CITY OF ABILENE

City of Abilene
Mayor's Downtown Task Force Agenda

Notice is hereby given of a meeting of the Mayor's Downtown Task Force of City of Abilene to be held on Friday, January 24, 2020 at 10 AM at City Hall, 555 Walnut Street, Basement South Conference Room, Abilene, Texas, for the purpose of considering the following agenda items.

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.

MINUTES

1. Approval of minutes from previous regular meeting held on November 1, 2019

AGENDA ITEMS

2. Discussion and Possible Action on Review of Center City Growth and Development Plan
3. Discussion and Possible Action Regarding the Realignment of On-Street Parking in the Downtown Area
4. Discussion and Possible Action Regarding Time Limits and Metered Parking Zones in the Downtown Area
5. Discussion and Possible Action Regarding Structured Parking Improvements in the Downtown Area
6. Discussion and Possible Action Regarding Branding and Marketing Downtown Abilene

ADJOURNMENT

Notice

In compliance with the Americans with Disabilities Act, the City of Abilene will provide for reasonable accommodations for persons attending meetings. To better serve you, requests should be received forty-eight (48) hours prior to scheduled meetings. Please contact the City Secretary's Office at 325-676-6208. Telecommunication device for the deaf is 325-676-6360.

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 17th day of January, 2020, at 2:35 p.m.

_____

Kaitlin Richardson, Deputy City Secretary

One vs Two Way

Pros and Cons of One Way to Two Way Street Conversions

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Advantages of One Way Operation

Signal timing is simpler, thus improving traffic flow and decreasing idling time and pollution from vehicles.

Facilitation of traffic flow before and after downtown events is simpler requiring less traffic control, and faster clearance.

Less vehicle conflict points for pedestrians crossing at intersections.

Can provide faster access to on-street parking.

Downtown Signals and timings were recently upgraded, therefore No changes are currently needed to existing operations of street network.

One way streets are common in downtown in many Cities in Texas.

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Disadvantages of One Way Operation

Bicycles are less comfortable riding in multiple lanes.

Increases vehicle miles traveled by adding additional navigation of one way streets.

Unfamiliar visitors may struggle with indirect routes due to One way street configurations downtown.

Speeds appear increased, however well timed traffic signals easily address speeding.

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Advantages of Two Way Operation

Two way streets provide bicyclists with a more comfortable trip.

Decreased vehicle miles traveled by eliminating indirect routes that one way streets require.

Gives the illusion of slower traffic due to oncoming traffic.

Gives the perception of greater visibility to businesses, two vehicles driving by in different directions versus having 2 vehicles driving by on a one way street.

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Disadvantage of Two Way Operation

Reduced access to on street parking. If a parking stall is located on the opposite side of the street, the driver must circle the block or find a location to make a U-turn. Most streets downtown do not accommodate a U-turn, requiring the driver to travel several blocks out of the way to return to the original parking stall (which may be filled).

Additional conflict points making pedestrian and vehicular travel more risky, Vehicles turning from multiple directions not just 1.

Additional costs and labor for events downtown. Would require 2x more setup time for barricades and traffic control to control four way traffic.

May reduce on street parking, or may block travel lanes to accommodate deliveries.

High cost of added infrastructure to convert traffic control, and additional ongoing maintenance expenses.

Conversion is very costly and timely, and Construction could disrupt downtown businesses for several months.

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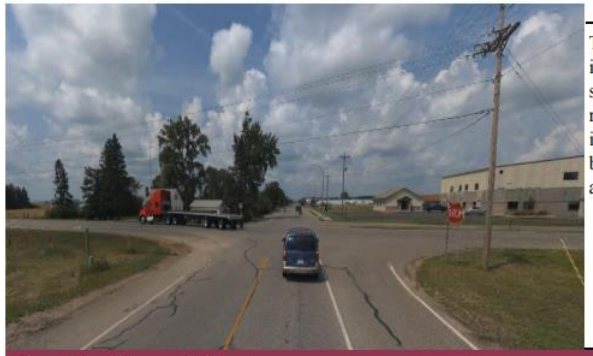
Stop Control vs Signal Control

Two-Way Stop Intersection



Description

Through/Stop intersections is an uncontrolled intersection with stop control on the minor street. The stop-controlled approaches are referred to as the minor street approaches. The intersection approaches that are not controlled by stop signs are referred to as the major street approaches.

Pros and Cons

Pros

1. Low installation cost
2. Continous traffic flow for major approaches
3. Low maintenance cost

Cons

1. Does not address the higher intersection crash severity rate
2. Difficult to enforce stop control compliance
3. Could result in drivers speeding across the intersection to make gaps
4. Motorist must be able to detect the presence of the intersectoin and then detect, recongize, and respond to the drivers crossing.
5. Higher stop control motorist delay during peak periods

Safety Considerations

Crash Types

- Most common crash types are rear end and right angle

Average Crash Rate

- 0.42 Crashes/MEV (Existing Conditions)
- 0.28 Crashes/MEV (Statewide Average - Rural Thru/Stop)

Crash Severity

- Injury related crashes represent approximately 67% of the total reported intersection crashes

Traffic Signal System

Description

Traffic signals assign right-of-way to various traffic movements at intersections. Signal design has typically focused on the operating characteristics of motorized vehicles, but do provide some added protection for pedestrians.

Pros and Cons

Pros

1. Generally Can Be Designed with Minor Impact to Street Width/Curbs
2. Compatible with the Lane Geometrics of the Stop Controlled Intersection and Could be Easily Installed at a Later Date.
3. Improves Left Turn Access onto CR 15
4. Provides for Controlled Movement of Traffic
5. Reduces the Frequency and Severity of Certain Types of Right-Angle Collisions
6. Familiarity

Cons

1. Traffic signal warrants are not met
2. Traffic Signals That Do Not Meet MMUTCD Warrants are Ineligible for Federal Funding. County Cost or Wait Until Warranted.
3. Ongoing Operation, Maintenance, Electricity Costs
4. Increased Crashes, Particularly Rear-end, Right Angle
5. Increased Motor Vehicle Delay and can be Inefficient During Off Peak Periods

Safety Considerations

Crash Types

- Predominant crash types are rear end, right angle and left turn collisions

Average Crash Rate

- 0.6 Crashes/MEV (Low Volume / Low Speed)

Crash Severity

- Injury related crashes represent approximately 29% of the total reported intersection crashes

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Costs of Conversion to Stop Conditions

Stop Conditions

	Hickory	Cedar	Cypress	Pine	Walnut	Mesquite	Plum	Ash	totals	Unit Cost to Implement	Extended Cost
signals to be removed	5	5	4		5				19	$5,000.00	$95,000.00
stop signs to be installed	20	4	16			4	8		52	$200.00	$10,400.00
add traffic signal			1						1	$125,000.00	$125,000.00
traffic control									6	$1,500.00	$9,000.00
Sub Total											**$239,400.00**
Mobilization (15%)											$35,910.00
Cont. (20%)											$55,062.00
Grand Total											**$330,372.00**

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Cost of Signal Conversions for Two Way Operations

Signal Conversions			
Item	**SUM**	**Unit Cost**	**Total**
Signal Arm and Pole	**44**	**$8,500.00**	**$374,000.00**
Signal Foundation	**44**	**$3,000.00**	**$132,000.00**
Signal Cable	**4165**	**$7.00**	**$29,155.00**
Signal Heads	**258**	**$150.00**	**$38,700.00**
Traffic Signal Arm Removal	**21**	**$3,000.00**	**$63,000.00**
NEW Intersection	**1**	**$125,000.00**	**$125,000.00**
Traffic Control (Month)	6	**$1,500.00**	**$9,000.00**
Sub Total			**$770,855.00**
Mobilization (15%)	1		$115,628.25
Contingency (20%)			$177,296.65
TOTAL			**$1,063,779.90**

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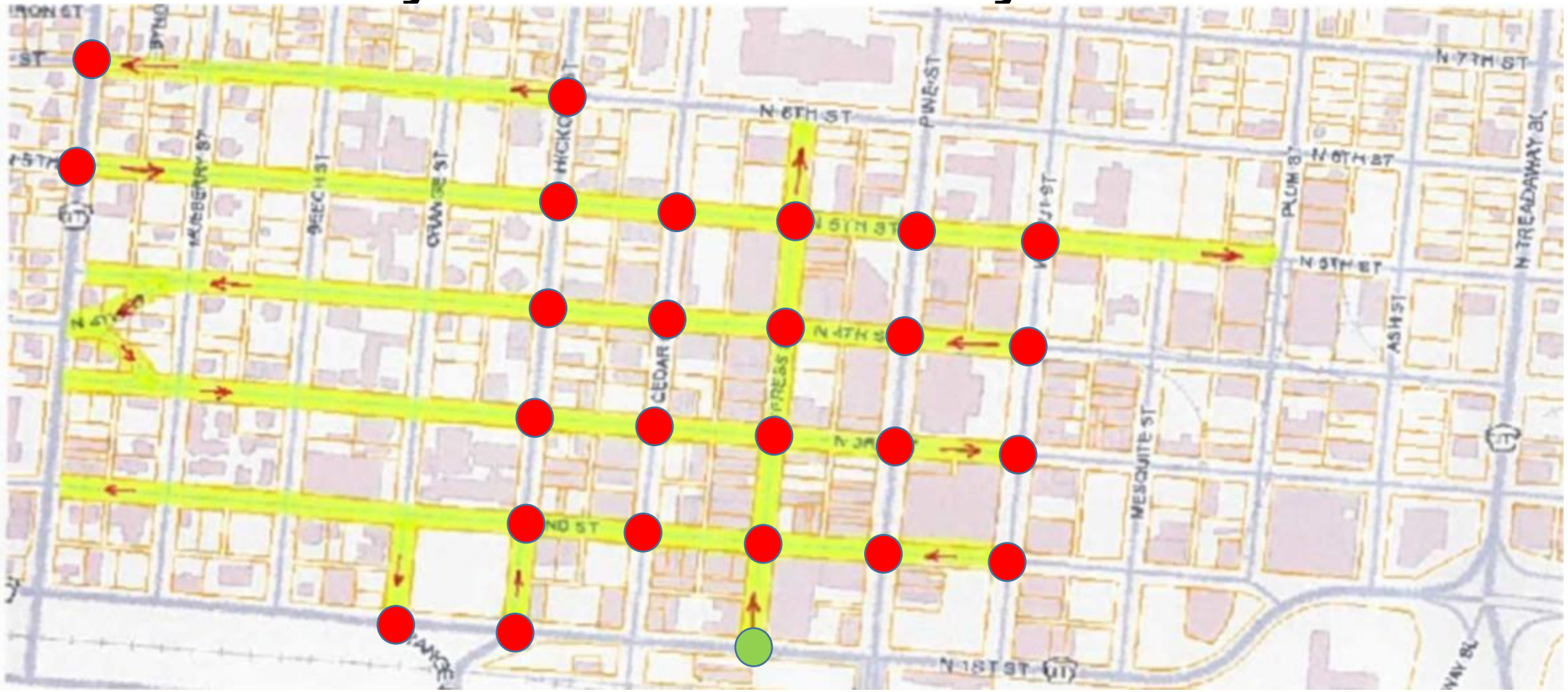
Study Area – One Way Streets



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Study Area – Paving Widths

Pine & Walnut – 70’
Blue – 50’
Yellow – 35’
Purple – 56’
Orange – 40’
N. 4th (1 Way) – 26’

Study Area – Current ROW Configurations

	STREET WIDTH (Face to Face)	26	35/36	35/36	40	39/40/41	50/51/52		50/51/52		56					56				70			
	One Way vs Two Way	One Way	One Way	Two Way	One Way	Two Way	One Way		Two Way		One Way					Two Way				Two Way			
	# of Blocks	2	13.5	11	8	12	2		18		21.5					14				10			
A	PARKWAY		22		20		15				12					12				15			
B	Parallel Parking (6'-8')		6	6	8	8		7		7					8				8	6			
B	30 Degree Parking (17')											17				17					17		
B	45 Degree Parking (19'-19.4')																			19		19	
B	60 Degree Parking (20'-20.3')						20		20		21		20	20			20						20
C	Lane (12')							12		12				12	13		12	13	11	11	12	11	10
C	Lane (12')	13	12	12	12	12	11	12	11	12	14	11	14	12	14	11	12	14	11	11	12	10	10
C	Lane (12')	13	12	12	12	12	11	12	11	12		11	14	12	13	11	12	13	11	11	12	11	10
C	Lane (12')																		11	11			
D	60 Degree Parking (20'-20.3')										21												20
D	45 Degree Parking (19'-19.4')																					19	
D	30 Degree Parking (17')											17				17					17		
D	Parallel Parking (6'-8')		6	6	8	8	8	7	8	7			8		8				8	6	7		
E	PARKWAY		22		20		15				12					12				15			
	STREET TOTAL	26	36	36	40	40	50	50	50	50	56	56	56	56	56	56	56	56	56	70	70	70	70
	ROW TOTAL		80		80		80				80					80				100			
	Cypress St-1st to 2nd																						

Parking Dimensions Along Curb		Ratio
Parallel	22'	1:1
30 Degree	18'	1:1.22
45 Degree	12.75'	1:1.72
60 Degree	10.5'	1:2.1

Staff Recommended ->	I	I	II	II	III	IV
				N. 6th	Cedar Hickory	

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Questions?

Off Street Parking

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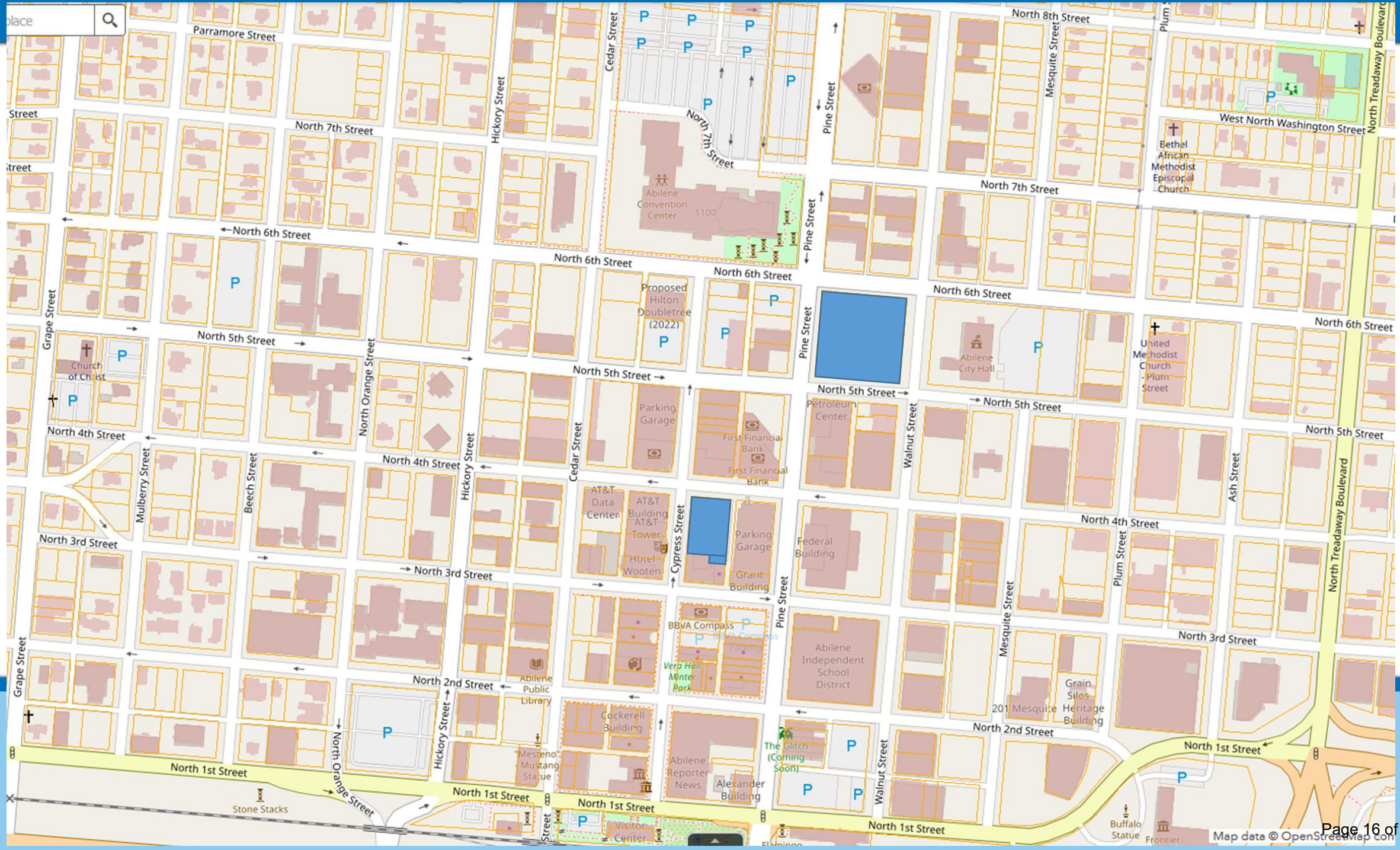
Parramore Street
North 7th Street
North 6th Street
North 5th Street
North 4th Street
North 3rd Street
North 2nd Street
North 1st Street
North 8th Street
West North Washington Street
Hickory Street
Cedar Street
Pine Street
Mesquite Street
North Treadaway Boulevard
Grape Street
North Orange Street
Mulberry Street
Beech Street
Walnut Street
Ash Street
Plum Street
Cypress Street
Abilene Convention Center
Proposed Hilton Doubletree (2022)
Parking Garage
First Financial Bank
Petroleum Center
Abilene City Hall
Bethel African Methodist Episcopal Church
United Methodist Church - Plum Street
Church of Christ
AT&T Data Center
AT&T Building
AT&T Tower
Hotel Wooten
Grant Building
Federal Building
BBVA Compass
Vera Hall Minter Park
Abilene Independent School District
Abilene Public Library
Cockerell Building
Mesteno Mustang Statue
Abilene Reporter News
Alexander Building
The Glitch (Coming Soon)
Grain Silos Heritage Building
201 Mesquite
Stone Stacks
Visitor Center
Buffalo Statue
Map data © OpenStreetMap

Questions?

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