data obtained through appropriate sampling and analysis performed during the period covered by the report, based on data that is representative of conditions occurring during the reporting period.

(1) Except as indicated in Subsections (k)(2) and (3), below, wastewater samples must be collected using 24-hour flow-proportional composite sampling techniques, unless time-proportional composite sampling is authorized by the Director. Where time-proportional composite sampling or grab sampling is authorized by the Director, the samples must be representative of the discharge. Using protocols

(including appropriate preservation) specified in 40 CFR Part 136 and appropriate EPA guidance, multiple grab samples collected during a 24-hour period may be composited prior to the analysis as follows: for cyanide, total phenols, and sulfides the samples may be composited in the laboratory or in the field; for volatile organics and oil and grease, the samples may be composited in the laboratory; total residual chlorine, pH, and temperature samples may not be composited under any circumstances. In the event flow proportional sampling is infeasible, the Director may authorize the use of time proportional sampling or a minimum of four (4) grab samples (either composited or analyzed separately) where the user demonstrates that this will provide a representative sample of the effluent being discharged. Composite samples for other parameters unaffected by the composting procedures as documented in approved EPA methodologies may be authorized by the Director, as appropriate. In addition, grab samples may be required to show compliance with instantaneous discharge limits.

(2) Samples for oil and grease, temperature, pH, cyanide, phenols, sulfides, and volatile organic chemicals must be obtained using grab collection techniques.

(3) For sampling required in support of baseline monitoring and 90-day compliance reports required in Section 32-62(a) and (c) [40 CFR 403.12(b) and (d)], a minimum of four (4) grab samples must be used for pH, cyanide, total phenols, oil and grease, sulfide and volatile organic compounds for facilities for which historical sampling data do not exist; for facilities for which historical sampling data are available, the Director may authorize a lower minimum. For reports required by Section 32-66(d) [40 CFR 403.12(e) and (h)], the Industrial User is required to collect the number of grab samples necessary to assess and assure compliance with applicable Pretreatment Standards and Requirements.

(4) All samples collected for analysis shall be accompanied by a properly completed Chain of Custody.

(l) Timing. Written reports will be deemed to have been submitted on the date postmarked. For reports which are not mailed through a mail facility serviced by the United States Postal Service, the date of receipt of the report shall govern.

(m) Recordkeeping. Users subject to the reporting requirements of this article shall retain, and make available for inspection and copying, all records of information obtained pursuant to any monitoring activities required by this article and any additional records of information obtained pursuant to monitoring activities undertaken by the user independent of such requirements and documentation associated with BMPs. Records shall include the date, exact place, method, and time of sampling and the name of the person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; the results of such analyses; and all QA/QC data required by permit. These records shall remain available for a period of at least three (3) years. This period shall be automatically extended for the duration of any litigation concerning the user or the City, or where the user has been specifically notified of a longer retention period by the Director.

(n) Fraud and False Statements. The reports and other documents required to be submitted or maintained by local, state, or federal law shall be subject to:

(1) The provisions of 18 U.S.C. Section 1001 regarding fraud or false statements:

(2) The provisions of 309(c)(4) of the Act, as amended, governing false statements, representations, or certifications; and

(3) The provisions in Section 309(c)(6) of the Act regarding responsible corporate officers.

Sec. 32-63. Compliance Monitoring.

(a) Right of Entry, Inspection And Sampling. The Director shall have the right to enter the premises of any user to determine whether the user is complying with all requirements of this article, and any wastewater discharge permit or order issued hereunder. The owners and occupants of premises where industrial waste is created or discharged into a sanitary sewer shall allow the Director, his inspectors, agents, and representatives ready access at any time necessary to all parts of such premises for purposes of inspection, sampling, characterizing the waste, setting up and using monitoring equipment, inspecting and copying records, and the performance of any of their duties; and the failure or refusal of such owners or occupants to comply with these provisions shall be grounds for the disconnection of water or sewer service or both.

(1) Where a user has security measures in force which require proper identification and clearance before entry into its premises, the user shall make necessary arrangements with its security guards so that, upon presentation of suitable identification, the Director will be permitted to enter without delay for the purposes of performing specific responsibilities.

(2) The Director shall have the right to set up on the user's property, or require installation of, such devices as are necessary to conduct sampling and/or metering of the user's operations.

(3) The Director may require the user to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the user at its own expense. All devices used to measure wastewater flow shall be calibrated yearly to ensure their accuracy. Instruments used to measure quality shall be calibrated as per the manufacturer's direction.

(4) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the user at the written or verbal request of the Director and shall not be replaced. The costs of clearing such access shall be borne by the user.

(5) Unreasonable delays in allowing the Director access to the user's premises shall be a violation of this article.

(6) Determining the character and concentration of industrial waste. The industrial waste discharged or deposited into a sanitary sewer shall be subject to inspection and sampling as often as may be deemed necessary by the Director, but at least annually. In determining the surcharge to be made, samples shall be collected in such manner as to be representative of the character and concentration of the waste under operational conditions. The laboratory methods used in the examination and analysis of the samples shall be in accordance with the techniques and procedures required by Section 32-62(j) of this article. The sampling schedule for determining the character and concentration of industrial waste shall be made by the Director at such times and on such basis as he may reasonably establish. Should the owner or occupant discharging industrial waste into a sanitary sewer desire that a determination of the quality of such industrial waste be made at some time other than that scheduled by the Director, such special determination may be made by the Director at the expense of the owner or occupant discharging the waste.

(b) Search Warrants. If the Director has been refused access to a building, structure or property, or any part thereof, and is able to demonstrate probable cause to believe that there may be a violation of this article, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program of the City

designed to verify compliance with this article or any permit or order issued hereunder, or to protect the overall public health, safety and welfare of the community, then the Director may seek issuance of a search warrant from any court of competent jurisdiction.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-64. Confidential Information.

Information and data on a user obtained from reports, surveys, wastewater discharge permit application, wastewater discharge permits, and monitoring programs, and from the Director's inspection and sampling activities, shall be available to the public without restriction, unless the user specifically requests, and is able to demonstrate to the satisfaction of the Director, that the release of such information would divulge information, processes or methods of production entitled to protection as trade secrets under applicable State law. Any claim of confidentiality must be made at the time of submittal by stamping the words "Confidential Business Information" on each page containing such information. When requested and demonstrated by the user furnishing a report that such information should be held confidential, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public, but shall be made available immediately upon request to governmental agencies for uses related to the TPDES program or pretreatment program, and in enforcement proceedings involving the person furnishing the report. Wastewater constituents and characteristics and other "effluent data" as defined by 40 CFR 2.302 will not be recognized as confidential information and will be available to the public without restriction.

(Ord. No. 36-1992, Pt. 1, 9-24-92; Ord. No. 36-2003, pt. 1(Exh. A), 9-25-03)

Sec. 32-65. Publication of Users in Significant Noncompliance.

The Director shall publish annually, in a newspaper of general circulation that provides meaningful public notice within the jurisdictions served by the POTW, a list of the users which, during the previous twelve (12) months, were in significant noncompliance with applicable pretreatment standards and requirements. The term significant noncompliance shall mean:

- (a) Chronic violations of wastewater discharge limits, defined here as those in which sixty-six (66) percent or more of wastewater measurements taken for the same pollutant parameter taken during a six (6) month period exceed (by any magnitude) a numeric pretreatment standard or requirement, including instantaneous maximum limits defined in Section 32-58 of this article;
- (b) Technical review criteria (TRC) violations, defined here as those in which thirty-three (33) percent or more of wastewater measurements taken for each pollutant parameter during a six (6) month period equals or exceeds the product of the numeric pretreatment standard or requirement including instantaneous maximum limits, as defined in Section 32-58 of this article, multiplied by the applicable criteria (1.4 for BOD, TSS, fats, oils and grease, and 1.2 for all other pollutants except pH);
- (c) Any other violation of a pretreatment standard or requirement as defined in Section 32-58 of this article (daily maximum, long-term average, instantaneous maximum limit, or narrative standard) that the Director determines has caused, alone or in combination with other discharges, interference or pass through, including endangering the health of POTW personnel or the general public;
- (d) Any discharge of pollutants that has caused imminent endangerment to the public or to the environment, or has resulted in the Director's exercise of its emergency authority to halt or prevent such a discharge;

(e) Failure to meet, within ninety (90) days of the scheduled date, a compliance schedule milestone contained in a wastewater discharge permit or enforcement order for starting construction, completing construction, or attaining final compliance;

(f) Failure to provide within forty-five (45) days after the due date, any required reports, including baseline monitoring reports, reports on compliance with categorical pretreatment standard deadlines, periodic self-monitoring reports, and reports on compliance with compliance schedules;

(g) Failure to accurately report noncompliance; or

(h) Any other violation(s), which may include violations of a BMP, which the Director determines will adversely affect the operation or implementation of the local pretreatment program.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-66. Administrative Enforcement Remedies.

(a) Notification of Violation. When the Director finds that a user has violated, or continues to violate, any provision of this article, a wastewater discharge permit or order issued hereunder, or any other pretreatment standard or requirement, the Director may serve upon that user a written notice of violation. Within ten (10) days of the receipt of this notice, an explanation of the violation and a plan for the satisfactory correction and prevention thereof, to include specific required actions, shall be submitted by the user to the Director. If the user denies that any violation occurred and/or contends that no corrective action is necessary, an explanation of the basis of any such denial or contention shall be submitted to the Director within ten (10) days of receipt of the notice. Submission of an explanation and/or plan in no way relieves the user of liability for any violations occurring before or after receipt of the notice of violation. Nothing in this section shall limit the authority of the Director to take any action, including emergency actions or any other enforcement action, without first issuing a notice of violation.

(b) Consent Orders. The Director may enter into consent orders, assurances of voluntary compliance, or other similar documents establishing an agreement with any user responsible for noncompliance. Such documents may include specific action to be taken by the user to correct the noncompliance within a time period specified by the document. Such documents shall have the same force and effect as the administrative orders issued pursuant to Sections 32-66(d) and (e) of this article and shall be judicially enforceable.

(c) Show Cause Hearing. The Director may order a user which has violated, or continues to violate, any provision of this article, wastewater discharge permit or order issued hereunder, or any other pretreatment standard or requirement, to appear before the Director and show cause why the proposed enforcement action should not be taken. Notice shall be served on the user specifying the time and place for the meeting, the proposed enforcement action, the reasons for such action, and a request that the user show cause why the proposed enforcement action should not be taken. The notice of the meeting shall be served personally or by registered or certified mail (return receipt requested) at least ten (10) days prior to the hearing. Such notice may be served on any authorized representative of the user. A show cause hearing shall not be a bar against, or prerequisite for, taking any other action against the user.

(d) Compliance Orders. When the Director finds a user has violated, or continues to violate, any provision of this article, a wastewater discharge permit or order issued hereunder, or any other pretreatment standard or requirement, the Director may issue an order to the user responsible for the discharge directing that the user come into compliance within a specified time limit. If the user does not come into compliance within the specified time limit, sewer service may be discontinued unless adequate treatment facilities, devices, or other

related appurtenances are installed and properly operated. Compliance orders also may contain other requirements to address the noncompliance, including additional self-monitoring, and management practices designed to minimize the amount of pollutants discharged to the sewer. A compliance order may not extend the deadline for compliance established for a federal pretreatment standard or requirement, nor does a compliance order relieve the user of liability for any violation, including any continuing violation. Issuance of a compliance order shall not be a bar against, or a prerequisite for, taking any other action against the user.

(e) Cease and Desist Orders. When the Director finds that a user has violated, or continues to violate, any provision of this article, a wastewater discharge permit or order issued hereunder, or any other pretreatment standard or requirement, or that the user's past violations are likely to recur, the Director may issue an order to the user directing it to cease and desist all such violations and directing the user to:

- (1) Immediately comply with all requirements; and
- (2) Take such appropriate remedial or preventive action as may be needed to properly address a continuing or threatened violation, including halting operations and/or terminating the discharge.

Issuance of a cease and desist order shall not be a bar against, or a prerequisite for, taking any other action against the user.

(f) Emergency Suspensions. The Director may immediately suspend a user's discharge, after any reasonable notice to the user that is practical under the circumstances, whenever such suspension is necessary to stop an actual or threatened discharge which reasonably appears to present or cause an imminent or substantial endangerment to the health or welfare of persons. The Director may also immediately suspend a user's discharge, after notice and opportunity to respond, that threatens to interfere with the operation of the POTW, or which presents, or may present, an endangerment to the environment.

(1) Any user notified of a suspension of its discharge shall immediately stop or eliminate its contribution. In the event of a user's failure to immediately comply voluntarily with the suspension order, the Director may take such steps as deemed necessary, including immediate severance of the sewer connection, to prevent or minimize damage to the POTW, its receiving stream, or endangerment to any individuals. The Director may allow the user to recommence its discharge when the user has demonstrated to the satisfaction of the Director that the period of endangerment has passed, unless the termination proceedings in Section 32-66(g) of this article are initiated against the user.

(2) A user that is responsible, in whole or in part, for any discharge presenting imminent endangerment shall submit a detailed written statement, describing the causes of the harmful contribution and the measures taken to prevent any future occurrence, to the Director prior to the date of any show cause or termination hearing under Sections 32-66(c) or (g) of this article.

Nothing in this section shall be interpreted as requiring a hearing prior to any emergency suspension under this section.

(g) Termination of Discharge. In addition to the provisions in Section 32-61(f) of this article, any user who violates the following conditions is subject to discharge termination:

- (1) Violation of wastewater discharge permit conditions;
- (2) Failure to accurately report the wastewater constituents and characteristics of its discharge;

- (3) Failure to report significant changes in operations or wastewater volume, constituents and characteristics prior to discharge;
- (4) Refusal of reasonable access to the user's premises for the purpose of inspection, monitoring or sampling; or
- (5) Violation of the pretreatment standards in Section 32-58 of this article.

Such user will be notified of the proposed termination of its discharge and be offered an opportunity to show cause under Section 32-66(c) of this article why the proposed action should not be taken. Exercise of this option by the Director shall not be a bar to, or a prerequisite for, taking any other action against the user.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-67. Judicial Enforcement Remedies.

(a) Injunctive Relief. When the Director finds that a user has violated, or continues to violate, any provision of this article, wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement, the Director may petition any court of competent jurisdiction through the City's attorney for the issuance of a temporary or permanent injunction, as appropriate, which restrains or compels the specific performance of the wastewater discharge permit, order, or other requirement imposed by this article on activities of the user. The Director may also seek such other action as is appropriate for legal and/or equitable relief, including a requirement for the user to conduct environmental remediation. A petition for injunctive relief shall not be a bar against, or a prerequisite for, taking any other action against a user.

(b) Civil Penalties.

(1) A user who has violated, or continues to violate, any provision of this article, a wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement shall be liable to the City for a maximum civil penalty of not more than one thousand dollars (\$1,000.00) per violation, per day. In the case of a monthly or other long-term average discharge limit, penalties shall accrue for each day during the period of the violation.

(2) The City may recover reasonable attorneys' fees, court costs, and other expenses associated with enforcement activities, including sampling and monitoring expenses, and the cost of any actual damages incurred by the City, as well as civil penalties, in any court of competent jurisdiction.

(3) In determining the amount of civil liability, the court shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration of the violation, any economic benefit gained through the user's violation, corrective actions by the user, the compliance history of the user, and any other factor as justice requires.

(4) Filing a suit for civil penalties shall not be a bar against, or a prerequisite for, taking any other action against the user.

(c) Criminal Prosecution.

(1) A user who has willfully or negligently violated any provision of this article, a wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement shall, upon conviction, be guilty of a misdemeanor, punishable by a fine of not more than two thousand dollars (\$2,000.00) per violation, per day.

(2) A user who has willfully or negligently introduced any substance into the POTW which causes personal injury or property damage shall, upon conviction, be guilty of a misdemeanor and be subject to a penalty of not more than two thousand dollars (\$2,000.00) per day of offending discharge. This penalty shall be in addition to any other cause of action for personal injury or property damage available under state law.

(3) A user who knowingly made any false statement, representations, or certifications in any application, record, report, plan, or other documentation filed, or required to be maintained, pursuant to this article, wastewater discharge permit, or order issued hereunder, or who falsified, tampered with, or knowingly rendered inaccurate any monitoring device or method required under this article shall, upon conviction, be punished by a fine of not more than two thousand dollars (\$2,000.00) per violation, per day.

(d) Remedies Nonexclusive. The remedies provided for in this article are not exclusive. The Director may take any, all, or any combination of these actions against a noncompliant user. The Director is empowered to take more than one enforcement action against any noncompliant user. These actions may be taken concurrently.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-68. Supplemental Enforcement Action.

(a) Performance Bonds. The Director may decline to issue or reissue a wastewater discharge permit to any user who has failed to comply with any provision of this article, a previous wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement unless such user first files a satisfactory bond, payable to the City, in a sum not to exceed a value determined by the Director to be necessary to achieve consistent compliance.

(b) Water Supply Severance. Whenever a user has violated or continues to violate any provision of this article, a wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement, water service to the user may be severed. Service will only recommence, at the user's expense, after it has satisfactorily demonstrated its ability to comply.

(c) Public Nuisances. A violation of any provision of this article, a wastewater discharge permit, or order issued hereunder, or any other pretreatment standard or requirement, is hereby declared a public nuisance and shall be corrected or abated as directed by the Director. Any person(s) creating a public nuisance shall be subject to the provisions of the City Code (Chapter 19) governing such nuisances, including reimbursing the City for any costs incurred in removing, abating, or remedying said nuisance.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-69. Affirmative Defenses.

(a) Bypass.

(1) For the purposes of this section,

Bypass means the intentional diversion of wastestreams from any portion of a user's treatment facility.

Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(2) A user may allow any bypass to occur which does not cause pretreatment standards or requirements to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of paragraphs (3) and (4) of this section.

(3) If a user knows in advance of the need for a bypass, it shall submit prior notice to the Director, at least ten (10) days before the date of the bypass, if possible.

a. A user shall submit oral notice to the Director of an unanticipated bypass that exceeds applicable pretreatment standards within twenty-four (24) hours from the time it becomes aware of the bypass. A written submission shall also be provided within five (5) days of the time the user becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. The Director may waive the written report on a case-by-case basis if the oral report has been received within twenty-four (24) hours.

(4) a. Bypass is prohibited, and the Director may take an enforcement action against a user for a bypass, unless:

1. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

2. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

3. The user submitted notices as required under paragraph (3) of this section.

b. The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed in paragraph (4)(a) of this section.

(b) Prohibited Discharge Standards. A user shall have an affirmative defense to an enforcement action brought against it for noncompliance with the general prohibitions in Section 32-58(a)(1) of this article or the specific prohibitions in Sections 32-58(a)(2)c–g and 32-58(a)(2)i–o of this article if it can prove that it did not know, or have reason to know, that its discharge, alone or in conjunction with discharges from other sources, would cause pass through or interference and that either:

(1) A local limit exists for each pollutant discharged and the user was in compliance with each limit directly prior to, and during, the pass through or interference; or

(2) No local limit exists, but the discharge did not change substantially in nature or constituents from the user's prior discharge when the City was regularly in compliance with its TPDES permit, and in the case of interference, was in compliance with applicable sludge use or disposal requirements.

(c) Act of God. In an action brought in municipal or state court, if a person can establish that an event that would otherwise be a violation of a pretreatment ordinance or a permit issued under this ordinance was caused solely by an act of God, war, strike, riot, or other catastrophe, the event is not a violation of the ordinance or permit.

(Ord. No. 36-1992, Pt. 1, 9-24-92; Ord. No. 36-2003, pt. 1(Exh. A), 9-25-03)

Sec. 32-70. Other Requirements.

(a) Other Sections Applicable. The sections of the City Code dealing with cross connections, items pertaining to safeguarding the water supply, waste traps, and items safeguarding the sanitary system remain applicable.

(b) Compliance with this article does not exempt or excuse a person from complying with provisions of the Texas Water Quality Act and its amendments, the Clean Water Act and its amendments, or the requirements of any applicable waste discharge permit, order, rule or regulation issued by the TCEQ and/or the EPA.

(c) No section or clause in this article shall exclude any agreement between the Director and any person to discharge wastewater, which complies with the objectives of this article, for treatment by the City. Said agreements shall provide for reimbursement to the City for any expenses incurred in the treatment and disposal of such wastewater.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Sec. 32-71. Miscellaneous Provisions.

(a) Pretreatment Charges and Fees. The City may adopt reasonable fees for reimbursement of costs of setting up and operating the City's pretreatment program which may include:

(1) Fees for wastewater discharge permit applications including the cost of processing such applications;

(2) Fees for monitoring, inspection, and surveillance procedures including the cost of collection and analyzing a user's discharge, and reviewing monitoring reports submitted by users;

(3) Fees for reviewing and responding to accidental discharge procedures and construction;

(4) Fees for filing appeals; and

(5) Other fees as the City may deem necessary to carry out the requirements contained herein. These fees relate solely to the matters covered by this article and are separate from all other fees, fines, and penalties chargeable by the City.

(b) Abnormal Waste Discharge Requirements. Persons generating abnormal industrial waste may discharge the waste into the sanitary sewer provided:

- (1) The waste will not cause interference; and
- (2) The waste will not endanger or be harmful to the operating personnel of the sewer system; and
- (3) The waste will not cause damage to the collection system; and
- (4) The waste will not impair the treatment processes; and
- (5) The waste will not affect sludge quality and/or require modifications in sludge disposal practices; and
- (6) The waste will not have an effect on receiving water quality; and
- (7) The discharge is in compliance with all limitations and requirements in Section 32-58 of this article; and
- (8) The waste shall be assessed a surcharge for any abnormal levels of BOD or TOC, TSS and FOG or TPH. There shall be one surcharge rate for BOD or TOC and FOG or TPH and a separate rate for TSS; and
- (9) All required permits are in force and approval in writing has been given by the Director for any waivers or special agreements.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

(c) Computation of Surcharges.

- (1) *Computation of the surcharge* for the industrial waste shall be based on the following formulas:

$$S = V (8.34) [X ((\text{BOD or TOC}) - 200) + Y (\text{TSS} - 200) + Z (\text{FOG} - 100) + Z (\text{TPH} - 20)]$$

S = Surcharge in dollars that will appear on the customer's monthly bill

V = Volume of wastewater discharge from user, in millions of gallons. This volume may be calculated from discharge meter or by a percentage of water consumption, as determined by the Director

8.34 = Pounds per gallon of water

X = Unit charge in dollars per pound of BOD or TOC

BOD = BOD strength in milligrams per liter (mg/L)

TOC = Total organic carbon strength in milligrams per liter (mg/L)

200 = Normal BOD/TOC strength in milligrams per liter (mg/L)

Y = Unit charge in dollars per pound for TSS

TSS = Total suspended solids concentration in milligrams per liter (mg/L)

200 = Normal TSS concentration in milligrams per liter (mg/L)

Z = Unit charge in dollars per pound for FOG and TPH

FOG = Fats, oil, and grease concentration in milligrams per liter (mg/l)

TPH = Total petroleum hydrocarbons in mg/L

100 = Normal FOG concentration in mg/l

20 = Normal TPH concentration in mg/L

X, Y, and Z values shall be set by the City Council from time to time.

(2) If the strength or concentration for BOD, TOC, TSS, FOG or TPH is less than the normal strength for that category, there shall be no surcharge for that category, nor shall there be credit given to the total surcharge if the strength or concentration of all three (3) categories is less than the normal. Surcharges payable under this paragraph shall become due monthly after the effective date of the surcharge.

(3) All BOD, TOC, FOG, TPH and TSS values in determining the surcharge shall be re-evaluated and adjusted to reflect any changes in wastewater characteristics as sampling results deem it necessary.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

(d) Governmental Functions. The inspectors, agents, and representatives of the City charged with the enforcement of this article shall be deemed to be performing a governmental function for the benefit of the general public, and neither the City, the Director, nor the individual inspector, agent or representative shall ever be held liable for any loss or damage, whether real or asserted, caused or alleged to have been caused as a result of the performance of such governmental function.

(Ord. No. 36-1992, Pt. 1, 9-24-92)

Secs. 32-72–32-94. Reserved.

Ordinance (First Reading): An Ordinance amending Chapter 32 "Utilities", Article III "Industrial Wastes", of the Abilene Municipal Code.



Industrial Wastes

- The City of Abilene has an approved Industrial Waste Pretreatment Program that is compliant with all applicable state and federal laws.
- The Pretreatment Program is implemented to monitor and control contaminated waste discharges from industrial processes or other users that otherwise might disrupt the chemical and/or biological treatment processes of the wastewater treatment plant, and/or pass through the treatment facility and cause health or safety concerns or harm to the environment.



Industrial Wastes

- The Code of Federal Regulations requires that the City periodically review its Technically Based Local Limits (TBLL) to determine if changes are needed, and if so make revisions to the Industrial Waste Ordinance.
- The Environmental Protection Agency's Pretreatment Streamlining Rule of 2005 requires that certain procedural changes be implemented into the City's Pretreatment Program and that the City's Industrial Wastes Ordinance be revised to ensure compliance and enforceability of the Pretreatment Program.



Industrial Wastes

A significant number of minor modifications have been proposed for the Industrial Wastes Ordinance (IWO). The agenda packet includes a redlined version of Exhibit A which clearly identifies all insertions and deletions made to the current Article III. Following is a summary of certain more extensive modifications to the IWO. The reader should refer to the Exhibit A for the actual insertions and deletions.

Sec. 32-58 (d) Local Limits, by (1) modifying the pollutants list of instantaneous maximum allowable discharge limits and (2) modifying the described pollutants or substances, and inserting significant language restricting the instantaneous maximum discharge of free or emulsified animal or vegetable oil or grease (FOG).

Sec. 32-61 (b) Wastewater Discharge Permit Contents, by inserting a list of additional conditions that may be added to wastewater discharge permits.

Sec. 32-62 (k) Sample Collection, by inserting additional instructions regarding sample collection procedures.

Sec. 32-65 Publication of Users in Significant Noncompliance, by inserting and modifying certain clarifying and instructional statements.



Ordinance (First Reading): An Ordinance amending Chapter 32 "Utilities", Article III "Industrial Wastes", of the Abilene Municipal Code.

QUESTIONS?





**City Council
Agenda Memo**

City Council Meeting Date: 10/8/2020

TO: Robert Hanna, City Manager

FROM: Greg McCaffery

SUBJECT: **9. Ordinance (Final Reading): Receive a Report, Hold a Discussion and Public Hearing, and Take Action to Change the Time Limits and Metered Parking Zones for Downtown Parking (Greg McCaffery)**

GENERAL INFORMATION

Over the last several months the Mayor's Downtown Task Force (Task Force) has held discussions, evaluated and made recommendations regarding the improvements of available on-street parking, limits on timed parking, structured parking improvements, and branding & marketing of downtown Abilene.

At the Task Force meeting of a June 26, 2020, it was recommended to change the parking limits and parking metered zones to improve the efficiencies of parking in the downtown. These improvements would involve removing the parking meters and adjusting the time limits, mostly to hours, on certain streets within the downtown.

An ordinance amendment has been developed by staff to address the time limits for parking within the downtown whereby parking meters will be removed and two hour parking limit will be set in place within the central downtown area bounded by North 1st Street to North 6th Street and Hickory Street to Walnut Street. Further, one hour parking would be allowed on Pine Street (Eastside) from 3rd to 4th Streets, and 3rd (Northside) and 4th (Southside) Streets from Walnut to Pine Streets.

Additionally the City has received a request from the property owners at the Cedar Terrace Apartments, at the Southwest corner of Cedar and 4th Streets, to remove all parking limits along the Southside of North 4th Street from the alley between Hickory and Cedar Streets to Cedar

Street, and along Cedar immediately in front of the Cedar Terrace Apartments.

SPECIAL CONSIDERATIONS

N/A

FUNDING/FISCAL IMPACT

STAFF RECOMMENDATION

Staff requests direction concerning the parking ordinance amendment.

BOARD OR COMMISSION RECOMMENDATION

ATTACHMENTS:

1. REV5_Redline_09242020_Final_Reading_Parking_Limits (1)
2. REV_Existing Parking Maps Model 09172020 (1)
3. REV2_Proposed Parking Maps Model 09172020 _1 (1)
4. Ltr_request_Cedar_Terrace_Apts_4th_Street_Cedar
5. REV10_Redline_10082020_Cedar_Apts_Request_Final_Reading_Parking_Limits (5) (2)
6. REV3_Proposed_Cedar_Apt_Request_Parking_Map_10012020
7. PP_REV6_Includes_Cedar_Apts_Downtown_Parking_Limits (1)

ORDINANCE NO. _____

AN ORDINANCE AMENDING CHAPTER 18, “MOTOR VEHICLES AND TRAFFIC,” ARTICLE VIII, “SCHEDULES,” SECTION 18-299, “PARKING TIME LIMITED,” AND SECTION 18-300, “PARKING METER ZONES” AS SET OUT BELOW; AND CALLING A PUBLIC HEARING.

WHEREAS, the Mayor’s Downtown Task Force, has made various recommendations regarding the improvements of available on-street parking, metered zoned parking and limits on timed parking within the downtown area; and,

WHEREAS, the City of Abilene is currently in the process of improving the efficiency of downtown parking; and,

WHEREAS, improvements include removing the metered street parking and adjusting time limits on certain streets within the downtown; and,

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

PART 1: That Chapter 18, “Motor Vehicles and Traffic,” Article VIII, “Schedules,” Section 18-299, “Parking time limited,” of the Abilene City Code be amended as set out in Exhibit “A,” attached hereto and made a part of this Ordinance for all purposes.

PART 2: That Chapter 18, “Motor Vehicles and Traffic,” Article VIII, “Schedules,” Section 18-300, “Parking meter zones,” be amended as set out in Exhibit “A,” attached hereto and made part of this Ordinance for all purposes.

PART 3: That if the provisions of any section, subsection, paragraph, subdivision or clause of this Ordinance shall be adjudged invalid by a court of competent jurisdiction, such judgment shall not effect or invalidate the remainder of any section, subsection, paragraph, subdivision, or clause of this Ordinance.

PART 4: That any person, firm, or corporation violating the provisions of this

Ordinance shall be deemed to have committed a misdemeanor, and upon conviction thereof shall be fined in accordance with Chapter 1 (Section 1-9) of this Code.

PART 5: Each day such violation shall continue, or be permitted to continue, shall be deemed a separate offense. Said ordinance, being a penal ordinance, becomes effective ten (10) days after its publication in the newspaper, as provided by Section 19 of the Charter of the City of Abilene.

PASSED ON FIRST READING this 24th day of September, 2020.

A notice of the time and place, where and when said ordinance would be given a public hearing and considered for final passage was published in the Abilene Reporter-News, a daily newspaper of general circulation in the City of Abilene, said publication being on 27th day of September 2020, the same being more than 24 hours prior to a public hearing being held in the Council Chamber of City Hall in Abilene, Texas, at 8:30 a.m. on the 8th day of October, 2020, to permit the public to be heard.

PASSED ON SECOND AND FINAL READING this 8th day of October 2020.

ATTEST:

CITY SECRETARY

MAYOR

APPROVED:

CITY ATTORNEY

Exhibit A

Sec. 18-299. Parking time limited.

In accordance with the terms of this chapter, and when signs are erected giving notice thereof, no person shall stand, stop or park a vehicle in excess of the indicated period of time specified in this schedule on the indicated days on the indicated sides of the following streets or portions of streets. Each consecutive increment of the time limit during which a vehicle remains continuously parked shall be deemed to be a separate offense.

(a) Two hour limit: 8:00 a.m. to 5:00 p.m., Monday through Friday:

<u>Street</u>	<u>Side</u>	<u>Extent</u>
North 1st St.	North	From Pine St to Cypress St.
North 2nd St.	South	From Pine St. to Cypress St.
	South	From Cedar St. to Hickory St.
	South	From alley east of Walnut St. to the alley west of Walnut St.
	North	From Walnut St. to Pine St.
	South	From Walnut St. to Pine St.
North 3rd St.	North	Cedar St. to Cypress St.
	North	From Hickory St. to alley east of Hickory St.
	South	Hickory St. to Cedar St.
		From alley east of Walnut St. to Walnut St.
	South	From Walnut St. to Pine St.
	North	From Pine St. to alley west of Pine St.
North 4th St.	Both	From Pine St. to Hickory St.
	North	From Walnut St. to Pine St.
North 5th St.	North	From Walnut St. to alley east of Hickory St.
	South	From alley west of Walnut St. to alley east of Hickory St.
Cedar St.	West	From North 2nd St. south to the alley

	West	From North 3rd to North 5th Sts.
	East	From North 2nd St. to North 1st St.
	East	From 150 feet north of North 3rd St. to North 6th St.
	East	From North 1st St. to North 3rd St.
Cypress St.	West	From alley between North 1st St. and North 2nd St. to North 2nd St.
	West	From North 5th St. to North 6th St.
	West	From North 3rd St. to 104 feet south of North 3rd St.
	East	From North 5th St. to North 6th St.
Hickory St.	East	From North 3rd St. to North 4th St.
Pine St.	Both	From North 5th to North 6th Sts.
	East	From North 4th to North 5th Sts.
	West	From 90 feet north of North 2nd St. to North 3rd St.
Pine St.	East	North 1st St. to North 2nd St.
	East	From North 2nd St. to North 3rd St.
Walnut St.	East	From North 2nd St. to North 3rd St.
	East	From North 5th St. north a distance of 155 feet
	East	From North 4th St. north a distance of 195 feet.
	West	From North 2nd St. to 100 feet south of North 5th St.
<u>North 2nd St.</u>	<u>Both</u>	<u>From Walnut St. to Hickory St.</u>
<u>North 3rd St.</u>	<u>Both</u>	<u>From Pine St. to Hickory St.</u>
	<u>South</u>	<u>From Walnut St. to Pine St.</u>
<u>North 4th St.</u>	<u>Both</u>	<u>From Pine St. to Cedar St.</u>
	<u>North</u>	<u>From Walnut St. to Pine St.</u>
	<u>South</u>	<u>From alley between Cedar St. and Hickory St. to Hickory St.</u>
<u>North 5th St.</u>	<u>Both</u>	<u>From Walnut St. to Hickory St.</u>
<u>North 6th St.</u>	<u>Both</u>	<u>From Walnut St. to Cypress St.</u>

	<u>Both</u>	<u>From Cedar St. to Hickory St.</u>
<u>Cedar St.</u>	<u>Both</u>	<u>From North 1st St. to North 5th St.</u>
<u>Cypress St.</u>	<u>Both</u>	<u>North 1st St. to North 6th St.</u>
<u>Hickory St.</u>	<u>East</u>	<u>From North 3rd St. to North 4th St.</u>
<u>Pine St.</u>	<u>West</u>	<u>From North 1st St. to North 6th St.</u>
	<u>East</u>	<u>From North 1st St. to North 3rd St.</u>
	<u>East</u>	<u>From North 4th St. to North 6th St.</u>
<u>Walnut</u>	<u>Both</u>	<u>From North 2nd St. to North 5th St.</u>

(b) One hour limit: 8:00 a.m. to 5:00 p.m., Monday through Friday:

<u>Street</u>	<u>Side</u>	<u>Extent</u>
North 2nd St.	North	From Cypress St. to Cedar St.
	North	From Cedar St. to Hickory St.
	North	From Pine St. to Cypress St.
	South	From Cypress St. to Cedar St.
North 3rd St.	North	From Cypress St. to alley west of Pine St.
	North	From 45 feet west of Mesquite St. to alley west of Mesquite St.
	South	From Mesquite St. to alley west of Mesquite St.
	South	From Pine St. to Cedar St.
North 5th St.	South	From Walnut St. to alley west of Walnut St.
North 6th St.	North	From Hickory St. to the alley east of Hickory.
Cedar St.	West	From North 2nd St. to North 3rd St.
	East	From North 3rd St. north a distance of 150 feet
Cypress St.	West	From 80 feet north of North 1st St. to alley between

		North 1st St. and North 2nd St.
	East	From North 1st St. to North 5th St.
	West	From 104 feet south of North 3rd St. to North 2nd St.
	West	From North 3rd St. to North 5th St.
Mesquite St.	West	From 90 feet north of North 3rd St. to 160 feet south of North 4th St.
Pine St.	West	From North 1st St. to 90 feet north of North 2nd St.
	West	From North 3rd to North 5th Sts.
Walnut St.	East	From North 3rd to North 4th St.
	West	From North 5th St. to south a distance of 100 feet.
<u>North 3rd St.</u>	<u>North</u>	<u>From Pine St. to Walnut St.</u>
<u>North 4th St.</u>	<u>South</u>	<u>From Pine St. to Walnut St.</u>
<u>Pine St.</u>	<u>East</u>	<u>From North 3rd St. to North 4th St.</u>

(c) One hour limit: 8:00 a.m. to 4:00 p.m., school days only:

<u>Street</u>	<u>Side</u>	<u>Extent</u>
North 5th Street	South	From Shelton Street to alley east of Shelton Street
North 6th Street	North	150 feet east of Fannin St. to 70 feet east of Burger St.
South 38th St.	North	From Sayles Blvd. west 260 feet
	South	From Sayles Blvd. west 240 feet
North 19th St.	North	Burger St. to alley west of Burger St.
Burger St.	West	From North 3rd St. to North 6th St.
	East	From 150 feet north of North 3rd St. to North 6th St.
Cooke St.	North	From Sayles Blvd. west a distance of 360 feet

	South	From Sayles Blvd. west a distance of 270 feet
Fannin St.	West	From 70 feet north of North 3rd St. to North 6th St.
	East	From North 6th St. to alley south of North 6th St.
	East	From 120 feet south of the alley south of North 6th St. to 190 feet north of North 3rd St.
Grand Ave.	East	From 300 feet south of South 35th St. to Sayles Blvd.
	West	From Moore St. to alley north of Cooke St.
Green St.	West	From 180 feet north of North 3rd St. to North 6th St.
Green St.	East	From 120 feet north of North 3rd St. to alley south of North 6th St.
Highland Ave.	East	From Sayles Blvd. to south 35th St.
Highland Ave.	West	From Sayles Blvd. north 250 feet
Moore St.	Both	From Sayles Blvd. to Erie St.
Shelton St.	East	From North 6th St. north a distance of 280 feet
	Both	From North 3rd St. to North 6th St.

(d) Forty-five minute limit: 8:00 a.m. to 5:00 p.m., Monday through Friday:

<u>Street</u>	<u>Side</u>	<u>Extent</u>
Campus Court	West	From point 150 feet north of East North 16th St. to a point 100 feet south of East North 18th St.
College Dr.	Both	From Campus Court to an alley west of Campus Court

(e) Thirty-minute limit: At any time: [Reserved]

- (f) Reserved.
- (g) Reserved.
- (h) Reserved.
- (i) Reserved.
- (j) Reserved.
- (k) One hour limit: 8:00 a.m. to 5:00 p.m., Sunday through Saturday:

<u>Street</u>	<u>Side</u>	<u>Extent</u>
South 4th St.	South	Oak St. to Pecan St.
South 5th St.	North	Oak St. to Pecan St.

- ~~(l) Two hour limit: 8:00 a.m. to 2:00 p.m., Saturday:~~

<u>Street</u>	<u>Side</u>	<u>Extent</u>
Walnut St.	West	From North 3rd St. to North 4th St.

- ~~(m) One hour limit: 8:00 a.m. to 2:00 p.m., Saturday:~~

<u>Street</u>	<u>Side</u>	<u>Extent</u>
Walnut St.	East	From North 3rd St. to North 4th St.

Sec. 18-300. Parking meter zones. Reserved.

~~In accordance with the terms of this chapter, parking meter zones are hereby established upon the following parking lots, streets or portions of streets, in which the parking of vehicles shall be regulated by parking meters between the hours of 8:00 a.m. and 6:00 p.m. of any day, except Saturdays, Sundays and legal holidays, except as otherwise specified herein:~~

~~(a) — 4-hour limit: At Rate A:~~

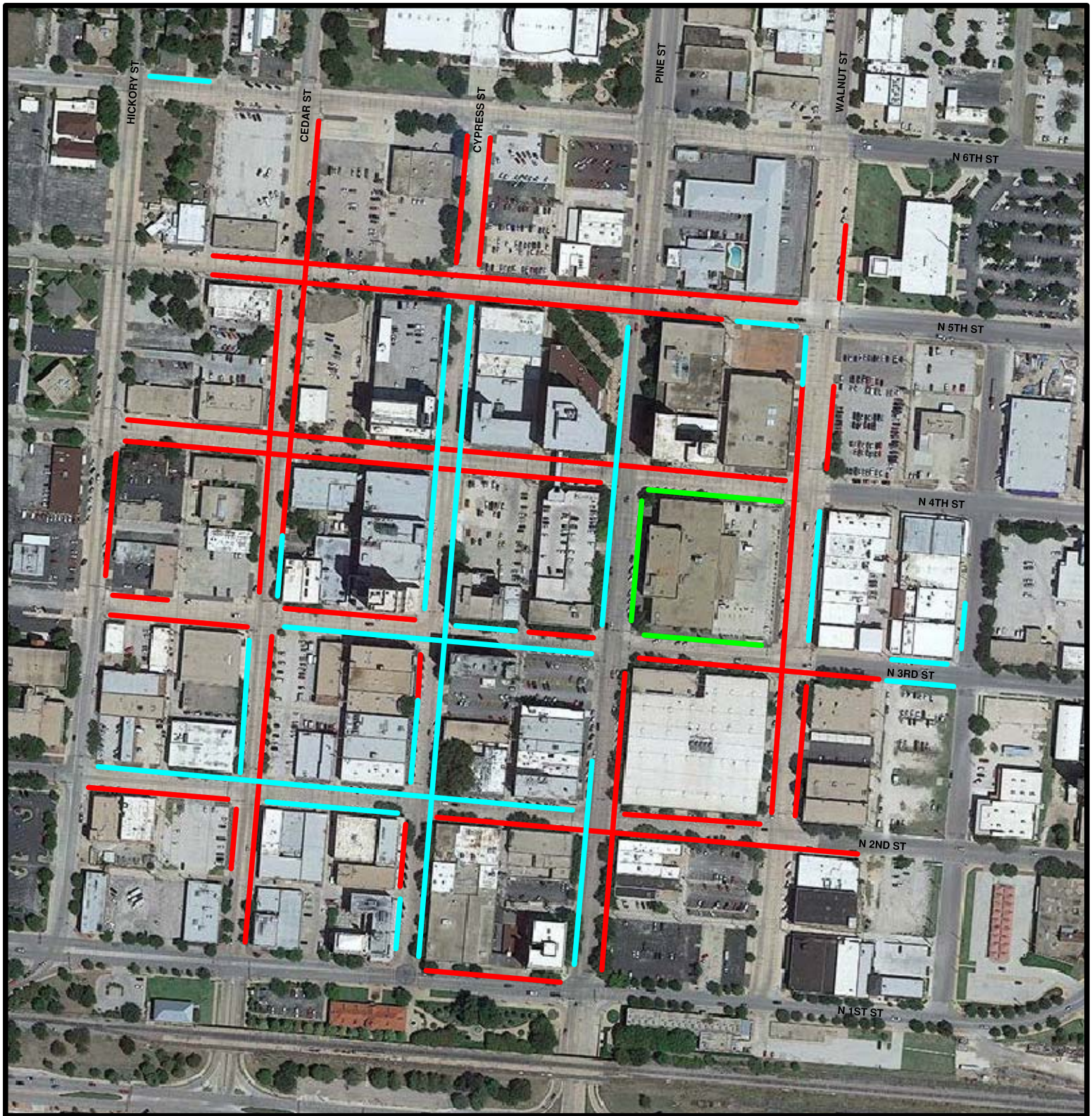
<u>Street</u>	<u>Side</u>	<u>Extent</u>
200 Block Cedar St.	East	All spaces

~~(b) — 24-minute limit: At Rate B:~~

<u>Street</u>	<u>Side</u>	<u>Extent</u>
North 3rd St.	North	From Pine to Walnut Sts.
North 4th St.	South	From Walnut to Pine Sts.
Pine St.	East	From North 3rd to North 4th Sts.

~~The time limits prescribed by this section shall be the maximum time for continuous parking within any space within the applicable parking meter zone. It shall be unlawful for any person to cause, allow, permit or suffer any vehicle registered in his name, operated by him or in his custody or control to be parked or remain in any parking space for any period of time in excess of the maximum period of time prescribed for such space by this section, or be parked or remain in any parking space while the meter controlling such space is displaying a signal or otherwise indicating that the vehicle occupying such space has been parked therein beyond the period of time permitted by this section or other provisions of this chapter. The enumeration of the foregoing violations shall not be exclusive, and shall not relieve any person from the duty to observe other and more restrictive provisions of this chapter or other applicable laws and ordinances.~~

~~In any prosecution charging a violation of this section, proof that the particular vehicle in question was parked or situated in any one parking space governed hereby at different times on the same day shall constitute in evidence a prima facie presumption that such vehicle was continuously parked or continuously remained in such parking space at all times during the period between such different times.~~



LEGEND

— TWO HOUR PARKING

— ONE HOUR PARKING

— METERED PARKING



Sheet
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of
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CITY OF ABILENE, TEXAS
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

CENTRAL BUSINESS DISTRICT EXISTING PARKING TIME

Designed By: S. CHANDLER

Drawn By: T. MATTHEWS

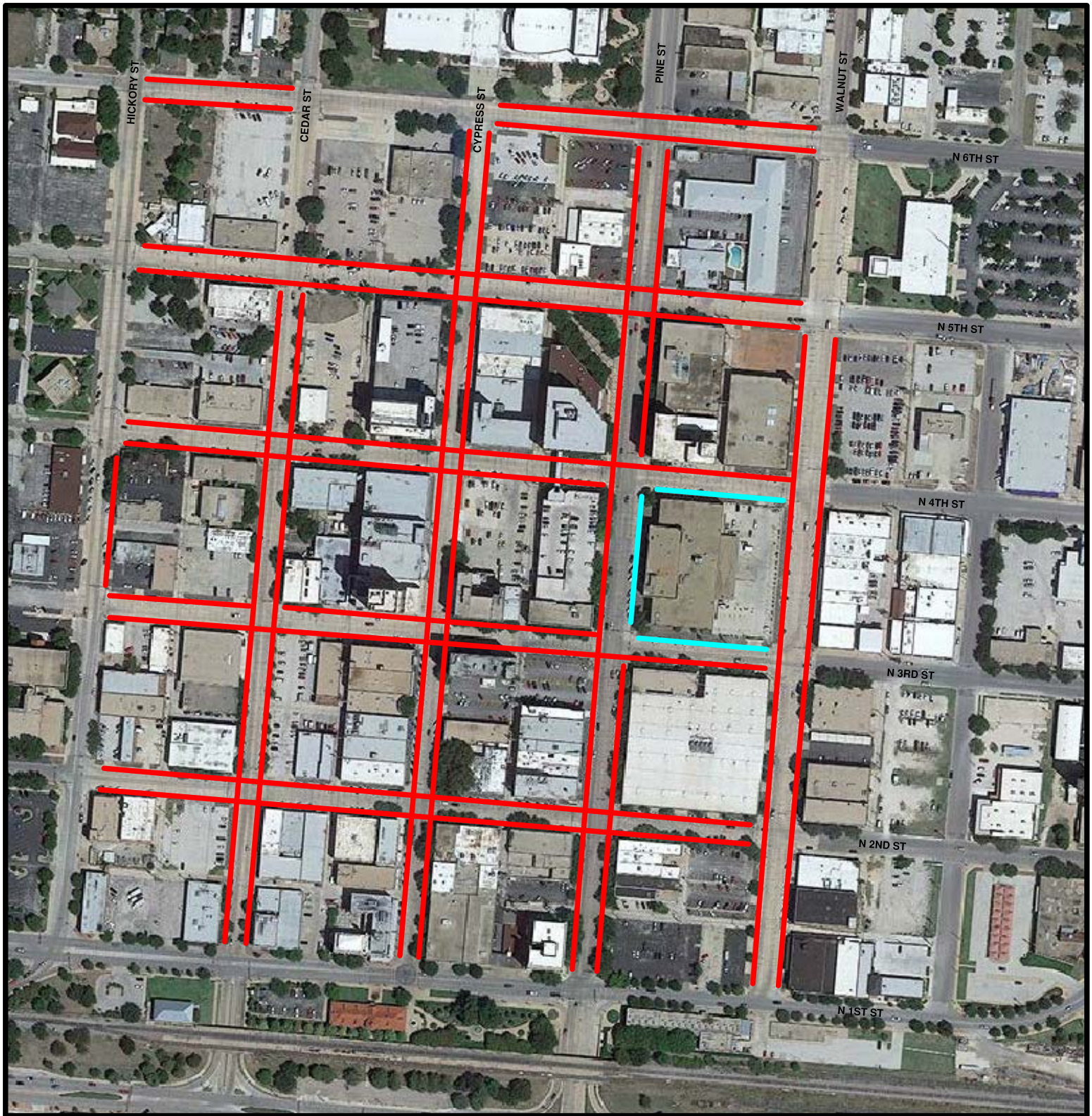
Checked By: S. CHANDLER

Horizontal Scale: 1"=600'

Vertical Scale: N.T.S.

Computer File Name:
PARKING MAPS

Date: SEPTEMBER 2020



LEGEND

——— TWO HOUR PARKING

——— ONE HOUR PARKING

——— METERED PARKING



Sheet
1
of
1

CITY OF ABILENE, TEXAS
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

CENTRAL BUSINESS DISTRICT PROPOSED PARKING TIME

Designed By: S. CHANDLER

Drawn By: T. MATTHEWS

Checked By: S. CHANDLER

Horizontal Scale: 1"=600'

Vertical Scale: N.T.S.

Computer File Name:
PARKING MAPS

Date: SEPTEMBER 2020

Parking...

Charlie Wolfe <charles.l.wolfe@gmail.com>

Wed, Sep 30, 2020 at 10:04 AM

To: "Hanna, Robert" <robert.hanna@abilenetx.gov>

Cc: Kevin Phillips <kphillips@harrisabilene.com>, Michael Rice <michael.rice@abilenetx.gov>

As the owners of the new Cedar Terrace downtown apartments,
we would like to formally request that the on-street parking limit be removed on the street parking next to the apartments.
Specifically, on the south side of North 4th from the alley between Hickory and Cedar to Cedar street.
and on the west side of Cedar from North 4th to driveway for 342 Cedar
Be believe this would be more compatible with the residential usage that the property now has.

Charlie Wolfe
Voice/Cell/Text 325-669-4203

[Quoted text hidden]

ORDINANCE NO. _____

AN ORDINANCE AMENDING CHAPTER 18, “MOTOR VEHICLES AND TRAFFIC,” ARTICLE VIII, “SCHEDULES,” SECTION 18-299, “PARKING TIME LIMITED,” AND SECTION 18-300, “PARKING METER ZONES” AS SET OUT BELOW; AND CALLING A PUBLIC HEARING.

WHEREAS, the Mayor’s Downtown Task Force, has made various recommendations regarding the improvements of available on-street parking, metered zoned parking and limits on timed parking within the downtown area; and,

WHEREAS, the City of Abilene is currently in the process of improving the efficiency of downtown parking; and,

WHEREAS, improvements include removing the metered street parking and adjusting time limits on certain streets within the downtown; and,

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

PART 1: That Chapter 18, “Motor Vehicles and Traffic,” Article VIII, “Schedules,” Section 18-299, “Parking time limited,” of the Abilene City Code be amended as set out in Exhibit “A,” attached hereto and made a part of this Ordinance for all purposes.

PART 2: That Chapter 18, “Motor Vehicles and Traffic,” Article VIII, “Schedules,” Section 18-300, “Parking meter zones,” be amended as set out in Exhibit “A,” attached hereto and made part of this Ordinance for all purposes.

PART 3: That if the provisions of any section, subsection, paragraph, subdivision or clause of this Ordinance shall be adjudged invalid by a court of competent jurisdiction, such judgment shall not effect or invalidate the remainder of any section, subsection, paragraph, subdivision, or clause of this Ordinance.

PART 4: That any person, firm, or corporation violating the provisions of this

Ordinance shall be deemed to have committed a misdemeanor, and upon conviction thereof shall be fined in accordance with Chapter 1 (Section 1-9) of this Code.

PART 5: Each day such violation shall continue, or be permitted to continue, shall be deemed a separate offense. Said ordinance, being a penal ordinance, becomes effective ten (10) days after its publication in the newspaper, as provided by Section 19 of the Charter of the City of Abilene.

PASSED ON FIRST READING this 24th day of September, 2020.

A notice of the time and place, where and when said ordinance would be given a public hearing and considered for final passage was published in the Abilene Reporter-News, a daily newspaper of general circulation in the City of Abilene, said publication being on 27th day of September 2020, the same being more than 24 hours prior to a public hearing being held in the Council Chamber of City Hall in Abilene, Texas, at 8:30 a.m. on the 8th day of October, 2020, to permit the public to be heard.

PASSED ON SECOND AND FINAL READING this 8th day of October 2020.

ATTEST:

CITY SECRETARY

MAYOR

APPROVED:

CITY ATTORNEY

Exhibit A

Sec. 18-299. Parking time limited.

In accordance with the terms of this chapter, and when signs are erected giving notice thereof, no person shall stand, stop or park a vehicle in excess of the indicated period of time specified in this schedule on the indicated days on the indicated sides of the following streets or portions of streets. Each consecutive increment of the time limit during which a vehicle remains continuously parked shall be deemed to be a separate offense.

(a) Two hour limit: 8:00 a.m. to 5:00 p.m., Monday through Friday:

<u>Street</u>	<u>Side</u>	<u>Extent</u>
North 1st St.	North	From Pine St to Cypress St.
North 2nd St.	South	From Pine St. to Cypress St.
	South	From Cedar St. to Hickory St.
	South	From alley east of Walnut St. to the alley west of Walnut St.
	North	From Walnut St. to Pine St.
	South	From Walnut St. to Pine St.
North 3rd St.	North	Cedar St. to Cypress St.
	North	From Hickory St. to alley east of Hickory St.
	South	Hickory St. to Cedar St.
		From alley east of Walnut St. to Walnut St.
	South	From Walnut St. to Pine St.
	North	From Pine St. to alley west of Pine St.
North 4th St.	Both	From Pine St. to Hickory St.
	North	From Walnut St. to Pine St.
North 5th St.	North	From Walnut St. to alley east of Hickory St.
	South	From alley west of Walnut St. to alley east of Hickory St.
Cedar St.	West	From North 2nd St. south to the alley

	West	From North 3rd to North 5th Sts.
	East	From North 2nd St. to North 1st St.
	East	From 150 feet north of North 3rd St. to North 6th St.
	East	From North 1st St. to North 3rd St.
Cypress St.	West	From alley between North 1st St. and North 2nd St. to North 2nd St.
	West	From North 5th St. to North 6th St.
	West	From North 3rd St. to 104 feet south of North 3rd St.
	East	From North 5th St. to North 6th St.
Hickory St.	East	From North 3rd St. to North 4th St.
Pine St.	Both	From North 5th to North 6th Sts.
	East	From North 4th to North 5th Sts.
	West	From 90 feet north of North 2nd St. to North 3rd St.
Pine St.	East	North 1st St. to North 2nd St.
	East	From North 2nd St. to North 3rd St.
Walnut St.	East	From North 2nd St. to North 3rd St.
	East	From North 5th St. north a distance of 155 feet
	East	From North 4th St. north a distance of 195 feet.
	West	From North 2nd St. to 100 feet south of North 5th St.
<u>North 2nd St.</u>	<u>Both</u>	<u>From Walnut St. to Hickory St.</u>
<u>North 3rd St.</u>	<u>Both</u>	<u>From Pine St. to Hickory St.</u>
	<u>South</u>	<u>From Walnut St. to Pine St.</u>
<u>North 4th St.</u>	<u>Both</u>	<u>From Pine St. to Cedar St.</u>
	<u>North</u>	<u>From Walnut St. to Pine St.</u>
	<u>South</u>	<u>From alley between Cedar St. and Hickory St. to Hickory St.</u>
<u>North 5th St.</u>	<u>Both</u>	<u>From Walnut St. to Hickory St.</u>
<u>North 6th St.</u>	<u>Both</u>	<u>From Walnut St. to Cypress St.</u>

	<u>Both</u>	<u>From Cedar St. to Hickory St.</u>
<u>Cedar St.</u>	<u>Both</u>	<u>From North 1st St. to North 3rd St.</u>
	<u>East</u>	<u>From North 3rd St. to North 5th St.</u>
	<u>West</u>	<u>From North 3rd Street to 190 feet north of North 3rd St.</u>
	<u>West</u>	<u>From North 4th St. to North 5th St.</u>
<u>Cypress St.</u>	<u>Both</u>	<u>North 1st St. to North 6th St.</u>
<u>Hickory St.</u>	<u>East</u>	<u>From North 3rd St. to North 4th St.</u>
<u>Pine St.</u>	<u>West</u>	<u>From North 1st St. to North 6th St.</u>
	<u>East</u>	<u>From North 1st St. to North 3rd St.</u>
	<u>East</u>	<u>From North 4th St. to North 6th St.</u>
<u>Walnut</u>	<u>Both</u>	<u>From North 2nd St. to North 5th St.</u>

(b) One hour limit: 8:00 a.m. to 5:00 p.m., Monday through Friday:

<u>Street</u>	<u>Side</u>	<u>Extent</u>
North 2nd St.	North	From Cypress St. to Cedar St.
	North	From Cedar St. to Hickory St.
	North	From Pine St. to Cypress St.
	South	From Cypress St. to Cedar St.
North 3rd St.	North	From Cypress St. to alley west of Pine St.
	North	From 45 feet west of Mesquite St. to alley west of Mesquite St.
	South	From Mesquite St. to alley west of Mesquite St.
	South	From Pine St. to Cedar St.
North 5th St.	South	From Walnut St. to alley west of Walnut St.
North 6th St.	North	From Hickory St. to the alley east of Hickory.
Cedar St.	West	From North 2nd St. to North 3rd St.

	East	From North 3rd St. north a distance of 150 feet
Cypress St.	West	From 80 feet north of North 1st St. to alley between North 1st St. and North 2nd St.
	East	From North 1st St. to North 5th St.
	West	From 104 feet south of North 3rd St. to North 2nd St.
	West	From North 3rd St. to North 5th St.
Mesquite St.	West	From 90 feet north of North 3rd St. to 160 feet south of North 4th St.
Pine St.	West	From North 1st St. to 90 feet north of North 2nd St.
	West	From North 3rd to North 5th Sts.
Walnut St.	East	From North 3rd to North 4th St.
	West	From North 5th St. to south a distance of 100 feet.
<u>North 3rd St.</u>	<u>North</u>	<u>From Pine St. to Walnut St.</u>
<u>North 4th St.</u>	<u>South</u>	<u>From Pine St. to Walnut St.</u>
<u>Pine St.</u>	<u>East</u>	<u>From North 3rd St. to North 4th St.</u>

(c) One hour limit: 8:00 a.m. to 4:00 p.m., school days only:

<u>Street</u>	<u>Side</u>	<u>Extent</u>
North 5th Street	South	From Shelton Street to alley east of Shelton Street
North 6th Street	North	150 feet east of Fannin St. to 70 feet east of Burger St.
South 38th St.	North	From Sayles Blvd. west 260 feet
	South	From Sayles Blvd. west 240 feet
North 19th St.	North	Burger St. to alley west of Burger St.
Burger St.	West	From North 3rd St. to North 6th St.
	East	From 150 feet north of North 3rd St. to North 6th St.

Cooke St.	North	From Sayles Blvd. west a distance of 360 feet
	South	From Sayles Blvd. west a distance of 270 feet
Fannin St.	West	From 70 feet north of North 3rd St. to North 6th St.
	East	From North 6th St. to alley south of North 6th St.
	East	From 120 feet south of the alley south of North 6th St. to 190 feet north of North 3rd St.
Grand Ave.	East	From 300 feet south of South 35th St. to Sayles Blvd.
	West	From Moore St. to alley north of Cooke St.
Green St.	West	From 180 feet north of North 3rd St. to North 6th St.
Green St.	East	From 120 feet north of North 3rd St. to alley south of North 6th St.
Highland Ave.	East	From Sayles Blvd. to south 35th St.
Highland Ave.	West	From Sayles Blvd. north 250 feet
Moore St.	Both	From Sayles Blvd. to Erie St.
Shelton St.	East	From North 6th St. north a distance of 280 feet
	Both	From North 3rd St. to North 6th St.

(d) Forty-five minute limit: 8:00 a.m. to 5:00 p.m., Monday through Friday:

<u>Street</u>	<u>Side</u>	<u>Extent</u>
Campus Court	West	From point 150 feet north of East North 16th St. to a point 100 feet south of East North 18th St.
College Dr.	Both	From Campus Court to an alley west of Campus Court

- (e) Thirty-minute limit: At any time: [Reserved]
- (f) Reserved.
- (g) Reserved.
- (h) Reserved.
- (i) Reserved.
- (j) Reserved.
- (k) One hour limit: 8:00 a.m. to 5:00 p.m., Sunday through Saturday:

<u>Street</u>	<u>Side</u>	<u>Extent</u>
South 4th St.	South	Oak St. to Pecan St.
South 5th St.	North	Oak St. to Pecan St.

- ~~(l) Two hour limit: 8:00 a.m. to 2:00 p.m., Saturday:~~

<u>Street</u>	<u>Side</u>	<u>Extent</u>
Walnut St.	West	From North 3rd St. to North 4th St.

- ~~(m) One hour limit: 8:00 a.m. to 2:00 p.m., Saturday:~~

<u>Street</u>	<u>Side</u>	<u>Extent</u>
Walnut St.	East	From North 3rd St. to North 4th St.

Sec. 18-300. Parking meter zones. Reserved.

~~In accordance with the terms of this chapter, parking meter zones are hereby established upon the following parking lots, streets or portions of streets, in which the parking of vehicles shall be regulated by parking meters between the hours of 8:00~~

~~a.m. and 6:00 p.m. of any day, except Saturdays, Sundays and legal holidays, except as otherwise specified herein:~~

~~(a) — 4 hour limit: At Rate A.~~

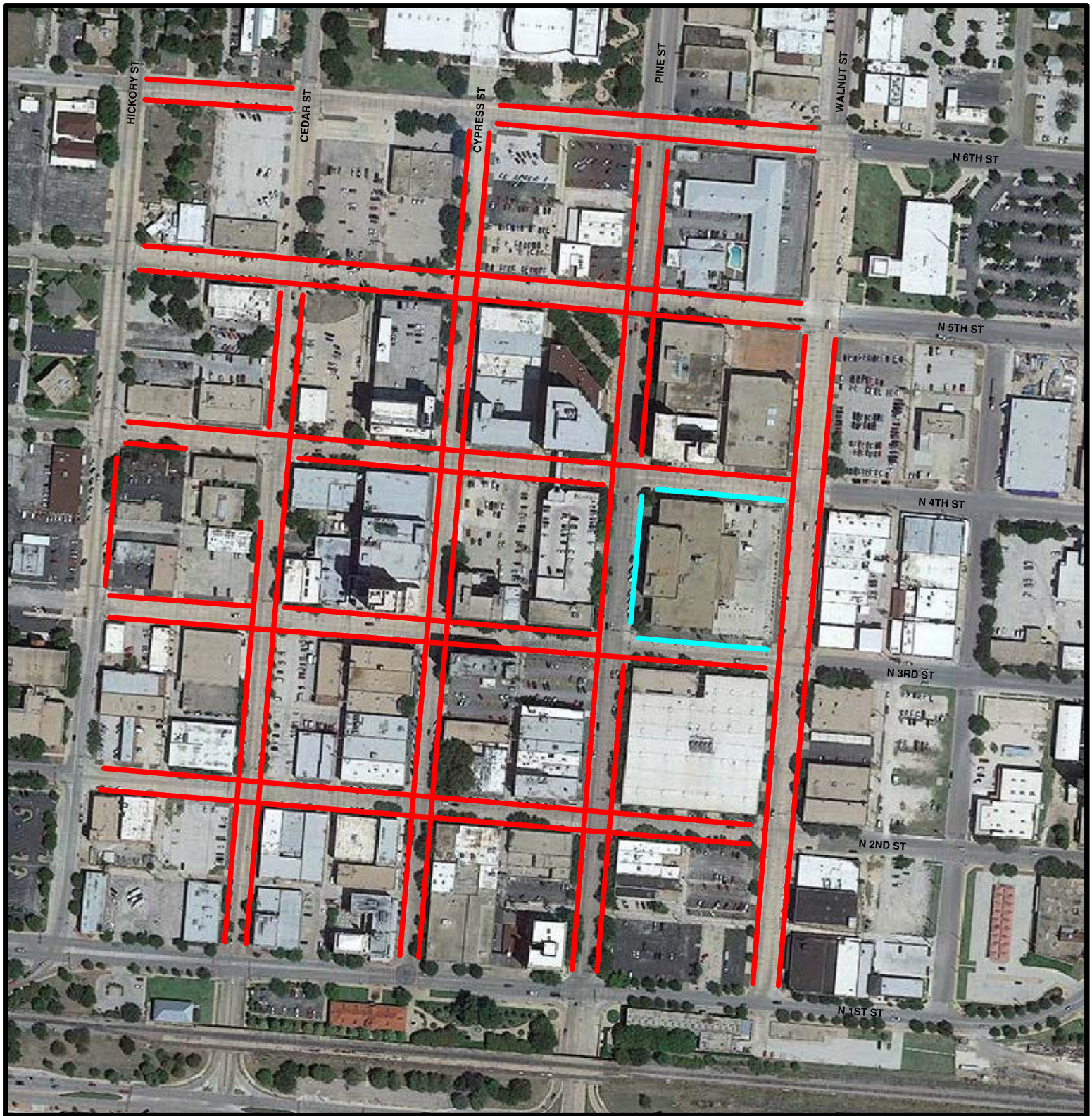
<u>Street</u>	<u>Side</u>	<u>Extent</u>
200 Block Cedar St.	East	All spaces

~~(b) — 24 minute limit: At Rate B.~~

<u>Street</u>	<u>Side</u>	<u>Extent</u>
North 3rd St.	North	From Pine to Walnut Sts.
North 4th St.	South	From Walnut to Pine Sts.
Pine St.	East	From North 3rd to North 4th Sts.

~~The time limits prescribed by this section shall be the maximum time for continuous parking within any space within the applicable parking meter zone. It shall be unlawful for any person to cause, allow, permit or suffer any vehicle registered in his name, operated by him or in his custody or control to be parked or remain in any parking space for any period of time in excess of the maximum period of time prescribed for such space by this section, or be parked or remain in any parking space while the meter controlling such space is displaying a signal or otherwise indicating that the vehicle occupying such space has been parked therein beyond the period of time permitted by this section or other provisions of this chapter. The enumeration of the foregoing violations shall not be exclusive, and shall not relieve any person from the duty to observe other and more restrictive provisions of this chapter or other applicable laws and ordinances.~~

~~In any prosecution charging a violation of this section, proof that the particular vehicle in question was parked or situated in any one parking space governed hereby at different times on the same day shall constitute in evidence a prima facie presumption that such vehicle was continuously parked or continuously remained in such parking space at all times during the period between such different times.~~



LEGEND

——— TWO HOUR PARKING

——— ONE HOUR PARKING

——— METERED PARKING



Sheet
1
of
1

CITY OF ABILENE, TEXAS
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

CENTRAL BUSINESS DISTRICT PROPOSED PARKING TIME

Designed By: S. CHANDLER

Drawn By: T. MATTHEWS

Checked By: S. CHANDLER

Horizontal Scale: 1"=600'

Vertical Scale: N.T.S.

Computer File Name:
PARKING MAPS

Date: SEPTEMBER 2020

Downtown Parking Metered and Time Limited

(G. McCaffery)



Mayor's Downtown Task Force Summary

- Evaluated On-Street Parking, Structured Parking, , and Branding & Marketing of Downtown Abilene
- June 26, 2020 Task Force Recommended Removal of Metered Parking and Changes to Two Hour Parking for Most Downtown Streets
- July 23, 2020 City Council Presentation of the On-Street Parking, Street Configuration and Overall Recommended Alignments
- Existing Ordinance Provides for Various Two Hour, One Hour and Metered Parking Downtown
- Amendment Provides for Two Hour Parking for Most Streets and One Hour Parking Around the US Post Office.



Existing Parking Time Limits and Parking Meter Zones

City of Abilene

Sections 18-299 and 300 Parking Time Limit and Parking Meter Zones Tables

Existing

(a) Two hour limit: 8:00 a.m. to 5:00 p.m., Monday through Friday:

Street	Side	Extent
North 1st St.	North	From Pine St. to Cypress St.
North 2nd St.	South	From Pine St. to Cypress St.
	South	From Cedar St. to Hickory St.
	South	From alley east of Walnut St. to the alley west of Walnut St.
	North	From Walnut St. to Pine St.
	South	From Walnut St. to Pine St.
North 3rd St.	North	Cedar St. to Cypress St.
	North	From Hickory St. to alley east of Hickory St.
	South	Hickory St. to Cedar St.
		From alley east of Walnut St. to Walnut St.
	South	From Walnut St. to Pine St.
	North	From Pine St. to alley west of Pine St.
North 4th St.	Both	From Pine St. to Hickory St.
	North	From Walnut St. to Pine St.
North 5th St.	North	From Walnut St. to alley east of Hickory St.
	South	From alley west of Walnut St. to alley east of Hickory St.
Cedar St.	West	From North 2nd St. south to the alley
	West	From North 3rd St. to North 5th St.
	East	From North 2nd St. to North 1st St.
	East	From 150 feet north of North 3rd St. to North 6th St.
	East	From North 1st St. to North 3rd St.
Cypress St.	West	From alley between North 1st St. and North 2nd St. to North 2nd St.
	West	From North 5th St. to North 6th St.
	West	From North 3rd St. to 104 feet south of North 3rd St.
	East	From North 5th St. to North 6th St.
Hickory St.	East	From North 3rd St. to North 4th St.
Pine St.	Both	From North 5th St. to North 6th St.
	East	From North 4th St. to North 5th St.
	West	From 90 feet north of North 2nd St. to North 3rd St.
Pine St.	East	North 1st St. to North 2nd St.
	East	From North 2nd St. to North 3rd St.
Walnut St.	East	From North 2nd St. to North 3rd St.
	East	From North 5th St. north a distance of 155 feet
	East	From North 4th St. north a distance of 195 feet
	West	From North 2nd St. to 100 feet south of North 5th St.

(b) One hour limit: 8:00 a.m. to 5:00 p.m., Monday through Friday:

Street	Side	Extent
North 2nd St.	North	From Cypress St. to Cedar St.
	North	From Cedar St. to Hickory St.
	North	From Pine St. to Cypress St.
	South	From Cypress St. to Cedar St.
North 3rd St.	North	From Cypress St. to alley west of Pine St.
	North	From 45 feet west of Mesquite St. to alley west of Mesquite St.
	South	From Mesquite St. to alley west of Mesquite St.
	South	From Pine St. to Cedar St.
North 5th St.	South	From Walnut St. to alley west of Walnut St.
North 6th St.	North	From Hickory St. to the alley east of Hickory St.
Cedar St.	West	From North 2nd St. to North 3rd St.
	East	From North 3rd St. north a distance of 150 feet
Cypress St.	West	From 80 feet north of North 1st St. to alley btwn. North 1st St. and North 2nd St.
	East	From North 1st St. to North 5th St.
	West	From 104 feet south of North 3rd St. to North 2nd St.
	West	From North 3rd St. to North 5th St.
Mesquite St.	West	From 90 feet north of North 3rd St. to 160 feet south of North 4th St.
Pine St.	West	From North 1st St. to 90 feet north of North 2nd St.
	West	From North 3rd St. to North 5th St.
Walnut St.	East	From North 3rd St. to North 4th St.
	West	From North 5th St. south a distance of 100 feet

(l) Two hour limit: 8:00 a.m. to 2:00 p.m., Saturday:

Street	Side	Extent
Walnut St.	West	From North 3rd St. to North 4th St.

(m) One hour limit: 8:00 a.m. to 2:00 p.m., Saturday:

Street	Side	Extent
Walnut St.	East	From North 3rd St. to North 4th St.

Parking Meter Zones

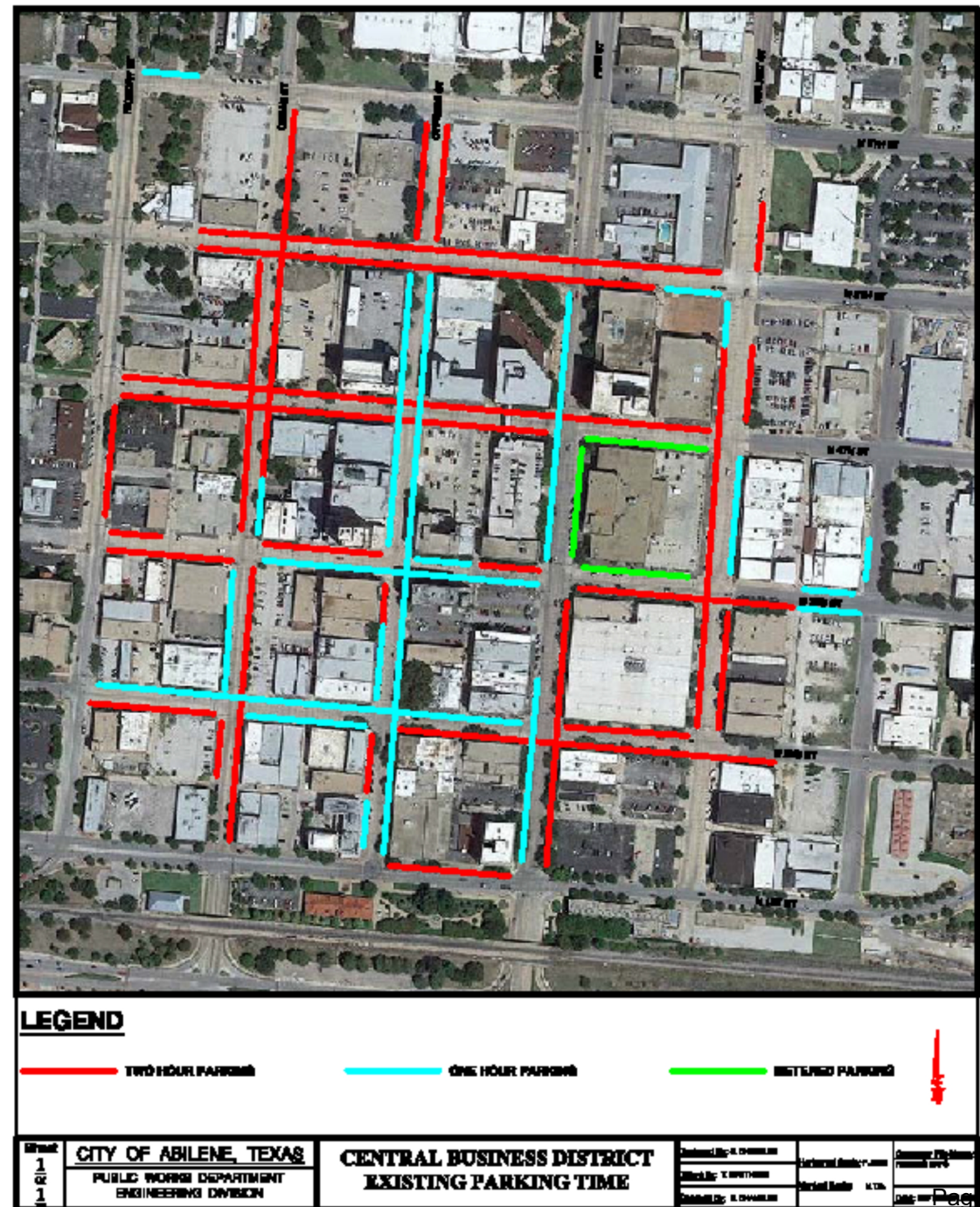
(a) 4-hour limit: At Rate A.

Street	Side	Extent
200 Block Cedar St.	East	All spaces

(b) 24-minute limit: At Rate B.

Street	Side	Extent
North 3rd St.	North	From Pine St. to Walnut St.
North 4th St.	South	From Walnut St. to Pine St.
Pine St.	East	From North 3rd St. to North 4th St.

Existing Parking Time Limits and Parking Meter Zones



Proposed Parking Time Limits per the Mayor's Downtown Task Force

New Time Limit Parking Tables

(a) Two hour limit: 8:00 a.m. to 5:00 p.m., Monday through Friday:

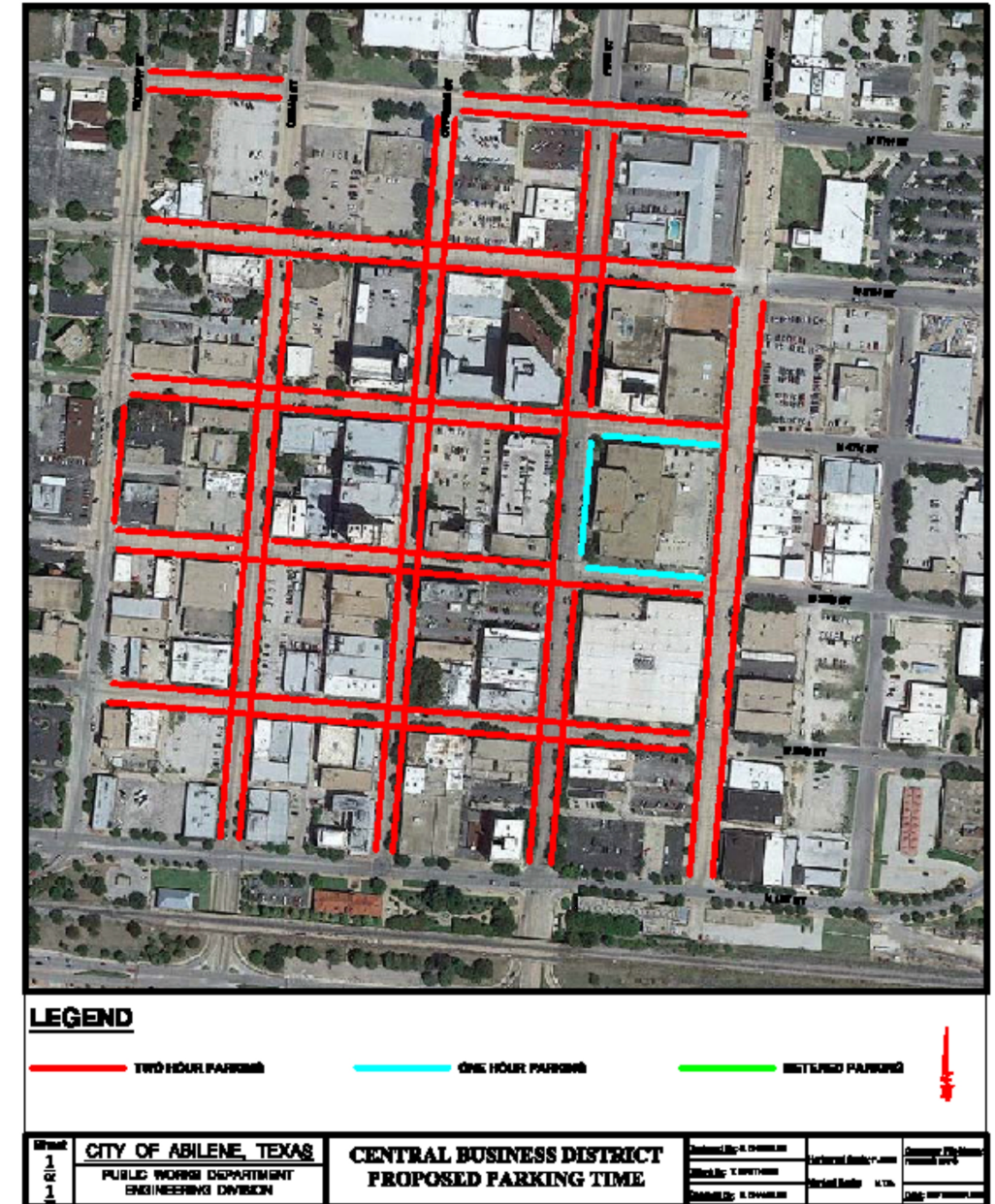
<u>Street</u>	<u>Side</u>	<u>Extent</u>
North 2nd St.	Both	From Walnut St. to Hickory St.
North 3rd St.	North	From Pine St. to Hickory St.
	South	From Walnut St. to Hickory St.
North 4 th St.	Both	From Pine St. to Hickory St.
	North	From Walnut St. to Pine St.
North 5th St.	Both	From Walnut St. to Hickory St.
North 6th St.	Both	From Walnut St. to Cypress St.
	Both	From Cedar St. to Hickory St.
Cedar St.	Both	From North 1 st St. to North 5th St.
Cypress St.	Both	North 1st St. to North 6th St.
Hickory St.	East	From North 3rd St. to North 4th St.
Pine St.	West	From North 1st St. to North 6th St.
	East	From North 1st St. to North 3rd St.
	East	From North 4th St. to North 6th St.
Walnut	Both	From North 2nd St. to North 5th St.

(b) One hour limit: 8:00 a.m. to 5:00 p.m., Monday through Friday:

North 3rd St.	North	From Pine St. to Walnut St.
North 4th St.	South	From Pine St. to Walnut St.
Pine St.	East	From North 3rd St. to North 4th St.



Proposed Parking Time Limits per the Mayor's Downtown Task Force



Proposed Parking Time Limits per the Mayor's Downtown Task Force and the Cedar Apartments Request

New Time Limit Parking Tables

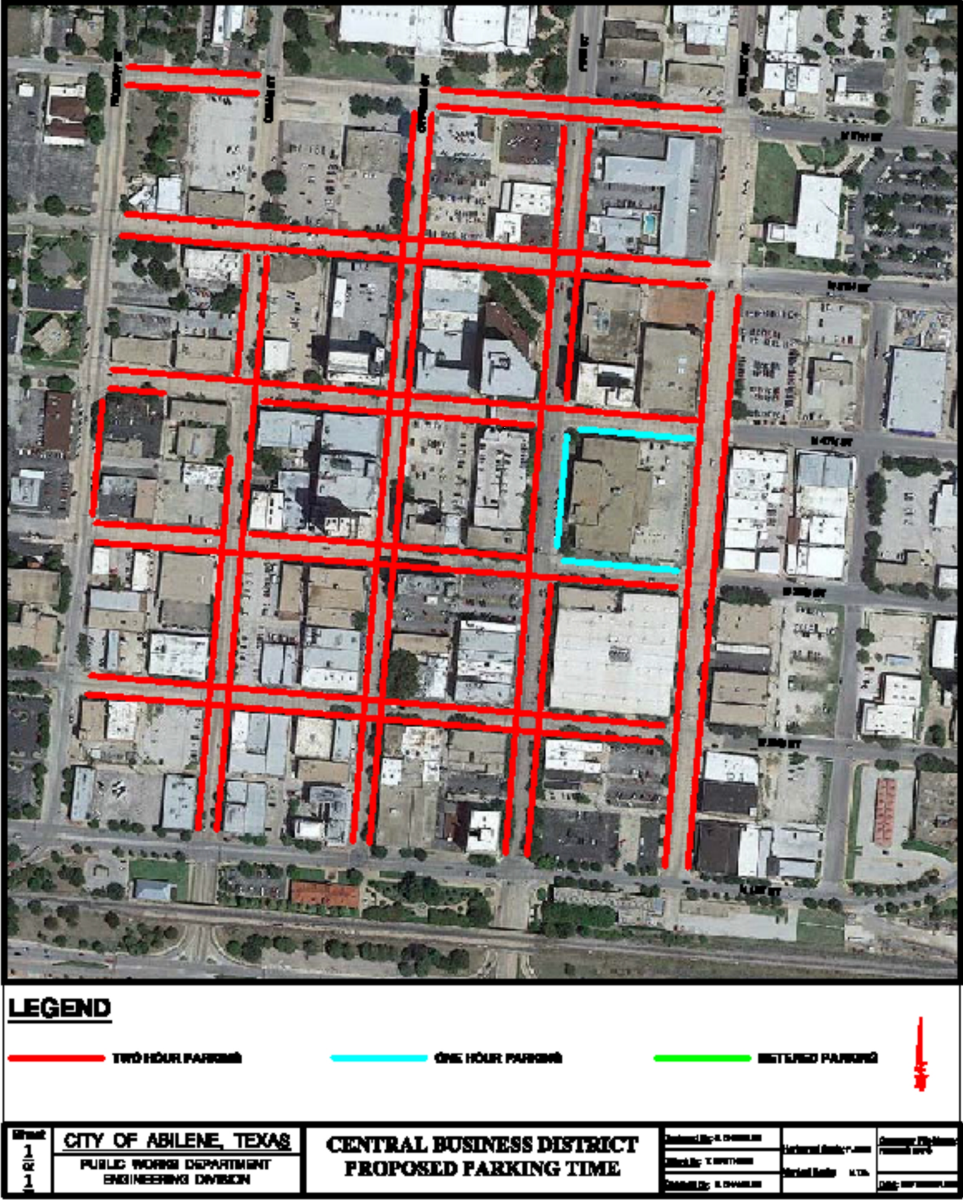
(a) Two hour limit: 8:00 a.m. to 5:00 p.m., Monday through Friday:

<u>Street</u>	<u>Side</u>	<u>Extent</u>
North 2nd St.	Both	From Walnut St. to Hickory St.
North 3rd St.	North	From Pine St. to Hickory St.
	South	From Walnut St. to Hickory St.
North 4 th St.	Both	From Pine St. to Hickory St.
	North	From Walnut St. to Pine St.
North 5th St.	Both	From Walnut St. to Hickory St.
North 6th St.	Both	From Walnut St. to Cypress St.
	Both	From Cedar St. to Hickory St.
Cedar St.	Both	From North 1 st St. to North 3 rd St.
	East	From North 3 rd Street to North 5 th Street
	West	From North 3 rd Street to 190 feet north of North 3 rd Street
	West	From North 4 th Street to North 5 th Street
Cypress St.	Both	North 1st St. to North 6th St.
Hickory St.	East	From North 3rd St. to North 4th St.
Pine St.	West	From North 1st St. to North 6th St.
	East	From North 1st St. to North 3rd St.
	East	From North 4th St. to North 6th St.
Walnut	Both	From North 2nd St. to North 5th St.

(b) One hour limit: 8:00 a.m. to 5:00 p.m., Monday through Friday:

North 3rd St.	North	From Pine St. to Walnut St.
North 4th St.	South	From Pine St. to Walnut St.
Pine St.	East	From North 3rd St. to North 4th St.

Proposed Parking
 Time Limits per the
 Mayor’s Downtown
 Task Force
 and the
 Cedar Apartments
 Request



QUESTIONS?





**City Council
Agenda Memo**

City Council Meeting Date: 10/8/2020

TO: Robert Hanna, City Manager

FROM: Mike Warrix, Director

SUBJECT: **10. Ordinance (Final Reading) Z-2020-10: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on a request from Sharon Riley, agent H.C. Zachry, to amend existing Planned Development (PD) District Number 32 by removing from subparagraph (f) 1 and 2 stating “no other signs shall be allowed” from Lots 25-30 and allowing all signage allowed in General Retail (GR) (Mike Warrix)**

GENERAL INFORMATION

Lot 232 is the subject property of potential construction for an off-site advertising billboard. Such a billboard is not permitted due to the current restrictions of the Planned Development Ordinance, although the underlying zoning for this lot is General Retail (GR) which is a zoning district that ordinarily permits off-site advertising billboards. The applicant is requesting to amend the current PD ordinance to allow one off-site advertising billboard on Lot 232. This amendment shall provide an updated graphic concept plan which illustrates the re-platting of Lot 30 to accurately reflect the lots which currently exist within this PD.

SPECIAL CONSIDERATIONS

The applicant has applied for their lot only to be allowed off-site advertising. However, due to verbiage in the Planned Development (PD), it was the opinion of staff to include the entire section of the PD that would be effected by the change if approved. Therefore a portion of this rezone request was initiated by staff.

FUNDING/FISCAL IMPACT

STAFF RECOMMENDATION

Staff recommends approval.

BOARD OR COMMISSION RECOMMENDATION

The Planning and Zoning Commission recommends approval of this item by a vote of five (5) to zero (0).

ATTACHMENTS:

1. 1- Z-2020-10 recommended PD ordinance (2)
2. 2- Z-2020-10 Council Staff Report
3. 3- Z-2020-10 Council Presentation

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF ABILENE, TEXAS, AMENDING CHAPTER 23, "LAND DEVELOPMENT CODE," OF THE ABILENE CITY CODE AND CONCERNING PD-32, A PLANNED DEVELOPMENT DISTRICT, AS WELL AS ORDINANCE NUMBERS 49-1985 AND 77-1986; CALLING A PUBLIC HEARING; PROVIDING A PENALTY AND AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

PART 1: That the Land Development Code of the City of Abilene is hereby amended by changing Ordinance Number 77-1986 specifically as set out in Exhibit "A" attached hereto and made a part of this ordinance for all purposes.

PART 2: That any person, firm or corporation violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not more than Five Hundred Dollars (\$500.00). Each day such violation shall continue or be permitted to continue, shall be deemed a separate offense.

PASSED ON FIRST READING this 24th day of September 2020.

A notice of the time and place, where and when said ordinance would be given a public hearing and considered for final passage, was published in the Abilene Reporter-News, a daily newspaper of general circulation in the City of Abilene, said publication being on the 15th day of August, 2020, the same being more than fifteen (15) days prior to a public hearing to be held in the Council Chamber of the City Hall in Abilene, Texas, at 8:30 a.m., on the 8th day of October, 2020, to permit the public to be heard prior to final consideration of this ordinance. Said ordinance, being a penal ordinance, becomes effective ten (10) days after its publication in the newspaper, as provided by Section 19 of the Charter of the City of Abilene.

PASSED ON SECOND AND FINAL READING THIS 8th day of October, 2020.

ATTEST:

Shawna Atkins,
City Secretary

Anthony Williams,
Mayor

APPROVED:

Stanley Smith,
City Attorney

ORDINANCE NO. _____

Exhibit "A"
2nd Amendment to Ordinance No. 49-1985

Amend Ordinance No. 49-1985 and Ordinance 77-1986 as follows:

DELETE: Existing Part 7, Paragraph 3, subparagraph (f), which reads as follows:

f. For all office-type uses as categorized by the Zoning Ordinance, including medical or dental clinics or offices, and those residential uses permitted in a Shopping Center district, either of the following standards for signs shall apply at the proponent's option:

1. Business and/or Identification Sign: Freestanding, maximum thirty-six (36) square feet in area; maximum (12) feet in height; located at least ten (10) feet from all property lines; one sign per use; illumination permitted. A nameplate or placard is allowed for each use and shall not exceed three (3) square feet in area and is to be wall-mounted.

All other sign regulations prescribed for Office-type uses shall furthermore apply and no other sign shall be allowed.

-or-

2. Business and/or Identification Sign: One wall sign no larger than 25% of the area of the wall upon which it is located; only one wall sign per use. A nameplate or placard is allowed for each use and shall not exceed three (3) square feet in area and is to be wall-mounted.

All other sign regulations prescribed for office-type uses shall furthermore apply, and no other signs shall be allowed.

ADD: New Part 7, Paragraph 3, subparagraph (f), to read as follows:

f. For all office-type uses as categorized by the Zoning Ordinance, including medical or dental clinics or offices, and those residential uses permitted in a General Retail district, either of the following standards for signs shall apply at the proponent's option:

1. Business and/or Identification Sign: Freestanding, maximum thirty-six (36) square feet in area; maximum (12) feet in height; located at least ten (10) feet from all property lines; one sign per use; illumination permitted. A nameplate or placard is allowed for each use and shall not exceed three (3) square feet in area and is to be wall-mounted.

All other on-site regulations pertinent to Office (O) zoning districts shall otherwise be applicable.

-or-

ORDINANCE NO. _____

EXHIBIT "A"

PAGE 3

2. Business and/or Identification Sign: One wall sign no larger than 25% of the area of the wall upon which it is located; only one wall sign per use. A nameplate or placard is allowed for each use and shall not exceed three (3) square feet in area and is to be wall-mounted.

All other on-site sign regulations pertinent to Office (O) zoning districts shall otherwise be applicable.

ADD: New Part 7, Paragraph 3, subparagraph (g), to read as follows:

- g. Off-site advertising signs ordinarily allowed within General Retail (GR) zoning districts shall be permitted, subject to all applicable standards governing location, size, height, spacing, et cetera.



ZONING CASE Z-2020-10

STAFF REPORT



REQUEST: Amend existing Planned Development District Number 32 (PD 32)

APPLICANT:

Owner: Sharon Riley
Agent: HC Zachry and City of Abilene

HEARING DATES:

P & Z Commission: September 1, 2020
City Council 1st Reading: September 24, 2020
City Council 2nd Reading: October 8, 2020

LOCATION:

2050 Antilley Road
Legal description: Lot 232 of Humana West Addition

BACKGROUND:

A Planned Development (PD) District is one that permits flexibility in building siting, mixtures of housing types and land uses, usable open spaces, and the preservation of significant natural features in new development.

Planned Development District 32 (PD 32) was approved in May of 1985. PD 32 is intended to provide a mixture of retail, office and medical care facilities. The PD 32 ordinance was amended by City Council in September of 1986 to modify sign regulations on lots 25-30 as identified on the originally provided site exhibit. This amendment limits all free standing signs constructed on lots 25-30 to 36 square feet in area with a maximum height of 12-feet. Furthermore, all other sign regulations prescribed by office zoning would apply and no other signs would be permitted. Since this time Lot 30 has been subdivided into four new lots which are respectively Lots 130, 131, 232, 233 of Humana West Addition.

PROPOSAL AND REQUESTED ACTION:

The applicant is the owner of Lot 232, the proposed site of an “off-site” advertising billboard. Such a billboard is not permitted due to the current restrictions of the PD 32 ordinance, although the underlying zoning for this lot is General Retail (GR) which is a zoning district that ordinarily permits off-site advertising billboards. The applicant is requesting to amend the current PD 32 ordinance to allow one off-site advertising billboard on Lot 232. This amendment shall provide an updated graphic concept plan which illustrates the replatting of Lot 30 to accurately reflect the lots which currently exist within this PD. The verbiage in the existing PD restricts lots 25-29 and Lot 30, which are now Lots 130, 131, 232, 233 respectively, in the area of signage. It is the opinion of staff that by amending the PD the other lots will be affected by the change. As a result, the City has requested to include the additional lots as part of this request.

APPLICATION REVIEW:

According to Section 1.4.1.4 (Criteria for Approval) in the City of Abilene Land Development Code, the Planning & Zoning Commission and City Council may consider the following factors in making a determination regarding requested zoning changes:

(1) Whether the proposed zoning amendment implements the policies of the adopted Comprehensive Plan, including the land use classification of the property on the Future Land Use and Development Plan map, as amended;

The subject property is located near the intersection of Highway 83-84 and Antilley Road. The Future Land Use and Development Plan Map considers this area to be a special activity center. The Comprehensive Plan states that special activity centers should provide unique services and uses to the local and regional economy, this particular special activity center serves as a medical hub for South Abilene and provide a mixture of both medical office and retail uses. It is customary for billboard advertising signs to be located near interstate and major arterial interchanges such as this. These locations provide the greatest exposure for promotion of businesses throughout Abilene.

(2) Whether the proposed zoning amendment will be appropriate in the immediate area of the subject property.

Abilene's Land Development Code provides a list of roads which permit off-site advertising signs. Antilley road is included on this list of roads that allow billboards. The immediate area of the subject property is entirely commercial in nature; therefore installation of a billboard will not appear out of place or inconsistent with the surrounding land uses. Furthermore, the base zoning of the subject property within PD 32 is (GR), thereby permitting all uses ordinarily allowed within this zoning classification. Traditionally, off-site advertising signs are permitted within General Retail (GR) zoning.

	Zoning	Existing Land Use
North	PDD-32	Vacant
South	PDD-25	Medical Use
East	PDD-32	Medical Use
West	PDD-32	General Retail

(3) Whether the proposed change is in accord with any existing or proposed plans for providing public schools, streets, water supply, sanitary sewers, and other public services and utilities to the area.

The proposed change will not adversely affect existing utilities and will not be required to provide public improvements and services.

(4) Any other factors which will substantially affect the public health, safety, morals, or general welfare.

It is the opinion of staff that the proposed rezoning and potential uses would not negatively affect the public health, safety, morals, or general welfare of the City of Abilene.

STAFF COMMENTS:

Abilene's Land Development Code identifies zoning districts which permit off-site advertising signs, General Retail (GR) zoning is one such zoning classification that is listed. The subject property falls within a Planned Development District with a base underlying zoning of General Retail (GR). Furthermore, Abilene's Land Development Code provides a list of roads which permit off-site advertising signs, specifically "Type II" signs, Antilley Road is listed as an appropriate road to locate off-site advertising Type II signs. Type II signs are be defined as off-site advertising signs permitted along arterial and collector roads as identified in

Abilene’s Thoroughfare Plan, Type II signs are permitted to have a maximum area of 378 square feet and maximum height of 35-feet. Lastly, the proposed location of this sign meets all separation requirements for off-site advertising signs as outlined in Section 4.2.8.9 in Abilene’s Land Development Code.

STAFF RECOMMENDATION:

Staff recommends approval.

PLANNING AND ZONING COMMISSION RECOMMENDATION:

The Planning & Zoning Commission recommended approval of this request by a vote of five (5) to zero (0) on Tuesday, September 1, 2020.

NOTIFICATION:

The Planning Services Division sent, with certificate of mailing, public notices to the applicant and to all owners of property within a 200-foot radius of the subject property.

Owner	Situs	Response
6050 HOSPITAL DRIVE LLC	6050 HOSPITAL DR	
ABILENE SOUTH REALTY LP	2015 HOSPITAL PL	
ABILENE SOUTH REALTY LP	2009 HOSPITAL PL	
ARMC LP	1888 ANTILLEY RD	
ASMO PROPERTIES LLC	2074 ANTILLEY RD	Opposed
CENTRAL PARK 91 JV		In Favor
COULTER PROPERTIES LLC	1901 ANTILLEY RD	
FIRST FINANCIAL BANK NA	1801 ANTILLEY RD	
FIRST FINANCIAL BANK NA	1725 ANTILLEY RD	In Favor
GFC LEASING CORP	24 HOSPITAL DR	
GFC LEASING CORP	1926 ANTILLEY RD	
HIT VENTURES LLC	1925 HOSPITAL PL	Opposed
HUMANA WEST LTD	5 HOSPITAL DR	
HUMANA WEST LTD	2 HOSPITAL DR	
MANGREM JOSEPH T & KELSI D	6 HOSPITAL DR	
MANGREM JOSEPH T & KELSI D	7 HOSPITAL DR	In Favor
NC SCHI INC	23 HOSPITAL DR	
NC SCHI INC	21 HOSPITAL DR	
PHYSICIAN RELIANCE INVEST	1957 ANTILLEY RD	
PROSPERITY BANK	2001 ANTILLEY RD	
RILEY SHARON		In Favor
RILEY SHARON	2050 ANTILLEY RD	In Favor
SHRINGERI AKKAMAHADEVI P	2100 ANTILLEY RD	
TENISON OIL CO	2005 HOSPITAL PL	In Favor
TENISON OIL CO	1963 HOSPITAL PL	In Favor
WILLIS THOMAS LEE	8 HOSPITAL DR	
WILLIS THOMAS LEE	4 HOSPITAL DR	

ATTACHMENTS:

- Application
- Site Plan Exhibit
- PowerPoint





Hoff's
Burgers

SUBWAY





Development Application

Planning

- | | | | |
|--|---|---|---|
| ☐ Conditional Use | ☐ Special Exceptions | ☐ Rezoning | ☐ Variance |
| ☒ PDD Amendment | ☐ Street Name Change | ☐ Thoroughfare Abandonment | ☐ Easement Release |
| ☐ Historic Certification of Appropriateness | ☐ Historic Project Tax Reduction | | |

Relief Procedures

- | | | | |
|--|---|---|---------------------------------|
| ☐ Petition for Relief
Other: _____ | ☐ Proportionality Appeal | ☐ Vested Rights Petition | ☐ Appeal |
|--|---|---|---------------------------------|

Project Name: Sharon's Barbeque D.S. Jul Sign

Address: 2050 Antilley Rd No. of lots: 1 Acreage: _____

Legal Description: _____

Subdivision Name: Humana West Block: _____ Lot: 232

Current Zoning: PDD-32 Proposed Zoning (if applicable): ~~PDD-32~~ ~~Other~~

OWNER AND AUTHORIZATION

Owner Name: Sharon Riley

Address: P.O. Box 3877

City, State, Zip: Abilene, Tex 79604 Fax: _____

Phone: _____ Email: _____

Agent Name: EHT

Address: 402 Cedar

City, State, Zip: Abilene, Tex 79606 Fax: _____

Phone: 698-5560 Email: david.todd@e-hi.com

I hereby certify that I am the owner of the property and further certify that the information provided on this development application is true and correct. I hereby designate the aforementioned agent to act on my behalf for submission, processing, representation, and/or presentation of this development application. The designated agent shall be the principal contact person for responding to all requests for information and for resolving all issues of concern relative to this application.

Signature Owner: _____ Date: 6/4/20

FOR OFFICE USE ONLY

Received: _____ Fee: \$ _____ Receipt No.: _____

Case No.: _____ Reviewed By: _____

Remove from Subparagraph (f) 1 & 2 the wording "no other signs shall be allowed"

THE STATE OF TEXAS

COUNTY OF TAYLOR

Know all men by these presents that the undersigned owner of the real property described on the reverse side hereof, has made, constituted and appointed, and by these presents does make, constitute and appoint H.C. ZACHRY, my true and lawful attorney, for me in my name, place, and stead, to:

(1) File an application for (check all that apply):

- ☒ Zone Change,
- ☐ Plat,
- ☐ Thoroughfare Closure, or
- ☐ Appeal to the Board of Adjustment, and

(2) Appear on my behalf at all necessary meeting of the appropriate board, commission, or City Council, as the case may be.

The undersigned further agrees that this power of attorney may be voluntarily revoked only by written revocation filed with the Planning and Development Services Division for the City of Abilene, Texas.

Witness my hand this 22 day of JUNE, 2020

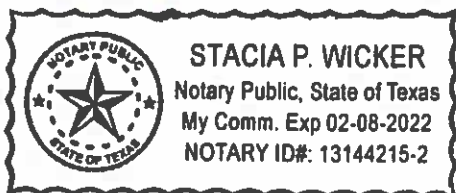
Sharon Riley
Owner

THE STATE OF TEXAS .

COUNTY OF TAYLOR .

BEFORE ME, the undersigned authority, on this date personally appeared Sharon Riley known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he/she executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this 22 day of June, 20 20.



Stacia P. Wicker
Notary Public, Taylor County, Texas

Zoning

ORDINANCE NO. 49-1985

613 0000 3-4

AN ORDINANCE OF THE CITY OF ABILENE, TEXAS, AMENDING CHAPTER 23, SUBPART E, ZONING, OF THE ABILENE MUNICIPAL CODE, CONCERNING HUMANA WEST PLANNED DEVELOPMENT DISTRICT; CALLING A PUBLIC HEARING; PROVIDING A PENALTY AND AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

PART 1: That Chapter 23, Subpart E, known as the Zoning Ordinance of the City of Abilene, is hereby amended; as set out in Exhibit "A," attached hereto and made a part of this ordinance for all purposes.

PART 2: That any person, firm or corporation violating any of the provisions of this chapter shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not more than One Thousand Dollars (\$1,000.00). Each day such violation shall continue or be permitted to continue, shall be deemed a separate offense.

PASSED ON FIRST READING this 9 day of May,
A.D. 19 85.

A notice of the time and place, where and when said ordinance would be given a public hearing and considered for final passage, was published in the Abilene Reporter-News, a daily newspaper of general circulation in the City of Abilene, said publication being on the 5 day of May, 19 85, the same being more than fifteen (15) days prior to a public hearing to be held in the Council Chamber of the City Hall in Abilene, Texas, at 9:00 a.m., on the 23 day of May, 19 85, to permit the public to be heard prior to final consideration of this ordinance. Said ordinance, being a penal ordinance, becomes effective ten (10) days after its publication in the newspaper, as provided by Section 19 of the Charter of the City of Abilene.

PASSED ON SECOND AND FINAL READING this 23 day of _____
May, A.D. 19 85.

ATTEST:

Patricia Patton
CITY SECRETARY

David Stubbeman
MAYOR

APPROVED:

Karen L. Anderson
CITY ATTORNEY

00133

Exhibit "A"

ORDINANCE NO. 49-1985

PART 1: Land Title. Title to land not dedicated to public use and services or for utility purposes and not otherwise designated for development purposes shall remain in the owner thereof, his heirs, assigns, lessees and successors in interest and shall not be the responsibility of the City of Abilene for any purpose.

PART 2: Development Specifications. All development in the Planned Development District shall be in accordance with the maps, topographical and drainage plans, utility plans, architectural drawings, site plan, plat, and any other required plans filed in connection with this requested Planned Development District and are hereby incorporated by reference and included as part of this ordinance. Site Plan (and vicinity map) is attached as Exhibit B.

Further, all agreements, provisions, or covenants which govern the use, maintenance, and continued protection of this P.D.D. are hereby incorporated by reference and included as part of this ordinance. (Some of these documents may be attached as Exhibit C.)

All use and development within the Planned Development District must be in compliance with the general Comprehensive Zoning Ordinance of the City of Abilene except as otherwise specifically provided herein.

PART 3: Building Specifications. All structures in the herein said Planned Development District shall be constructed in accordance with all pertinent building and construction codes of the City of Abilene.

PART 4: Zoning. That Chapter 23, Subpart E, Abilene Municipal Code, known as the Zoning Ordinance of the City of Abilene, is hereby further amended by changing the zoning district boundaries, as hereinafter set forth: From AO (Agricultural Open Space) District to PD MX (Planned Development Mixed Use) District.

That the Planning Director be, and is hereby authorized and directed to change the official Zoning Map of the City of Abilene to correctly reflect the amendments thereto.

PART 5: Legal Description. The legal description of this P.D.D. is as follows:

ORDINANCE NO. 49-1985

EXHIBIT "A"

Page 2

Legal Description:

BEING all that certain lot, tract or parcel of land out of a 64.41 acre tract out of a 78.12 acre tract out of lot 4 out of Alfred & Mary Fasshauer Subdivision of Survey 10 and 12, Lunatic Asylum Lands, Abilene, Taylor County, Texas, and being more particularly described as follows:

BEGINNING at a 3/8" iron rod, found, for the Northwest corner of said 64.41 acre tract, for the Northwest corner of this tract;

THENCE North 89 degrees 31 minutes 13 seconds East along the North line of said 64.41 acre tract a distance of 1061.62 feet to a 3/8" iron rod, found, for the Northeast corner of this tract;

THENCE South 0 degrees 06 minutes 03 seconds West a distance of 1349.61 feet to a 3/8" iron rod, set, on the North right-of-way of Antilley Road for the Southeast corner of this tract;

THENCE South 88 degrees 09 minutes 11 seconds West along said North right-of-way of Antilley Road a distance of 1018.82 feet to a 3/8" iron rod, found, for the Southwest corner of this tract

THENCE North 1 degree 42 minutes 22 seconds West along the West line of said 64.41 acre tract a distance of 1374.17 feet to the place of beginning containing 32.52 acres of land.

PART 6: Purpose. The purpose of the Humana West Planned Development district is to integrate development of facilities for retail, office, and medical care. District regulations described in the following Part 7 are designed to achieve the following:

- A. designate particular areas within the district for appropriate selected activities, and
- B. integrate the scale of building development in the district with less intensive residential use existing and anticipated to the west, as well as with relatively intensive commercial use existing and anticipated to the north and east.

PART 7: Specific Modifications.

- A. The following regulations shall govern the use and development of the Planned Development district, for each of the lots indicated on the site plan (attached as Exhibit B) and as set forth below:

- 1. Lots 1-20. Except as otherwise specified below, use and development of land shall be subject to regulations applicable to the Office (O) zoning classification.
 - a. Surgical centers shall be permitted as a right-of-use, rather than by special exception only.
 - b. Buildings shall be limited to two stories or 30 feet, whichever is greater, excluding architectural exceptions as generally allowed by Zoning Ordinance.
 - c. Building setbacks shall be a minimum of 30 feet from the bounding arterial street (Antilley Road) and 20 feet from other bounding street rights-of-way.
- 2. Lots 21-24. Except as otherwise specified below, use and development of land shall be subject to regulations applicable to the Limited Commercial (LC) zoning classification.
 - a. Surgical centers shall be permitted as a right-of-use, rather than by special exception only.
 - b. Building setbacks shall be a minimum of 30 feet from the bounding arterial street (Antilley Road) and 20 feet from other bounding street rights-of-way.
 - c. The number of business signs shall be restricted to just one (1) per business, no taller than 30 feet in height and no greater than 150 square feet in area.
- 3. Lots 25-30. Except as otherwise specified below, use and development of land shall be subject to regulations applicable to the Shopping Center (SC) zoning classification.
 - a. Hotel and motel facilities shall be permitted as a right-of-use.
 - b. Building height shall be limited to two stories or 30 feet, whichever is greater, excluding architectural exceptions as normally allowed by Zoning Ordinance.
 - c. Building setbacks shall be a minimum of 30 feet from the bounding arterial street (Antilley Road) and 20 feet from any other bounding street rights-of-way. Rear building setbacks shall be a minimum of 20 feet, and building setbacks from the (interior) side lot line shall be a minimum of 10 feet.

- d. Unless some specific use may be identified, for which parking demand may be more specifically measured, off-street parking spaces shall be provided as follows:
- (1) One space for each 222 square feet of gross retail area.
 - (2) One space for each 300 square feet of gross office area.
 - (3) One space for each motel or hotel unit.
 - (4) For other activities, as specified within the Zoning Ordinance.

- e. Except as otherwise specified below, no more than one (1) business sign shall be permitted per business, and such sign shall be a wall sign no larger than 25 percent of the building wall area to which it is attached. Businesses have customer access and/or building frontage within 100 feet of adjacent street rights-of-way, may have two (2) such business signs mounted on walls of the building in which they are located. In addition to permitted wall signs, a hotel, motel or restaurant may have one (1) free-standing sign mounted on a pole, so long as such sign is no more than 150 square feet in area and extends to a height no more than 30 feet. Also, any shopping center(s) located on the lot shall have no more than one free-standing sign per street frontage, identifying the name of the overall shopping center development. Such signs shall be no more than 150 square feet in area and extend no more than 30 feet in height.

- f. For activities other than of a commercial nature, sign regulations pertinent to the Office (O) zoning classification shall be applicable.

Lot 31. Except as otherwise specified below, use and development of land shall be subject to regulations applicable to the Medical Use (MU) zoning classification.

- a. Standard restaurant facilities shall be allowed to occupy up to 25% of the total floor area of an appropriate structure in which the restaurant is located.
- b. Buildings, or portions thereof, constructed on the western 100 feet of the lot shall be no greater than two stories or 30 feet, whichever is greater, excluding architectural exceptions normally allowed by Zoning Ordinance.
- c. Buildings, or portions thereof, constructed on the remainder of Lot 31, shall be no greater in height than 3 stories or 40 feet, whichever is greater, excluding architectural exceptions normally allowed by Zoning Ordinance.
- d. Building setbacks from all bounding street rights-of-way shall be a minimum of 20 feet.
- e. For any future lot resubdivided within Lot 31, the minimum (interior) side building setback shall be 10 feet.
- f. The minimum building setback from any rear lot boundary (not adjoining a street) shall be 10 feet.
- g. The Zoning Ordinance requirement for an additional one (1) foot of building setback, for every additional one foot of building height above 30 feet, shall not be applicable.
- h. Screening requirements associated with activities in the MU district shall be applicable only to power and/or heat generation facilities, refuse collection facilities, off-street loading spaces and open storage.

- B. Except as otherwise specified below, subdivision or resubdivision of any one or more lots represented on the site plan (attached as

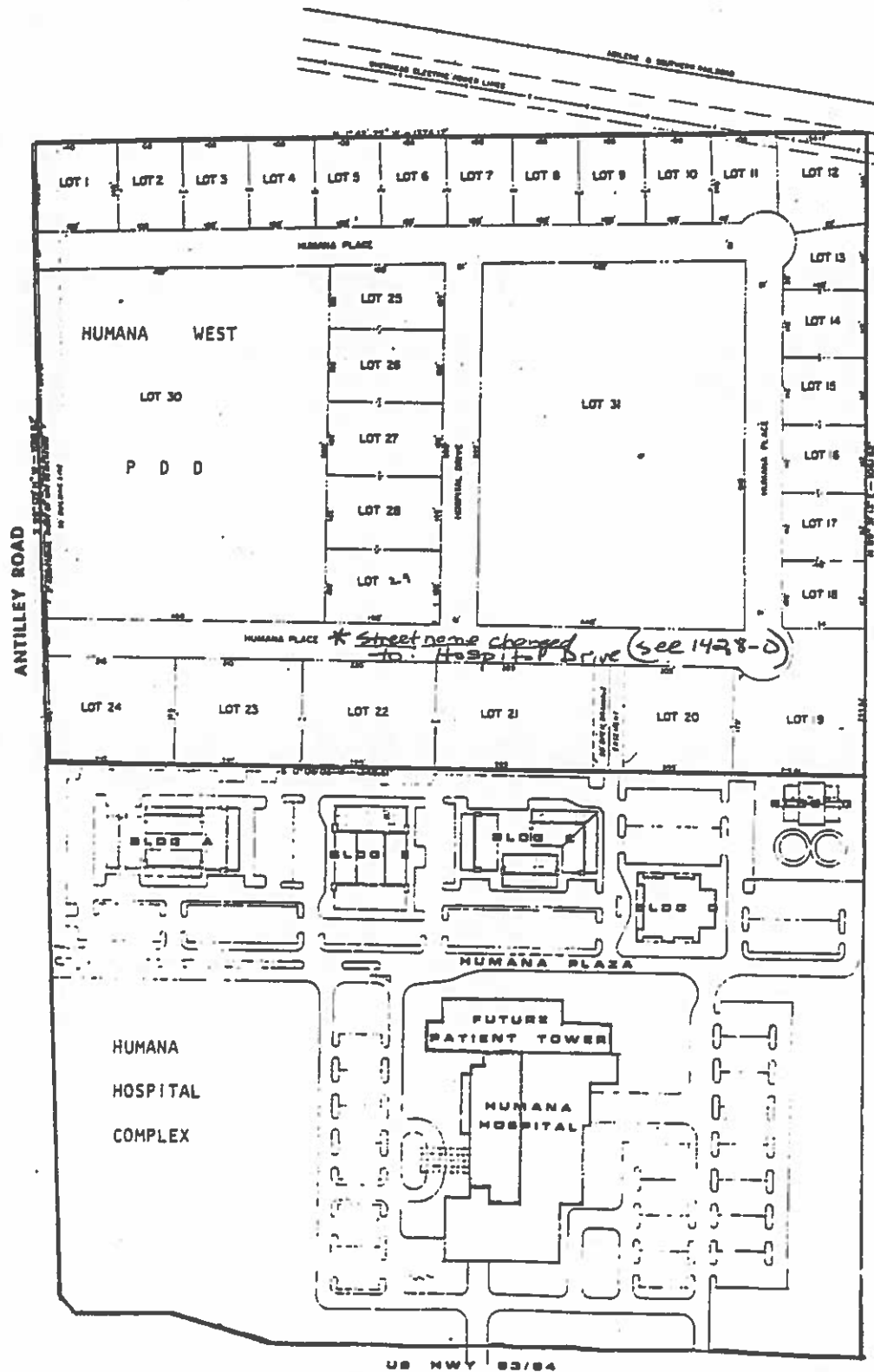
no longer applicable as it implies the old signs. See reg.

Lot 30

Exhibit B) shall be undertaken in conformance with Subdivision Regulations of the City of Abilene applicable at the time of resubdivision. Amendment of this Planned Development ordinance shall not be necessary for resubdivision; however, above-described regulations regarding use and development shall remain applicable to the lots represented on the attached site plan, unless such regulations are modified by amendment to this ordinance.

1. Provisions of Utility Placement Policy shall be modified to permit installation of electric, communication and gas utility lines (and all associated above-ground appurtenances) within any appropriately-designated easements located on private property.
2. Provisions of the Street Naming Policy shall be modified to permit one street name for a U-shaped street extended throughout the Humana West Planned Development district.

ORDINANCE NO. 49-1985
EXHIBIT "B"



00139

Cur. Plan.

ORDINANCE NO. 77-1986

AN ORDINANCE OF THE CITY OF ABILENE, TEXAS, AMENDING CHAPTER 23, SUBPART E, "ZONING," OF THE ABILENE MUNICIPAL CODE AND ORDINANCE NO. 49-1985, CONCERNING THE HUMANIA WEST PLANNED DEVELOPMENT DISTRICT; CALLING A PUBLIC HEARING; PROVIDING A PENALTY AND AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

PART 1: That Chapter 23, Subpart E, known as the Zoning Ordinance of the City of Abilene, is hereby amended by changing Ordinance No. 49-1985, as set out in Exhibit "A," attached hereto and made a part of this ordinance for all purposes.

PART 2: That any person, firm or corporation violating any of the provisions of this chapter shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not more than One Thousand Dollars (\$1,000.00). Each day such violation shall continue or be permitted to continue, shall be deemed a separate offense.

PASSED ON FIRST READING this 11 day of September, A.D. 19 86.

A notice of the time and place, where and when said ordinance would be given a public hearing and considered for final passage, was published in the Abilene Reporter-News, a daily newspaper of general circulation in the City of Abilene, said publication being on the 31 day of August, 19 86, the same being more than fifteen (15) days prior to a public hearing to be held in the Council Chamber of the City Hall in Abilene, Texas, at 9:00 a.m., on the 25 day of September, 19 86, to permit the public to be heard prior to final consideration of this ordinance. Such ordinance, being a penal ordinance, becomes effective ten (10) days after its publication in the newspaper, as provided by Section 19 of the Charter of the City of Abilene.

PASSED ON SECOND AND FINAL READING this 25 day of September, A.D. 19 86.

ATTEST:

Patricia Patton
CITY SECRETARY

David Stubbeman
MAYOR

APPROVED:

Henry Cayell
CITY ATTORNEY

ORDINANCE NO. 77-1986

EXHIBIT "A"

1st amendment to Ordinance #49-1985

Amend Ordinance #49-1985, Part 7, Paragraph 3, subparagraph (f)

DELETE: subparagraph (f)

ADD: New subparagraph (f), to read as follows:

- f. For all office-type uses as categorized by the Zoning Ordinance, including medical or dental clinics or offices, and those residential uses permitted in a Shopping Center district, either of the following standards for signs shall apply at the proponents option:

1. Business and/or Identification Sign: Freestanding, maximum thirty-six (36) square feet in area; maximum twelve (12) feet in height; located at least ten (10) feet from all property lines; one sign per use; illumination permitted. A nameplate or placard is allowed for each use and shall not exceed three (3) square feet in area and is to be wall-mounted.

~~All other sign regulation prescribed for Office-type uses shall furthermore apply and no other signs shall be allowed.~~

-or-

2. Business and/or Identification Sign: One wall sign no larger than 25% of the area of the wall upon which it is located; only one wall sign per use. A nameplate or placard is allowed for each use and shall not exceed three (3) square feet in area and is to be wall-mounted.

All other sign regulation prescribed for office-type uses shall furthermore apply, and no other signs shall be allowed. '



TENISON OIL CO
STE B101
209 S DANVILLE DR
ABILENE, TX 79605-1451



NOTICE OF PUBLIC HEARING

RE: Rezoning Application Number Z-2020-10

07/20/2020

The Planning and Zoning Commission will hold a public hearing on **Tuesday, August 4, 2020 at 1:30 PM**, in **City Council Chambers, 2nd Floor**, City Hall, N. 5th and Walnut Streets, to recommend approval or denial to City Council on a request from Sharon Riley, agent Enprotec/Hibbs and Todd, Inc., to amend existing Planned Development (PD) District Number 32 by removing from subparagraph (f) 1 and 2 the language stating "no other signs shall be allowed" from Lot 232 and allowing all signage allowed in General Retail (GR); Legal description being Lot 232 of Humana West Addition, Abilene, Taylor County, Texas and located at 2050 Antilley Road.

This hearing is open to any interested person. Opinions, objections and/or comments relative to this matter may be expressed in writing or in person at the hearing. At the bottom of this letter is a form that you may cut off, fill out, and mail. Comments are also accepted by email as listed below. All responses must be signed.

The attached map shows the area of the request. Only that area which is bounded by the cross-hatched line on the map is being considered for rezoning. The solid boundary line around the subject area is only a notification area. If approved by the Planning and Zoning Commission or if denied and appealed to Abilene's City Council within the specified ten-day period, this case will be heard by City Council for 2nd and Final Reading with a public hearing on **August 27, 2020, at 8:30 AM** in Council Chambers on the second floor of City Hall, 555 Walnut Street.

If you have any questions, please contact Jared Smith, Planner II at (325) 676-6490 or jared.smith@abilenetx.gov

For the PLANNING & ZONING COMMISSION
Please call (325) 676-6237 if you have any questions about this notice.

CASE #: Z-2020-10

You may indicate your position on the above request by detaching this sheet at the dotted line and returning it to the address below. You may attach additional sheets if needed. You may also email your position to the email address listed below. All correspondence must include your name and address.

Name: TENISON OIL CO
Address: 1963 HOSPITAL PL

Mailing To: Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

Email: planning@abilenetx.gov

I am in favor ☒
Additional Comments: 

I am opposed ☐

Signature: 

July 28, 2020

City of Abilene
Planning and Zoning Commission

RE: Rezoning Application Number Z-2020-10

Dear Planning and Zoning Commission,

I am writing in response to rezoning Application Number Z-2020-10, concerning lot number 232 of Humana West Addition located at 2050 Antilley Road. that asks for a change in language to allow further signage.

The owners respectfully ask for no language change to the current Planned Development on this parcel not because we are anti-growth but because we are enthusiastic supporters of smart, planned urban development. Our most compelling reasons include:

- The request is based exclusively upon a desire to make more money out of the property as we have been made aware of the development plans to place a large, obnoxious sign in the said area.
- The particular physical surroundings do not support the need of such as sign in that particular location, especially that it will detract from our current office at 2074 Antilley and will obstruct our planned sign addition at the corner of 2074 Antilley.
- Another visual distraction will exacerbate current traffic congestion that may result in more accidents, injuries, or fatalities. This might be alleviated by a new traffic signal at the intersection which should be considered by the City of Abilene.
- It is a neighborly consideration to give equal air space to everyone in the area.

In as such, we **oppose** the said variance/language change and rezoning request. We respectfully ask for the Planning and Zoning Commission to deny this application.

Regards,



Bryan R. Vela
Administrator
ASMO Properties
2074 Antilley Road
Abilene, Texas 79606

CASE #: Z-2020-10

You may indicate your position on the above request by detaching this sheet at the dotted line and returning it to the address below. You may attach additional sheets if needed. You may also email your position to the email address listed below. All correspondence must include your name and address.

Name: ASMO PROPERTIES LLC
Address: 2074 ANTILLEY RD

Mailing To: Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

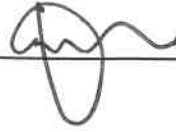
Email: planning@abilenetx.gov

I am in favor ☐

I am opposed ☒

Additional Comments:

Signature: _____

A handwritten signature in black ink, consisting of a stylized 'A' followed by a wavy line, written over a horizontal line.



Sawyers, Cheryl <cheryl.sawyers@abilenetx.gov>

Rezoning

Kelsi Mangrem <kmangrem@hollandhearing.com>
To: cheryl.sawyers@abilenetx.gov

Fri, Au

I support the rezoning application relating to signage changes in our development area on Antilley between 83/84 and Memorial Drive.

Thank you!

Dr. Kelsi Mangrem
Holland Hearing Center
[7 Hospital Drive](#)



Dr. Kelsi Mangrem
Owner/Audiologist

kmangrem@hollandhearing.com | Phone: 325-437-4730
7 Hospital Dr. Abilene, TX 79606 | hollandhearing.com



Sawyers, Cheryl <cheryl.sawyers@abilenetx.gov>

Zoning

1 message

Logan Huffington <huffingtonpilatesandfitness@gmail.com>
To: cheryl.sawyers@abilenetx.gov

Thu, Aug 13, 2020 at 12:28 PM

I support the rezoning application relating to signage changes in our development area.

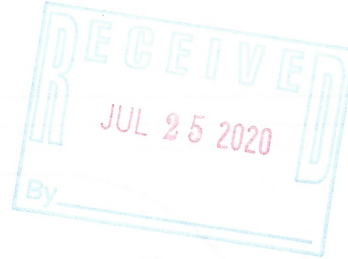
Dayna Huffington

Huffington Fitness Studio

[9 Hospital Drive](#)



TENISON OIL CO
STE B101
209 S DANVILLE DR
ABILENE, TX 79605-1451



NOTICE OF PUBLIC HEARING

RE: Rezoning Application Number Z-2020-10

07/20/2020

The Planning and Zoning Commission will hold a public hearing on **Tuesday, August 4, 2020 at 1:30 PM**, in **City Council Chambers, 2nd Floor**, City Hall, N. 5th and Walnut Streets, to recommend approval or denial to City Council on a request from Sharon Riley, agent Enprotec/Hibbs and Todd, Inc., to amend existing Planned Development (PD) District Number 32 by removing from subparagraph (f) 1 and 2 the language stating "no other signs shall be allowed" from Lot 232 and allowing all signage allowed in General Retail (GR); Legal description being Lot 232 of Humana West Addition, Abilene, Taylor County, Texas and located at 2050 Antilley Road.

This hearing is open to any interested person. Opinions, objections and/or comments relative to this matter may be expressed in writing or in person at the hearing. At the bottom of this letter is a form that you may cut off, fill out, and mail. Comments are also accepted by email as listed below. All responses must be signed.

The attached map shows the area of the request. Only that area which is bounded by the cross-hatched line on the map is being considered for rezoning. The solid boundary line around the subject area is only a notification area. If approved by the Planning and Zoning Commission or if denied and appealed to Abilene's City Council within the specified ten-day period, this case will be heard by City Council for 2nd and Final Reading with a public hearing on **August 27, 2020, at 8:30 AM** in Council Chambers on the second floor of City Hall, 555 Walnut Street.

If you have any questions, please contact Jared Smith, Planner II at (325) 676-6490 or jared.smith@abilenetx.gov

For the PLANNING & ZONING COMMISSION
Please call (325) 676-6237 if you have any questions about this notice.

CASE #: Z-2020-10

You may indicate your position on the above request by detaching this sheet at the dotted line and returning it to the address below. You may attach additional sheets if needed. You may also email your position to the email address listed below. All correspondence must include your name and address.

Name: TENISON OIL CO
Address: 2005 HOSPITAL PL

Mailing To: Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

Email: planning@abilenetx.gov

I am in favor ☒
Additional Comments:

I am opposed ☐

Signature: 

CASE #: Z-2020-10

You may indicate your position on the above request by detaching this sheet at the dotted line and returning it to the address below. You may attach additional sheets if needed. You may also email your position to the email address listed below. All correspondence must include your name and address.

Name: RILEY SHARON
Address: 2050 ANTILLEY RD

Mailing To: Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

Email: planning@abilenetx.gov

I am in favor ☒
Additional Comments:

I am opposed ☐

Signature: _____



AUG 10 AM 10:19



Sawyers, Cheryl <cheryl.sawyers@abilenetx.gov>

Rezoning application

1 message

Steve Walker <steve@walkertradesman.com>

Fri, Aug 14, 2020 at 5:01 PM

To: "cheryl.sawyers@abilenetx.gov" <cheryl.sawyers@abilenetx.gov>

I support the rezoning application relating to signage changes in our development area.

Steve & Diane Walker

Walker Tradesman Plumbing

[31 Windmill Circle Ste B](#)

Sincerely,

Steve Walker, Owner/Operations Manager

[31 Windmill Circle, Suite B](#)

[Abilene, Texas 79606](#)

Phone: 325.704.4100

Fax: 325.672.4769

<http://walkertradesmanplumbing.com>

Walker Tradesman Plumbing and Walker Tradesman Construction – *"Together We Can Make It Happen".*

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Sawyers, Cheryl <cheryl.sawyers@abilenetx.gov>

Rezoning Application

1 message

Andrew Kouba <akouba@abilenedc.com>

Fri, Aug 14, 2020 at 2:39 PM

To: "cheryl.sawyers@abilenetx.gov" <cheryl.sawyers@abilenetx.gov>

Good Afternoon Ms. Sawyers,

I support the rezoning application relating to signage changes in our development area.

Andrew Kouba CEO

Medical Mall of Abilene

[1665 Antilley Road](#)

Andrew Kouba, CPA

Chief Executive Officer



[1665 Antilley Rd, Suite 180](#)

[Abilene, TX 79606](#)

[325-437-8645 \(office\)](#)

[806-535-4000 \(cell\)](#)

akouba@abilenedc.com

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If you continue to receive erroneous email, please contact me at postmaster@abilenedc.com.



Sawyers, Cheryl <cheryl.sawyers@abilenetx.gov>

Signage in our development area

2 messages

Kris Seale <kris.seale@funeraldirectorslife.com>
To: "cheryl.sawyers@abilenetx.gov" <cheryl.sawyers@abilenetx.gov>

Sat, Aug 15, 2020 at 9:56 AM

Cheryl:

I understand that HC Zachry has a rezoning application filed for a "billboard" on Antilley Blvd. I support the rezoning application relating to signage changes in our development area.

Kris Seale

Funeral Director's Life

6550 Director's Parkway

Blessings,

Kris

Sawyers, Cheryl <cheryl.sawyers@abilenetx.gov>
To: Kris Seale <kris.seale@funeraldirectorslife.com>

Sat, Aug 15, 2020 at 2:46 PM

Thank you Kris, I'll put your response in the packet for the commission and council.

[Quoted text hidden]

--

CHERYL SAWYERS

Planning Services Manager

Planning & Development Services

City of Abilene

555 Walnut Street, Suite 110

Abilene, Texas 79601-5254

Post Office Box 60

Abilene, Texas 79604-0060

(325) 676-6230 (Office)

[City of Abilene Planning & Development Services](#)





Sawyers, Cheryl <cheryl.sawyers@abilenetx.gov>

Billboard zoning opinion

1 message

Jason Heuerman <jmdrugsouth@yahoo.com>

Wed, Aug 12, 2020 at 11:23 AM

To: "cheryl.sawyers@abilenetx.gov" <cheryl.sawyers@abilenetx.gov>

I support the rezoning application relating to signage changes in our development area.

Trey Guffey

James McCoy's Drug Store South

[1725 Antilley Road](#)



CENTRAL PARK 91 JV
PO BOX 6868
ABILENE, TX 79608-6868

NOTICE OF PUBLIC HEARING

RE: Rezoning Application Number Z-2020-10

08/21/2020

The Planning and Zoning Commission will hold a public hearing on **Tuesday, September 1, 2020 at 1:30 PM**, in **City Council Chambers, 2nd Floor**, City Hall, N. 5th and Walnut Streets, to recommend approval or denial to City Council on a request from Sharon Riley, agent H.C. Zachry, to amend existing Planned Development (PD) District Number 32 by removing from subparagraph (f) 1 and 2 the language stating "no other signs shall be allowed" from Lots 25-30 and allowing all off-site advertising signage ordinarily allowed in General Retail (GR); Legal description Lot 232 of Planned Development 32, Humana West Addition, Abilene, Taylor County, Texas and located at 2050 Antilley Road.

This hearing is open to any interested person. Opinions, objections and/or comments relative to this matter may be expressed in writing or in person at the hearing. At the bottom of this letter is a form that you may cut off, fill out, and mail. Comments are also accepted by email as listed below. All responses must be signed.

The attached map shows the area of the request. Only that area which is bounded by the cross-hatched line on the map is being considered for rezoning. The solid boundary line around the subject area is only a notification area. If approved by the Planning and Zoning Commission or if denied and appealed to Abilene's City Council within the specified ten-day period, this case will be heard by City Council for 2nd and Final Reading with a public hearing on **October 8, 2020, at 8:30 AM** in Council Chambers on the second floor of City Hall, 555 Walnut Street.

If you have any questions, please contact Jared Smith, Planner II at (325) 676-6490 or jared.smith@abilenetx.gov

For the PLANNING & ZONING COMMISSION

Please call (325) 676-6237 if you have any questions about this notice.

CASE #: Z-2020-10

You may indicate your position on the above request by detaching this sheet at the dotted line and returning it to the address below. You may attach additional sheets if needed. You may also email your position to the email address listed below. All correspondence must include your name and address.

Name: CENTRAL PARK 91 JV

Address:

Mailing To: Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

Email: planning@abilenetx.gov

I am in favor ☒
Additional Comments:

I am opposed ☐

Signature: _____

CASE #: Z-2020-10

You may indicate your position on the above request by detaching this sheet at the dotted line and returning it to the address below. You may attach additional sheets if needed. You may also email your position to the email address listed below. All correspondence must include your name and address.

Name: RILEY SHARON

Address:

Mailing To: Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

Email: planning@abilenetx.gov

I am in favor ☒
Additional Comments:

I am opposed ☐

Signature: Sharon Riley

AUG 10 AM 10:19



Sawyers, Cheryl <cheryl.sawyers@abilenetx.gov>

[Planning] Rezoning application Z-2020-10

1 message

Gary Milliorn <GMilliorn@ffin.com>

Tue, Aug 25, 2020 at 2:49 PM

To: "planning@abilenetx.gov" <planning@abilenetx.gov>

This message was sent securely using Zix®

First Financial Bank

[1725 Antilley](#)

1801 Antilley

Approve

Gary Milliorn

VP Property Manager

First Financial Bank, N.A. | Abilene[400 Pine St.](#), 2nd Floor | Abilene, Texas 79601

Office: 325-627-7151 Cell: 325-307-8146

Fax: 325-627-7187

gmilliorn@ffin.comThis message was secured by **Zix**®^{#174}.

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Watts, Nick <nick.watts@abilenetx.gov>

[Planning] Case#: Z-2020-10

1 message

Bryan Vela <velab67@gmail.com>
To: planning@abilenetx.gov

Tue, Aug 25, 2020 at 6:30 PM

Please find my position of "opposed" to the above referenced case.

Please note we are the new owners of 1925 Hospital Place and have not received letter from this department.

Regards,

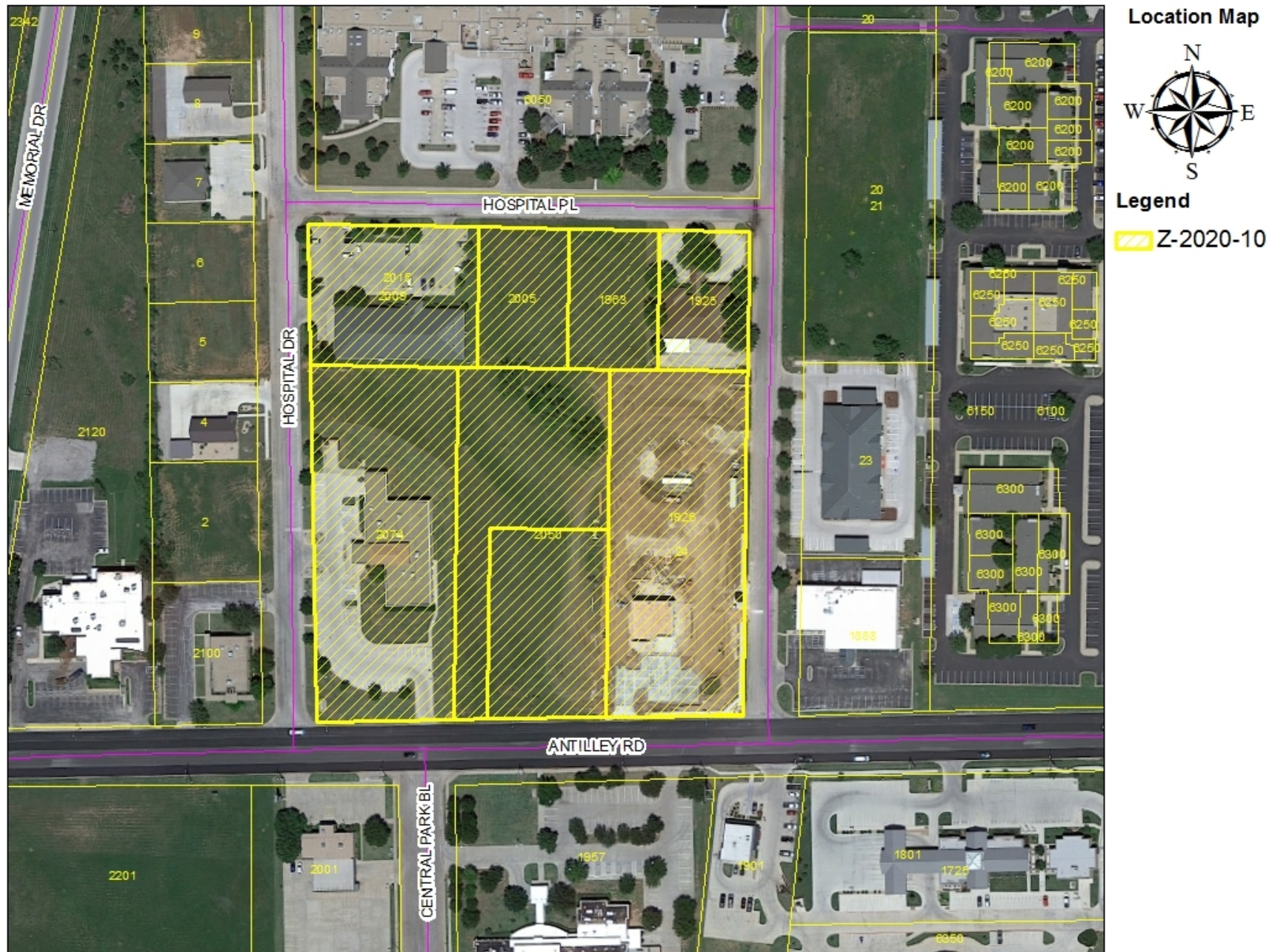
Bryan and Erika Vela
1925 Hospital Place
Abilene, TX 79606

--

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To unsubscribe from this group and stop receiving emails from it, send an email to planning+unsubscribe@abilenetx.gov.
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Case: Z-2020-10
Owner: Sharon Riley
Agent: HC Zachry and City of Abilene
Request: Amend existing Planned Development District
Number 32 (PD 32)
Location: 2050 Antilley Road
Notification: 12 in Favor, 2 Opposed
Planning & Zoning Recommendation: Approval

Z-2020-10 AERIAL LOCATION MAP (Amended Portion of PD32)



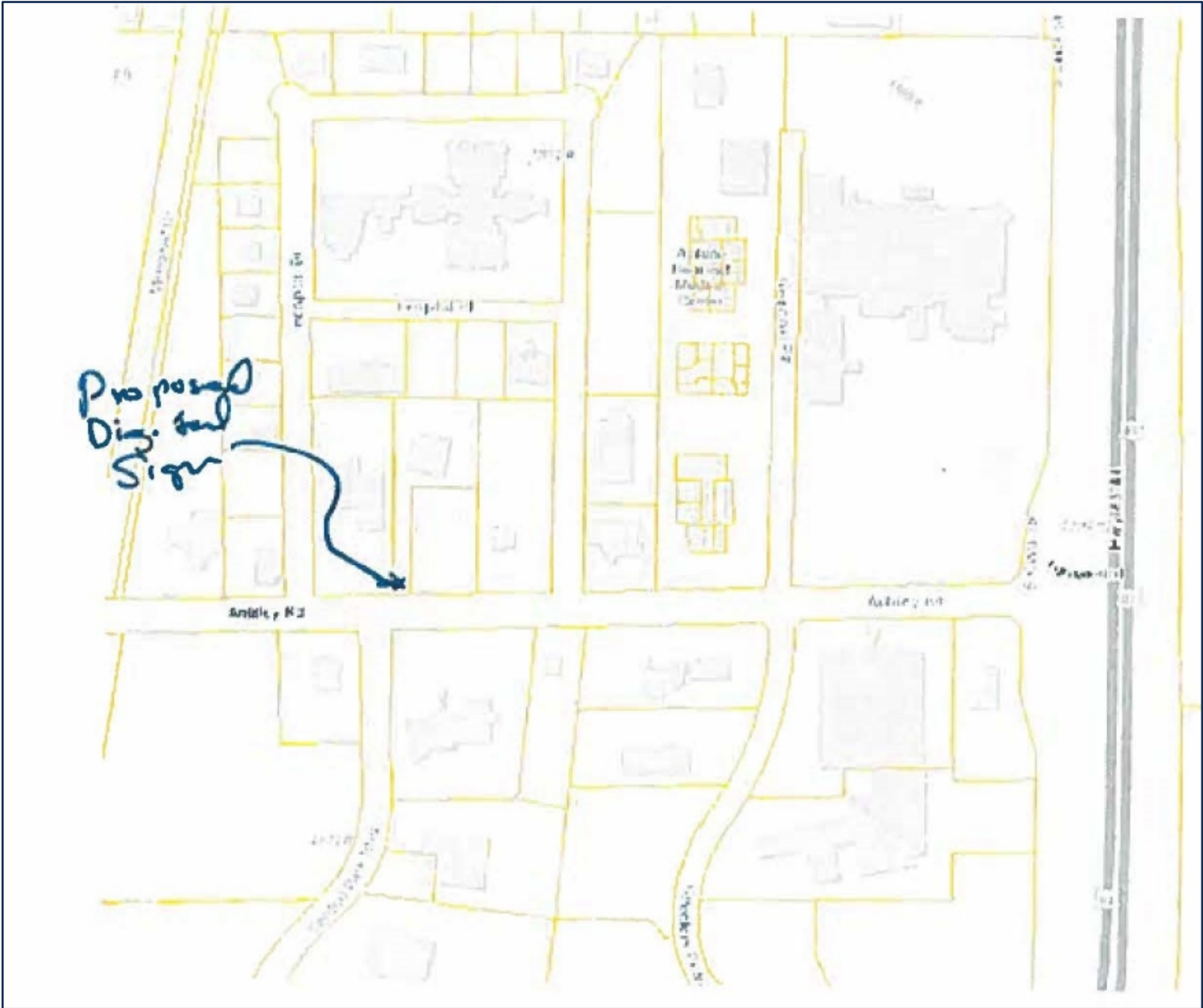
Z-2020-10 AERIAL LOCATION MAP (Proposed Billboard Location)



Z-2020-10 ZONING MAP



Z-2020-10 GRAPHIC CONCEPT PLAN





Z-2020-10 VIEWS OF SUBJECT PROPERTY

Subject Property



Neighboring property to the East



Neighboring property to the West



Property South of Antilley Rd.



Z-2020-10 NOTIFICATION AREA MAP



- Consistent with *Comprehensive Plan* and *Future Land Use and Development Plan Map*
- Consistent with General Land Use and Zoning Character of Immediate Area (Section 2.3.3.5)
- Reviewed Pursuant to Section 1.4.3.5 of Land Development Code (Criteria for Approval)
- Staff Recommendation: Approval
- Planning & Zoning Recommendation: Approval

Questions?



**City Council
Agenda Memo**

City Council Meeting Date: 10/8/2020

TO: Robert Hanna, City Manager

FROM: Mike Warrix, Director

SUBJECT: **11. Ordinance (Final Reading) Z-2020-13: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on a request from Denise Dilliard Rister and Jerry Lynn Rister to rezone property from General Commercial (GC) to General Retail (GR) District (Mike Warrix)**

GENERAL INFORMATION

The applicant is requesting to rezone from General Commercial (GC) to General Retail (GR) to permit residential use by right.

SPECIAL CONSIDERATIONS

FUNDING/FISCAL IMPACT

STAFF RECOMMENDATION

Staff recommends approval.

BOARD OR COMMISSION RECOMMENDATION

The Planning and Zoning Commission recommends approval by a vote of six (6) to zero (0).

ATTACHMENTS:

1. 1- Z-2020-13 council ordinance
2. 2- Z-2020-13 Council Staff Report
3. 3- Z-2020-13 Council Presentation

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF ABILENE, TEXAS, AMENDING THE, "LAND DEVELOPMENT CODE" OF THE ABILENE CITY CODE, BY CHANGING THE ZONING DISTRICT BOUNDARIES AFFECTING CERTAIN PROPERTIES; CALLING A PUBLIC HEARING; PROVIDING A PENALTY AND AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

PART 1: That Chapter 2 (Zoning Regulations) of the Land Development Code of the City of Abilene, is hereby amended by changing the zoning district boundaries as set out in Exhibit A, attached hereto and made a part of this ordinance for all purposes.

PART 2: That any person, firm or corporation violating any of the provisions of this chapter shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not more than Five Hundred Dollars (\$500.00). Each day such violation shall continue or be permitted to continue, shall be deemed a separate offense.

PART 3: That the Planning Director be, and is hereby authorized and directed to change the official Zoning Map of the City of Abilene to correctly reflect the amendments thereto.

PASSED ON FIRST READING the 24th day of September, 2020.

A notice of the time and place, where and when said ordinance would be given a public hearing and considered for final passage, was published in the Abilene Reporter-News, a daily newspaper of general circulation in the City of Abilene, said publication being on the 15th day of August, 2020, the same being more than fifteen (15) days prior to a public hearing held in the Council Chamber of the City Hall in Abilene, Texas, at 8:30 p.m. on the 8th day of October, 2020, to permit the public to be heard prior to final consideration of this ordinance. Said ordinance, being a penal ordinance, becomes effective ten (10) days after its publication in the newspaper, as provided by Section 19 of the Charter of the City of Abilene.

PASSED ON FINAL READING THIS 8th day of October, 2020.

ATTEST:

CITY SECRETARY

MAYOR

APPROVED:

CITY ATTORNEY

ZONING CASE Z-2020-13

STAFF REPORT



REQUEST: Rezoning

APPLICANT:

Owner: Denise Dilliard & Jerry Lynn Rister

Agent: Sarah Faynan

HEARING DATES:

P & Z Commission: September 1, 2020

City Council 1st Reading: September 24, 2020

City Council 2nd Reading: October 8, 2020

LOCATION:

- 1425 Matador Street
- Legal description(s): South 53 feet of the West 140 feet of Lot 1, Block 16, Campus Addition.

PROPOSAL AND REQUESTED ACTION:

The applicant is requesting to rezone from General Commercial (GC) to General Retail (GR) to permit residential use by right.

APPLICATION REVIEW:

According to Section 1.4.1.4, Criteria for Approval, of the City of Abilene Land Development Code, in making a determination regarding a requested zoning change, the Planning and Zoning Commission and the City Council may consider the following factors:

(1) Whether the proposed zoning map amendment implements the policies of the adopted Comprehensive Plan, including the land use classification of the property on the Future Land Use and Development Plan map, as amended;

The Future Land Use and Development Plan Map of the Comprehensive Plan designates this general area as a Local Community Center. The intent of Local Community Centers are to provide neighboring residential districts with a mixture of supermarkets, retail stores, service shops, churches, and parks within a walkable distance. Many local community centers are surrounded by higher-density housing with residential intensities decreasing closer to single-family areas. This proposed zone change is consistent with the characteristics of local community centers. It will also promote the Comprehensive Plan's goal of achieving a mixture of land uses that will encourage a variety of activities, shorten automobile trips and promote pedestrian and bicycle accessibility.

(2) Whether the uses permitted by the proposed change in zoning district classification and the standards applicable to such uses will be appropriate in the immediate area of the land to be reclassified.

General Retail (GR) zoning permits residential structures by right and serves as an appropriate zoning buffer between commercial zoning districts and residential zoning districts. The block consists of four (4) other residences, church, fast food restaurant, and a retail shopping center; all of which are permitted uses within GR zoning.

	Zoning	Existing Land Use
North	GC	Single Family Residence
South	GC	Single Family Residence
East	GC	Crossway Youth & Activity Building
West	GC	Kenley School

(3) Whether the proposed change is in accord with any existing or proposed plans for providing public schools, streets, water supply, sanitary sewers, and other public services and utilities to the area.

The subject property currently has access to existing utilities and public amenities. No additional development of said infrastructure will be required for the development of this subject property.

(4) Any other factors, which will substantially affect the public health, safety, morals, or general welfare.

It is the opinion of the staff that there are no other factors, which substantially affect the public health, safety, morals, or general welfare of the City of Abilene.

STAFF COMMENTS:

Building records indicate that a residence has existed on this property since at least 1950 and according to the zoning ordinance in effect at this time, single family dwellings were permitted uses. In 1974, when the City of Abilene adopted its current Zoning Map, this property including the entire 16th block of Campus Addition was designated as a General Commercial (GC) District. However in 2010, when the City of Abilene adopted the current Land Development Code, single-family dwellings along with other residential uses, became non-permitted uses within the GC Zoning. Based on the neighboring residential properties and similarities of both GC and GR zoning districts, re-zoning this property would permit residential use within a predominantly non-residential district.

STAFF RECOMMENDATION:

Staff recommends approval of the request. The rezoning request was reviewed pursuant Section 1.4.1.4 (Criteria for Approval).

PLANNING AND ZONING COMMISSION RECOMMENDATION:

The Planning and Zoning Commission recommended approval of this request by a vote of six (6) to zero (0) on Tuesday, September 1, 2020.

NOTIFICATION:

The Planning Services Division sent, with a certificate of mailing, public notices to the applicant and property owners within a 200-foot radius.

Owner	Situs	Response
ALEMAN MARTHA OLVERA	1457 MATADOR ST	
CROSSWAY BAPTIST CHURCH	1458 SEWELL ST	
CROSSWAY BAPTIST CHURCH	1410 SEWELL ST	
GGTP LLC	2807 S 14TH ST	
GGTP LLC	2809 S 14TH ST	
GGTP LLC	2805 S 14TH ST	
GGTP LLC	2803 S 14TH ST	
GGTP LLC	2801 S 14TH ST	
GGTP LLC	2833 S 14TH ST	
GGTP LLC	2741 B S 14TH ST	
GGTP LLC	2741 S 14TH ST	
HILL JOHN A	1425 SEWELL ST	Opposed
HILL JOHN A & MOLLY	1415 SEWELL ST	Opposed
JONES WILLIAM D II	1449 MATADOR ST	
KENLEY SCHOOL	1434 MATADOR ST	
LUDOVICI BUILDING TWO INC	2901 S 14TH ST	
MC NEILL DAN S & SHERI L	2910 S 15TH ST	
MC NEILL DAN S & SHERI L	1450 MATADOR ST	
MC NEILL DAN S & SHERI L	1442 MATADOR ST	
MC NEILL DAN S & SHERI L	1450 1/2 MATADOR ST	
MC NEILL DAN S & SHERI L	1442 1/2 MATADOR ST	
MOEN PAMELA & DONALD	1433 MATADOR ST	
ORTIZ MANUEL	1417 MATADOR ST	In Favor
ORTIZ MANUEL	2849 S 14TH ST	In Favor
RISTER DENISE DILLIARD	1425 MATADOR ST	

ATTACHMENTS:

- Application
- PowerPoint





Development Application

Planning

- ☐ Conditional Use
 ☐ Easement Release
 ☒ Rezoning
 ☐ Other
☐ PDD
 ☐ Street Name Change
 ☐ Thoroughfare Abandonment
 ☐ PDD Amendment
 Other: _____

Project Name: NA
 Address: 1425 Matador No. of lots: 1 Acreage: _____
 Legal Description: _____
 Subdivision Name: Campus Addition Block: _____ Lot: _____
 Current Zoning: General Commercial Proposed Zoning (if applicable): General Retail

OWNER AND AUTHORIZATION

Owner Name: Denise Dilliard Rister + Jerry Lynn Rister
 Address: 1425 Matador St.
 City, State, Zip: Abilene, Tx. 79605 Fax: _____
 Phone: 325-260-8706 Email: deniserister56@gmail.com

I am the property owner, and I certify that the information included in this application is true to the best of my knowledge. (Name) Sarah Fayman will act as my agent before the Planning and Zoning Commission.

Agent Name: Sarah Fayman
 Address: 2545 S. Danville Dr.
 City, State, Zip: Abilene Tx 79605 Fax: _____
 Phone: 325-669-1667 Email: Sarahfayabilene@gmail.com

I hereby certify that I am the owner of the property and further certify that the information provided on this development application is true and correct. I hereby designate the aforementioned agent to act on my behalf for submittal, processing, representation, and/or presentation of this development application. The designated agent shall be the principal contact person for responding to all requests for information and for resolving all issues of concern relative to this application.

Signature Owner: Denise Rister Date: 7-21-2020

FOR OFFICE USE ONLY

Received: NICK WATTS Fee: \$ waived Receipt No.: N/A
 Case No.: 2020-13 Reviewed By: NW



Development Application

Please answer the following question in order to assist Staff with the processing of your Zoning request.

1. Please (if necessary) provide background information for the zoning request and explain why you feel it is appropriate.

I Sarah Fay was hired by Mr. Mrs. Bister to sell there property located at 1425 Matador Abilene Tx 79605. The list price for property was \$120K. I sold the property in 3 days. The property passed all inspections and was appraised for sales price with no lender repairs. The appraiser Justin Walker with walker appraisal realized that the property was currently zoned GC. As an appraiser he had to report to the lender the zoning. Because of this zoning the lender (and all lenders) will not loan money to a buyer to live in a residential property zoned commercial. The reason why if some accident or unforeseen destruction of the property the current owner would have to rebuild commercial and that cannot be done with a 1-4 residential leading contract. We are asking the City to rezone this property to GR so that the sellers can sell there property and the buyers lender will loan on the property. The seller has spent her inheritance to remodel and fix up the house on Matador to sell. The Seller currently have bought another home and was using the proceeds from the sale of the home to finalize the payment of there new home.



Development Application

RECOMMENDATIONS

The Planning & Zoning Commission (P&Z) and the City Council look to the Planning & Development Services staff to make a recommendation for the approval or disapproval of this application. We will make every effort to notify you (FAX or E-mail) of our recommendation at least one (1) week in advance of the scheduled meeting of the P&Z Commission. In the case of a rezoning, and when the public interest requires it, we may recommend a rezoning to a Planned Development District (PDD) or a classification other than the classification requested. We will notify you of our decision to propose a PDD as soon as possible after the application is filed to give you time to prepare a site plan.

PUBLIC NOTIFICATION

The public is entitled to examine this application and participate in the decision-making process. In most cases, we are required to notify all property owners within two hundred feet (200') of the boundaries of your property. To ensure the fullest possible consideration, we may also notify neighborhood groups, organizations or individuals that have a special interest in a particular issue. Except for matters that the Planning & Development Services staff have expressly agreed not to disclose (and provided the law allows us to hold the matter in confidence), then all information that we deem relevant to the review and processing of this application may become public knowledge.

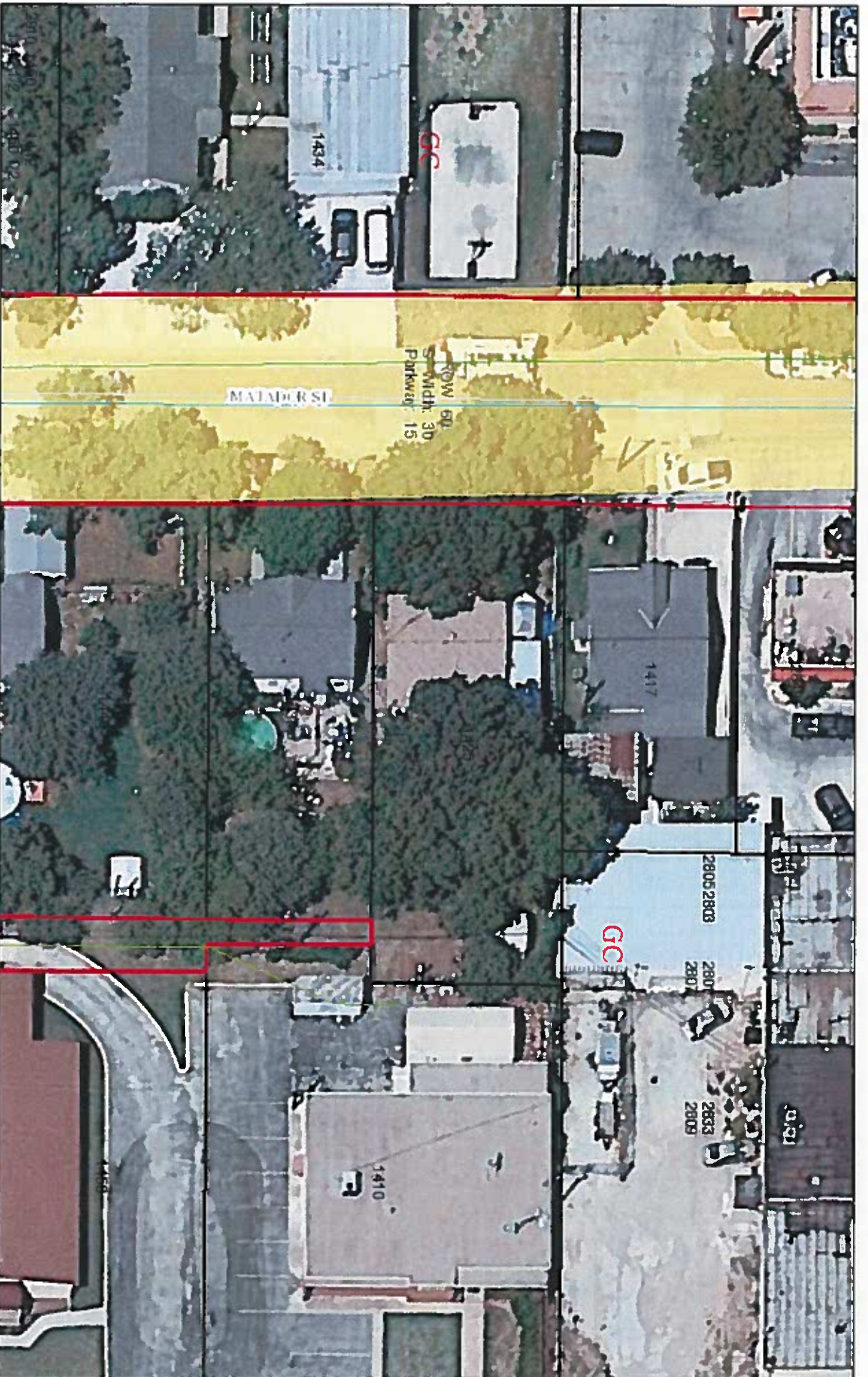
PLEASE READ BEFORE SIGNING

The undersigned has read the above application and hereby certifies that the information contained therein is complete, true and correct; and does hereby request that said application be submitted to the Planning & Zoning Commission at the earliest available meeting.

I understand and acknowledge that it is my responsibility to furnish an accurate and precise legal description of the property, and only the property, that is subject of this application, and that failure to furnish such information prior to the application deadline date will delay the processing of this application. I also understand that the City must notify affected property owners of this application. In the event that I fail to submit in a timely manner any information that the City deems necessary to transmit this application to the Planning & Zoning Commission or City Council, then in lieu of dismissal I hereby request that this application be temporarily withdrawn from further consideration until such information is submitted, and I agree to pay a resubmission fee of \$120 to reimburse the City for the expense of re-notifying affected property owners. I have been informed of the tentative date and time that the Planning & Zoning Commission and City Council will hear this application, and I understand that hearings may be continued from time to time at the discretion of the Commission or Council to allow for full consideration or when the public interest requires a continuation.

SIGNED: *Denise Rister* DATE: 7-21-2020

ArcGIS Web Map



July 21, 2020

- Water Lines
- Sewer Lines
- Streets
- Thirpjan Current
- Arterial
- Collector
- Expressway
- minor arterial
- Thirpjan Extended
- Arterial - Extended
- Expressway
- Thirpjan Proposed
- Arterial
- Collector
- Expressway
- minor arterial
- ZONING

1:564

0 0.00475 0.0095 0.019 mi

0 0.0075 0.015 0.03 km

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, Geobase, IGN, Kadaster NL, Ordnance Survey, Esri



HILL JOHN A
750 N JUDGE ELY BLVD
ABILENE, TX 79601-5560

NOTICE OF PUBLIC HEARING

RE: Rezoning Application Number Z-2020-13

08/21/2020

The Planning and Zoning Commission will hold a public hearing on **Tuesday, September 1, 2020** at **1:30 PM**, in **City Council Chambers, 2nd Floor**, City Hall, N. 5th and Walnut Streets, to recommend approval or denial to City Council on a request from Denise Dilliard & Jerry Lynn Rister to **rezone 1425 Matador Street from General Commercial (GC) District to General Retail (GR) District**. Legal descriptions being South 53 feet of the West 140 feet of Lot 1, Block 16, Campus Addition, City of Abilene, Taylor County, Texas

This hearing is open to any interested person. Opinions, objections and/or comments relative to this matter may be expressed in writing or in person at the hearing. At the bottom of this letter is a form that you may cut off, fill out, and mail. Comments are also accepted by email as listed below. All responses must be signed.

The attached map shows the area of the request. Only that area which is bounded by the cross-hatched line on the map is being considered for rezoning. The solid boundary line around the subject area is only a notification area. If approved by the Planning and Zoning Commission or if denied and appealed to Abilene's City Council within the specified ten-day period, this case will be heard by City Council for 2nd and Final Reading with a public hearing on **October 8, at 8:30 AM** in Council Chambers on the second floor of City Hall, 555 Walnut Street.

If you have any questions, please contact Nick Watts, Planner I & Historic Preservation Officer at (325) 437-4585 or nick.watts@abilenetx.gov

For the PLANNING & ZONING COMMISSION
Please call (325) 676-6237 if you have any questions about this notice.

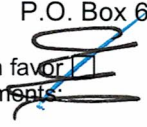
CASE #: Z-2020-13

You may indicate your position on the above request by detaching this sheet at the dotted line and returning it to the address below. You may attach additional sheets if needed. You may also email your position to the email address listed below. All correspondence must include your name and address.

Name: HILL JOHN A
Address: 1425 SEWELL ST

Mailing To: Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

Email: planning@abilenetx.gov

I am in favor ☒
Additional Comments: 

I am opposed ☐

Signature: 

Why go from GC to GR? Makes no sense!



HILL JOHN A & MOLLY
750 N JUDGE ELY BLVD
ABILENE, TX 79601-5560

NOTICE OF PUBLIC HEARING

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Name: HILL JOHN A & MOLLY
Address: 1415 SEWELL ST

Mailing To: Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

Email: planning@abilenetx.gov

I am in favor ☒ I am opposed ☐
Additional Comments:

Signature: 

Don't take the more restrictive zoning!

Please call (325) 676-6237 if you have any questions about this notice.

CASE #: Z-2020-13

You may indicate your position on the above request by detaching this sheet at the dotted line and returning it to the address below. You may attach additional sheets if needed. You may also email your position to the email address listed below. All correspondence must include your name and address.

Name: ORTIZ MANUEL
Address: 1417 MATADOR ST

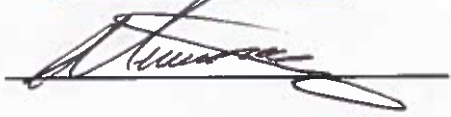
Mailing To: Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

Email: planning@abilenetx.gov

I am in favor ☒
Additional Comments:

I am opposed ☐

Signature:



AUG 28 AM 10:09

Please call (325) 676-6237 if you have any questions about this notice.

CASE #: Z-2020-13

You may indicate your position on the above request by detaching this sheet at the dotted line and returning it to the address below. You may attach additional sheets if needed. You may also email your position to the email address listed below. All correspondence must include your name and address.

Name: ORTIZ MANUEL
Address: 2849 S 14TH ST

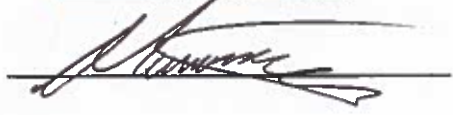
Mailing To: Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

Email: planning@abilenetx.gov

I am in favor ☒
Additional Comments:

I am opposed ☐

Signature:



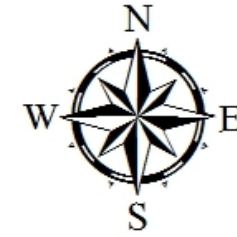
AUG 28 AM 10:09

Case:	Z-2020-13
Owner:	Denise Dillard & Jerry Lynn Rister
Request:	Rezone from GC to GR
Legal Description:	South 53' of the West 140' of lot 1, Block 16, Campus Addition, City of Abilene, Taylor County, Texas.
Notification:	2 in Favor, 2 Opposed
Planning & Zoning Recommendation:	Approval

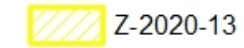
Z-2020-13 AERIAL LOCATION MAP



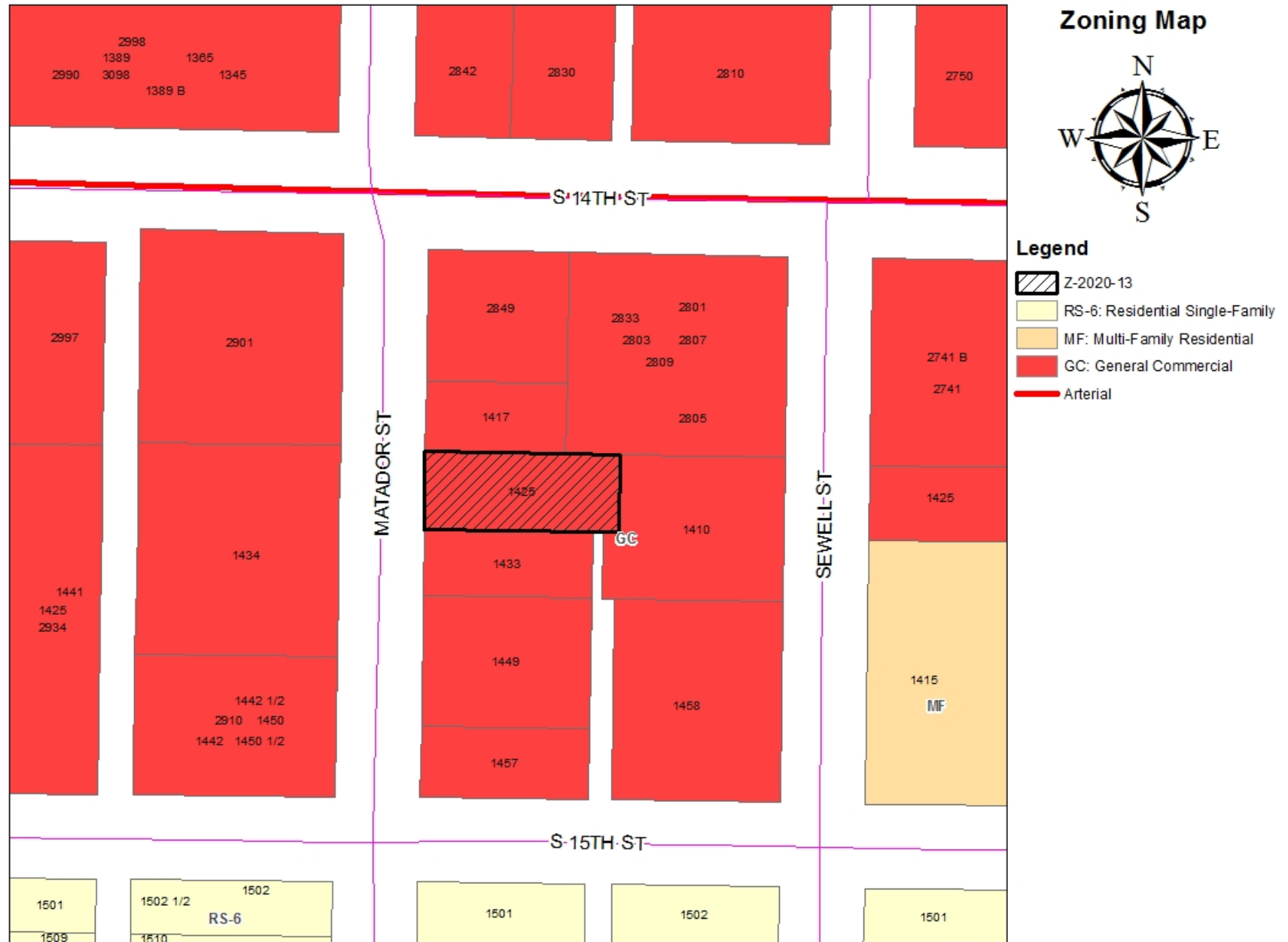
Location Map



Legend



Z-2020-13 ZONING MAP



GC PERMITTED USES

RESIDENTIAL USES:

- P Hotel/Motel
- C Vacation Travel Trailer Park

ACCESSORY AND INCIDENTAL USES:

- P Accessory Structure (Also see Division 4 of this article)
- P Antenna, Non-Commercial/Amateur
- P ATM's, Self-Serve Kiosks, and Similar Facilities
- P Drive-Thru Facility
- TP Field Office or Construction Office (temporary)
- C Freight Container
- P Fuel Sales
- TP Itinerant Business
- P Manufacturing (incidental)
- C Mobile Home (permanent security residence)
- TP Mobile Home (temporary security residence)
- C Mobile Home or Temporary Building (office for sales and service)
- P Recycling Collection Point
- C Travel Trailers (accessory to hospitals)
- P/SE Wind Energy Conversion Systems

CULTURAL AND RECREATIONAL USES:

- P Civic, Social, and Fraternal Organization
- P Cultural Facilities
- P Drive-in Theater
- P Recreation – Outdoors (active)
- P Recreation – Outdoors (passive)
- P Recreation and Commercial Entertainment – Indoor

GOVERNMENT, HEALTH, SAFETY AND WELFARE USES:

- P Ambulance Service
- P Fire/Police Station
- C Homeless/Emergency Shelter
- P Hospital
- P Medical/Dental Laboratory
- P Post Office
- C Rehabilitation Facility
- P Social Service Facility

EDUCATIONAL AND RELIGIOUS USES:

- P Arts School
- C Cemetery, Crematorium, and Mausoleum
- P Church or Place of Worship
- P Day-Care Operation - Center-Based
- P Educational and Scientific Research
- P School: Public/Private
- P Trade/Business School
- P University/College

SERVICE

- P/C Automobile Wash
- C Contractor Services
- P Funeral Home/ Mortuary/Morgue
- C Kennel (With Outdoor Pens)
- P Kennel (Without Outdoor Pens)
- P Laundry, Dry Cleaning, Dyeing, and Linen Service (no retail customers)
- P Laundry/Dry Cleaning Services & Facilities
- P Office (general, professional, financial)
- P Personal Services
- P Printing, Copying, Reproduction, Publishing
- C Recycling Collection and Processing Center
- P Repair and Maintenance Services - Automobile/Small Truck (major)
- P Repair and Maintenance Services - Automobile/Small Truck (minor)
- P Repair and Maintenance Services (indoor)
- C Repair and Maintenance Services (outdoors)
- P Storage - Self-Service Units
- P Tattoo Parlor
- P Taxidermist
- P Veterinary Service (small animals)

TRADE – RETAIL USES

- C Aircraft and Accessories
- P ATM's, Self-Serve Kiosks, and Similar Facilities
- P Fuel Sales
- P Liquor Store (Off Premises Consumption) (*Defined under Liquor Store*)
- P Liquor Store (On Premises Consumption) (*Defined under Liquor Store*)
- P Restaurant, Fast Food
- P Restaurant, Standard
- P Retail Sales/Rental (automobile/small truck)
- P Retail Sales/Rental (indoor)
- P Retail Sales/Rental (outdoors, non-vehicle)
- C Retail Sales/Rental (trucks and other large vehicles and equipment)

TRADE – WHOLESALE USES

- C Wholesaling and Storage (indoor)

TRANSPORTATION, COMMUNICATION AND UTILITIES:

- C Antenna Tower - Commercial
- P Automobile Parking Lot or Structure - Commercial
- P Broadcast Studio
- P Passenger Ground Transportation Terminal
- P Pressure Control Station
- P Public Utility Facility

RESOURCE PRODUCTION AND EXTRACTION USES:

- P Petroleum or Gas Well
- P Urban Garden

LEGEND

P

Permitted as a Right-of-Use (may be subject to compliance with conditions described within Section 2.4.3 of the Land Development Code)

C

Permitted as a Conditional Use Permit, Requiring Approval by City Council

TP

Permitted by Temporary Permit Only, Requiring Approval by Board of Adjustment

GR PERMITTED USES

RESIDENTIAL USES:

- P Bed & Breakfast
- P Dwelling – Industrialized Housing Unit
- P Dwelling – Institutional
- P Dwelling – Multiple-Family
- P Dwelling – Single Family Detached**
- P Hotel/Motel

ACCESSORY AND INCIDENTAL USES:

- P Accessory Structure (Also see Division 4 of this article)
- P Antenna, Non-Commercial/Amateur
- P ATM's, Self-Serve Kiosks, and Similar Facilities
- P Day Care Operation – Home Based
- P Drive-Thru Facility
- TP Field Office or Construction Office (temporary)
- C Freight Container
- P Fuel Sales
- P Garage Sales
- P Home Occupation
- TP Itinerant Business
- P Manufacturing (incidental)
- TP Mobile Home (temporary security residence)
- P Recreation Building, Multipurpose
- P Recreation Equipment, Mobile (storage and parking)
- P Recycling Collection Point
- P Subdivision Sales Office (temporary)
- P Swimming Pools, Private (accessory to residential use)
- P Tennis Courts, Private (accessory to residential use)
- P/SE Wind Energy Conversion Systems

CULTURAL AND RECREATIONAL USES:

- P Civic, Social, and Fraternal Organization
- P Cultural Facilities
- C Recreation – Outdoors (active)
- P Recreation – Outdoors (passive)
- P Recreation and Commercial Entertainment - Indoor

GOVERNMENT, HEALTH, SAFETY AND WELFARE USES:

- C Ambulance Service
- P Fire/Police Station
- P Medical/Dental Laboratory
- P Post Office
- C Social Service Facility

EDUCATIONAL AND RELIGIOUS USES:

- P Arts School
- P Church or Place of Worship
- P Day-Care Operation - Center-Based
- P Educational and Scientific Research
- P School: Public/Private
- C Trade/Business School
- P University/College

SERVICE

- P/C Automobile Wash
- C Funeral Home/ Mortuary/Morgue
- P Kennel (Without Outdoor Pens)
- P Laundry/Dry Cleaning Services & Facilities
- P Office (general, professional, financial)
- P Personal Services
- C Printing, Copying, Reproduction, Publishing
- P Repair and Maintenance Services - Automobile/Small Truck (minor)
- P Repair and Maintenance Services (indoor)
- C Tattoo Parlor
- P Veterinary Service (small animals)

TRADE – RETAIL USES

- P ATM's, Self-Serve Kiosks, and Similar Facilities
- P Fuel Sales
- P Liquor Store (Off Premises Consumption) (*Defined under Liquor Store*)
- P Liquor Store (On Premises Consumption) (*Defined under Liquor Store*)
- P Restaurant, Fast Food
- P Restaurant, Standard
- P Retail Sales/Rental (indoor)
- C Retail Sales/Rental (outdoors, non-vehicle)

TRANSPORTATION, COMMUNICATION AND UTILITIES:

- C Antenna Tower- Commercial
- P Automobile Parking Lot or Structure - Commercial
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- P Public Utility Facility

RESOURCE PRODUCTION AND EXTRACTION USES:

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LEGEND

P

Permitted as a Right-of-Use (may be subject to compliance with conditions described within Section 2.4.3 of the Land Development Code)

C

Permitted as a Conditional Use Permit, Requiring Approval by City Council

TP

Permitted by Temporary Permit Only, Requiring Approval by Board of Adjustment

Z-2020-13 VIEWS OF SUBJECT PROPERTY

Neighboring Property (North)



Neighboring Property (East)



Photo of Subject Property



Neighboring Property (West)



Neighboring Property (South)



Z-2020-13 NOTIFICATION AREA MAP



- Consistent with *Comprehensive Plan* and *Future Land Use and Development Plan Map*
- Reviewed Pursuant to Section 1.4.1.4 of Land Development Code (Criteria for Approval)
- Staff Recommendation: Approval
- Planning & Zoning Recommendation: Approval

Questions?



**City Council
Agenda Memo**

City Council Meeting Date: 10/8/2020

TO: Robert Hanna, City Manager

FROM: Mike Warrix, Director

SUBJECT: **12. Ordinance (Final Reading) CUP-2020-06: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on a request from Hit Ventures LLC, agent Cody Myers, for approval of Conditional Use Permit allowing light manufacturing and, in particular, coffee processing in a Heavy Commercial (HC) District (Mike Warrix)**

GENERAL INFORMATION

The applicant is requesting a Conditional Use Permit (CUP) to allow light manufacturing within Heavy Commercial (HC) Zoning.

SPECIAL CONSIDERATIONS

FUNDING/FISCAL IMPACT

STAFF RECOMMENDATION

Staff recommends approval with conditions.

BOARD OR COMMISSION RECOMMENDATION

The Planning and Zoning Commission recommends approval of this request by a vote of six (6) to zero (0).

ATTACHMENTS:

1. 1- CUP-2020-06 3- ordinance
2. 2- CUP-2020-06 Council staff report
3. 3- CUP-2020-06 Council Presentation

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF ABILENE, TEXAS, AMENDING THE "LAND DEVELOPMENT CODE" OF THE ABILENE CITY CODE, BY APPROVING A CONDITIONAL USE PERMIT (CUP) AFFECTING CERTAIN PROPERTY; CALLING A PUBLIC HEARING; PROVIDING A PENALTY AND AN EFFECTIVE DATE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

PART 1: That Chapter 2 (Zoning Regulations) of the Land Development Code of the City of Abilene, is hereby amended by approving a Conditional Use Permit (CUP) as set out in Exhibit A, attached hereto and made a part of this ordinance for all purposes.

PART 2: That any person, firm or corporation violating any of the provisions of this chapter shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by a fine of not more than Five Hundred Dollars (\$500.00). Each day such violation shall continue or be permitted to continue, shall be deemed a separate offense.

PART 3: That the Planning Director be, and is hereby authorized and directed to change the official Zoning Map of the City of Abilene to correctly reflect the amendments thereto. PASSED ON FIRST READING the 24th day of September A.D. 2020.

A notice of the time and place, where and when said ordinance would be given a public hearing and considered for final passage, was published in the Abilene Reporter-News, a daily newspaper of general circulation in the City of Abilene, said publication being on the 15th day of August, 2020, the same being more than fifteen (15) days prior to a public hearing held in the Council Chamber of the City Hall in Abilene, Texas, at 8:30 a.m. on the 8th day of October, 2020, to permit the public to be heard prior to final consideration of this ordinance. Said ordinance, being a penal ordinance, becomes effective ten (10) days after its publication in the newspaper, as provided by Section 19 of the Charter of the City of Abilene.

PASSED ON FINAL READING THIS 8th day of October, A.D. 2020.

ATTEST:

CITY SECRETARY

MAYOR

APPROVED:

CITY ATTORNEY

EXHIBIT A

Conditional Use Permit (CUP) to allow a “Light Manufacturing” facility as defined within the Land Development Code, specifically limited to only allow coffee processing with the following conditions for approval:

1. The portion of the facility which is to be utilized for coffee processing shall be separately ventilated from the portion of the business which is used as customer dining area.
2. The portion of the facility which is to be utilized for coffee processing must be fully partitioned and separate from the portion of the building which is utilized as customer dining area.
3. Light manufacturing activities at this location are restricted to the processing of coffee. To include but not to be limited to roasting, grinding, packaging, canning and distribution of coffee products.

Legal description: Lot 1 & 2 of Block Y in J. Stoddard, Johnston Subdivision a re-plat of Lot 2, Block 190 of Original Town of Abilene.



Location: 802 S Treadaway Blvd.

-END-

ZONING CASE CUP-2020-06

STAFF REPORT



REQUEST: Conditional Use Permit

APPLICANT:

Owner: Hit Ventures, LLC

Agent: Cody Myers

HEARING DATES:

P & Z Commission: September 1, 2020

City Council 1st Reading: September 24, 2020

City Council 2nd Reading: October 8, 2020

LOCATION:

- 802 S. Treadaway Blvd.
- Lots 1 & 2 of Block Y in J. Stoddard, Johnston Subdivision a Re-plat of Lot 2, Block 190 of Original Town of Abilene

PROPOSAL AND REQUESTED ACTION:

The applicant is requesting a Conditional Use Permit (CUP) to allow light manufacturing within Heavy Commercial (HC) Zoning.

BACKGROUND:

The subject property has been zoned Heavy Commercial (HC) since at least 1974. This building was originally an automotive service station. Over the years, several automotive businesses have operated at this location. In 2018, a certificate of occupancy was issued for a retail coffee shop to occupy the existing building. The applicant is seeking a Conditional Use Permit (CUP) for light manufacturing to allow the roasting/processing of coffee beans as well as the packaging and distribution of products from this location as an incidental to the currently existing retail coffee shop.

ANALYSIS:

Criteria Analysis:

Staff has reviewed the request based upon the factors established in Section 1.4.3.5, Criteria for Approval, of the Land Development Code. These factors are identified and addressed below:

1. The proposed use at the specified location is consistent with the policies embodied in the adopted Comprehensive Plan.

Yes, the Comprehensive Plan designates the property to be located within a "Local Activity Center." The Comprehensive Plan details the purpose of such activity centers to "provide a higher concentration and greater variety of activity for several neighborhoods, including a mix of commercial, employment, entertainment, housing and civic services."

2. **The proposed use is consistent with the general purpose and intent of the applicable zoning district regulations.**

Yes, Heavy Commercial (HC) Zoning is intended to accommodate sales and services which by their nature may not be compatible with many other traditional commercial zoning districts found in the City of Abilene, this is interpreted to include light manufacturing.

3. **The proposed use is compatible with and preserves the character and integrity of adjacent developments and neighborhoods, and includes improvements either on-site or within the public rights-of-way to mitigate development-related adverse impacts, such as traffic, noise, odors, visual nuisances, drainage or other similar adverse effects to adjacent development and neighborhoods.**

Due to the scale of processing and distribution of coffee products from this location, City staff believes granting the CUP for light manufacturing will not be detrimental to the overall character and integrity of the surrounding properties.

4. **The proposed use does not generate pedestrian and vehicular traffic which will be hazardous or conflict with the existing and anticipated traffic in the neighborhood.**

The proposed use will not generate pedestrian and vehicular traffic that will be hazardous or conflict with existing and anticipated traffic.

5. **The proposed use incorporates roadway adjustments, traffic control devices or mechanisms, and access restrictions to control traffic flow or divert traffic as may be needed to reduce or eliminate development-generated traffic on neighborhood streets.**

The proposed use will not incorporate roadway adjustments, traffic control devices, mechanisms and access restrictions. However, no anticipated generation of traffic which would warrant such measures.

6. **The proposed use incorporates features to minimize adverse effects, including visual impacts, of the proposed conditional use on adjacent properties.**

In order to be considered light manufacturing, all activities associated with the proposed conditional use must take place indoors and must not create any nuisances such as odors, noise, heat, vibration and radiation outside of the subject property. It is the opinion of staff that there are no negative visual impacts associated with the proposed conditional use.

7. **The proposed use meets the standards for the zoning district, or to the extent variations from such standards have been requested, that such variations are necessary to render the use compatible with adjoining development and the neighborhood.**

It is the opinion of staff that the proposed use will meet the standards for the zoning district.

Comprehensive Planning Analysis

The Future Land Use and Development Plan Map of the Comprehensive Plan designates this general area as a local activity center. Approval of the Conditional Use Permit promotes the goal of the future land use plan as it intends to provide a high concentration and greater variety of activity for several neighborhoods, including a mix of commercial, employment and entertainment services. Additionally, the subject property is located within the Neighborhood Empowerment Zone (78-2018), a zone designed to promote redevelopment in “economically distressed” areas of Abilene.

Existing Land Use

Location	Zoning	Existing Land Use
North	HC	Restaurant
South	HC	Vacant Building
East	HC	Abilene Hope Haven (transitional housing)
West	PD (137B)	Single Family Residential

STAFF RECOMMENDATION:

Staff recommends approval subject to the following conditions:

1. The portion of the facility which is to be utilized for coffee processing shall be separately ventilated from the portion of the business that is used for a customer dining area.
2. The portion of the facility which is to be utilized for coffee processing must be fully partitioned and separate from the portion of the building which is utilized for customer dining area.
3. Light manufacturing activities at this location are restricted to the processing of coffee. To include but not to be limited to roasting, grinding, packaging, canning and distribution of coffee products.

PLANNING AND ZONING COMMISSION RECOMMENDATION:

The Planning and Zoning Commission recommended approval of this request by a vote of six (6) to zero (0), on September 1, 2020.

NOTIFICATION:

The Planning Services Division sent public notices, with a certificate of mailing, to the applicant and to owners of property within a 200-foot radius of the subject property.

Owner	Situs	Response
ABILENE HOPE HAVEN INC	801 S TREADAWAY BL	
CIRCLE G INVESTMENTS LLC	754 S TREADAWAY BL	In Favor
CIRCLE G INVESTMENTS LLC	758 S TREADAWAY BL	In Favor
CROSSLAND ASHLEY JUSTIN & DUARTE WALTER ANTONIO	781 S TREADAWAY BL	
HERNANDEZ PEDRO G	833 CHERRY ST	
HERNANDEZ SALETA	827 CHERRY ST	
HIT VENTURES LLC	825 CHERRY ST	
LONE STAR RAILROAD INC	802 S TREADAWAY BL	
MK POWELL PROPERTIES LLC	825 S TREADAWAY BL	
MORRIS & JACOBY PARTNERSHIP	830 S TREADAWAY BL	In Favor
MORRIS & JACOBY PARTNERSHIP	773 CHERRY ST	
MORRIS MARVIN	780 S TREADAWAY BL	
MORRIS MARVIN	765 CHERRY ST	
MORRIS MARVIN	811 CHERRY ST	
MORRIS MARVIN	809 CHERRY ST	
PARKS GREGORY L	842 S TREADAWAY BL	
POPE BRYAN	820 S TREADAWAY BL	In Favor
SCOTT FAMILY ENTERPRISES LLC	765 S TREADAWAY BL	
SCOTT FAMILY ENTERPRISES LLC	773 S TREADAWAY BL	
SMITH LARRY C & KRISTY K	834 S TREADAWAY BL	
WEST TEXAS UTILITIES CO	841 S TREADAWAY BL	





Development Application

Planning

☒ Conditional Use ☐ Easement Release ☐ Rezoning ☐ Other
☐ PDD ☐ Street Name Change ☐ Thoroughfare Abandonment ☐ PDD Amendment
 Other: _____

Project Name: Big Country Coffee Food Manufacturing
 Address: 802 South Treadaway Boulevard No. of lots: _____ Acreage: 0.2984
 Legal Description: Lots 1 and 2 in Block Y of J. Stoddard Johnston's Subdivision of Lot 2, Block 190, Abilene's Original Town
 Subdivision Name: _____ Block: _____ Lot: _____
 Current Zoning: Heavy Commercial Proposed Zoning (if applicable): _____

OWNER AND AUTHORIZATION

Owner Name: Hit Ventures, LLC
 Address: 402 South 7th Street
 City, State, Zip: Abilene, TX 79602 Fax: _____
 Phone: (325) 829-5160 Email: harleyburnett@gmail.com

I am the property owner, and I certify that the information included in this application is true to the best of my knowledge. (Name) Cody Myers will act as my agent before the Planning and Zoning Commission.

Agent Name: Cody Myers
 Address: 9 Reagan Circle
 City, State, Zip: Abilene, TX 79605 Fax: _____
 Phone: (406) 581-2487 Email: kelevrainvestments@hotmail.com

I hereby certify that I am the owner of the property and further certify that the information provided on this development application is true and correct. I hereby designate the aforementioned agent to act on my behalf for submittal, processing, representation, and/or presentation of this development application. The designated agent shall be the principal contact person for responding to all requests for information and for resolving all issues of concern relative to this application.

Signature Owner: Cody Myers Date: 8/5/2020

FOR OFFICE USE ONLY

Received: 8/3/20 Fee: \$ 1500 Receipt No.: _____
 Case No.: CUP-2020-06 Reviewed By: [Signature]

*Conditional use to allow roasting coffee and canning cold brew coffee products, as limited light manufacturing, in existing heavy commercial district.



Development Application

Please answer the following question in order to assist Staff with the processing of your Zoning request.

1. Please (if necessary) provide background information for the zoning request and explain why you feel it is appropriate.

As mentioned on page number 6 of this application, Big Country Coffee is seeking to obtain a
conditional use permit in an existing heavy commercial district for the use of limited light manufacturing
and processing of coffee products. This includes roasting coffee and canning cold brew coffee.
The area dedicated for manufacturing is partitioned from their coffee shop residing within the same
building. The partition provides full separation of their customers from the manufacturing of their goods.



Development Application

RECOMMENDATIONS

The Planning & Zoning Commission (P&Z) and the City Council look to the Planning & Development Services staff to make a recommendation for the approval or disapproval of this application. We will make every effort to notify you (FAX or E-mail) of our recommendation at least one (1) week in advance of the scheduled meeting of the P&Z Commission. In the case of a rezoning, and when the public interest requires it, we may recommend a rezoning to a Planned Development District (PDD) or a classification other than the classification requested. We will notify you of our decision to propose a PDD as soon as possible after the application is filed to give you time to prepare a site plan.

PUBLIC NOTIFICATION

The public is entitled to examine this application and participate in the decision-making process. In most cases, we are required to notify all property owners within two hundred feet (200') of the boundaries of your property. To ensure the fullest possible consideration, we may also notify neighborhood groups, organizations or individuals that have a special interest in a particular issue. Except for matters that the Planning & Development Services staff have expressly agreed not to disclose (and provided the law allows us to hold the matter in confidence), then all information that we deem relevant to the review and processing of this application may become public knowledge.

PLEASE READ BEFORE SIGNING

The undersigned has read the above application and hereby certifies that the information contained therein is complete, true and correct; and does hereby request that said application be submitted to the Planning & Zoning Commission at the earliest available meeting.

I understand and acknowledge that it is my responsibility to furnish an accurate and precise legal description of the property, and only the property, that is subject of this application, and that failure to furnish such information prior to the application deadline date will delay the processing of this application. I also understand that the City must notify affected property owners of this application. In the event that I fail to submit in a timely manner any information that the City deems necessary to transmit this application to the Planning & Zoning Commission or City Council, then in lieu of dismissal I hereby request that this application be temporarily withdrawn from further consideration until such information is submitted, and I agree to pay a resubmission fee of \$120 to reimburse the City for the expense of re-notifying affected property owners. I have been informed of the tentative date and time that the Planning & Zoning Commission and City Council will hear this application, and I understand that hearings may be continued from time to time at the discretion of the Commission or Council to allow for full consideration or when the public interest requires a continuation.

SIGNED: _____

Cody Meyer

DATE: _____

8/3/2020

An aerial satellite view of a property. A yellow rectangular label with a black border is placed over a building. The label contains the text "Coffee Roasting" and "Light Manufacturing". The building is a large, light-colored structure with a dark roof. To the left of the building is a paved area with several cars parked. To the right is a dirt area. A red dashed line outlines the property. A red "HC" label is visible below the building. A search result box is on the right side of the image.

Coffee Roasting
"Light Manufacturing"

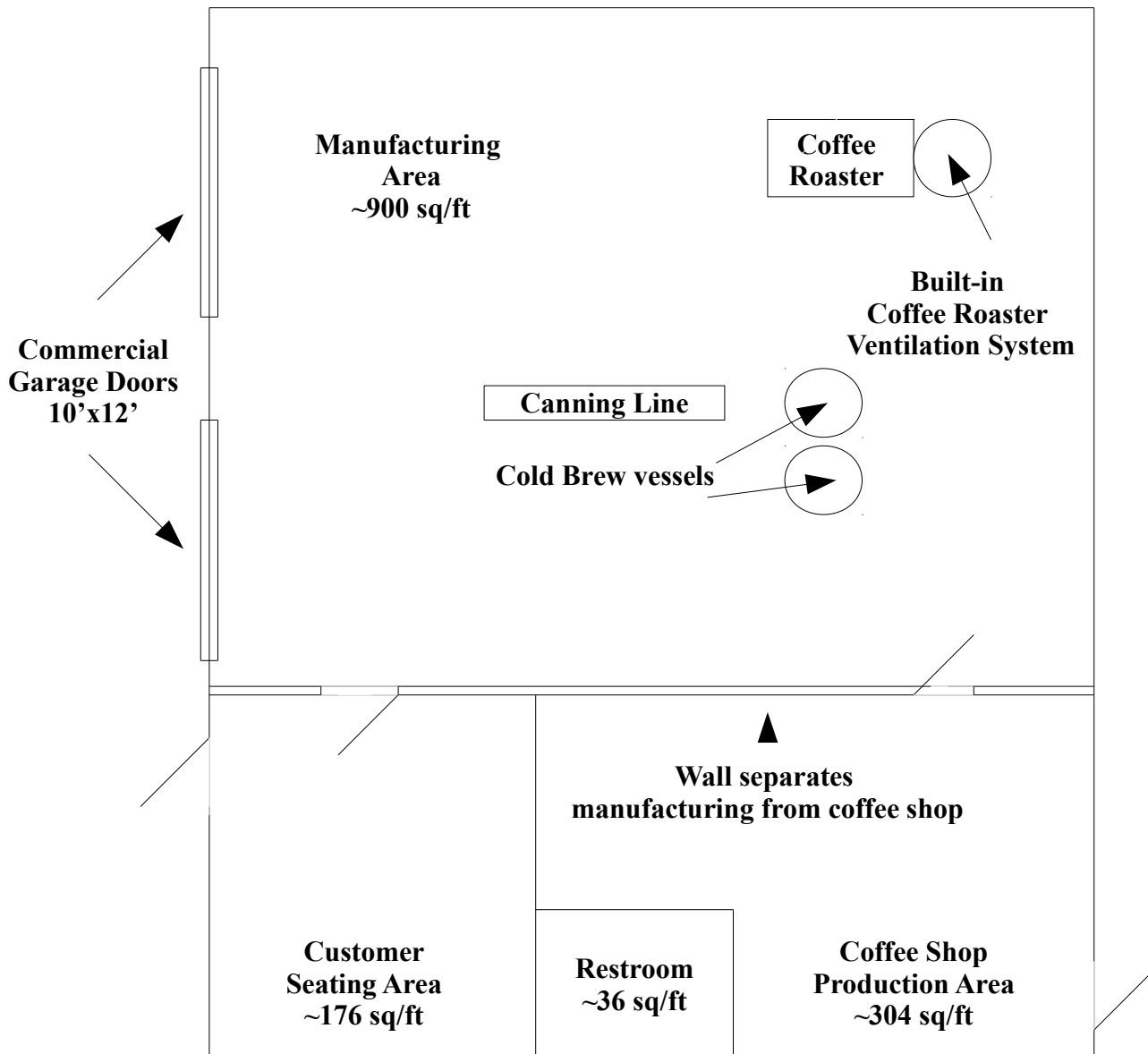
Search result

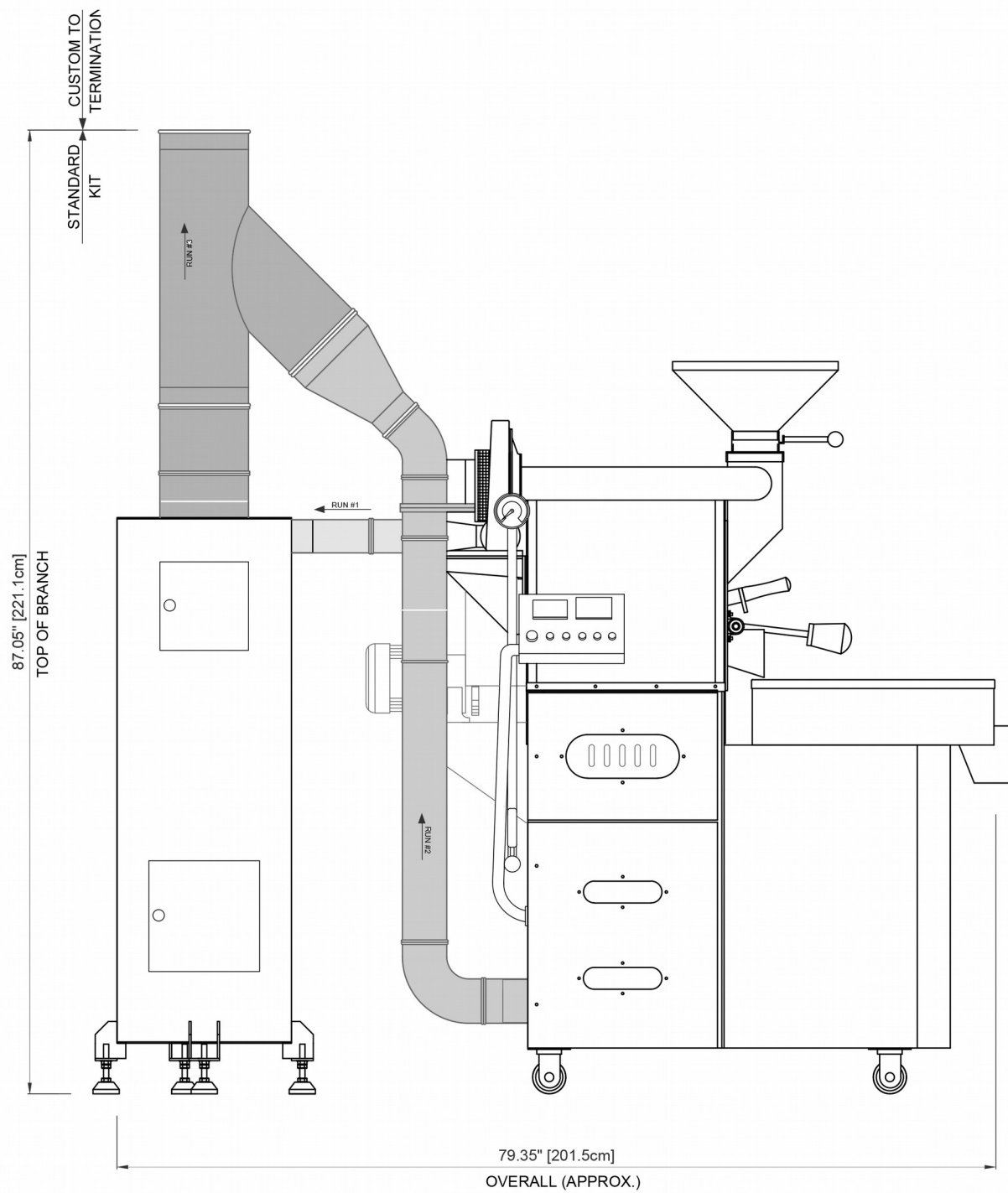
802 S TREADAWAY BL, ABIL

[Zoom to](#)

1895

HC





ELEVATION: ROASTER & CHAFF COLLECTOR



CITY OF ABILENE

PLANNING &
DEVELOPMENT
SERVICES

MK POWELL PROPERTIES LLC
2810 S 27TH ST
ABILENE, TX 79605-6328

NOTICE OF PUBLIC HEARING

RE: Rezoning Application Number CUP-2020-06

08/19/2020

The Planning and Zoning Commission will hold a public hearing on **Tuesday, September 1, 2020** at **1:30 PM**, in City Council Chambers, 2nd Floor, City Hall, N. 5th and Walnut Streets, to recommend approval or denial to City Council on a request from Hit Ventures LLC, agent Cody Myers, for approval of Conditional Use Permit allowing light manufacturing and, in particular, coffee processing in a Heavy Commercial (HC) District; Legal description being Lots 1 and 2 in Block Y of J. Stoddard Johnston's Subdivision of Lot 2 in Block 190 of Abilene's Original Townsite and located at 809 South Treadaway Boulevard.

This hearing is open to any interested person. Opinions, objections and/or comments relative to this matter may be expressed in writing or in person at the hearing. At the bottom of this letter is a form that you may cut off, fill out, and mail. Comments are also accepted by email as listed below. All responses must be signed.

The attached map shows the area of the request. Only that area which is bounded by the cross-hatched line on the map is being considered for rezoning. The solid boundary line around the subject area is only a notification area. If approved by the Planning and Zoning Commission or if denied and appealed to Abilene's City Council within the specified ten-day period, this case will be heard by City Council for 2nd and Final Reading with a public hearing on **October 8, 2020**, at **8:30 AM** in Council Chambers on the second floor of City Hall, 555 Walnut Street.

If you have any questions, please contact Jared Smith, Planner II at (325) 676-6490 or jared.smith@abilenetx.gov

For the PLANNING & ZONING COMMISSION

Please call (325) 676-6237 if you have any questions about this notice.

CASE #: CUP-2020-06

You may indicate your position on the above request by detaching this sheet at the dotted line and returning it to the address below. You may attach additional sheets if needed. You may also email your position to the email address listed below. All correspondence must include your name and address.

Name: MK POWELL PROPERTIES LLC
Address: 830 S TREADAWAY BL

Mailing To: Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

Email: planning@abilenetx.gov

I am in favor ☒
Additional Comments:

I am opposed ☐

Signature: *MK Powell, member*



CIRCLE G INVESTMENTS LLC
1408 DORAL CT
SAN ANGELO, TX 76904-9372

NOTICE OF PUBLIC HEARING

RE: Rezoning Application Number CUP-2020-06

08/19/2020

The Planning and Zoning Commission will hold a public hearing on **Tuesday, September 1, 2020 at 1:30 PM**, in **City Council Chambers, 2nd Floor**, City Hall, N. 5th and Walnut Streets, to recommend approval or denial to City Council on a request from Hit Ventures LLC, agent Cody Myers, for approval of Conditional Use Permit allowing light manufacturing and, in particular, coffee processing in a Heavy Commercial (HC) District; Legal description being Lots 1 and 2 in Block Y of J. Stoddard Johnston's Subdivision of Lot 2 in Block 190 of Abilene's Original Townsite and located at 809 South Treadaway Boulevard.

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For the PLANNING & ZONING COMMISSION
Please call (325) 676-6237 if you have any questions about this notice.

CASE #: CUP-2020-06

You may indicate your position on the above request by detaching this sheet at the dotted line and returning it to the address below. You may attach additional sheets if needed. You may also email your position to the email address listed below. All correspondence must include your name and address.

Name: CIRCLE G INVESTMENTS LLC
Address: 754 S TREADAWAY BL

Mailing To: Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

Email: planning@abilenetx.gov

I am in favor ☒
Additional Comments:

I am opposed ☐

Signature: 



CIRCLE G INVESTMENTS LLC
1408 DORAL CT
SAN ANGELO, TX 76904-9372

NOTICE OF PUBLIC HEARING

RE: Rezoning Application Number CUP-2020-06

08/19/2020

The Planning and Zoning Commission will hold a public hearing on **Tuesday, September 1, 2020 at 1:30 PM**, in **City Council Chambers, 2nd Floor**, City Hall, N. 5th and Walnut Streets, to recommend approval or denial to City Council on a request from Hit Ventures LLC, agent Cody Myers, for approval of Conditional Use Permit allowing light manufacturing and, in particular, coffee processing in a Heavy Commercial (HC) District; Legal description being Lots 1 and 2 in Block Y of J. Stoddard Johnston's Subdivision of Lot 2 in Block 190 of Abilene's Original Townsite and located at 809 South Treadaway Boulevard.

This hearing is open to any interested person. Opinions, objections and/or comments relative to this matter may be expressed in writing or in person at the hearing. At the bottom of this letter is a form that you may cut off, fill out, and mail. Comments are also accepted by email as listed below. All responses must be signed.

The attached map shows the area of the request. Only that area which is bounded by the cross-hatched line on the map is being considered for rezoning. The solid boundary line around the subject area is only a notification area. If approved by the Planning and Zoning Commission or if denied and appealed to Abilene's City Council within the specified ten-day period, this case will be heard by City Council for 2nd and Final Reading with a public hearing on **October 8, 2020, at 8:30 AM** in Council Chambers on the second floor of City Hall, 555 Walnut Street.

If you have any questions, please contact Jared Smith, Planner II at (325) 676-6490 or jared.smith@abilenetx.gov

For the PLANNING & ZONING COMMISSION
Please call (325) 676-6237 if you have any questions about this notice.

CASE #: CUP-2020-06

You may indicate your position on the above request by detaching this sheet at the dotted line and returning it to the address below. You may attach additional sheets if needed. You may also email your position to the email address listed below. All correspondence must include your name and address.

Name: CIRCLE G INVESTMENTS LLC
Address: 758 S TREADAWAY BL

Mailing To: Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

Email: planning@abilenetx.gov

I am in favor ☒
Additional Comments:

I am opposed ☐

Signature: _____

A handwritten signature in black ink, appearing to be "Jared Smith", written over a horizontal line.

AUG 26 AM 10:15

For the PLANNING & ZONING COMMISSION

Please call (325) 676-6237 if you have any questions about this notice.

CASE #: CUP-2020-06

You may indicate your position on the above request by detaching this sheet at the dotted line and returning it to the address below. You may attach additional sheets if needed. You may also email your position to the email address listed below. All correspondence must include your name and address.

Mailing To:

Planning and Development Services
P.O. Box 60, Abilene TX 79604-0060

I am in favor ☒

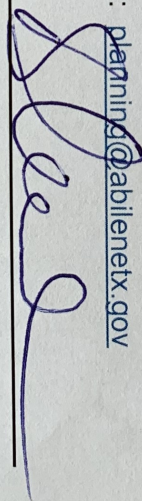
I am opposed ☐

Additional Comments:

Name: POPE BRYAN
Address: 820 S TREADAWAY BL

Email: planning@abilenetx.gov

Signature: _____

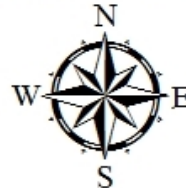


Case: CUP-2020-06
Owner: Hit Ventures, LLC
Agent: Cody Myers
Request: Conditional Use Permit to allow “Light Manufacturing” in Heavy Commercial (HC) Zoning
Location: 802 S. Treadaway Blvd.
Notification: 4 in Favor, 0 Opposed
Planning & Zoning Recommendation: Approval

CUP-2020-06 AERIAL LOCATION MAP



Location Map



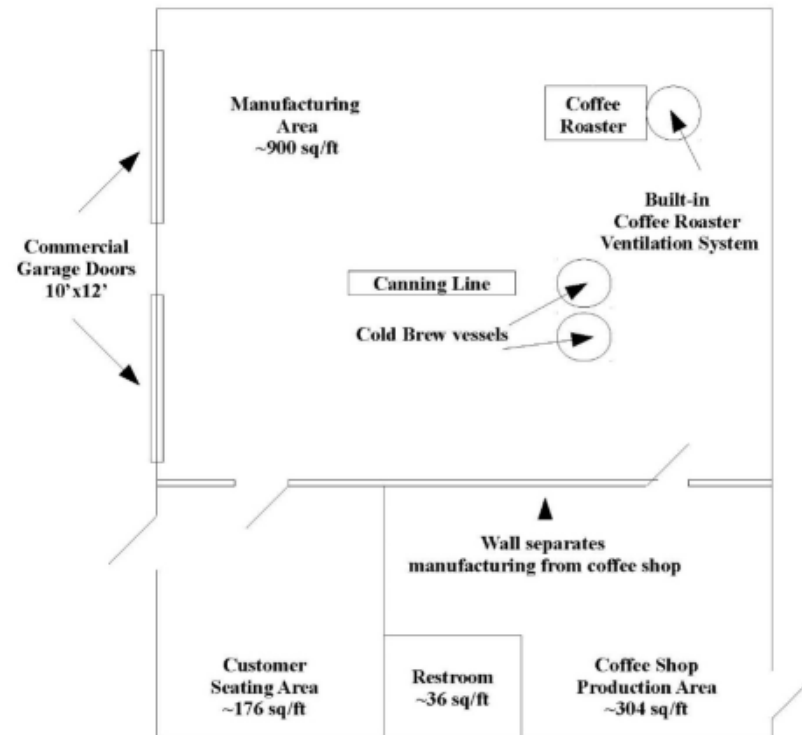
Legend

 CUP-2020-06

CUP-2020-06 ZONING MAP









Subject Property



Neighboring property to the South



Neighboring property to the North



Property East of S. Treadaway Blvd



CUP-2020-06 NOTIFICATION AREA MAP



- Consistent with *Comprehensive Plan* and *Future Land Use and Development Plan Map*
- Consistent with General Land Use and Zoning Character of Immediate Area (Section 2.3.3.10)
- Reviewed Pursuant to Section 1.4.3.5 of Land Development Code (Criteria for Approval)
- Staff Recommendation: Approval with conditions
- Planning & Zoning Recommendation: Approval with conditions

Questions?



**City Council
Agenda Memo**

City Council Meeting Date: 10/8/2020

TO: Honorable Mayor and Council Members

FROM: Stanley Smith, City Attorney

SUBJECT: 13. The City Council of the City of Abilene reserves the right to adjourn into executive session at any time during the course of this meeting to discuss any of the matters listed below, as authorized by the noted Texas Government Code Sections:

GENERAL INFORMATION

The City Council of the City of Abilene reserves the right to adjourn into executive session at any time during the course of this meeting to discuss any of the matters listed below, as authorized by the noted Texas Government Code Sections:

A. 551.071 (Consultation with Attorney)

1. Ruby Flores and Cory Almanza v. Jesus Verastegui, Alfredo Verastegui, Rosalva Verastegui, and City of Abilene, Cause No. 49368-A, 42nd District Court, Abilene, Taylor County, Texas, filed April 13, 2016
2. Robert Steven Reitz v. City of Abilene, Texas, et al., Case No. 1:16-cv-00181-BL; In the U.S. District Court, Northern District of Texas, Abilene Division, filed October 10, 2016
3. Officer Patrick Sumrall and City of Abilene, Case No. 01-18-000-8653; Appeal of Indefinite Suspension to Arbitration, filed February 6, 2018
4. Alfredo Valencia v. Corey Davis and City of Abilene; Case No. 1:19-cv-00017-C; In the United States District Court, Northern District of Texas, Abilene Division, filed February 4, 2019.
5. City of Abilene v. Patrick Sumrall; Cause No. 27,733-B, In the 104th Judicial District Court, Taylor County, Texas, filed May 28, 2019
6. City of Abilene v. 3118 South 22nd Street, Abilene, Texas, et al.; Cause No. 11968-D, In the 350th Judicial District Court, Taylor County, Texas; filed October 11, 2019
7. City of Abilene, Texas and Garfield Public/Private LLC v. Ken Paxton, Attorney General of Texas; Cause No. D-1-GN-20-000900, In the 261st Judicial District Court,

Travis County, Texas, filed February 13, 2020

8. Chandler Brooks v. Taylor County, et al.; Civil Action No. 1:20-cv-00049, In the United States District Court, Northern District of Texas, Abilene Division; filed March 5, 2020
9. John Doe v. Robert Hanna, Individually and as City Manager; Cause No. 28078-B; In the 104th Judicial District Court, Taylor County, Texas; filed July 7, 2020
10. Kimberly Mattson v. City of Abilene (Board of Building Standards); Cause No. 12197-D, In the 350th Judicial District Court, Taylor County, Texas, filed July 30, 2020
11. The City of Abilene, Texas v. Ken Paxton, Attorney General of Texas; Cause No. D-1-GN-20-004598, In the 53rd Judicial District Court, Travis County, Texas; filed September 1, 2020
12. Cockrell Investment Partners, L.P. v. Middle Pecos Groundwater Conservation District, et al.; Cause No. P-8277-83-CV, In the 83rd Judicial District Court, Pecos County, Texas; filed September 11, 2020
13. Sharra Sampson v. City of Abilene; Cause No. 8144-B, In the 104th Judicial District Court, Taylor County, Texas; filed September 14, 2020
14. Governor's Executive Orders COVID-19

B. 551.072 (Deliberations about Real Property)

1. Clyde Water

C. 551.073 (Deliberations about Gifts and Donations)

D. 551.074 (Personnel Matters)

1. City Council may consider appointment, employment, compensation, reassignment, duties, discipline, or dismissal of public officers or employees, City Manager, City Attorney, Municipal Court Judge, City Secretary, and City Board and Commission Members
2. City of Abilene Boards and Commissions may be discussed, as needed for (re)appointment

E. 551.076 (Deliberations about Security Devices)

F.551.087 (Business Prospect/Economic Development)

1. Abilene Convention Center Hotel Project

SPECIAL CONSIDERATIONS

FUNDING/FISCAL IMPACT

STAFF RECOMMENDATION

BOARD OR COMMISSION RECOMMENDATION

ATTACHMENTS:

None



**City Council
Agenda Memo**

City Council Meeting Date: 10/8/2020

TO: Honorable Mayor & Members of City Council

FROM: Shawna Atkinson, City Secretary

SUBJECT: 14.

Resolution: Receive a Report, Hold a Discussion and Public Hearing, and Take Action on Appointing Members to Various Boards and Commissions per the City Charter (*Shawna Atkinson*)

- **Abilene-Taylor County Public Health District Board**
- **Abilene-Taylor County Venue District Board**

GENERAL INFORMATION

The item provides for reappointment of new members as well as new members to certain boards and commissions.

SPECIAL CONSIDERATIONS

Member terms vary per board and commission and are outlined in Exhibit A of the resolution.

FUNDING/FISCAL IMPACT

No cost consideration to the city.

STAFF RECOMMENDATION

(Re)Appointment

BOARD OR COMMISSION RECOMMENDATION

N/A

ATTACHMENTS:

1. B&C Resolution
2. Exhibit A
3. B&C Presentation Slide

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS, APPOINTING MEMBERS TO VARIOUS BOARDS AND COMMISSIONS AS REQUIRED BY THE CHARTER OF THE CITY OF ABILENE AND STATUTES OF THE STATE OF TEXAS

WHEREAS, the Charter of the City of Abilene and the Statutes of the State of Texas require that certain Boards and Commissions be established with a portion of the memberships thereof to be filled by appointment each year; and

WHEREAS, the City Council is of the opinion that the following members should be appointed to the designated Boards and Commissions, and has requested the Mayor to appoint same with the approval of the Council.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ABILENE, TEXAS:

PART 1: That the list of Members is attached hereto as Exhibit A, shall be in all things, approved.

PART 2: That this resolution shall take effect immediately from and after its passage.

PASSED this 8th day of October, 2020.

ATTEST:

Shawna Atkinson, City Secretary

Anthony Williams, Mayor

APPROVED:

Stanley Smith, City Attorney

RESOLUTION NO. _____
EXHIBIT "A"

Board	Term End Date
<i>Abilene-Taylor County Public Health District</i>	
Travis Craver [Reappointment]	November 2023
Robert Hawley [Reappointment]	November 2023
James McCoy [Reappointment]	November 2023
<i>Abilene-Taylor County Venue District Board</i>	
Glen Dromgoole [Reappointment]	November 2022

Resolution:

Appointing Member(s) to various Boards and Commissions per the City Charter

- Abilene-Taylor County Public Health District Board
- Abilene-Taylor County Events Venue Board

