Blackstone/Shaw Activity Center Today

Fresno COG/City of Fresno/Caltrans/FAX

Stakeholder Meeting

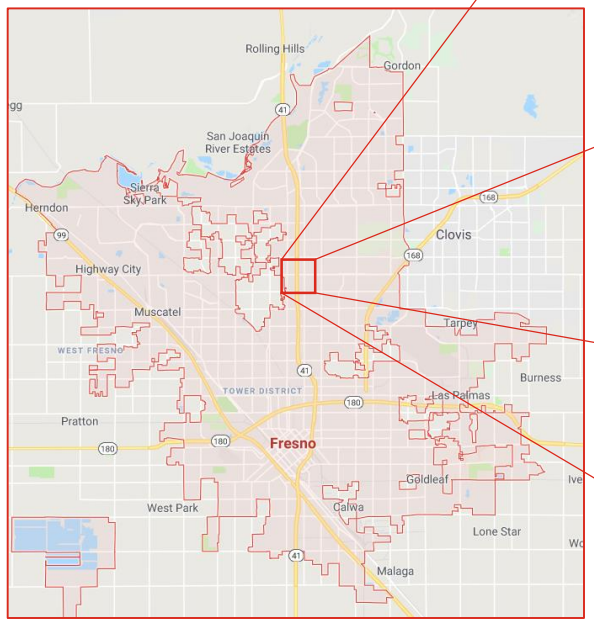
3/11/19

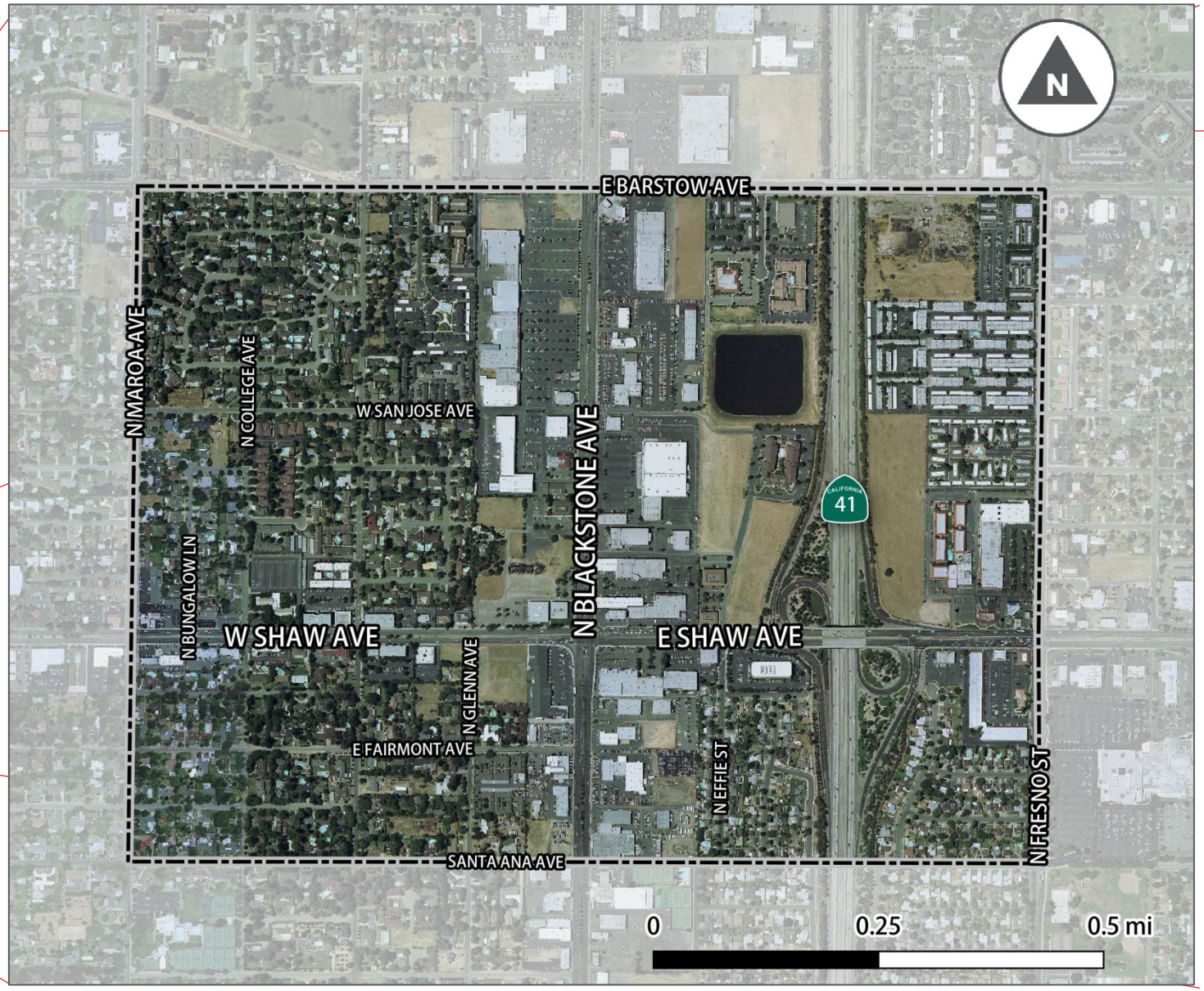
Contents

- **Blackstone/Shaw Today**
  - Project Area Context
  - Proposed Development
  - Existing Cross Sections
  - Roadway, Pedestrian, Bike, and Transit Networks
  - Crash History
  - Vehicle Speeds, Volumes and Operations

TOOLE DESIGN

Project Area





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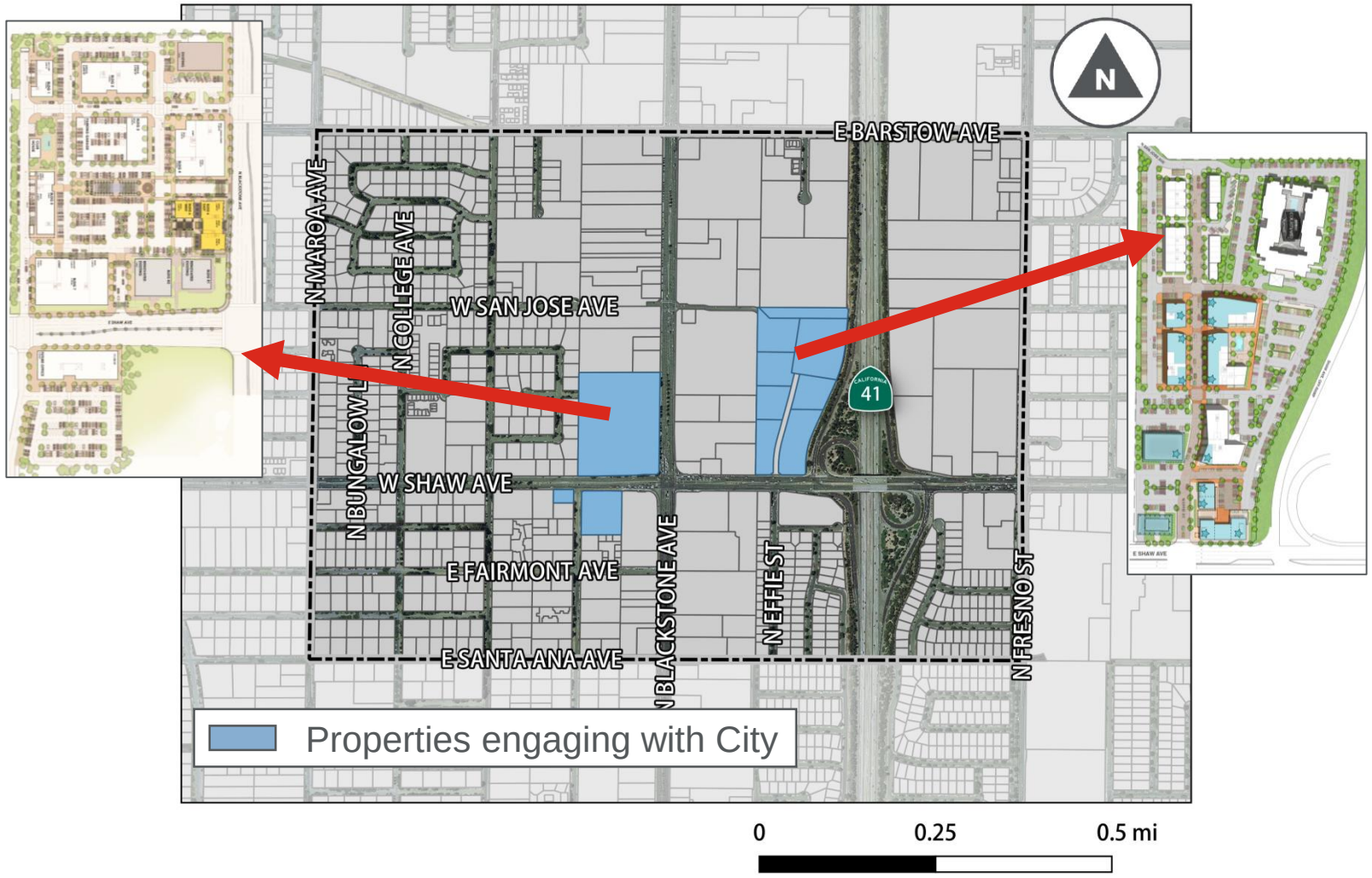
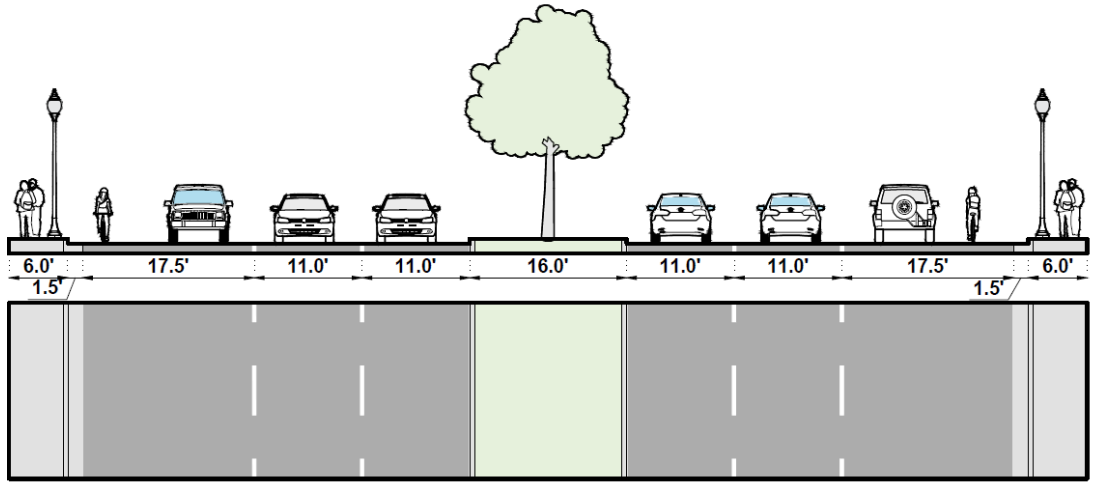
Potential Development



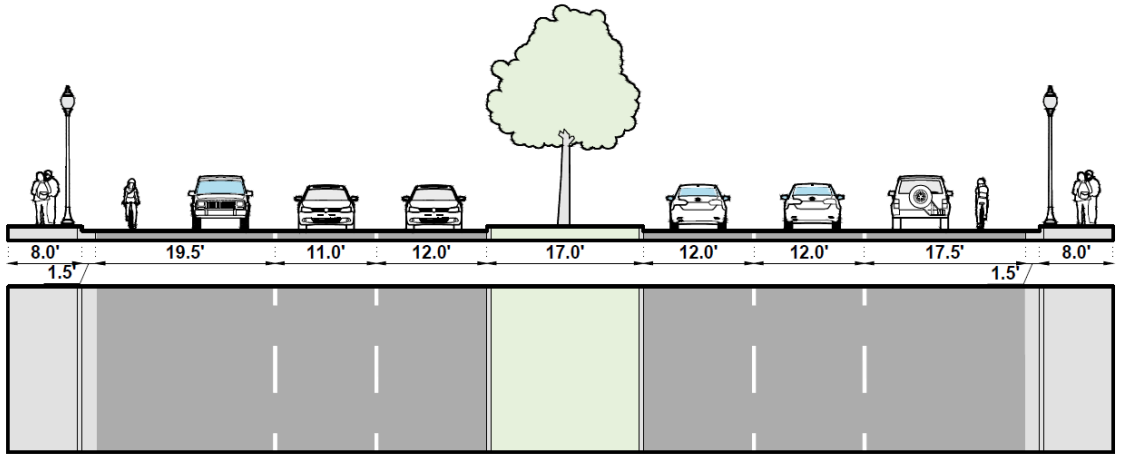
- Environments geared toward pedestrian activity
- New street network with increased connectivity for all modes of transit, utilizing new BRT access
- A mix of uses including retail, office, and residential

Existing Cross Sections

Blackstone Avenue (110’)



Shaw Avenue (120’)



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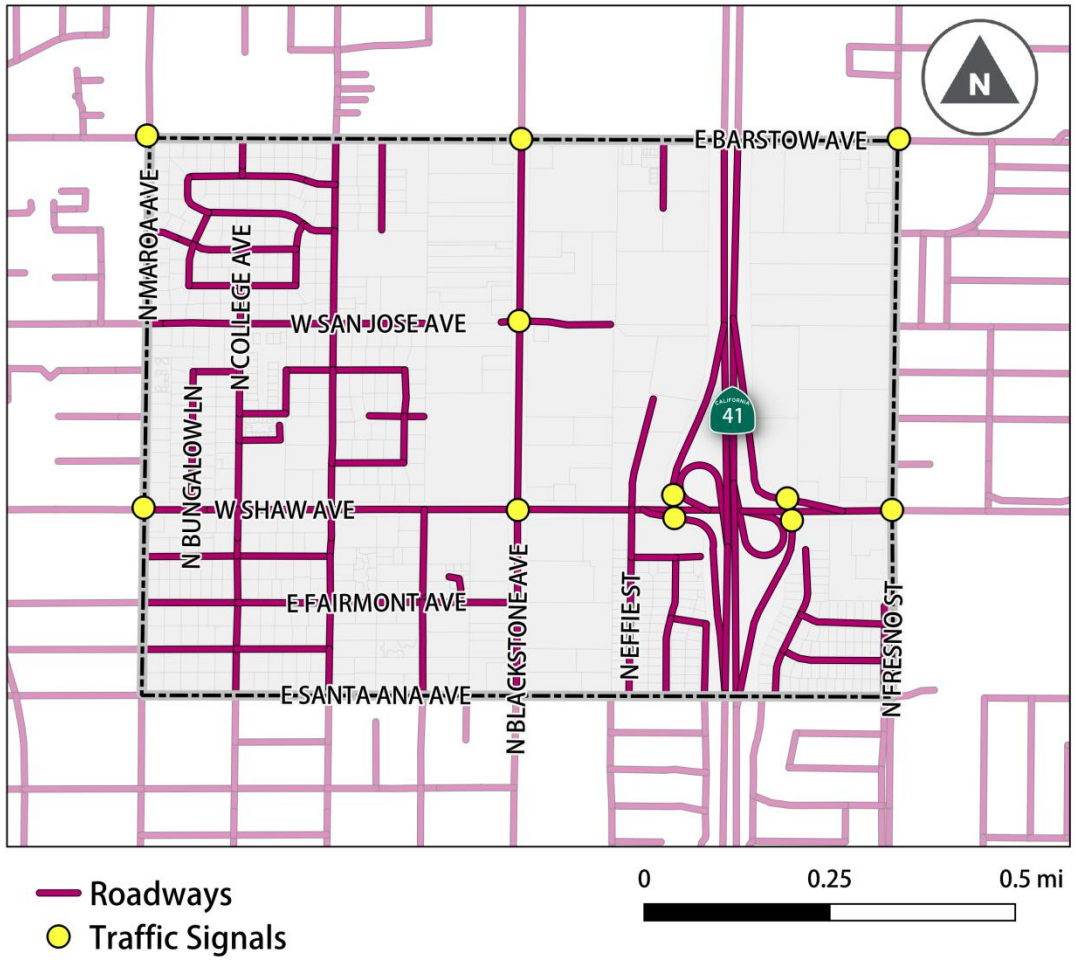
Current Roadway Network



Identified gaps

- Lack of connectivity from residential areas to major roads and destinations
- Long gaps between signalized crossings are challenging for pedestrians
- Raised medians on Blackstone and Shaw limit turning movements and access to businesses

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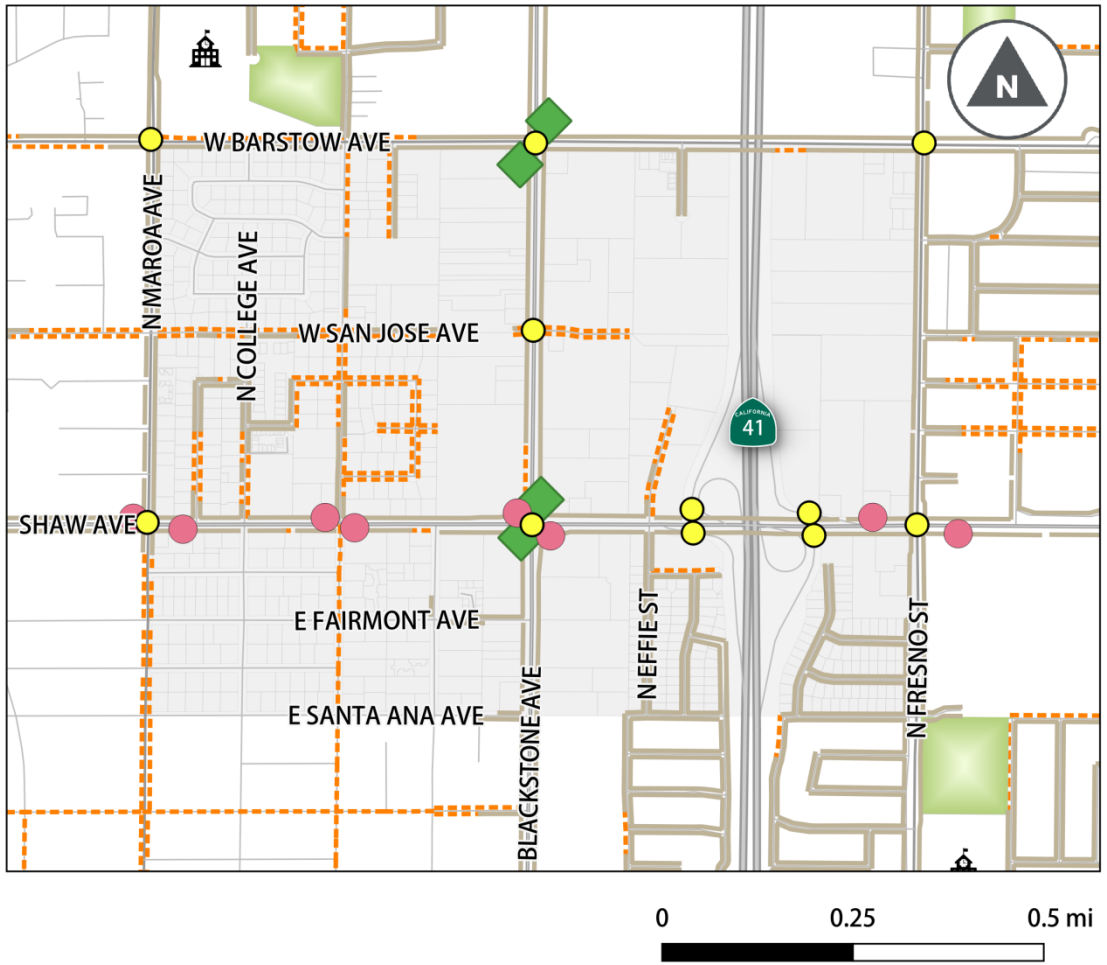
Current and Planned Pedestrian Network



Pedestrian Facilities
- Existing Sidewalk
- Planned Sidewalks
- Signalized Pedestrian Crossings

Walking Destinations
- BRT Station
- Bus Stop
- School
- Park

Identified gaps

Proposed infill sidewalks on neighborhood streets do not connect through commercial areas along Blackstone/Shaw

- Need to increase safe crossing opportunities on major roads throughout the project area – currently, crossings are only at major intersections or across highway ramps

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Pedestrian Experience

- Sidewalks exposed to high-speed traffic
- Street edges have poor definition; large parking lots separate pedestrians from destinations
- Crosswalks are few and far between
  - Minimum distance between crossings in the project area is 1,250 feet (1/4 mile)
- When crosswalks are provided, they are long and exposed
  - Pedestrians must cross up to 9 travel lanes without a median refuge

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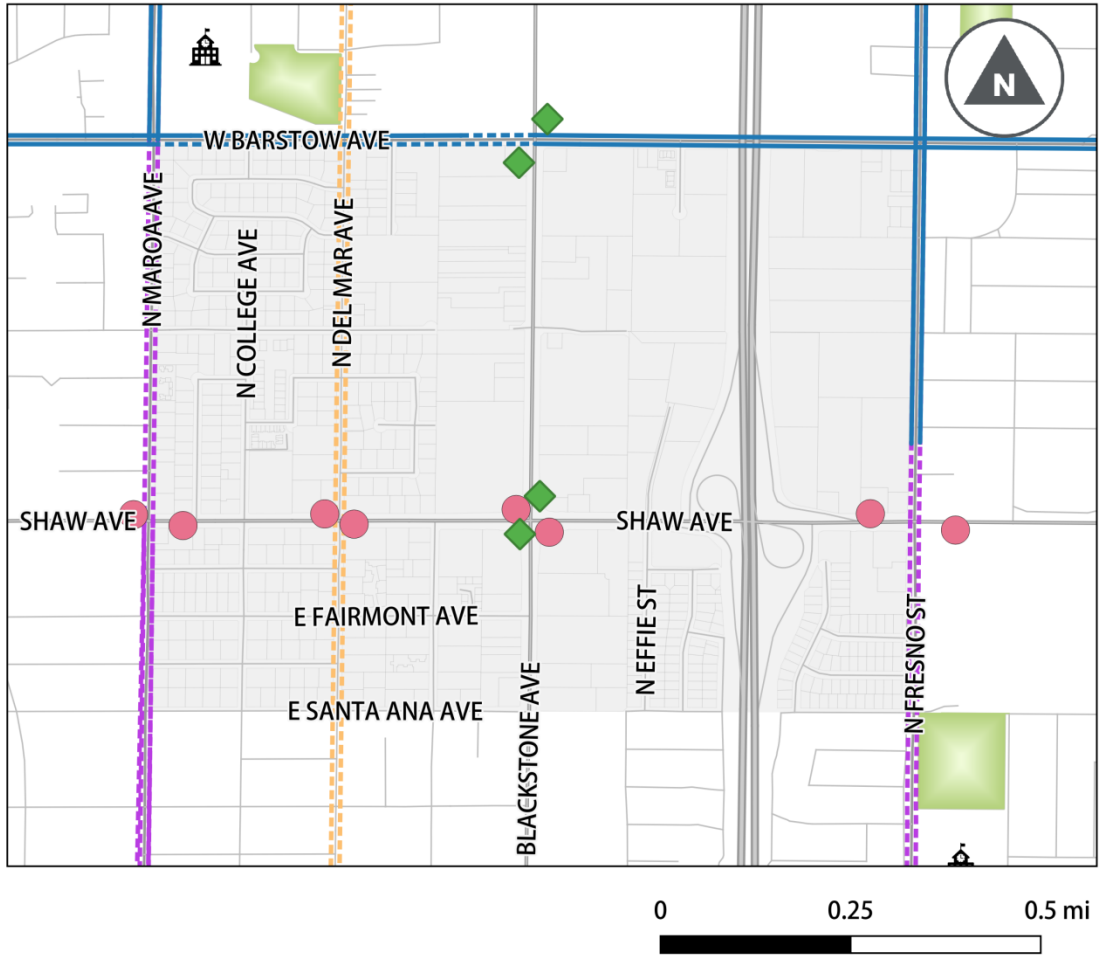
Current and Planned Bike Network



Existing Bicycle Facilities
- Class II Bike Lane

Planned Bicycle Facilities
- Class II Bike Lane
- Class III Bike Route
- Class IV Separated Bikeway

Bicycling Destinations
- BRT Station
- Bus Stop
- School
- Park

Identified gaps

- Lack of bike facilities on the major roads with shopping, employment, transit, or commercial destinations (Blackstone or Shaw)
- Lack of local street connections to Blackstone north and southeast of Shaw compared to southwest of Shaw

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Bicyclist Experience

- No bicycle facilities on Blackstone or Shaw
- High-speed, high-volume vehicle traffic
- Bicycling on the street is dangerous, high-stress, and unattractive to most bicyclists
- Bicyclists who do use these corridors frequently ride on the sidewalk to avoid vehicle traffic, posing potential conflicts with pedestrians.

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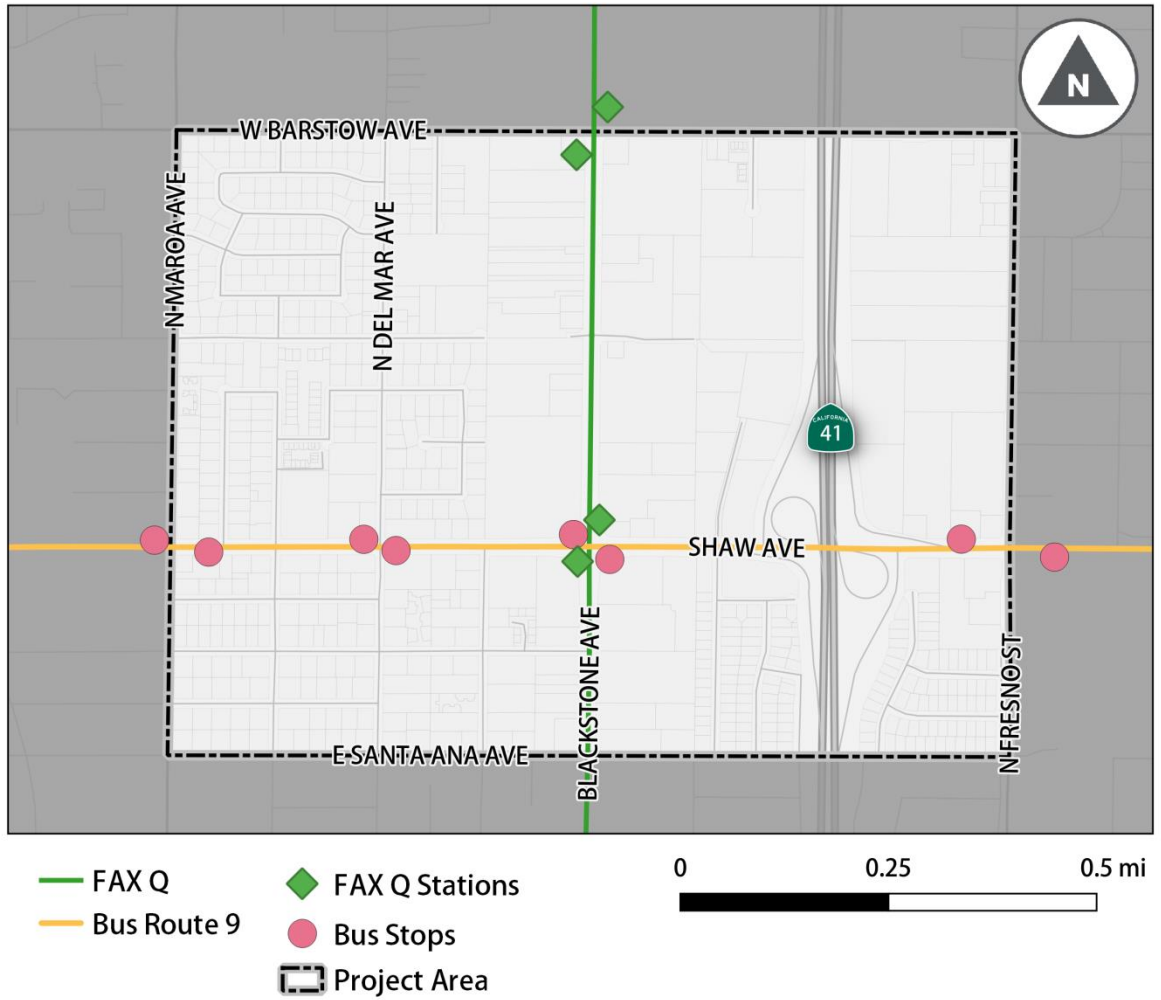
Transit Network



- **FAX Q BRT line (Blackstone Ave)**
  - 10-minute headways 6:00am-9:00am and 2:30pm-7:00pm
  - 15-minute headways in non-peak hours
  - Exceeded ridership expectations since opening in 2018
- **FAX Route 9 (Shaw Ave)**
  - 15-minute headways M-F 6:00am-6:00pm

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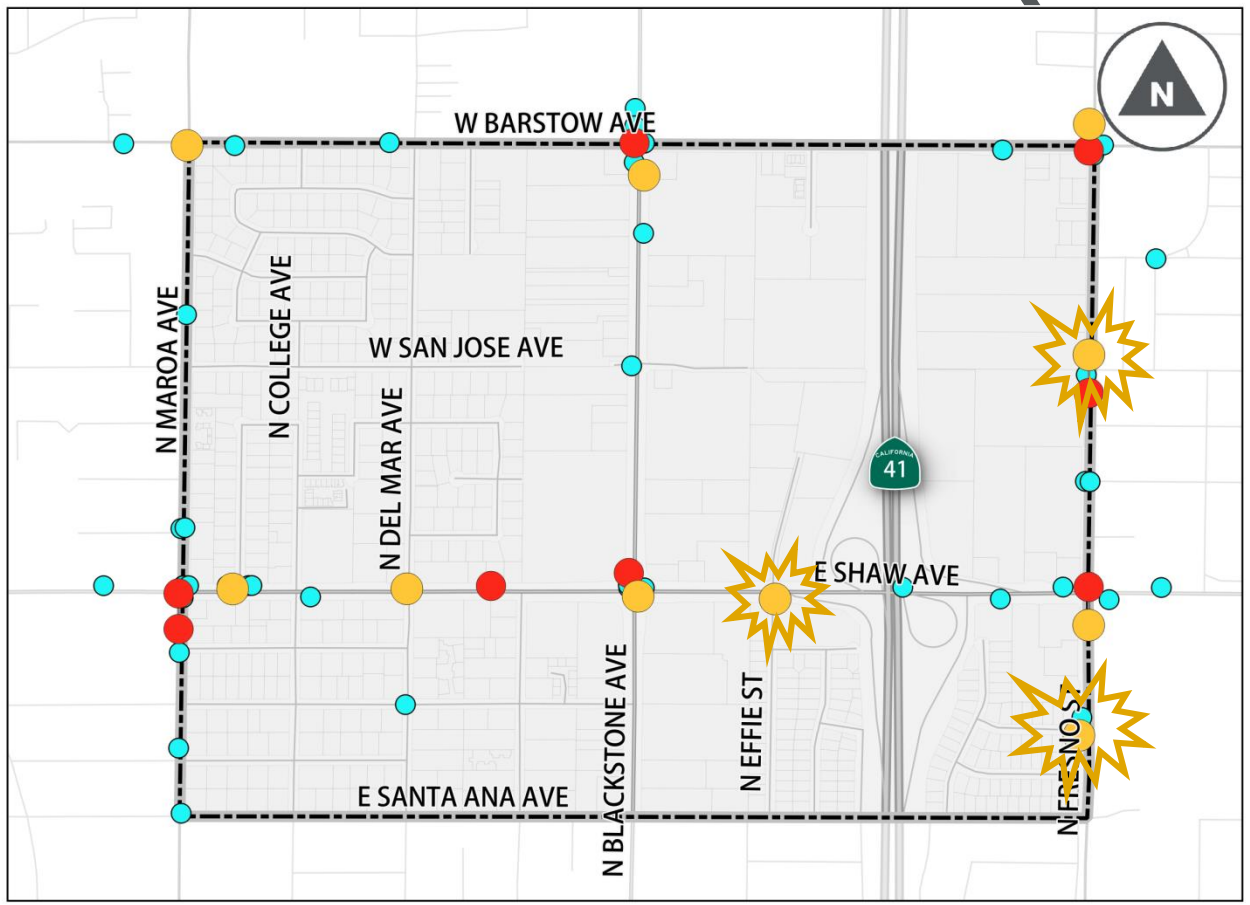
Collision Trends (2011 – 2015)



- Collisions occurred predominantly along arterials, including Blackstone and Shaw Avenues, and disproportionately affect pedestrians and bicyclists.
- On Blackstone and Shaw, 0.01% of roadway users are pedestrians and 0.001% are on bike,* but they account for 8% and 4% of crashes, respectively.

**estimated from the vehicle, bicycle, and pedestrian traffic counts at the Blackstone-Shaw intersection (Kittelson, December 2018)*

Vehicle Speeds

SPEED LIMIT 40	Blackstone Ave (north of Gettysburg Ave)	Blackstone Ave (north of Shaw Ave)	Shaw Ave (west of Blackstone Ave)	Shaw Ave (west of Fresno St)
Average Speed	37.0	36.6	38.3	37.3
50th Percentile	36.8	36.6	38.2	37.3
85th Percentile	**40.1**	39.7	**41.8**	**40.9**
95th Percentile	**42.5**	**41.6**	**43.4**	**42.8**

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Vehicle Volumes

Future vehicle volumes are expected to be similar to current volumes, with increases less than 10% in all directions.

	Blackstone Ave 2015/2016	Blackstone Ave 2042	Shaw Ave 2015/2016	Shaw Ave 2042
Northbound ADT	12,183	13,100	–	–
Southbound ADT	11,277	12,300	–	–
Eastbound ADT	–	–	28,856	29,600
Westbound ADT	–	–	28,696	29,600

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Source: City of Fresno traffic counts and Fresno COG travel demand model

AM Peak Level of Service

Table 1: Level of Service Criteria for Signalized Intersections

Level of Service	Average Control Delay per Vehicle (Seconds)
A	<10.0
B	>10.0 and ≤ 20.0
C	>20.0 and ≤ 35.0
D	>35.0 and ≤ 55.0
E	>55.0 and ≤ 80.0
F	>80.0

Source: Highway Capacity Manual.

Table 2: Level of Service Criteria for Unsignalized Intersections

Level of Service	Average Control Delay per Vehicle (Seconds)
A	<10.0
B	>10.0 and ≤ 15.0
C	>15.0 and ≤ 25.0
D	>25.0 and ≤ 35.0
E	>35.0 and ≤ 50.0
F	>50.0

Source: Highway Capacity Manual.

Source: SimTraffic Intersection Analysis Results, Kittelson (December 2018)

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Midday Peak Level of Service

Table 1: Level of Service Criteria for Signalized Intersections

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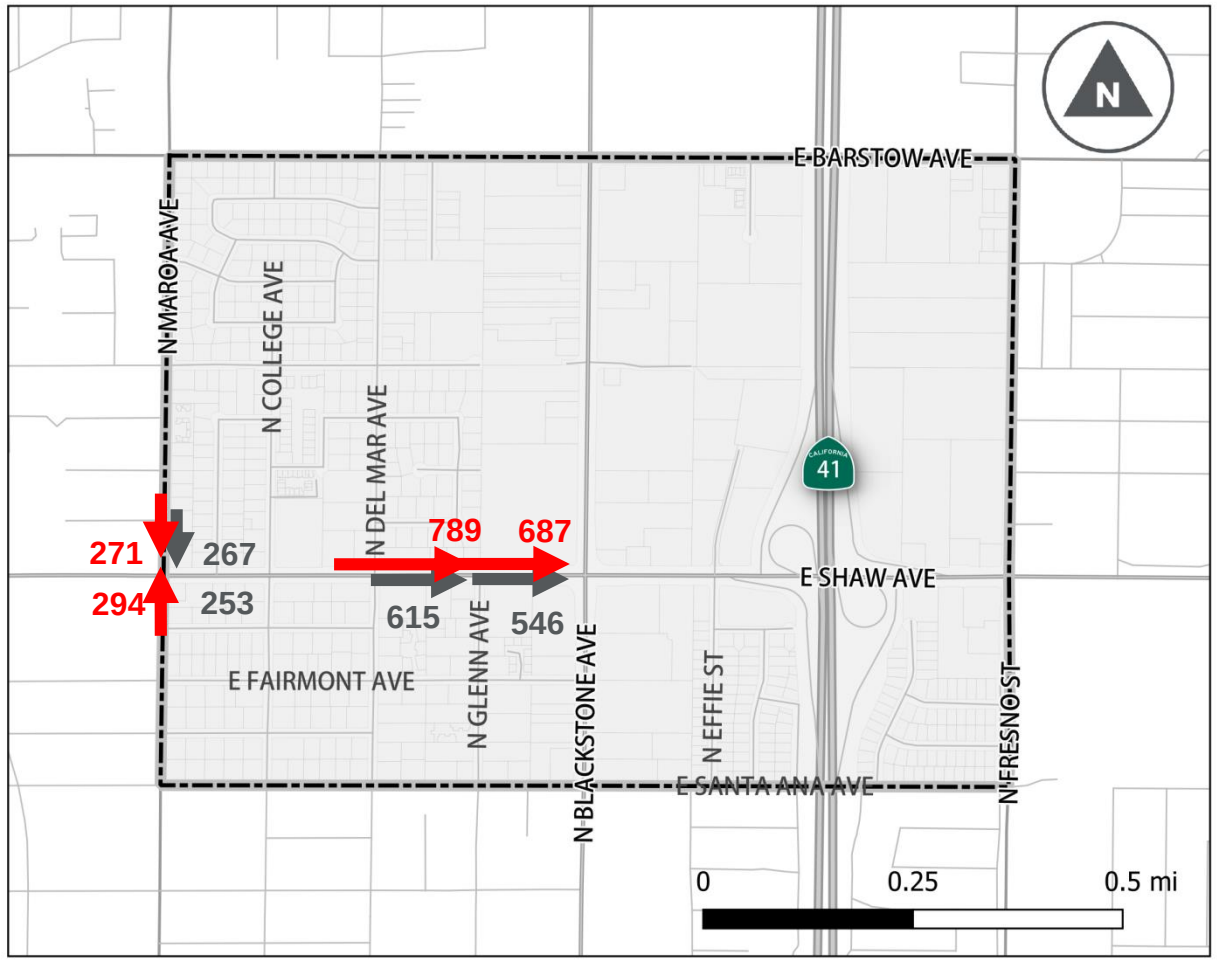
AM Peak Queue Lengths Exceeding Storage Space



95th Percentile Queue

Available Queue Storage

Queue/Storage Length (ft)

Note: Arrowhead tips represent start of queue/storage

Source: Queue Length Results, Kittelson (December 2018)

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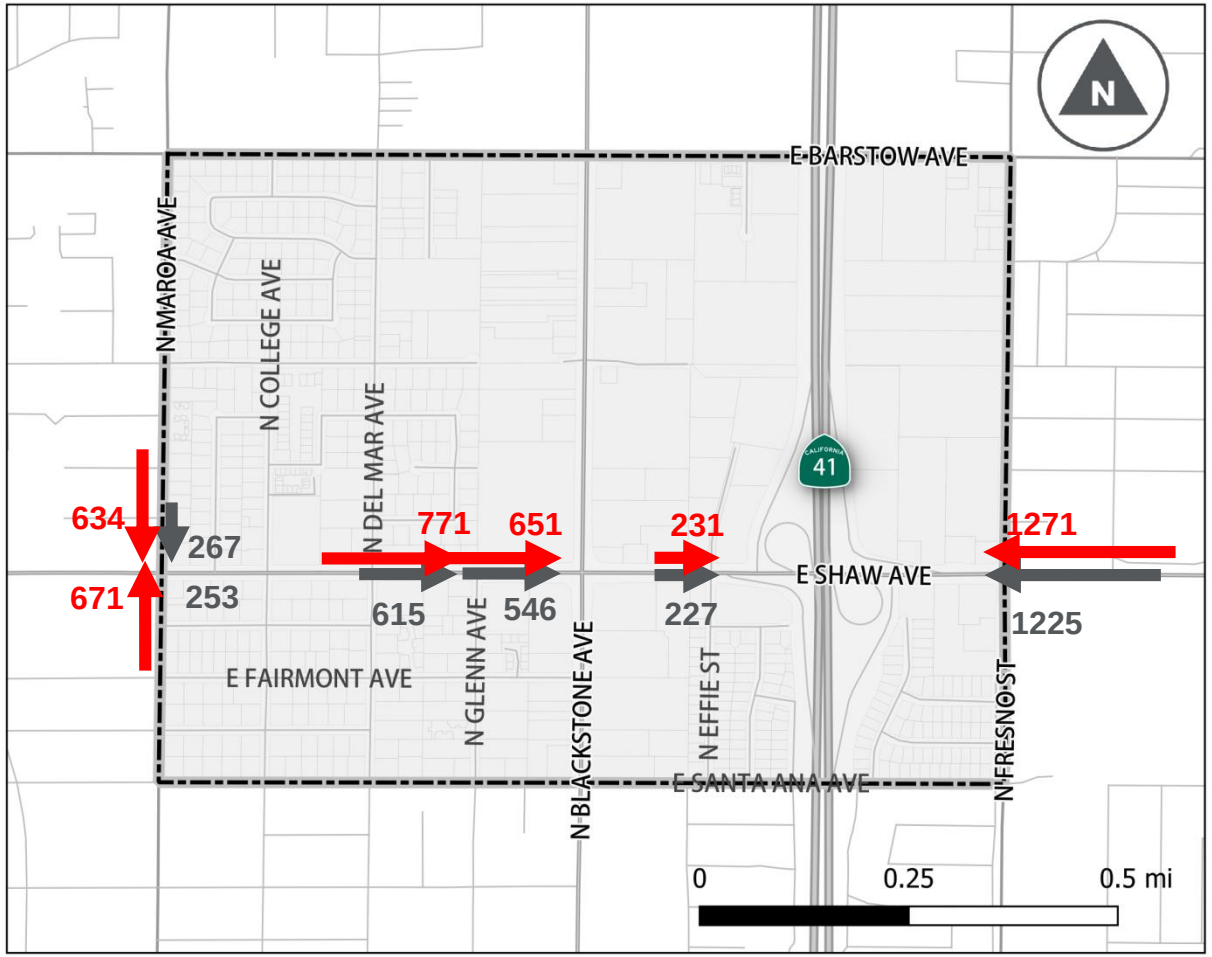

95th Percentile Queue

Available Queue Storage

Queue/Storage Length (ft)

Note: Arrowhead tips represent start of queue/storage

Source: Queue Length Results, Kittelson (December 2018)

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Reference

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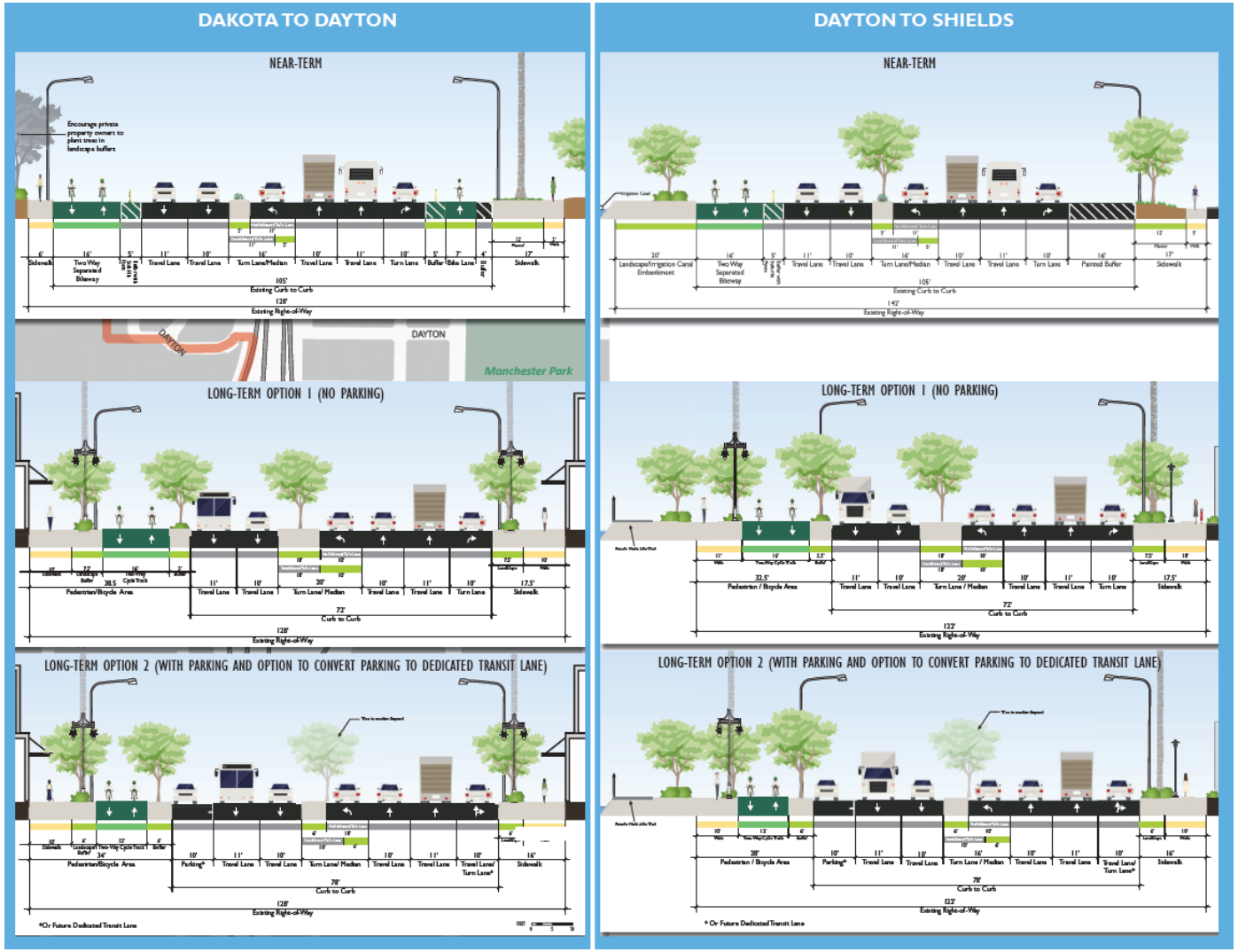
Southern Blackstone Smart Mobility Plan

- The project's objectives include:
  - Improving bicycle and pedestrian mobility with better sidewalk and on-street bike facilities
  - Identifying opportunities for roadway calming
  - Supporting high quality and high frequency transit



Source: City of Fresno

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