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#### **EXECUTIVE SUMMARY**

#### **Project Goals**

The conceptual design process for the 8<sup>th</sup> Street Corridor Streetscape Plan begins with identifying the goals and constraints of the project. The 8<sup>th</sup> Street Corridor Streetscape Plan consists of a series of recommendations and design concepts with the objective of addressing the traffic and safety concerns raised by residents of the neighborhoods along the 8<sup>th</sup> Street corridor. The concepts included in this plan are comprised of traffic calming and improvements to the pedestrian and bicyclist environment along the study corridor from Bridge Boulevard to Iron Avenue.

The goals of this streetscape plan are:

- 1. Improve resident safety within the 8<sup>th</sup> Street neighborhoods;
- 2. Reduce cut-through traffic along 8<sup>th</sup> Street by shifting traffic to the commercial 4<sup>th</sup> Street corridor;
- 3. Reduce speeds along the study corridor;
- 4. Accommodate bicyclists within the corridor;
- 5. Improve connectivity and safety of pedestrian facilities;
- 6. Improve quality of life and create a sense of neighborhood through the design of safe and attractive streets.

#### **Constraints and Requirements**

In addressing the above goals, the streetscape plan acknowledges the following constraints and requirements:

- 1. 8<sup>th</sup> Street is currently classified as a minor arterial, which limits the installation of various traffic calming tools like speed humps and traffic circles. Furthermore, as an arterial street, 8<sup>th</sup> Street is intended to carry some level of through traffic.
- 2. The 8<sup>th</sup> Street corridor serves as a bus route; therefore, any design changes must avoid diverting or impeding bus traffic.
- 3. Right-of-way is limited along the corridor. If possible, design concepts should avoid elements that require the acquisition of additional right-of-way, which may be difficult to acquire and costly.
- 4. The Mid-Region Council of Governments (MRCOG) 2030 Metropolitan Transportation Plan identifies the desire to include bike lanes along 8<sup>th</sup> Street. The addition of bike lanes would eliminate parking on some segments along 8<sup>th</sup> Street; however, recent weekday and weekend parking surveys show that little on-street parking is currently utilized.
- 5. Sidewalks are as narrow as three feet and the corridor lacks compliance with the Americans with Disabilities Act (ADA) in some areas.

#### **Project Description**

The 8<sup>th</sup> Street corridor is located east of the Bosque/Rio Grande River and south of downtown Albuquerque. The 8<sup>th</sup> Street study area is primarily a residential area between Bridge Boulevard/Avenida Caesar Chavez in the south and Iron and Coal Avenues in the north. The street currently serves as a key link to downtown Albuquerque and

other local amenities such as Tingley Park, Dolores Gonzales Elementary School, the Barelas Community Center, the National Hispanic Cultural Center and the Rio Grande Zoo.

Residents in the neighborhoods along the 8<sup>th</sup> Street corridor are concerned with through traffic using 8<sup>th</sup> Street as a direct route to downtown (claims indicate up to 75 percent of 8<sup>th</sup> Street traffic is cut-through), and speeding. The posted speed limit is 25 mph. The 85<sup>th</sup> percentile speed, a measure of the predominant speed, is currently about 33 mph. The community has expressed a desire to shift through traffic to 4<sup>th</sup> Street, a parallel commercial corridor. The neighborhood has also requested, and the Department of Municipal Development has agreed in principle, to convert 2<sup>nd</sup> and 3<sup>rd</sup> Streets from their existing one-way configuration to two-way streets.

The appendix contains a description of the existing physical characteristics and traffic conditions of the 8<sup>th</sup> Street corridor and present recommended streetscape design concepts.

#### **Design Concepts**

The design concepts are presented in the form of Near-Term Improvements and Ultimate Improvements. Near-Term improvements include new roadway striping along the entire corridor and intersection improvements at a few priority gateway locations that could be implemented in the near future at relatively low cost. The Marquez Lane and Stover Avenue intersections serve as primary gateways to the 8<sup>th</sup> Street Corridor and the 8<sup>th</sup> Street / Atlantic Avenue intersection serves as an important connection between the Barelas Community Center, Tingley Park, Rio Grande Zoo and Dolores Gonzales Elementary School. For these reasons, these three intersections are considered priority locations and are recommended for Near-Term Improvements. Ultimate improvements represent the full implementation of the 8<sup>th</sup> Street Corridor Streetscape Plan, which could be installed in phases over a period of time.

#### **Proposed Design Elements**

Lane Width	Current lane width: 12 to 16 feet				
Lane wiain	Proposed lane width: 11 feet				
	Current designation: city bike route				
	(A bike route is defined as a street without striped bike lanes,				
	where bicyclists share the road with automobiles)				
Bike Lanes	MRCOG proposed designation: bike lanes				
	<b>Proposed design</b> : four to six foot bike lanes				
	1 0				
	<b>Definition</b> : Bulbouts are extensions of the curbline at intersections that				
	extend into the parking lane				
	Benefits:				
Bulbouts	Reduce the roadway width from curb to curb				
	Shorten crossing distance for pedestrians				
	Create protected parking bays for on-street parking				
	• Tighten curb radii at the corners reducing the speeds of turning vehicles				

	<b>Proposed</b> : bulbouts proposed in several locations.
Landscaping	Current condition: Some landscaping treatments along the north end of the corridor near Coal Avenue, however the majority of the 8 <sup>th</sup> Street corridor lacks landscaping.  Proposed condition: Includes landscaping at the south end of the corridor between Bridge Boulevard/Avenida Caesar Chavez and Simpier Lane, where there is sufficient right-of-way. Landscaping elements are also incorporated into the proposed bulbouts.
Curb Ramps	<b>Proposed</b> : New ADA compliant curb ramps where curb reconstruction is proposed for bulbouts.
Bus Stops	Current conditions: There are 11 existing flag stops between Bridge Boulevard and Coal Avenue.  Proposed: Retain existing stops and relocate/consolidate some stops and provide shelters and other amenities where space allows.

**Exhibit 1** shows an overview of the streetscape design and the proposed roadway cross sections for the 8<sup>th</sup> Street corridor between Bridge Boulevard/Avenida Caesar Chavez and Coal Avenue.

#### **Specific Design Elements**

In preparing the design concepts for the 8<sup>th</sup> Street Corridor, particular attention was given to evaluating specific design options for the following locations:

- 1. 8<sup>th</sup> Street / Bridge Boulevard intersection
- 2. 8<sup>th</sup> Street segment from Bridge Boulevard to Marquez Lane
- 3. 8<sup>th</sup> Street / Marquez Lane intersection
- 4. 8<sup>th</sup> Street / Atlantic Avenue intersection (off-set) and pedestrian crossings
- 5. 8<sup>th</sup> Street segment from Pacific Avenue to Atlantic Boulevard
- 6. Tingley Park and Rio Grande Zoo access
- 7. 8<sup>th</sup> Street / Stover Avenue intersection

The design concepts and near-term and ultimate improvement recommendations are described in the table below.

#### **Parking Surveys**

An on-street parking survey was conducted to determine if the installation of bicycle lanes, and associated removal of parking on some segments of 8<sup>th</sup> Street, would cause substantial impacts. Surveys were conducted on those segments that are too narrow to provide both a bicycle lane and on-street parking. The surveys were conducted on multiple weekdays, Fridays, and Saturdays, in the late evening and early morning to capture residential parking demand. During nearly 100% of the survey times there were no vehicles parked on the study segments.

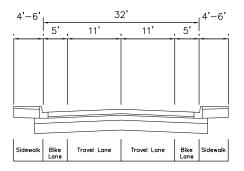
Approximately twice there was one vehicle parked. Given the low amount of on-street parking, and availability of side street parking, it was determined that no impacts would occur with the installation of bicycle lanes.



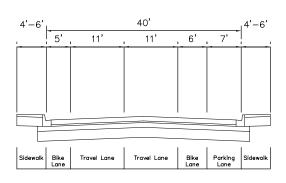




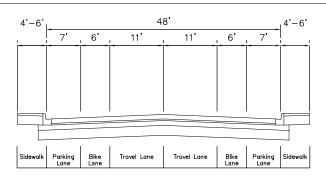
#### 8th Street Coal Avenue to Bridge Boulevard **Typical Cross Sections**



TYPICAL 32' CROSS SECTION (NO PARKING)



TYPICAL 40' CROSS SECTION (ONE-SIDED PARKING)



TYPICAL 48' CROSS SECTION (PARKING ALLOWED)

#### Summary of Near-Term and Ultimate 8<sup>th</sup> Street Corridor Streetscape Plan Recommendations

Near-Term Improvements – (NT); Ultimate Improvements – (U)

#### 8<sup>th</sup> Street / Bridge Boulevard/Avenida Caesar Chavez Intersection

- Add way finding signs directing vehicular traffic to use 4<sup>th</sup> Street to access downtown. (NT)
- Realign crosswalks and include zebra striping.
   (NT)
- Add curb extensions on the west leg of the intersection. (Reduces the curb-to-curb width of the roadway, thus shortening the crossing distance for pedestrians and enhancing the connection to the Hispanic Cultural Center. Additional width not necessary to accommodate dual right turn lanes, as one has been eliminated) (U)
- Remove southbound shared through-right turn lane, and modify left turn lane to include through movement. (Eliminating one of the southbound approach lanes helps make 8<sup>th</sup> Street a less attractive route for through traffic by increasing queues and delay for vehicles turning right). Add a southbound right turn lane at 4<sup>th</sup> Street to encourage its use over 8<sup>th</sup> Street (*NT*)
- Add ADA compliant pedestrian refuge islands in the median of the east and west legs of the intersection. (U)

**Additional Recommendation:** Adjust the signal timing for the left turn movement from Bridge Boulevard to 8<sup>th</sup> to reduce the convenience of using 8<sup>th</sup> Street as a through route, in combination with adjustments to the Cesar Chavez / 4<sup>th</sup> Street to encourage the use of 4<sup>th</sup> Street, and provide signs to use 4<sup>th</sup> Street to access downtown. Reducing the green time for this eastbound left turn phase will allow fewer vehicles to make left turns onto 8<sup>th</sup> Street; however, this may increase queuing and reduce the intersection level-of-service. Providing way finding signs and encouraging drivers to use 4<sup>th</sup> Street will reduce the left turn queues. (*NT*)

See Exhibit 2A for Near-Term design concept See Exhibit 2B for Ultimate design concept

#### 8<sup>th</sup> Street (Bridge Boulevard/Avenida Caesar Chavez to Marques Lane)

- Bulbouts along 8<sup>th</sup> Street at intersections of 8<sup>th</sup> Street with Marquez Lane and Barelas Court. (NT)
- Bulbouts along 8<sup>th</sup> Street at intersections of 8<sup>th</sup> Street with Simpier Lane, Bell Avenue and Lewis Avenue. (U)

See Exhibits 2A and 3A for Near-Term design concept See Exhibits 2B and 3B for Ultimate design concept  Landscaping at each bulbout and between sidewalk and curb from Bridge Boulevard to Simpier Lane. (U)

August 2009

#### 8<sup>th</sup> Street / Marquez Lane Intersection and 8<sup>th</sup> Street (Cromwell Ave to Nuanes Lane)

- Add landscaped bulbouts on corners where sufficient right-of-way exists. (NT)
- Re-stripe eastbound approach of Marquez Lane from two lanes to one shared left/right turn lane. (*NT*)
- Remove northbound left turn lane from 8<sup>th</sup> Street to Marquez Lane. (reduces speeds and convenience of using 8<sup>th</sup> Street as a viable through route) (*NT*)

**Optional Recommendation**: The feasibility of constructing a roundabout at the intersection of 8<sup>th</sup> Street / Marquez Lane was evaluated as a possible design alternative. A roundabout is feasible to construct but would require acquisition of right-of-way. Because of the relatively high cost associated with the acquisition of right-of-way, a roundabout is not recommended as a near-term improvement.

See Exhibit 3A for Near-Term design concept See Exhibit 3B for Ultimate design concept

#### 8<sup>th</sup> Street (Santa Fe Avenue to Pacific Avenue)

The curb to curb width for this segment of 8<sup>th</sup> Street has sufficient width to install bike lanes and one parking lane in addition to the two, 11-foot travel lanes.

- Allow on-street parking on only the west side of the street to allow sufficient width for bike lanes. (NT)
- Add landscaped bulbouts along west side of 8<sup>th</sup> Street at intersection corners where sufficient right-of-way exists. (U)

See Exhibit 4A for Near-Term design concept

See Exhibit 4B for Ultimate design concept

#### 8<sup>th</sup> Street and Santa Fe Avenue Intersection

The community expressed a desire to add a northbound left turn lane from 8<sup>th</sup> Street to Santa Fe Avenue because this movement is a primary route to Dolores Gonzales Elementary School and left turns frequently impede through traffic.

Add a northbound left turn lane at 8<sup>th</sup> Street / Santa Fe Avenue (NT)

See Exhibit 4A for Near-Term design concept

See Exhibit 4B for Ultimate design concept

#### 8<sup>th</sup> Street / Atlantic Avenue Intersection

- Add bulbouts on east leg of the intersection. (NT)
- Add crosswalks with zebra striping (improves the visibility of the crosswalks) (NT)

See **Exhibit 5A** for Near-Term design concept See **Exhibit 5B** for Ultimate design concept • Add landscaping along the southwest corner of the intersection. (NT)



#### 8<sup>th</sup> Street / Stover Avenue Intersection

- Add landscaped bulbouts on east and west legs of the intersection, where feasible.
   (NT)
- Install landmark and/or signage to signify the Stover Avenue intersection as a "Gateway" point to the 8<sup>th</sup> Street Corridor. (NT)

See **Exhibit 6A** for Near-Term design concepts See **Exhibit 6B** for Ultimate design concepts

#### **Tingley Park and Rio Grande Zoo Access**

The current one-way operations along 10<sup>th</sup> Street and Atlantic Avenue near the Tingley Rio Grande Zoo and Tingley Park have some advantages and some disadvantages. The advantages of the current one-way operation and configuration of 10<sup>th</sup> Street and Atlantic Avenue include the following:

- Eliminates turning movement conflicts at the zoo and school driveways
- Existing speed humps help slow traffic along 10<sup>th</sup> Street
- Reduces some traffic through the 10<sup>th</sup> Street neighborhoods

The disadvantages of the current one-way operations include the following:

- Re-routes traffic to 8<sup>th</sup> Street
- Different entrance (10<sup>th</sup> Street) versus exit (8<sup>th</sup> Street) may be confusing for zoo patrons
- 10<sup>th</sup> Street has very wide cross-section, combined with one way travel, encourages higher speeds
- Added travel time for buses and vehicles accessing the school since entrance requires using Stover or Santa Fe to access parking
- Short segment of 10<sup>th</sup> Street is one-way with no physical barriers to adjacent twoway segment

After evaluating the feasibility of changing Atlantic Avenue and 10<sup>th</sup> Street to two-way streets, the following observations and conclusions were made:

- Changing Atlantic Avenue to two-way may cause queuing and a degrade in level-ofservice at the 8<sup>th</sup> Street / Atlantic Avenue intersection without the addition of a northbound left turn on 8<sup>th</sup> Street.
- Modifications may be needed to the Rio Grande Zoo parking lot to create entranceonly and exit-only driveways to reduce turning conflicts. There appears to be sufficient room to do this.
- Changing 10<sup>th</sup> Street to two-way may decrease traffic on 8<sup>th</sup> Street, at the expense of increasing traffic through other 10<sup>th</sup> Street neighborhood streets.

While this plan does not recommend changing the current one-way circulation pattern, some recommendations that should be considered include:

- Add a longitudinal striped crosswalk on the east leg of the 10<sup>th</sup> Street / Atlantic Avenue intersection. (improves the visibility of the pedestrian connectivity between the zoo,
- Install curb bulbouts at Stover Avenue, driveway to park parking lot, and at existing mid-block crosswalk as shown in Exhibit 6C

- school and park) (NT)
- Implement angled on-street parking on 10<sup>th</sup> Street along park frontage to physically narrow the street (NT)
- Eliminate one through lane on 10<sup>th</sup> Street and retain parallel parking/bus parking on west side of street (*NT*)

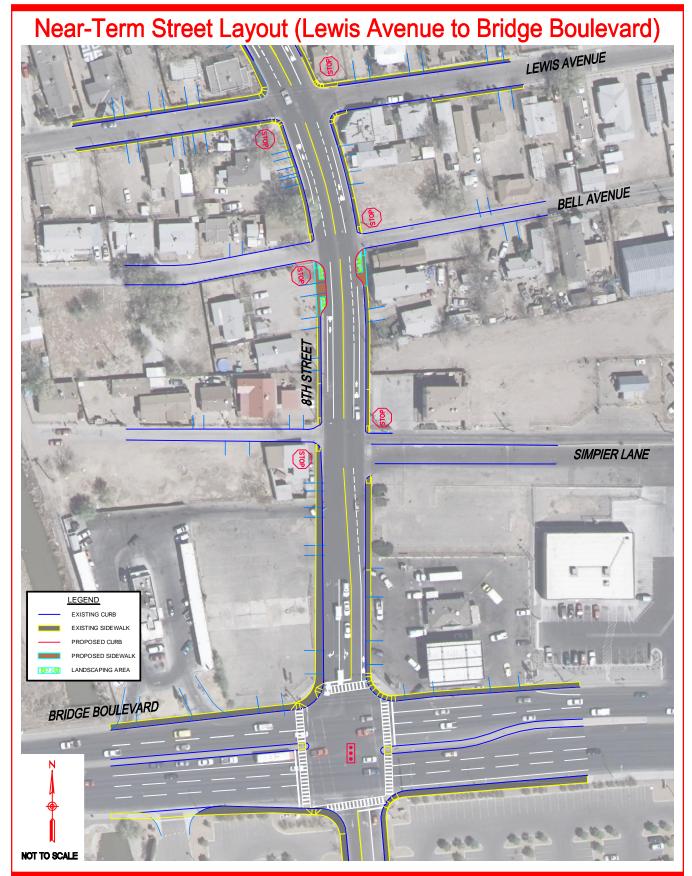
 Eliminate northernmost speed hump and reconstruct southernmost speed hump to current city standards

#### See Exhibit 6C

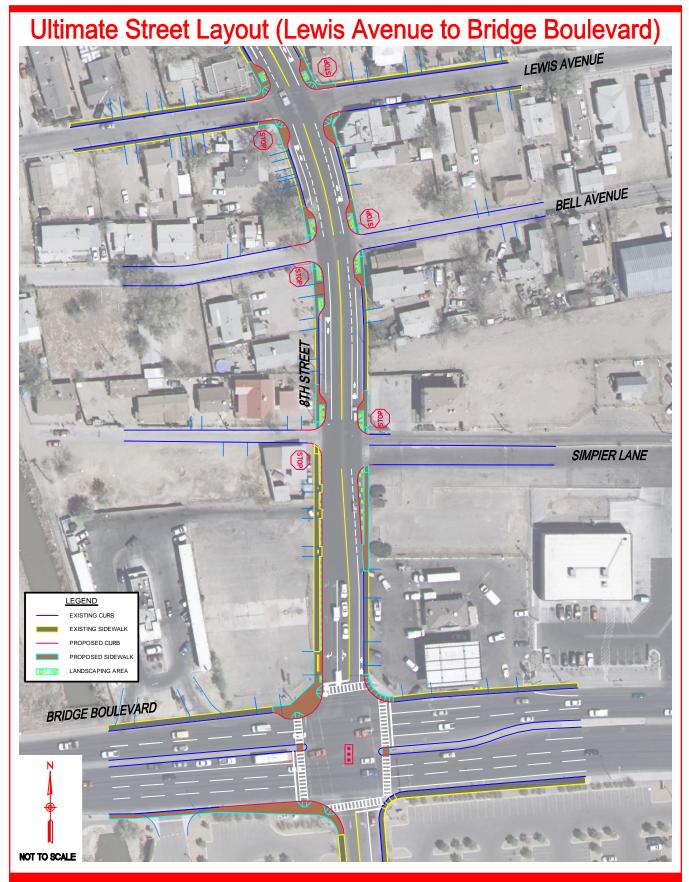
The appendix contains additional supporting information including:

- A discussion of the operational impacts of the recommendations
- Opinion of probable cost for implementing the ultimate improvements





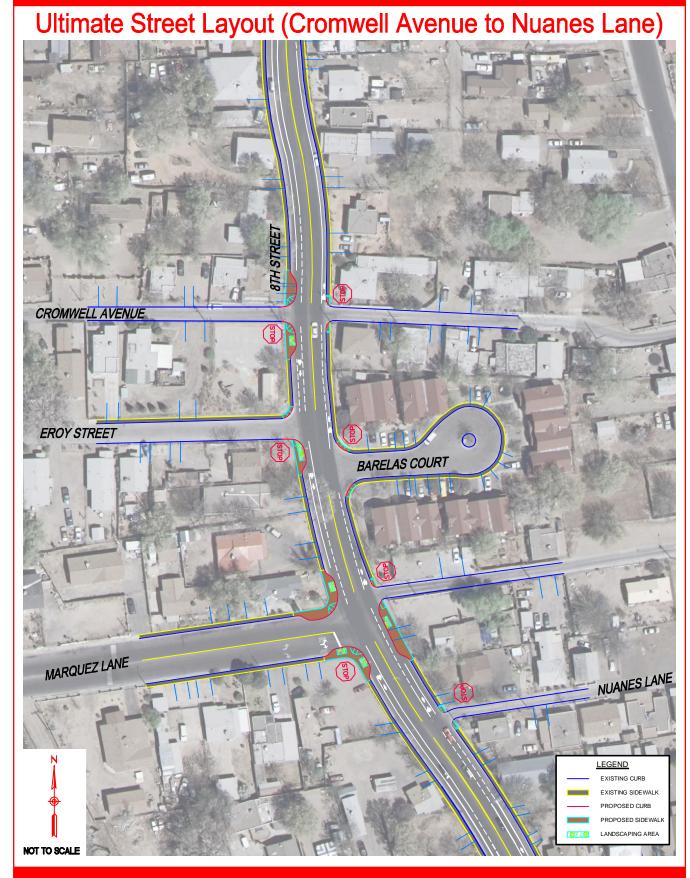




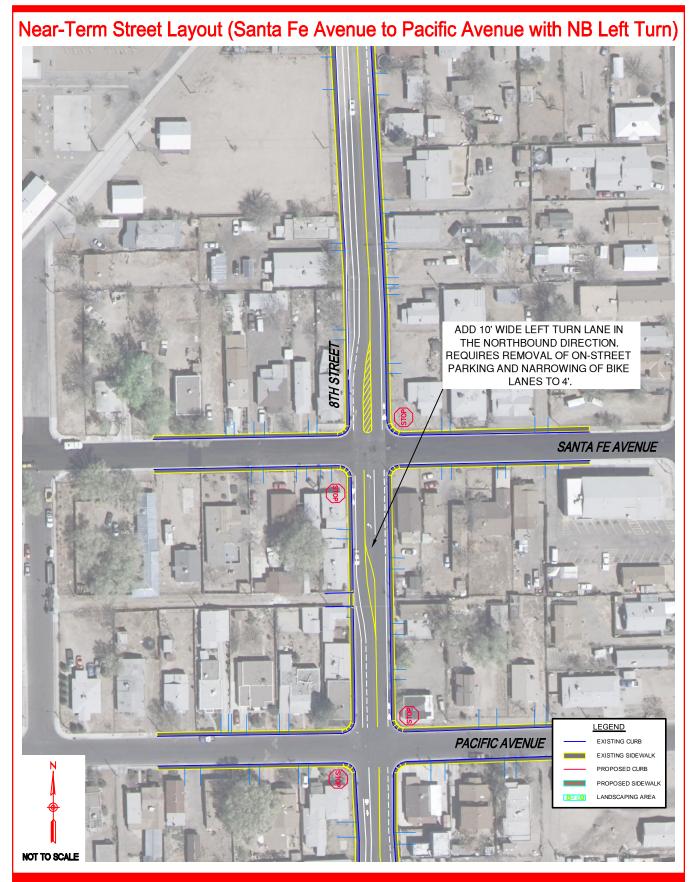


# Near-Term Street Layout (Cromwell Avenue to Nuanes Lane) **Priority #1 Gateway Improvement** CROMWELL AVENUE **EROY STREET** BARELAS COURT MARQUEZ LANE NUANES LANE

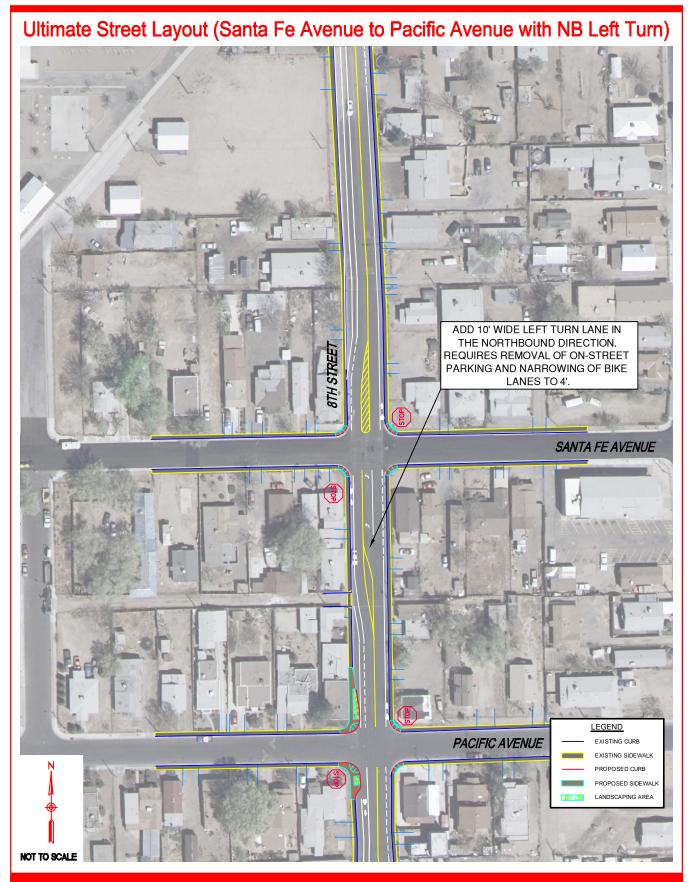




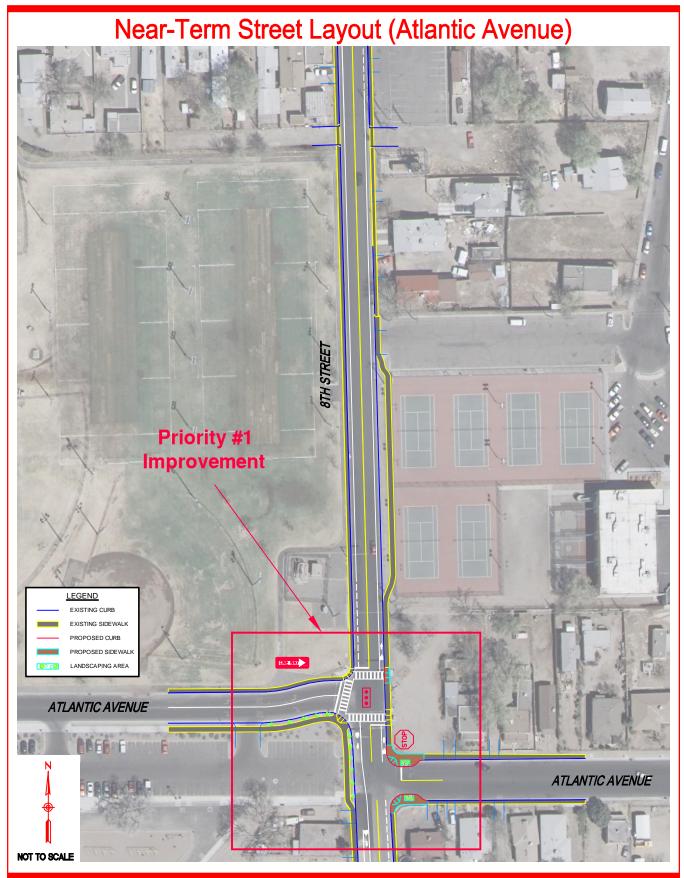




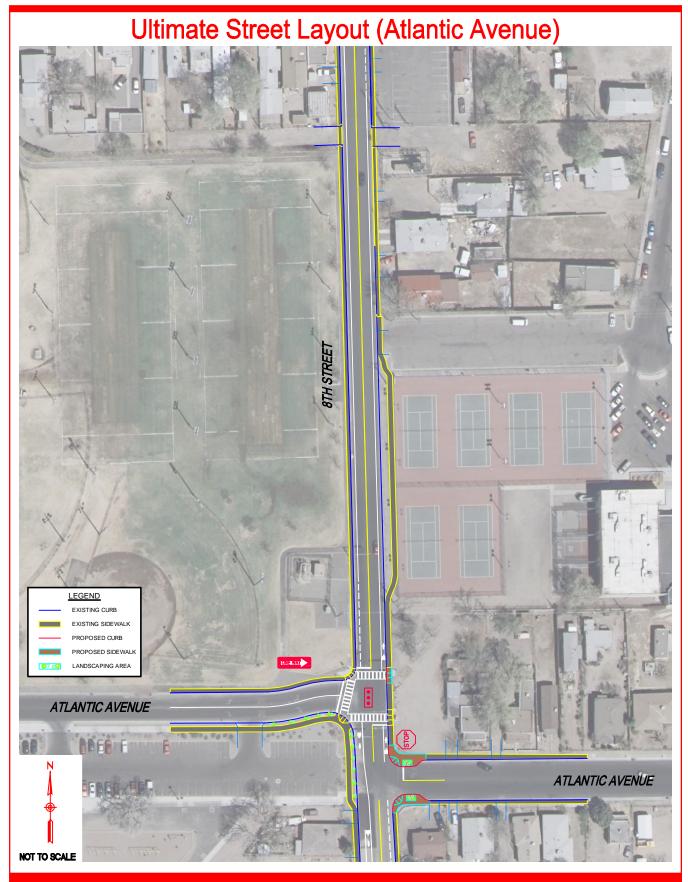




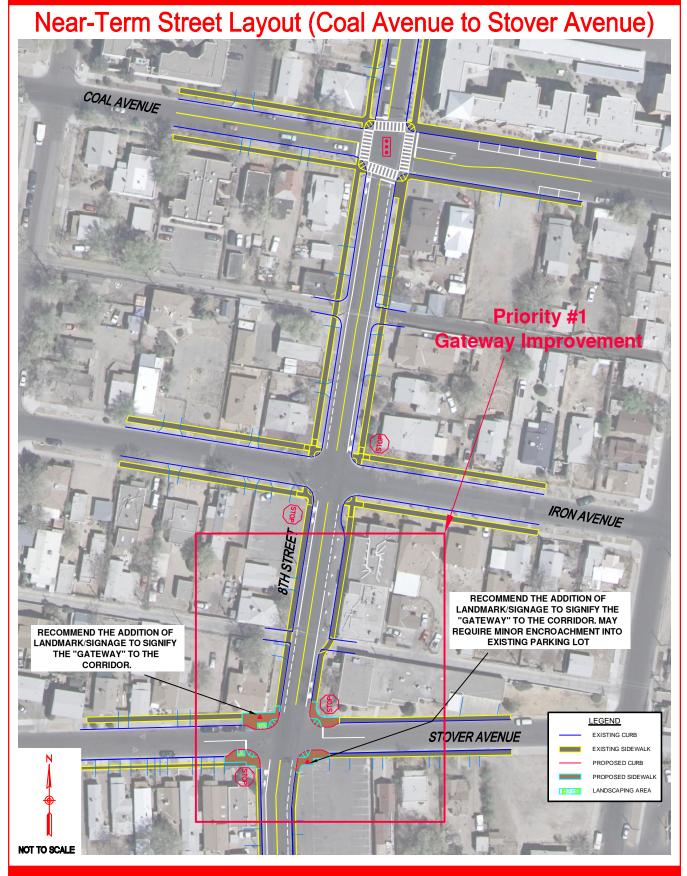




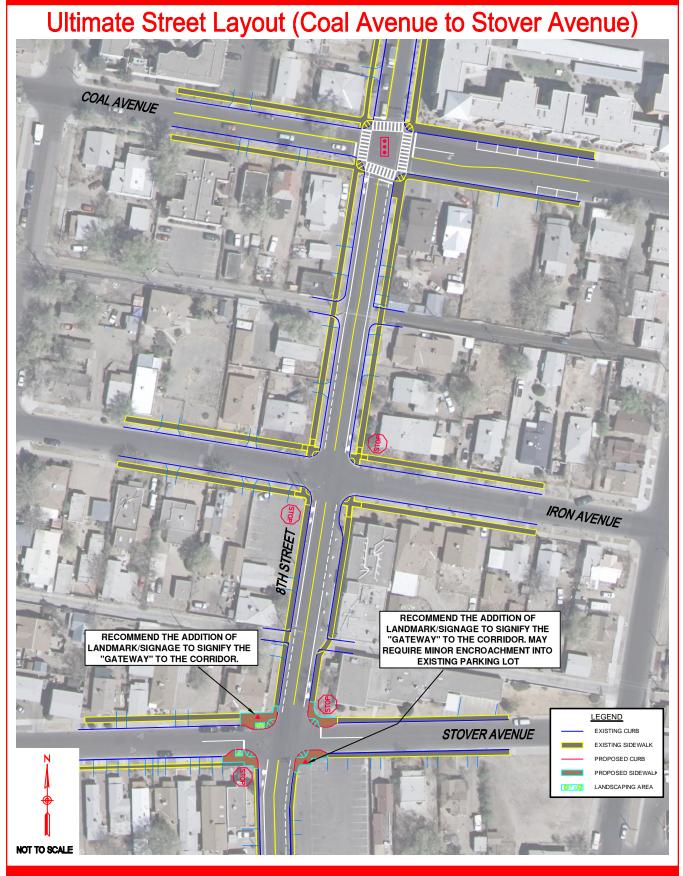




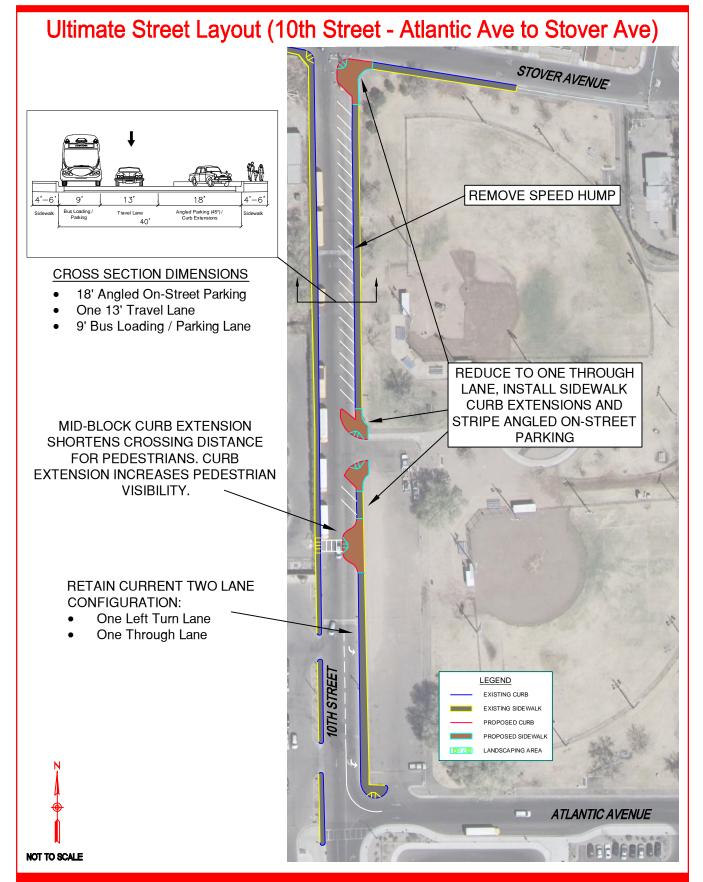










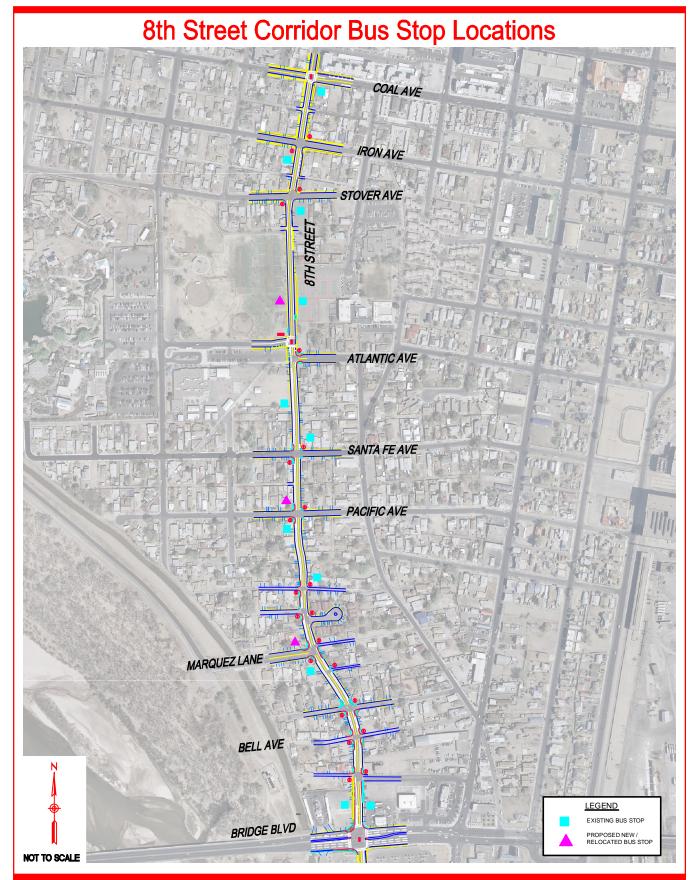


#### **Bus Stops**

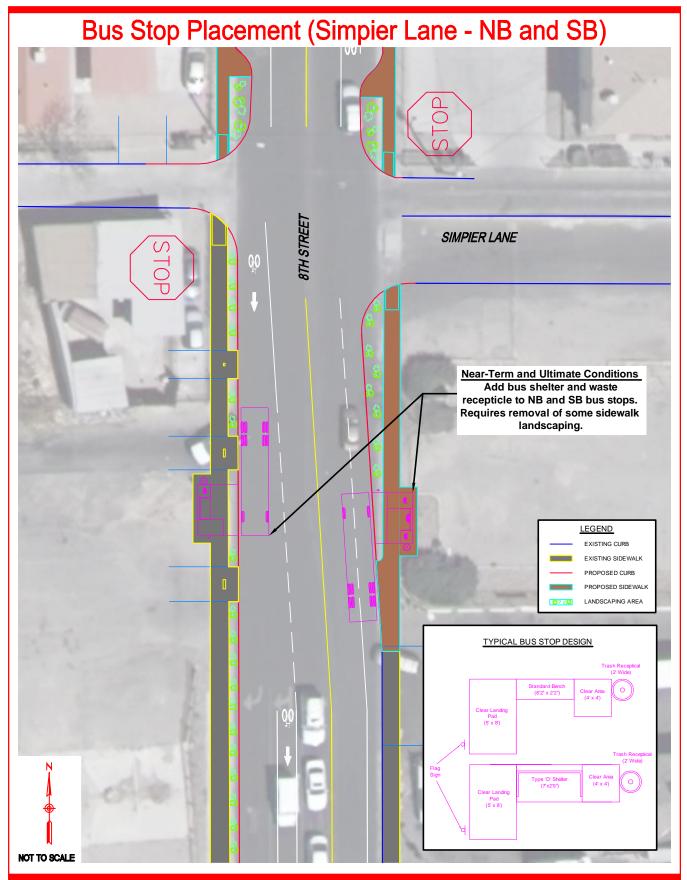
Transit service in the City of Albuquerque is provided by ABQ Ride. ABQ Ride Route 53, the only route that currently travels along the 8<sup>th</sup> Street Corridor, operates Monday through Saturday with 45-minute headways and connects Mailpais Road in the south to Downtown Albuquerque in the north. Bus stops are currently spaced at approximately 1/3-mile intervals along the corridor and typically consist of a flag sign pole with no bench or shelter. As part of the 8<sup>th</sup> Street Corridor Streetscape Plan, each bus stop location was examined to assess the feasibility of installing enhanced amenities, such as shelters, benches, trash receptacles and ADA recommended loading pads.

**Exhibits 7through 15** show the preliminary Near-Term and Ultimate bus stop design concepts/elements for the 8<sup>th</sup> Street Corridor. City of Albuquerque standard benches, receptacles and Type-D bus shelters were used and bus stops were relocated to curb bulbouts where possible.





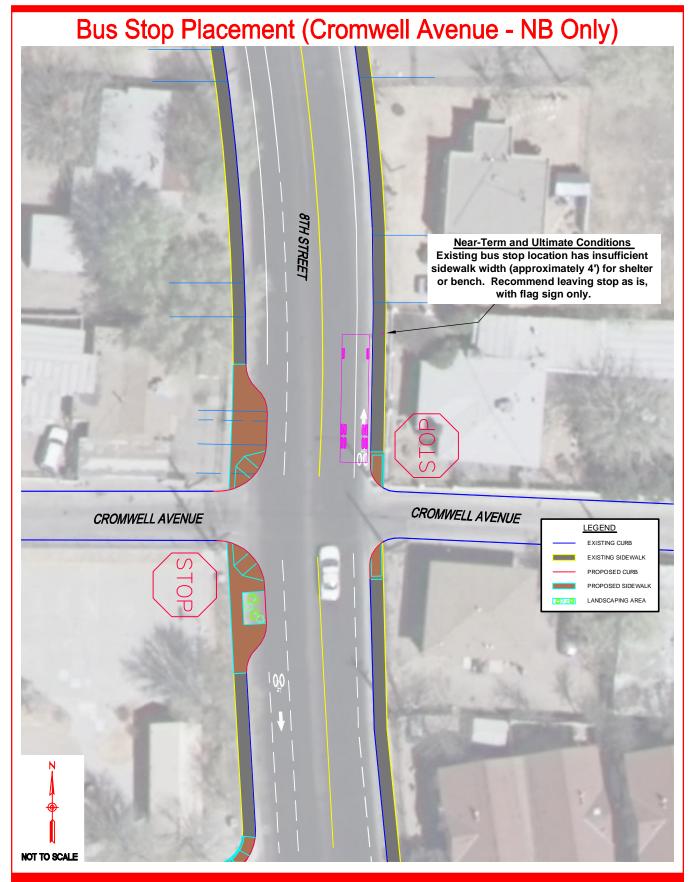




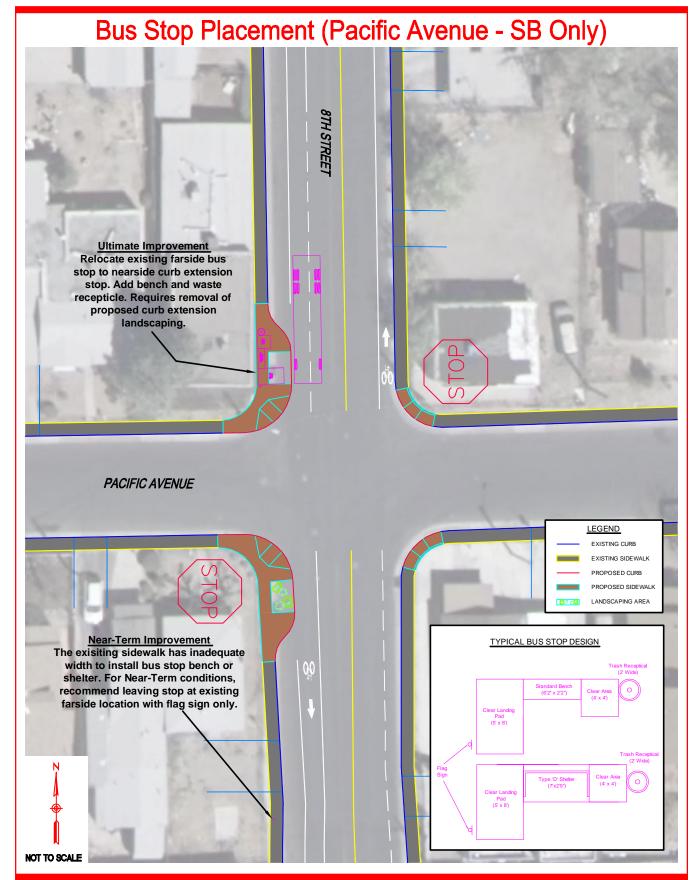


# Bus Stop Placement (Marquez Lane - SB Only) Near-Term and Ultimate Conditions Stopping sight distance for Relocate existing farside stop to southbound vehicles approaching nearside curb extension stop. Add bus stop exceeds AASHTO bench and waste recepticle. guidelines for 35 mph (250 ft.). Requires removal of proposed curb extension landscaping. MARQUEZ LANE MARQUEZ LANE **LEGEND** LANDSCAPING AREA TYPICAL BUS STOP DESIGN NOT TO SCALE

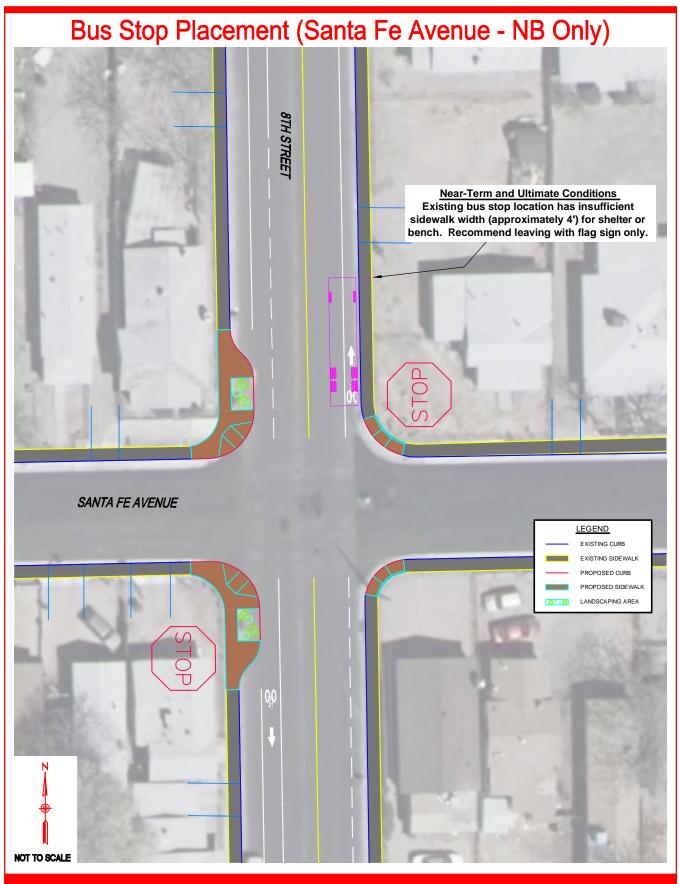




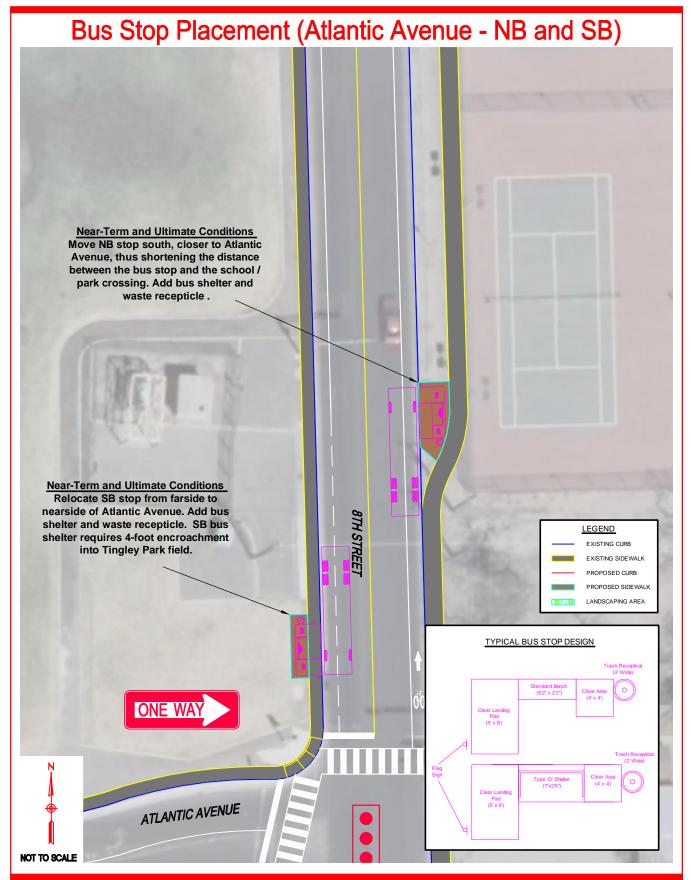




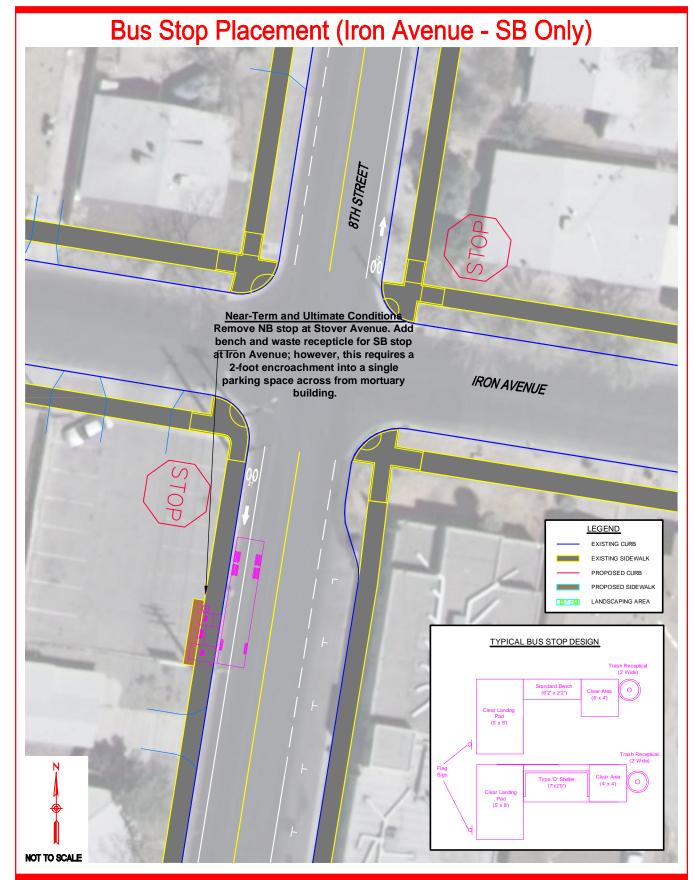




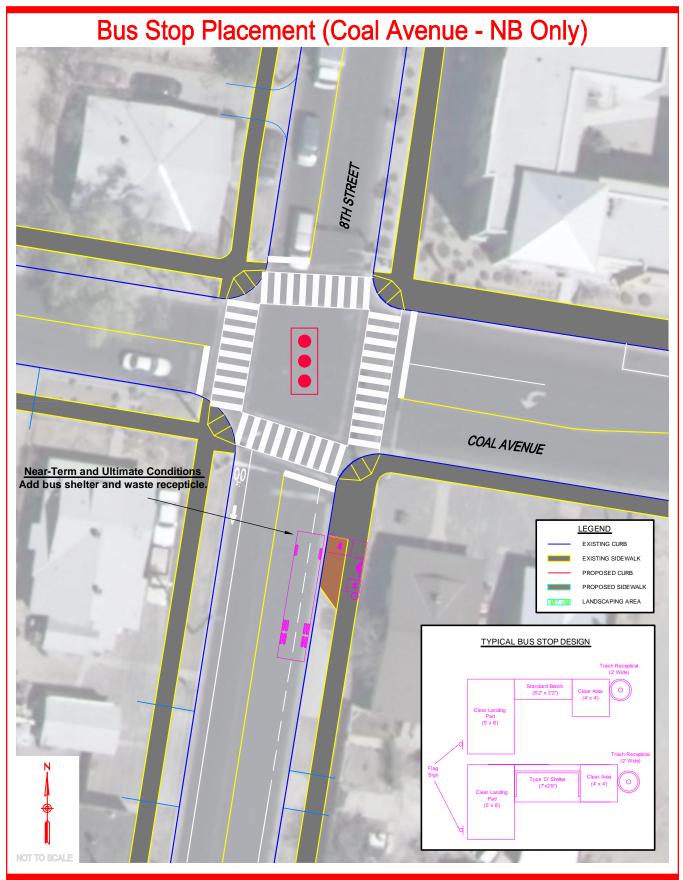












#### **APPENDIX**

#### **Existing Physical Characteristics**

According to the MRCOG Roadway Functional Classification System, 8<sup>th</sup> Street is classified as a minor urban arterial. Arterial streets are designed to primarily serve intra-urban travel, carrying traffic from collector level streets to and from other parts of the City. 8<sup>th</sup> Street also serves a bus route for Albuquerque's transit provider, ABQ Ride. Route 53 runs along 8<sup>th</sup> Street, providing access from Malpais Road in the south to downtown Albuquerque in the north.

There are primarily residential land uses adjacent to 8<sup>th</sup> Street and several residential driveways have direct access to the street. There are also some commercial, civic and recreational land uses along the corridor, such as Tingley Park, Dolores Gonzales Elementary School, Barelas Community Center and the National Hispanic Cultural Center.

**Figure 1** shows the study corridor area and the location of key landmarks nearby.

To describe the existing physical features of the 8<sup>th</sup> Street corridor, the stretch of roadway was divided into four segments. Characteristics of each segment are described in the following sections.

#### **Segment 1: Coal Avenue to Stover Avenue**

In Segment 1, 8<sup>th</sup> Street provides one lane in each direction. There is curb and gutter along both sides of Segment 1. The width of 8<sup>th</sup> Street is approximately 32 feet curb to curb. South of Iron Avenue, parking is provided on the east side of the street and the width of the roadway is 40 feet from curb to curb for approximately 110 feet.

From Coal Avenue to Iron Avenue, there is a six foot sidewalk with approximately seven feet between the curb and the sidewalk on both sides of 8<sup>th</sup> Street. South of Iron Avenue, the sidewalk is located adjacent to the curb on both sides of the road and is approximately five feet wide.

#### **Segment 2: Stover Avenue to Santa Fe Avenue**

Segment 2 consists of provides one lane in each direction with curb and gutter along both sides. The roadway width from Stover to Atlantic Avenue is approximately 32 feet from curb to curb. From Atlantic Avenue to Santa Fe Avenue, the width of the roadway is approximately 40 feet wide from curb to curb.

The sidewalk on the west side of 8<sup>th</sup> Street ends approximately 175 feet south of Stover Avenue. The sidewalk on the east side is located adjacent to the curb for about 400 feet south of Stover Avenue, the sidewalk then transitions to ten feet from the curb until just north of Atlantic Avenue. From Atlantic Avenue to Santa Fe Avenue the sidewalk is adjacent to the curb on both sides of the street and is approximately five feet wide.

#### **Segment 3: Santa Fe Avenue to Marquez Lane**

Segment 3 contains one lane in each direction and curb and gutter is provided on both sides of the roadway. From Santa Fe Avenue to Marquez Lane, the width of the roadway is approximately 40 feet. There is sidewalk located adjacent to the curb on both sides of the street that is approximately five feet wide. On the northwest corner of 8<sup>th</sup> Street and Marquez Lane, there is a small gap in the sidewalk approximately 30 feet long from curb to curb.

# Segment 4: Marquez Lane to Bridge Boulevard/Avenida Caesar Chavez

Segment 4 includes is a two-lane roadway with curb and gutter along both sides of the street. The width of the roadway from Marquez Lane to Bridge Boulevard is approximately 48 feet wide curb to curb.

The sidewalk is located adjacent to the curb on the east side of the street and is approximately five feet wide. There is no sidewalk on the west side of 8<sup>th</sup> Street from Marquez Lane to Nuanes Lane. The sidewalk on the west side begins south of Nuanes Lane, ends just south of Bell Avenue, begins again at Simpier Lane and continues to Bridge Boulevard.

#### **Existing Traffic Conditions**

#### **Traffic Volumes**

Twenty-four hour hose counts were conducted at multiple locations along the 8<sup>th</sup> Street corridor and at several nearby streets. The hose counts were conducted for three consecutive days, starting Tuesday, October 14, 2008 and were used to determine the average daily traffic (ADT) volumes near the study area, as well as directional peak hour volumes.

**Table 1** shows the ADT and AM and PM peak hour roadway volumes.

**Table 1 – Existing Roadway Volumes** 

Location	Doily	AM	Peak	PM Peak		
Location	Daily	NB/EB	SB/WB	NB/EB	SB/WB	
8 <sup>th</sup> St – Coal Ave to Atlantic Ave	5,734	318	118	259	389	
8 <sup>th</sup> St – Atlantic Ave to Pacific Ave	5,828	278	149	164	468	
8 <sup>th</sup> St –Pacific Ave to Marquez Ln	6,426	391	184	195	455	
8 <sup>th</sup> St – Marquez Ln to Bridge Blvd	8,437	370	315	316	563	
4 <sup>th</sup> St – Coal Ave to Atlantic Ave	4,999	305	144	160	311	
4 <sup>th</sup> St – Pacific Ave to Barelas St	5,617	293	165	167	339	
Lead Ave – 8 <sup>th</sup> St to 4 <sup>th</sup> St	5,846	61	343	44	505	
Coal Ave – 8 <sup>th</sup> St to 4 <sup>th</sup> St	5,397	454	14	341	56	
Tingley Dr – west of Marquez Ln	2,824	138	162	112	75	
Marquez Ln – west of 8 <sup>th</sup> St	2,727	166	71	126	161	
Bridge Blvd – west of 8 <sup>th</sup> St	38,177	2,030	912	1,203	2,234	
Bridge Blvd – east of 4 <sup>th</sup> St	31,690	1,849	719	1,264	1,608	

NB – Northbound; SB – Southbound; EB – Eastbound; WB – Westbound

Note: Volumes reflect an average of three consecutive weekdays.

As shown in the table, ADT volumes on 8<sup>th</sup> Street range from approximately 8,400 vehicles per day near Bridge Boulevard to 5,700 vehicles per day near Coal Avenue. Meanwhile, volumes on 4<sup>th</sup> Street are generally 13 percent lower than 8<sup>th</sup> Street volumes, ranging from 5,600 vehicles per day near Pacific Avenue to 5,000 vehicles per day between near Coal Avenue. During the AM peak hour, the

majority of the traffic along 8<sup>th</sup> Street and 4<sup>th</sup> Street is traveling northbound, towards downtown Albuquerque. During the PM peak hour, the traffic volumes are higher in the southbound direction.

Considering 4<sup>th</sup> Street is more of a commercial corridor, the traffic using 8<sup>th</sup> Street as a cut-through route should be re-routed to 4<sup>th</sup> Street.

#### **Vehicle Speed and Classification**

Vehicular speed and classification data were also collected at several locations throughout the study area. For purposes of this study, any vehicle larger than a passenger car, pickup truck, or small delivery truck is considered a heavy vehicle.

**Table 2** shows the average and 85<sup>th</sup> percentile speeds and heavy vehicle percentages for the study roadway locations. When setting posted speed limits, the 85<sup>th</sup> percentile speed is used; this is the speed 85 percent of the vehicles are traveling.

**Table 2 – Existing Vehicular Speeds** 

	Sp	Classificatio	
Location	Axa	n % Heavy	
	Avg. Speed	85 <sup>th</sup> Percentile	Vehicles
8 <sup>th</sup> St – Coal Ave to Atlantic Ave	27.7	33.0	3.0%
8 <sup>th</sup> St – Atlantic Ave to Pacific Ave	29.2	34.8	2.8%
8 <sup>th</sup> St –Pacific Ave to Marquez Ln	27.2	32.1	3.0%
8 <sup>th</sup> St – Marquez Ln to Bridge Blvd	28.3	33.2	4.0%
4 <sup>th</sup> St – Coal Ave to Atlantic Ave	28.1	33.6	4.1%
4 <sup>th</sup> St – Pacific Ave to Barelas St	25.8	32.5	4.1%
Lead Ave – 8 <sup>th</sup> St to 4 <sup>th</sup> St	23.6	28.9	5.0%
Coal Ave – 8 <sup>th</sup> St to 4 <sup>th</sup> St	20.1	25.2	3.0%
Tingley Dr – west of Marquez Ln	33.5	39.0	1.6%
Marquez Ln – west of 8 <sup>th</sup> St	23.0	27.5	2.1%
Bridge Blvd – west of 8 <sup>th</sup> St	33.5	38.7	5.5%
Bridge Blvd – east of 4 <sup>th</sup> St	31.3	38.3	8.0%
Note: Results reflect an average of the			
weekdays.			

As shown in **Table 2**, the existing average vehicular speeds throughout the 8<sup>th</sup> Street corridor exceed the posted speed limit of 25 mph. For the segment of 8<sup>th</sup> Street between Atlantic Avenue and Pacific Avenue, the average speed is approximately four mph above the posted speed limit, while the 85<sup>th</sup> percentile speed is roughly ten mph above the posted speed limit. This section of 8<sup>th</sup> Street is adjacent to Dolores Gonzales Elementary School,

#### **Operational Impacts**

In order to evaluate the potential impacts to traffic operations along the 8<sup>th</sup> Street corridor, the intersection levels-of-service were calculated for

Tingley Park and the Barelas Community Center. Heavy vehicles represent approximately three to four percent of the vehicular traffic on 8<sup>th</sup> Street.

Some of the heavy vehicle traffic consists of school buses and ABQ transit buses, which should continue to use 8<sup>th</sup> Street. Other heavy vehicles should be using 4<sup>th</sup> Street as their primary route and should be rerouted to 4<sup>th</sup> Street.

locations where changes to the lane geometry and/or operation have been recommended. Level of Service (LOS) is a qualitative term used to describe the operating conditions a driver

will experience while traveling on a particular street or at an intersection during a specific time interval. Levels of service are represented by a letter scale from LOS A to LOS F, with LOS A representing the best performance and LOS F representing the poorest performance under significantly congested conditions

**Table 3** shows the intersection levels-of-service for existing conditions and conditions with the Ultimate proposed conceptual design improvements.

Table 3 – Intersection Level-of-Service

	Existing				Proposed Improvements			
Location	AM ]	Peak	PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
8 <sup>th</sup> St / Bridge Blvd <sup>1</sup>	16.5	В	23.7	С	16.7	В	37.7	D
8 <sup>th</sup> St / Marquez Ln <sup>2</sup>	11.2	В	13.7	В	11.7	В	14.5	В

- (1) Signalized (LOS based on average control delay for intersection)
- (2) Two-way Stop-controlled (LOS reported for worst-case approach)
- LOS based on 2000 HCM

Weekday peak hour volume counts were conducted in October, 2008.

As shown in **Table 3**, the level of service does not change at either intersection for AM peak hour conditions. For the PM peak hour, the level-of-service for the 8<sup>th</sup> Street / Marquez Lane intersection remains unchanged. The 8<sup>th</sup> Street / Bridge Boulevard/Avenida Caesar Chavez

#### **Opinion of Probable Costs**

The costs associated with implementing the design concepts and improvements of the proposed 8<sup>th</sup> Street Corridor Plan include costs related to pavement striping and legends, providing a seal coat of the corridor, bike lane and roadway signage, curb and gutter improvements, sidewalk

intersection level-of-service changes from LOS C to LOS D. While the proposed lane configuration changes at Bridge Boulevard/Avenida Caesar Chavez may increase delays, this may, in turn, act as a means of encouraging cut-through traffic to use  $4^{\text{th}}$  Street.

improvements, landscaping (without irrigation), engineering and surveying services, administrative expenses, project mobilization and contingency.

**Table 4** shows the estimated opinion of probable costs for the full implementation of the proposed 8<sup>th</sup> Street Corridor Plan design concepts.



**Table 4 – Estimated Opinion of Probable Costs for 8<sup>th</sup> Street Corridor Improvements** 

Expense	Amount	
Direct Construction Costs		
Striping	\$60,900	
Seal Coat (165,024 square feet @ \$0.15 per square foot)	\$24,800	
Pavement Legends and Signing	\$5,000	
Subtotal	\$90,700	
Soft Costs for Engineering, Surveying, Administrative, etc. (35%)	\$31,745	
Mobilization (5%)	\$4,535	
Contingency (35%)	\$31,745	
Total	\$158,725	
Bulbouts: Curb and Gutter, Sidewalks, Drainage Improvements and		
Landscaping	\$500,000	
Soft Costs for Engineering, Surveying, Administrative, etc. (35%)	\$175,000	
Mobilization (5%)	\$25,000	
Contingency (35%)	\$175,000	
Total	\$875,000	

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