



CITY OF COLLEGE STATION  
*Home of Texas A&M University®*

# Traffic Congestion & Mobility Analysis

City Council Workshop

August 8, 2024



TJKM

# Project Goals

- The primary goal of this study is to improve traffic and mobility within the City now and into the future by conducting a detailed analysis of the City's transportation system and provide a quantitative view of current transportation issues, impacts, concerns, trends, system capacity surplus, and shortfalls.

# Stakeholder and Community Engagement

- Solicit input on Congestion and Mobility; and measures/strategies to be implemented.
- Solicit Community Input via Survey at following link, currently posted on City website and will be available through August 31, 2024:  
<https://www.surveymonkey.com/r/9JPP99Z>
- Working with TxDOT, BCSMPO, and Texas A&M as public agency stakeholders

## Congestion and Mobility Study City of College Station

The City of College Station is in the process of preparing a Congestion and Mobility Analysis framework to help identify congested corridors and track citywide congestion trends throughout the city. The primary goal of this study is to improve traffic and mobility within the city and explore options in the future. Overall, a congestion and mobility analysis is a valuable tool for cities like College Station to assess their transportation systems, identify challenges, and develop data-driven strategies to enhance mobility, reduce congestion, and improve residents' and visitors' overall quality of life.

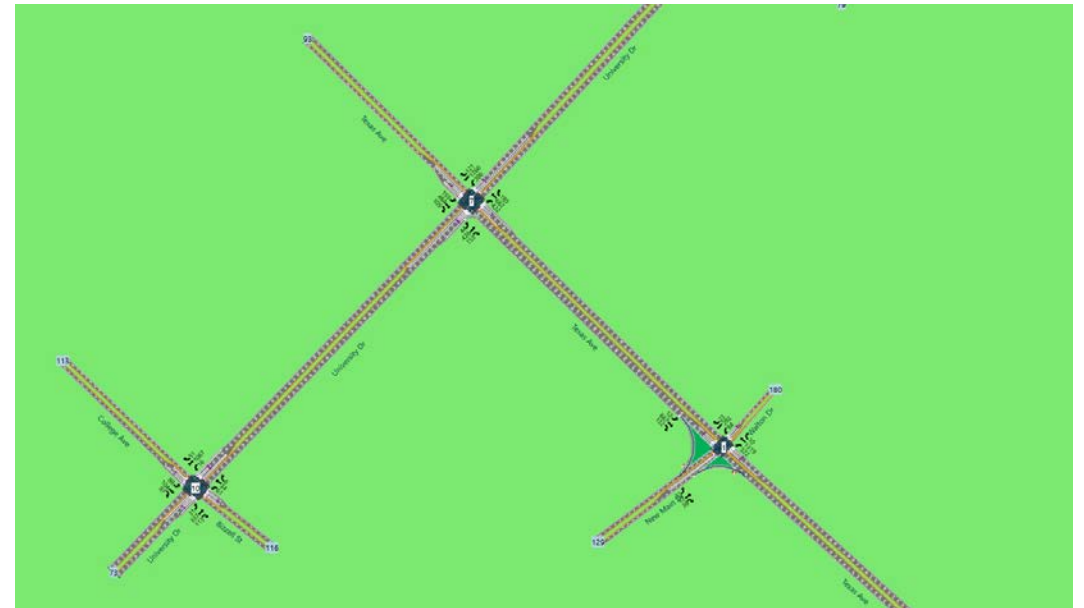
\* 1. Please select your primary means of transportation that you use to travel to work or school.

- |  |   |
|--|---|
| <input type="radio"/> Walk                       | <input type="radio"/> Bus                                     |
| <input type="radio"/> Bike                       | <input type="radio"/> Carpool                                 |
| <input type="radio"/> E-bike or electric scooter | <input type="radio"/> Rideshare or taxi                       |
| <input type="radio"/> Skateboard or push scooter | <input type="radio"/> Other                                   |
| <input type="radio"/> Motorcycle or moped        | <input type="radio"/> None - retired/telecommute/not employed |
| <input type="radio"/> Drive alone in car         |   |

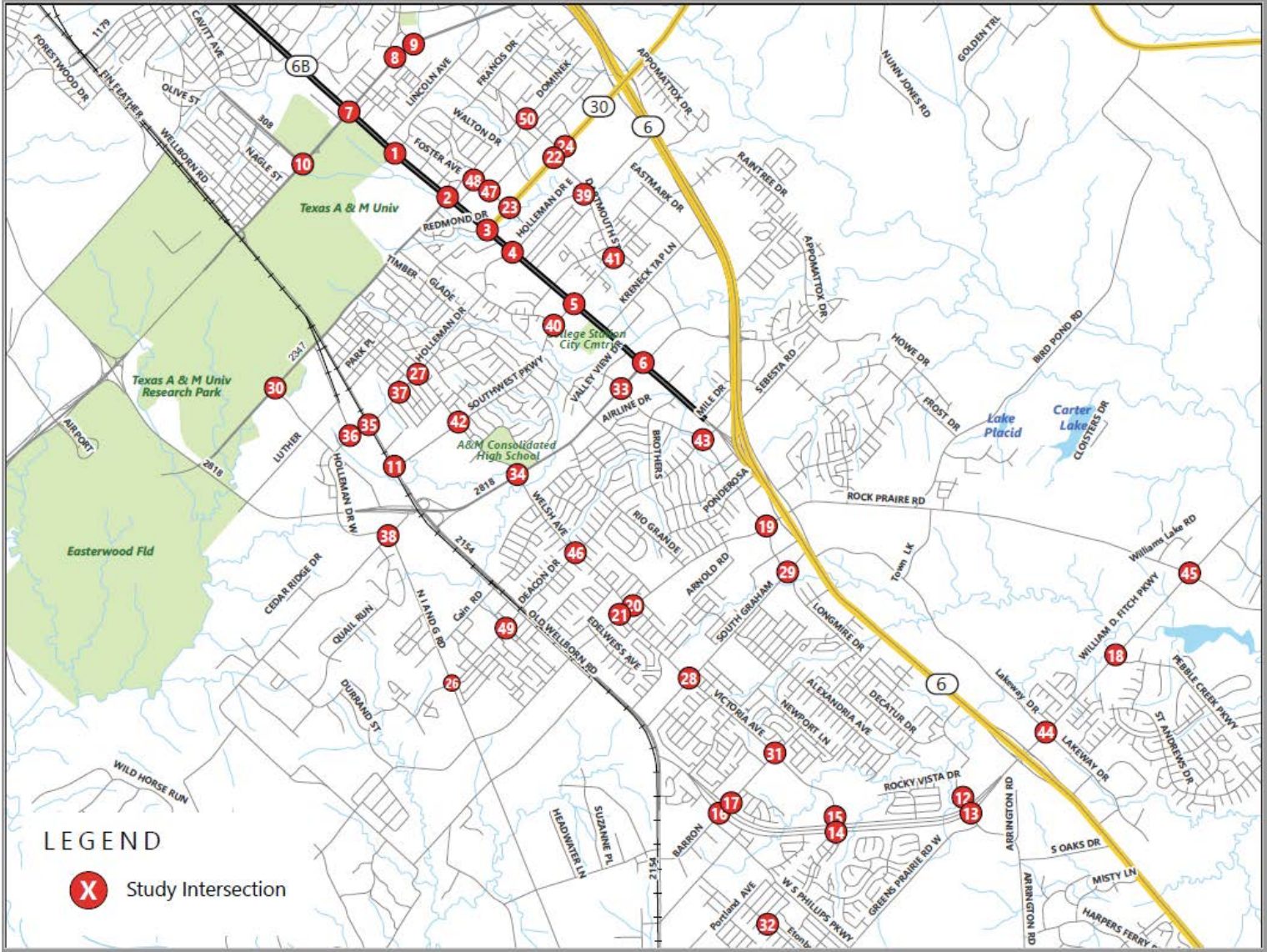
\* 2. How many miles (one-way) do you travel to get to work or school?

# Project Tasks

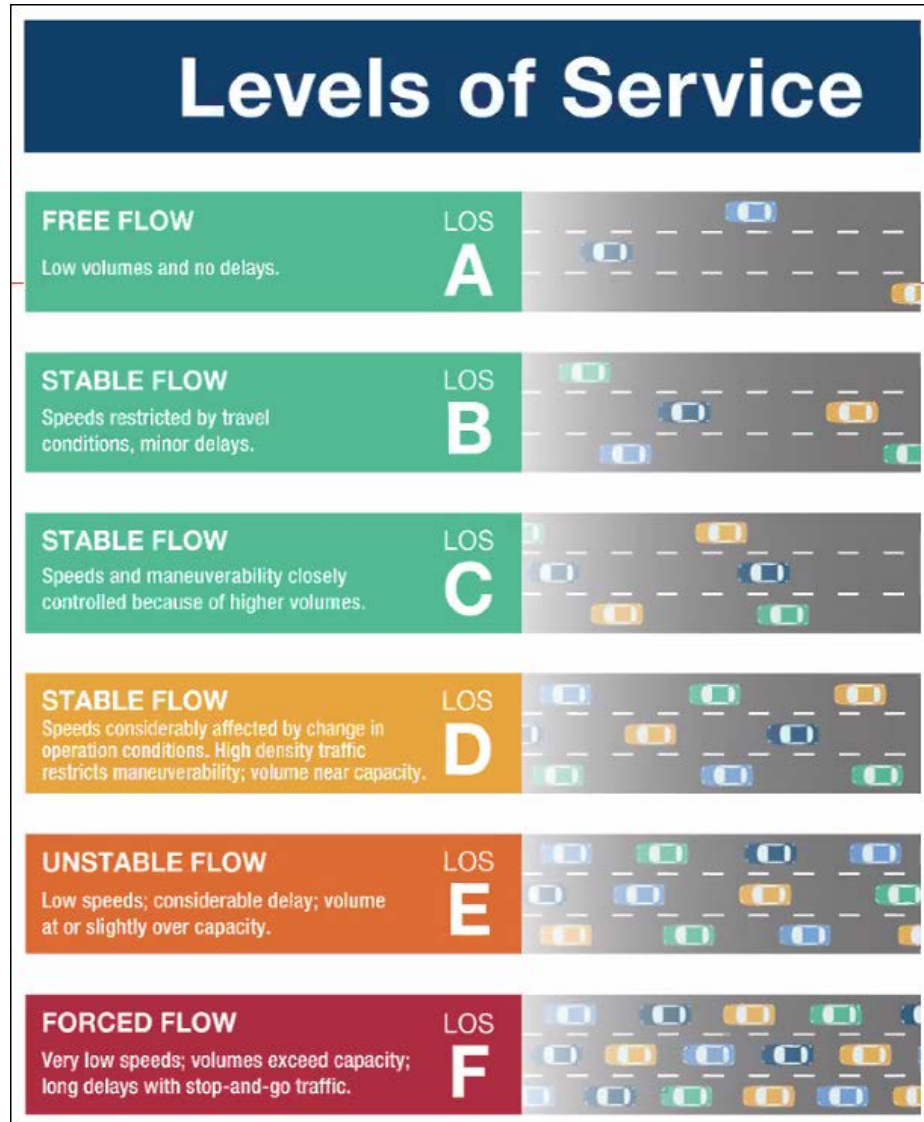
- Congestion and Mobility Analysis;
  - 50 Study Intersections selected in consultation with City Staff
  - Data Collection
  - Future Demands
  - Operational Analysis (LOS D as acceptable standard)
- Upcoming Tasks
  - Congestion Corridor Identification Mapping
  - Congestion Mitigation Toolkit
  - Report



# Study Intersections



# Level of Service Descriptions



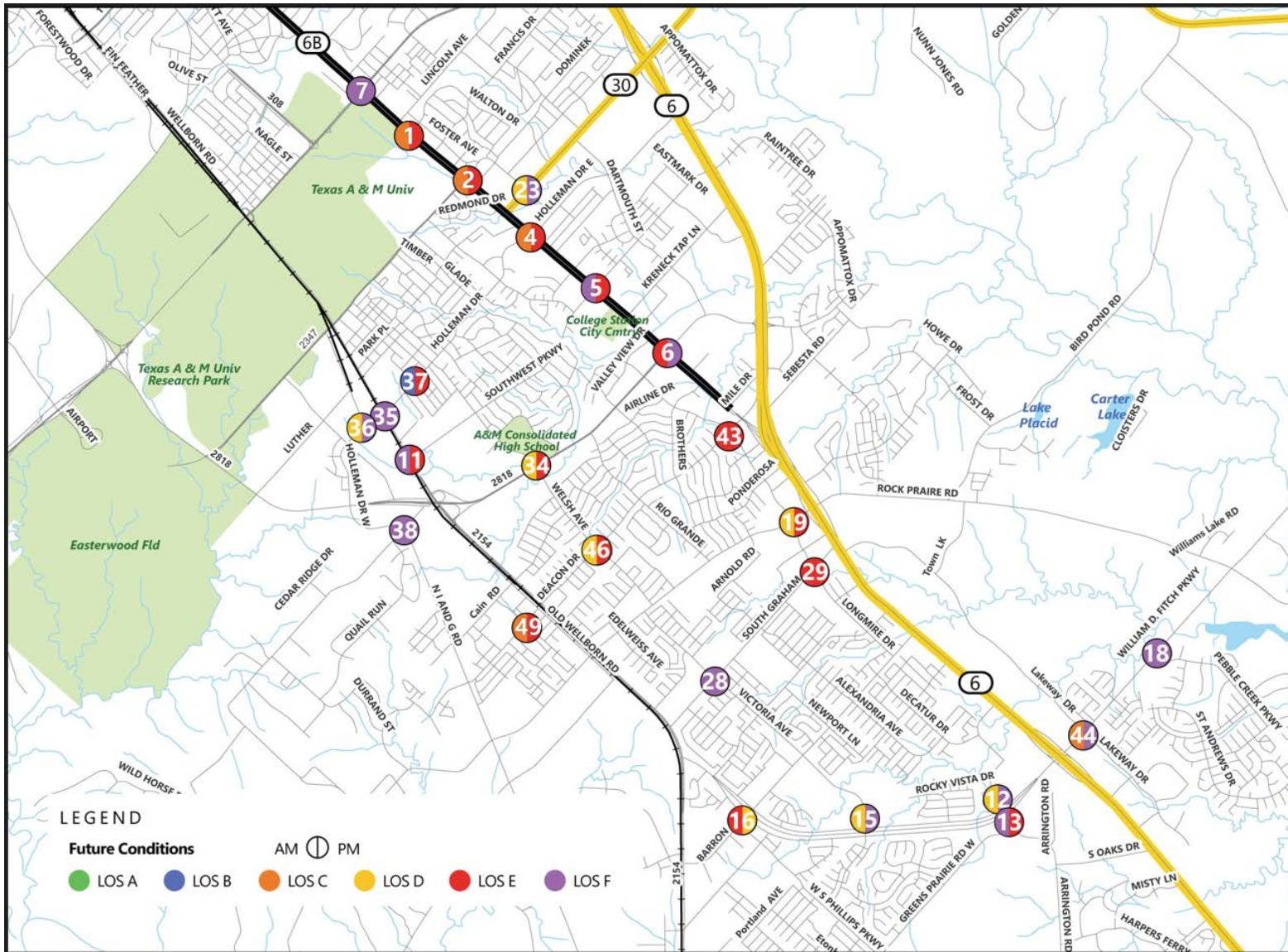
	Traffic lights	Stop signs /roundabout
Level of service	Delay (s/veh)	Delay (s/veh)
A	0-10	0-10
B	10-20	10-15
C	21-35	16-25
D	36-55	26-35
E	56-80	36-50
F	>80	>50

# Existing Conditions – Failing LOS



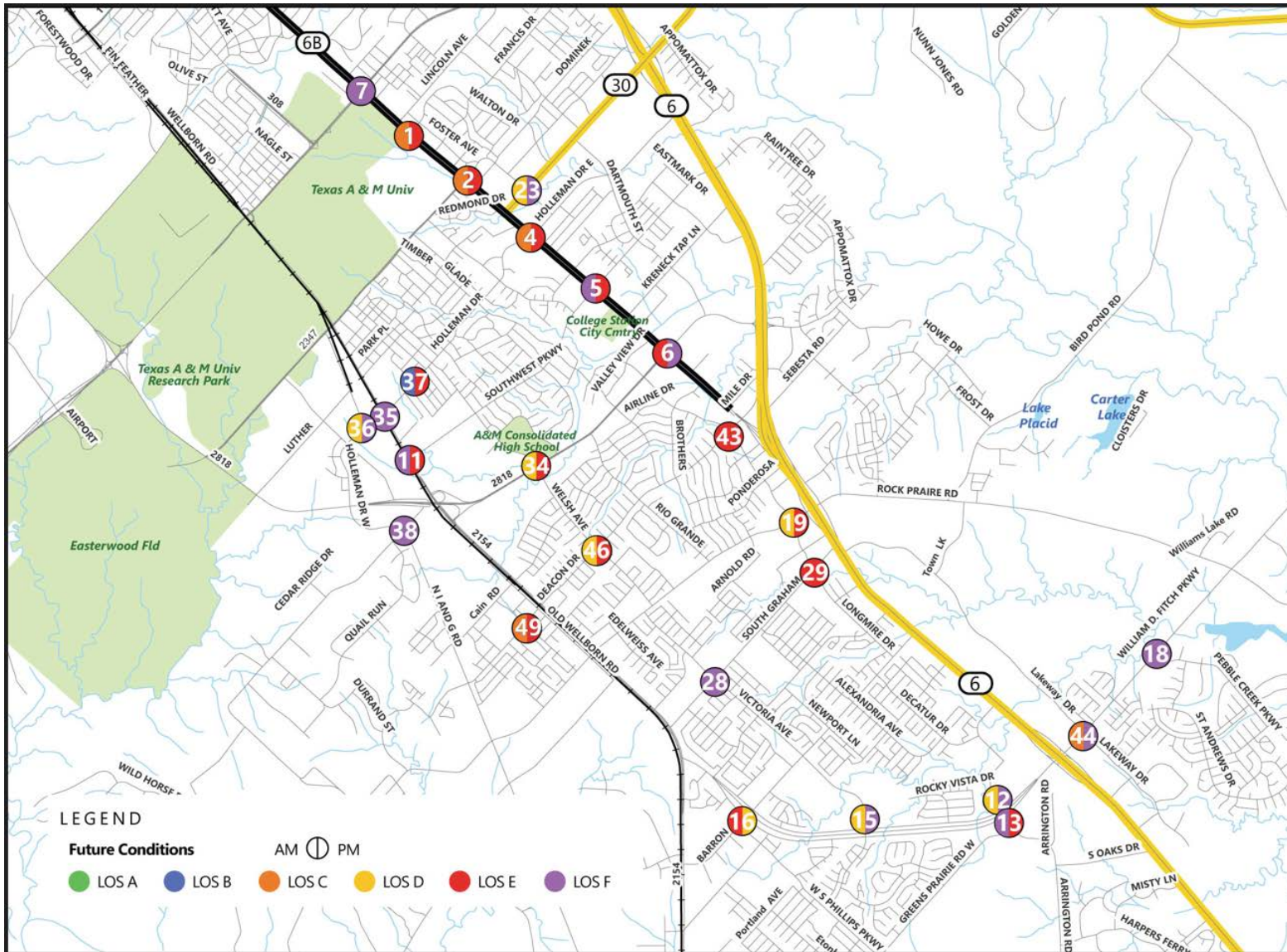
- | #  | Intersection (2024 AM)                          |
|----|---|
| 5  | Texas Avenue & Southwest Parkway                |
| 7  | Texas Avenue & University Drive                 |
| 11 | Wellborn Road & Southwest Parkway               |
| 16 | Barron Road & William D. Fitch Parkway (EB)     |
| 18 | William D. Fitch Parkway & Pebble Creek Parkway |
| 38 | Holleman Drive S & N Dowling Road               |
- 
- | #  | Intersection (2024 PM)                          |
|----|---|
| 7  | Texas Avenue & University Drive                 |
| 12 | Arrington Road & William D. Fitch Parkway (WB)  |
| 15 | Victoria Avenue & William D. Fitch Parkway (NB) |
| 18 | William D. Fitch Parkway & Pebble Creek Parkway |
| 23 | George Bush Drive & Harvey Road                 |
| 35 | Wellborn Road & Holleman Drive                  |
| 38 | Holleman Drive S & N Dowling Road               |

# Future Conditions AM Peak – Failing LOS



#	Intersection (2035 AM)
5	Texas Avenue & Southwest Parkway
6	Texas Avenue & Harvey Mitchell Parkway S
7	Texas Avenue & University Drive
11	Wellborn Road & Southwest Parkway
13	Arrington Road & William D. Fitch Parkway (EB)
16	Barron Road & William D. Fitch Parkway (EB)
18	William D. Fitch Parkway & Pebble Creek Parkway
28	Victoria Avenue & Graham Road
29	Longmire Drive & Graham Road
35	Wellborn Road & Holleman Drive
38	Holleman Drive S & N Dowling Road
43	Longmire Drive & Deacon Drive

# Future Conditions PM Peak – Failing LOS



#	Intersection (2035 PM)
1	Texas Avenue & New Main Drive/Walton Drive
2	Texas Avenue & George Bush Drive
4	Texas Avenue & Holleman Drive
5	Texas Avenue & Southwest Parkway
6	Texas Avenue & Harvey Mitchell Parkway S
7	Texas Avenue & University Drive
11	Wellborn Road & Southwest Parkway
12	Arrington Road & William D. Fitch Parkway (WB)
13	Arrington Road & William D. Fitch Parkway (EB)
15	Victoria Avenue & William D. Fitch Parkway (NB)
16	Barron Road & William D. Fitch Parkway (EB)
18	William D. Fitch Parkway & Pebble Creek Parkway
19	Longmire Drive & Rock Prairie Road
23	George Bush Drive & Harvey Road
28	Victoria Avenue & Graham Road
29	Longmire Drive & Graham Road
34	Welsh Avenue & Harvey Mitchell Parkway S
35	Wellborn Road & Holleman Drive
36	Holleman Drive & Marion-Pugh Drive
37	Phoenix Street/Eleanor Street & Holleman Drive
38	Holleman Drive S & N Dowling Road
43	Longmire Drive & Deacon Drive
44	Lakeway Drive/Midtown Drive & William D. Fitch Parkway
49	General Parkway & Deacon Drive

# Potential Mitigation Strategies

- Strategies to enhance capacity and safety for all modes, at the deficient intersections may include:
  - Additional turn lanes
  - Synchronization of traffic signals along the corridors in real time
  - Reducing the curb return radii to slow turning vehicles
  - Alternative Traffic Control such as All-Way Stop; Traffic Signal or Roundabout
  - Leading Pedestrian Intervals (LPI) to enhance pedestrian safety
- Intersections with significant LOS issues may necessitate a larger change to the intersection design and configuration

# Next Steps & Schedule

- Develop toolbox for implementing mitigations
- Prepare Conceptual Layouts
- Prepare Cost Estimates for proposed mitigations
- Develop list of potential projects for inclusion in future CIP program or for other funding sources

Thank You !!!.