

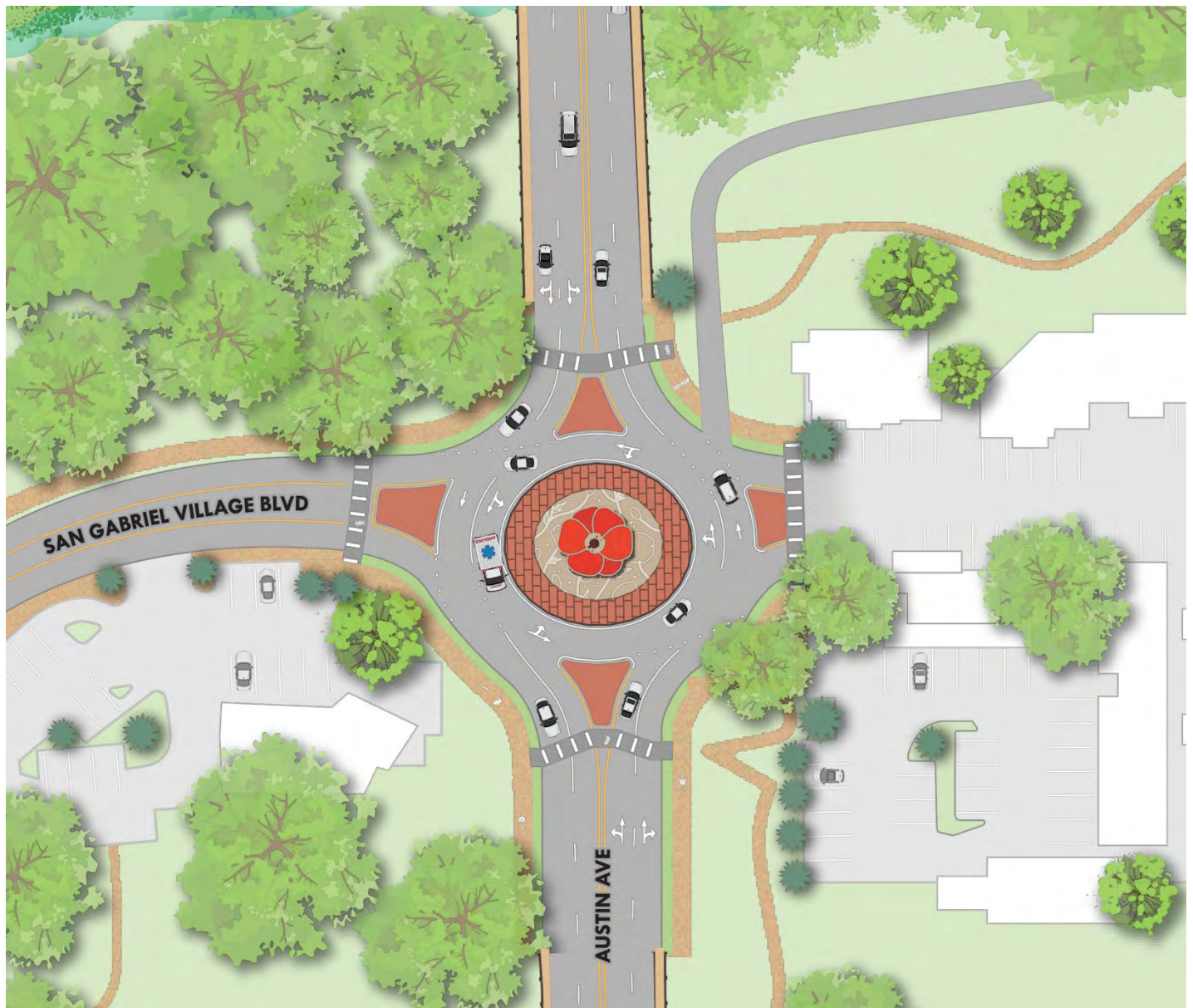
# APPENDIX

## Recommendations Technical Memorandum

E

# Austin Avenue Corridor Study

## Recommendations Memorandum



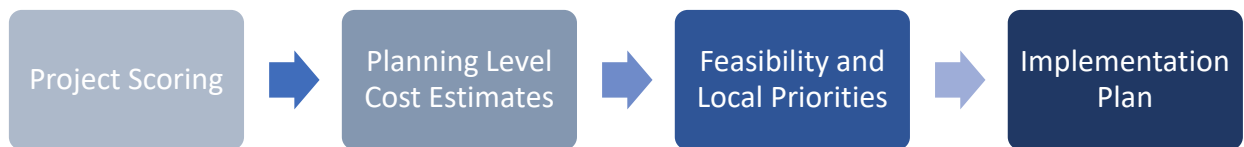
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# Introduction

Final recommendations for Austin Avenue were developed based on the feedback received during the concept development phase of the study. The recommendations are aimed at addressing key challenges and enhancing the overall functionality, safety, and sustainability of the corridor. They are based on a thorough analysis of existing and future conditions, best practices in transportation planning and design, and consideration of local priorities and constraints. As displayed in **Figure 1** below, qualitative and quantitative criteria were used to evaluate each improvement to determine a preferred implementation timeframe.

*Figure 1: Project Prioritization Process*



## Project Scoring

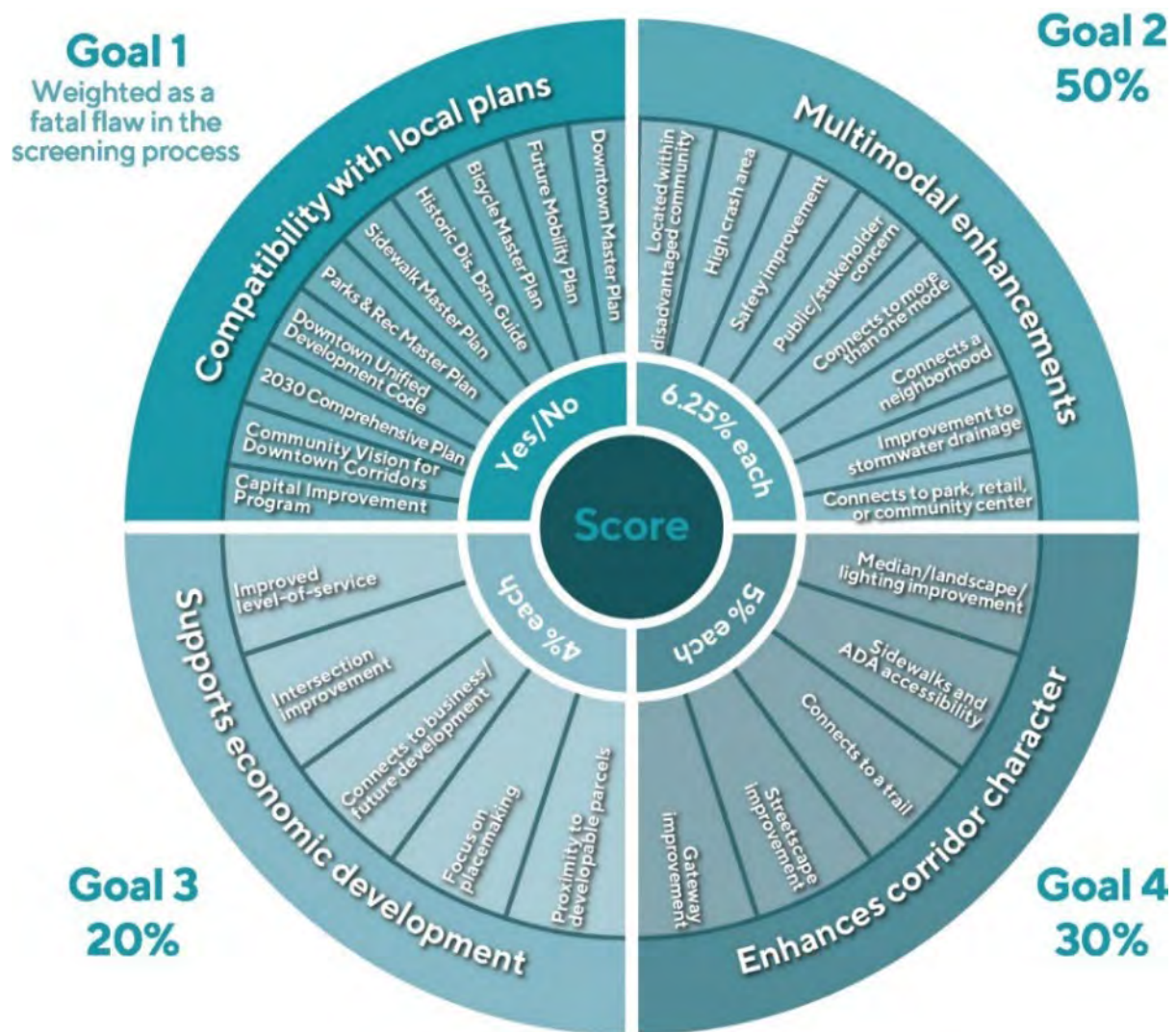
To develop an implementation plan with prioritized projects, recommendations were first scored based on their ability to achieve the goals of the study. The four study goals are:

- Goal 1 – Furthers the Goals of Previous Planning Efforts
- Goal 2 – Multimodal, Operations and Safety Enhancements
- Goal 3 – Enhance Corridor Character
- Goal 4 – Supports Economic Development

Each goal is assigned objectives that are used as metrics in the scoring process. Goal 1 was used as a fatal flaw screening to confirm the recommendations are furthering previous planning efforts. Goals 2, 3, and 4, were given a weighted percentage based on the feedback received during the first two rounds of public engagement. **Figure 2** provides a breakdown of the scoring criteria and components of each.



Figure 2: Recommendation Scoring Breakdown



### Scoring process- Metrics

**Goal 1 – Furthers the Goals of Previous Planning Efforts.** Recommendations were analyzed against the goals and objectives of the ten plans identified below. If a recommendation did not meet criteria in Goal #1, it was either removed or modified to meet the criteria.

- Downtown Master Plan
- Future Mobility Plan
- Parks and Recreation Master Plan
- Bicycle Master Plan
- 2030 Comprehensive Plan
- Community Vision for Downtown Corridors
- Capital Improvement Plan
- Historic Design District Guidelines
- Downtown Unified Development Code

**Goal 2 – Multimodal, Operations and Safety Enhancements = 50% of Score.** Metrics Included:

- Located within disadvantaged community
- High crash area – within 300ft of crash hot spot
- Safety improvement
- Public stakeholder concern
- Connects to more than one mode
- Connects to a neighborhood
- Improvements to stormwater drainage
- Connects to park, retail, or community center

**Goal 3 – Supports Economic Development = 30% of Score.** Metrics Included

- Improved Traffic Level-of-Service
- Intersection Improvement
- Connects to Business / Future Development

**Goal 4 – Enhance Corridor Character = 20% of Score.** Metrics Included:

- Median/landscape/lighting improvement
- Sidewalks and ADA accessibility
- Focus on Placemaking
- Connects to a trail
- Streetscape improvement
- Gateway improvement
- Proximity to Developable Parcel (within 500 ft)

### Comprehensive Score

Each recommendation was assigned a comprehensive score based on the sum of points earned from goals 2, 3, and 4. For example, a recommendation that earns 18.75 points in goal two, 12 points in goal three, and 18 points in goal four equals a comprehensive score of 45.75 [ $18.75 + 12 + 18 = 45.75$ ].

Scoring of the recommendations ranged from a minimum of 18.50 and a maximum of 89.75. To normalize the scoring, the scores were categorized into a low, medium, or high category that were distributed based on the dataset scores utilizing the maximum of 100.

*Table 1: Recommendation Scoring Thresholds*

Low	Medium	High
0 – 26	27 – 41	42 – 100

Results of the recommendations scoring can be found in **Appendix A**.

### Planning Level Cost Estimates

The next step involved developing planning level cost estimates for each of the proposed recommendations. These estimates play a critical role in the city's future budgeting, project planning, and future alternative evaluation of recommendations along the Corridor. They provide essential information for decision-making and ensure the successful implementation of the Corridor's improvement projects.

The methodology to develop the planning level cost estimates involved determining approximate length and area for each facility type and assigning unit costs to each component. Unit costs averages were

utilized and are based on previous experience in Central Texas and nationwide averages. Details on unit costs can be found in **Appendix B**. Operational improvements, aesthetic improvements, and recommendations for a study utilized median costs based on national averages and the project team's recent experience. Estimates were developed for individual improvements, then grouped based on the location or recommendations type. For example, improvements at intersections include both operational improvements and infrastructure improvements and recommendation for a shared use path include the construction of a shared use path and elements connecting to the path, such as a connection to a park. Additionally, the recommendation for a lane reduction includes intersection improvements and curb infrastructure improvements.

Cost estimates provided in the implementation plan include a comprehensive estimate that includes planning level construction costs, design and engineering costs, mobilization costs, construction contingencies, and construction inspection costs. Construction costs were based on 2024 dollars and included a percentage to account for the cost of potential property acquisition/right-of-way or utility relocation. The estimates are provided only as a guideline for planning and as an indication of scale. As projects progress to the next phase of design, further review should be conducted.

### Feasibility and Local Priorities

The final consideration for recommendations was a qualitative review based on feasibility and local priorities. It's essential to consider both to ensure that the study effectively addresses the needs of the community and provide actionable recommendations the city can realistically implement. The evaluation considered various factors, including physical characteristics, existing infrastructure, and engineering constraints. By gaining an understanding of the feasibility of these improvements, the study prioritized realistic and implementable solutions.

This approach not only enhances the chances of success but also fosters collaboration and support among the public and stakeholders. By incorporating community input the recommendations are prioritized to meet the needs of the community and pave the way for successful long-term transportation solutions. Results of the feasibility and local priorities review can be found in **Appendix C**.

### Funding Opportunities

This plan outlines the necessary policies and actions to achieve the vision and goals set forth. The City will play a vital role in implementing this plan and to effectively implement these projects and policies the City will need to set aside future funding and allocate financial resources from its existing programs and policies, and potential future grant opportunities.

When opportunities arise, the City should actively seek funds through Federal, State, and local grants, and other financial resources. These sources of funding can be utilized to supplement the City's financial commitments and ensure the successful implementation of the plan. By exploring opportunities to secure external funding, the City can leverage additional resources and broaden the reach of its initiatives.

### Implementation Plan

The Implementation Plan outlines a strategic framework for translating the findings and recommendations into actionable initiatives. The successful implementation of this study requires a

coordinated effort involving collaboration among various stakeholders, resource management, and a commitment from various departments at the City. By following the structured approach outlined in this implementation plan, the next step towards further study, adoption of policies, or construction can be achieved in a feasible manner.

Local and regional entities, such as CAMPO and TxDOT, will provide valuable support and partnership in the implementation of the recommendations. These entities bring expertise and resources that can complement the efforts of the City. By working together, the City can leverage collective resources and achieve greater results. The private sector also plays a vital role in implementation. By collaborating with the City and regional entities, the private sector can contribute to the successful implementation of specific actions and policies. This collaboration may involve joint funding partnerships or other forms of financial support.

Recommendations were categorized into three key improvement type categories, vehicular transportation, active transportation, and placemaking/quality of life. Each category includes a timeline and breakdown by action type as displayed in Table 2.

*Table 2: Recommendations Categories*

Improvement Type	Timeframe	Action Type
Vehicular Transportation	Near-term (0-3 years): 2026 - 2029	Capital Projects
Active Transportation	Medium-term (3-7 years): 2030 – 2034	Operational Change
Placemaking/Quality of Life	Long-term (7+ years): 2034+	Policy Recommendation
		Study

**Tables 3, 4, and 5** provide the list of recommendations by improvement type. A corridor map displaying location of the recommendations can be found in **Appendix D**.

Table 3: Vehicular Transportation Recommendations

VEHICULAR TRANSPORTATION						
Implementation Time Frame	Action #	Action Summary	Action Type	Cost Estimate	Department Lead	Study Goals
Near-Term [0 – 3 Years]	VT-1	Evaluate entries of N. Myrtle St and N. Church St	Study	\$50,000	Systems Engineering	1, 2, 4
	VT-2	Coordinate with Georgetown ISD to improve multimodal ingress and egress at Georgetown/Richarte High School driveways.	Study	Staff Time	Planning Department	1, 2, 3, 4
	VT-3	Install speed (awareness) monitoring device in the Old Town Subarea	Capital	\$20,000	Police Department	1, 2, 4
	VT-4	Install traffic signal detection equipment at the intersection of Austin Ave and Town Square Floors Driveway and Williams Drive	Operational Change	\$60,000	Systems Engineering	1, 2, 3, 4
	VT-5	Complete traffic signal warrant analysis for Austin Ave at I35 Exit and Old Airport Rd/Stadium Dr	Capital	\$50,000	Systems Engineering	1, 2, 3, 4
Medium-Term [3 – 7 Years]	VT-6	Traffic signal coordination from NE Inner Loop to SE Inner Loop	Operational Change	\$300,000	Systems Engineering	1, 2, 4
	VT-7	Install traffic signal and pedestrian improvements for Austin Ave and Chamber Way	Capital	\$400,000	Systems Engineering	1, 2, 3, 4
	VT-8	Intersection improvements for Austin Ave and NE Inner Loop/Lakeway Drive	Capital	\$1,000,000	TxDOT	1, 2, 4
	VT-9	Perform preliminary engineering analysis to develop a 30% schematic including RoW, utility conflicts and access management/driveway consolidation and on street parking evaluation. Develop access management policies and construction plans to encourage consolidation of driveways.	Study	\$1,200,000	Systems Engineering	1, 2, 4
	VT-10	Intersection improvements for Austin Ave and SE Inner Loop	Capital	\$350,000	TxDOT	1, 2, 4
	VT-11	Reconstruction of Austin Ave through Downtown to reduce to a one lane NB and SB roadway NB with a raised median and center left hand turn pockets and intersection signal operational improvements from 2nd St to University Ave/SH 29 including a potential signals at 6 <sup>th</sup> and 9 <sup>th</sup> Streets*	Capital	\$4,350,000	Systems Engineering	1, 2, 3, 4
	VT-12	Reconstruction of Austin Ave through Old Town to reduce to a one lane NB and SB roadway with center turn lanes. Install raised medians at intersection only with center left hand turn pockets and intersection signal operational improvements from University Ave/SH 30 to W. 18th St.*	Capital	\$2,550,000	Systems Engineering	1, 2, 3, 4
	VT-13	Build two-lane roundabout for Austin Ave and San Gabriel Village Blvd	Capital	\$4,850,000	Systems Engineering	1, 2, 3, 4
	VT-14	Close entrance to Brushy St	Capital	\$200,000	Systems Engineering	1, 2, 3, 4
	VT-15	Install traffic signal and intersection improvements once warranted for Austin Ave and IH35 NBFR/Apartment Dwy and Old Airport Rd/Stadium Dr	Capital	\$1,800,000	Systems Engineering	1, 2, 4
	VT-16	Intersection and operational improvements for University Ave/SH 29 at Austin Ave and Main St**	Capital/Operational Change	\$2,000,000	Systems Engineering	1, 2, 4
Long Term [7+ Years]	VT-17	Intersection and operational improvements for Austin Ave and Leander Rd/FM 1460	Capital/Operational Change	\$1,050,000	Systems Engineering	1, 2, 4
	VT-18	Construct raised median from NE Inner Loop to Williams Drive	Capital	\$1,950,000	TxDOT	1, 2, 3, 4
	VT-19	Construct raised median from W. 18th to Leander Rd/FM 1460	Capital	\$450,000	Systems Engineering	1, 2, 3, 5
	VT-20	Perform preliminary engineering analysis for drainage improvements	Study	\$600,000	Public Works	1, 2, 4
	VT-21	Intersection improvements for Austin Ave and Weir Rd/Northwest Blvd (along Northwest Blvd)	Capital	\$600,000	Systems Engineering	1, 2, 4
	VT-22	Intersection and operational improvements for Austin Ave and Morrow St	Capital/Operational Change	\$550,000	Systems Engineering	1, 2, 4
	VT-23	Evaluate entries to 24th and Industrial Ave	Study	\$50,000	Systems Engineering	1, 2, 4

\*Timeframe references project development (schematic, funding identification, ROW)



\*\*Austin Avenue improvements included in VT-11

Table 4: Active Transportation Recommendations

ACTIVE TRANSPORTATION						
Implementation Time Frame	Action #	Action Summary	Action Type	Cost Estimate	City Department Lead	Study Goals
Near-Term [0 - 3 Years]	A-1	Implement priority projects in the study area identified in the Sidewalk Master Plan	Capital	Staff Time	Systems Engineering	1, 2, 3, 4
	A-2	Improve separation of sidewalk and travel way between 7 <sup>th</sup> and 9 <sup>th</sup> Streets by implementing the Downtown Master Plans recommended pedestrian Right-of-Way Zones, street trees, planters and elements of sidewalk hierarchy.	Policy	Staff Time	Downtown & Tourism	1, 2, 4
	A-3	Construct a westbound sidewalk on W. 4 <sup>th</sup> Street between Main Street and Austin Avenue	Capital	\$20,000	Systems Engineering	1, 2, 3, 4
	A-4	Construct an eastbound and westbound sidewalk on E.18th Street between Main Street and Austin Avenue	Capital	\$30,000	Systems Engineering	1, 2, 3, 4
	A-5	Construct an eastbound and westbound sidewalk on E.19th Street between Main Street and Austin Avenue	Capital	\$30,000	Systems Engineering	1, 2, 3, 4
	A-6	Construct an eastbound and westbound sidewalk on E.20th Street between Main Street and Austin Avenue	Capital	\$35,000	Systems Engineering	1, 2, 3, 4
	A-7	Construct a westbound sidewalk on W.21 <sup>st</sup> Street between Main Street and Austin Avenue	Capital	\$40,000	Systems Engineering	1, 2, 3, 4
Medium-Term [3 -7 Years]	A-8	Construct a 10' shared-use path on the entire corridor, southbound and northbound Austin Ave. Including connections to hike and bike trails at 2nd St, connections to Old Town park, and CARTS Park and Ride	Capital	\$8,350,000	Systems Engineering	1, 2, 3, 4
Long-Term [7+ Years]	A-9	Install parklets and pocket parks where space allows	Capital	\$650,000	Systems Engineering	1, 2, 3, 4

Table 5: Placemaking / Quality of Life Recommendations

Placemaking / Quality of Life						
Implementation Time Frame	Action #	Action Summary	Action Type	Cost Estimate	City Department Lead	Study Goals
Medium-Term [3 -7 Years]	P-1	Implement corridor wide aesthetic enhancements (landscaping, street lighting, signage and wayfinding) during road reconstruction and intersection improvements	Capital	\$200,000	Systems Engineering	1, 2, 3, 4
	P-2	Provide enhanced major gateways along Austin Ave. at University Ave and 2 <sup>nd</sup> Street that builds on elevated materiality, and monument signage, as described in the 2024 Downtown Master Plan	Capital	\$50,000	Downtown and Tourism	1, 2, 3 ,4
	P-3	Fund streetscape enhancements at key roadway transition points	Capital	\$100,000	Systems Engineering	1, 2, 3, 4



**Appendix A**  
**Project Scoring Results**

				Goal 1 - Fatal Flaw Screening	Goal 2 - 50% [6.25% Each]								Goal 3 - 20% [4% Each]								Goal 4 - 30% [6% Each]												
#	Improvement Summary	Location	Action Type	Subarea	Furtheres the goals of previous planning efforts	Located within a disadvantaged community	High crash area (within 300 ft of crash hotspot)	Safety improvement	Public/ Stakeholder Concern	Connects to more than 1 mode	Connects a neighborhood	Connects to a park, retail, or community center	Goal 2 sum of metrics	Goal 2 Score [# of metrics x 6.25]	Median / landscape / lighting improvement	Sidewalk continuity, state of good repair, and ADA/ universal accessibility	Connect to a trail	Streetscape improvement	Gateway improvement	Goal 3 sum of metrics	Goal 3 Score [# of metrics x 4]	Improved traffic level of service	Intersection improvement	Connects to a business / future development	Focus on placemaking	Proximity to developable parcels (within 500 ft)	Goal 4 sum of metrics	Goal 4 Score [# of metrics x 6]	Comprehensive Score (Goal 2 Score + Goal 3 Score + Goal 4 Score)	Priority Scoring Results [High - Medium - Low]	Department Lead		
1	<b>Lane Reduction through Downtown</b> a) Reduce NB and SB Austin Ave to one-lane b) Extend the curb and pedestrian area c) Install a paved or landscaped raised median d) Provide permitted/protected phasing and build dedicated NB and SB left-turn lanes at the intersection of Austin Ave and: -2nd, 3rd, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 16th, 17th and University Ave	SB and NB Austin Ave from 2nd St to W. 18th	Operations and safety	Downtown / Old Town	Yes	1	1		1	1	1	1	7	43.75	1	1	0		1	1	4	16.00	1	1	1		1	1	5	30.00	89.75	High	Systems Engineering
2	<b>Lane Reduction Through Old Town</b> a) Reduce NB and SB Austin Ave to one-lane b) Extend the curb and pedestrian area c) Install a paved or landscaped raised median at intersections only d) Provide permitted/protected phasing and build dedicated NB left-turn lane only at W 18th St.	SB and NB Austin Ave from 2nd St to W. 18th	Operations and safety	Downtown / Old Town	Yes	1	1		1	1	1	1	7	43.75	1	1	0		1	1	4	16.00	1	1	1		1	1	5	30.00	89.75	High	
3	<b>Build a Shared-Use Path</b> a) Build 10 ft shared-use path on NB and SB b) Construct bicycle and pedestrian connections to E or W 2nd St c) Install pedestrian barricades on SB Austin Ave between 7th and 9th St d) Construct bicycle and pedestrian connections to Old Town Park on E. 16th e) Construct bicycle and pedestrian connection to transit facility at CARTS	Austin Ave: NE Inner Loop to SE Inner Loop	Multimodal, safety and economic development	Corridor wide	Yes	1	1		1	1	1	1	7	43.75	1	1	1		1	0	4	16.00	0	0	1		0	1	2	12.00	71.75	High	Systems Engineering
4	<b>Sidewalk Master Plan Priority Projects</b> Implement priority projects in the study area identified in the Sidewalk Master Plan	Austin Ave: NE Inner Loop to SE Inner Loop	Operations and safety	Corridor wide	Yes	1	1		1	1	1	1	7	43.75	0	1	1		0	0	2	8.00	0	0	1		1	1	3	18.00	69.75	High	Systems Engineering
5	<b>Access Management</b> a) Perform preliminary engineering analysis for access management/driveway consolidation b) Develop access management policies and construction plans to encourage consolidation of driveways	Austin Ave: NE Inner Loop to SE Inner Loop	Operations and safety	Corridor wide	Yes	1	1		1	1	1	1	7	43.75	0	0	0		0	0	0	0.00	1	0	0		0	1	2	12.00	55.75	High	Systems Engineering
6	<b>Construct Sidewalks Connecting to Sidewalk Master Plan Priorities</b> Construct sidewalks from Austin Avenue connecting to the priority projects identified in the Sidewalk Master Plan	Austin Ave: W.4th St, E. 18th St, E.19th St, E. 20th St, W. 21st St	Multimodal, safety and economic development	Corridor wide	Yes	0	0		1	1	1	1	5	31.25	0	1	1		0	0	2	8.00	0	1	1		0	1	3	18.00	57.25	High	Systems Engineering
7	<b>Intersection Modification</b> Install traffic signal with pedestrian crossing treatments	Austin Ave and Chamber Way	Operations and safety	Northern Gateway	Yes	0	1		1	1	1	1	6	37.50	1	1	1		0	0	3	12.00	0	1	0		0	0	1	6.00	55.50	High	Systems Engineering
8	<b>Intersection Modification</b> Evaluate entries of N Myrtle St and N Church St	NB (east) Austin Ave from N. Myrtle St to N. Church St	Operations and safety	San Gabriel	Yes	1	1		1	1	1	0	6	37.50	0	0	0		0	0	0	0.00	0	1	1		0	1	3	18.00	55.50	High	Systems Engineering
9	<b>Intersection Modification</b> Construct a two-lane roundabout	Austin Ave and San Gabriel Village Blvd	Operations, safety, economic development	San Gabriel	Yes	1	1		1	1	0	0	5	31.25	0	0	1		0	0	1	4.00	1	1	1		0	0	3	18.00	53.25	High	Systems Engineering
10	<b>Install Parklets and Pocket Parks</b> Install parklets and pocket parks where space allows	Austin Ave: NE Inner Loop to SE Inner Loop	Operations and safety	Corridor wide	Yes	1	0		1	1	0	0	4	25.00	1	0	0		1	0	2	8.00	0	0	1		1	1	3	18.00	51.00	High	Systems Engineering
11	<b>Optimize Traffic Signal Timing</b> Optimize signal timing to improve intersection operations and coordination along the corridor	Austin Ave: NE Inner Loop to SE Inner Loop	Operations, safety, and economic development	Corridor wide	Yes	1	1		1	1	0	0	4	25.00	0	0	0		0	0	0	0.00	1	1	1		0	1	4	24.00	49.00	High	Systems Engineering
12	<b>Incorporate Gateway Features</b> Provide enhanced major gateways along Austin Ave. at University Ave and 2nd Street that builds on elevated materiality, and monument signage, as described in the 2024 Downtown Master Plan	Austin Ave from San Gabriel Village Boulevard to 3rd St	Character and aesthetics	San Gabriel and Downtown	Yes	1	1		0	1	0	0	4	25.00	1	0	0		1	1	3	12.00	0	0	0		1	0	1	6.00	43.00	Medium	Systems Engineering
13	<b>Intersection Modification</b> Close entrance to Brushy St	Austin Ave and Brushy St	Operations, safety and character	Southern Gateway	Yes	1	0		0	1	0	0	2	12.50	1	0	0		0	1	2	8.00	0	1	0		1	1	3	18.00	38.50	Medium	Systems Engineering
14	<b>Intersection Modification</b> a) Provide permitted/protected left-turn phasing b) Build dedicated left-turn lanes at EB and WB approaches	University Ave and Main St	Operations, safety and economic development	Downtown	Yes	1	1		1	1	0	0	4	25.00	0	0	0		0	0	0	0.00	1	1	0		0	0	2	12.00	37.00	Medium	Systems Engineering
15	<b>Intersection Modification</b> a) Provide permitted/protected phasing on all approaches b) Extend NB left-turn lane c) Build EB and WB left-turn lanes	Austin Ave and Morrow St	Operations, safety and economic development	San Gabriel	Yes	1	0		1	0	0	0	3	18.75	0	0	0		0	0	0	0.00	1	1	1		0	0	3	18.00	36.75	Medium	Systems Engineering
16	<b>Intersection Modification</b> a) Provide dual left-turn lanes at NB approach	Austin Ave and Lakeway Dr/NE Inner Loop	Operations, safety and economic development	Northern Gateway	Yes	0	1		1	1	0	0	3	18.75	0	0	0		0	0	0	0.00	1	1	0		0	1	3	18.00	36.75	Medium	TxDOT
17	<b>Intersection Modification</b> a) Provide phasing for permitted/protected NB left-turn and protected-only SB left-turn b) Build SB dual left-turn lanes and WB right-turn lane c) Extend EB left-turn lane	Austin Ave and Leander Rd/FM 1460	Operations, safety and economic development	Industrial and Institutional	Yes	0	1		1	1	0	0	3	18.75	0	0	0		0	0	0	0.00	1	1	0		0	1	3	18.00	36.75	Medium	Systems Engineering
18	<b>Intersection Modification</b> a) Complete traffic signal warrant analysis b) Build dedicated left-turn lanes at all approaches when signal is warranted	Austin Ave and Old Airport Rd/Stadium Dr	Operations, safety and economic development	Northern Gateway	Yes	0	0		1	1	0	0	2	12.50	0	0	0		0	0	0	0.00	1	1	1		0	1	4	24.00	36.50	Medium	TxDOT
19	<b>Evaluate Entries/Access Management</b> Evaluate entries to 24th and Industrial Ave	Austin Ave at 24th St and Industrial Ave	Operations and safety	Industrial and Institutional	Yes	0	1		0	1	0	0	2	12.50	0	0	0		0	0	0	0.00	1	1	1		0	1	4	24.00	36.50	Medium	Systems Engineering
20	<b>Incorporate Streetscape Enhancements</b> Fund streetscape enhancements at key roadway transition points	Austin Ave: NE Inner Loop to SE Inner Loop	Character and aesthetics	Corridor wide	Yes	1	0		0	1	0	0	2	12.50	1	0	0		1	1	3	12.00	0	0	0		0	1	1	6.00	30.50	Medium	Parks
21	<b>Intersection Modification</b> Modify geometry to provide one through and one dedicated right-turn lane for the NB approach	Austin Ave and E 18th St	Operations, safety and economic development	Southern Gateway	Yes	1	0		1	0	0	0	2	12.50	0	0	0		0	0	0	0.00	1	1	0		0	1	3	18.00	30.50	Medium	Systems Engineering
22	<b>Intersection Modification</b> Provide SB right-turn overlap phasing, build EB through lane and extend WB through lane	Austin Ave and SE Inner Loop	Operations, safety and economic development	Industrial and Institutional	Yes	0	1		1	0	0	0	2	12.50	0	0	0		0	0	0	0.00	1	1	0		0	1	3	18.00	30.50	Medium	TxDOT
23	<b>Incorporate Aesthetic Enhancements</b> Implement corridor wide aesthetic enhancements (landscaping, street lighting, signage and wayfinding)	Austin Ave: NE Inner Loop to SE Inner Loop	Character and aesthetics	Corridor wide	Yes	0	0		0	1	0	0	1	6.25	1	0	0		1	0	2	8.00	0	0	0		1	1	2	12.00	26.25	Low	Systems Engineering
24	<b>Intersection Modification</b> a) Complete traffic signal warrant analysis b) Build dedicated left-turn lanes at all approaches	Austin Ave and IH 35 NBFR Slip/Apartment Dwy	Operations, safety and economic development	Northern Gateway	Yes	0	0		1	1	0	0	2	12.50	0	0	0		0	0	0	0.00	1	1	0		0	0	2	12.00	24.50	Low	TxDOT
25	<b>Intersection Modification</b> a) Extend NB left-turn lanes b) Extend NB right-turn lanes c) Extend EB left-turn lane	Austin Ave and Weir Rd/Northwest Blvd (along Northwest Blvd)	Operations, safety and economic development	Northern Gateway	Yes	0	1		0	0	0	0	1	6.25	0	0	0		0	0	0	0.00	0	1	1		0	1	3	18.00	24.25	Low	Systems Engineering
25	<b>Install speed (awareness) monitoring device</b>	Austin Ave from University Ave to W 18th	Operations and safety	Old Town	Yes	1	0		1	1	0	0	3	18.75	0	0	0		0	0	0	0.00	0	0	0		0	0	0	0.00	18.75	Low	Police Department

				Goal 1 - Fatal Flaw Screening	Goal 2 - 50% [6.25% Each]								Goal 3 - 20% [4% Each]								Goal 4 - 30% [6% Each]											
#	Improvement Summary	Location	Action Type	Subarea	Furtheres the goals of previous planning efforts	Located within a disadvantaged community	High crash area (within 300 ft of crash hotspot)	Safety improvement	Public/ Stakeholder Concern	Connects to more than 1 mode	Connects a neighborhood	Connects to a park, retail, or community center	Goal 2 sum of metrics	Goal 2 Score [# of metrics x 6.25]	Median / landscape / lighting improvement	Sidewalk continuity, state of good repair, and ADA/ universal accessibility	Connect to a trail	Streetscape improvement	Gateway improvement	Goal 3 sum of metrics	Goal 3 Score [# of metrics x 4]	Improved traffic level of service	Intersection improvement	Connects to a business / future development	Focus on placemaking	Proximity to developable parcels (within 500 ft)	Goal 4 sum of metrics	Goal 4 Score [# of metrics x 6]	Comprehensive Score (Goal 2 Score + Goal 3 Score + Goal 4 Score)	Priority Scoring Results (High - Medium - Low)	Department Lead	
27	Drainage Improvements Perform preliminary engineering analysis for drainage improvements	Austin Ave: NE Inner Loop to SE Inner Loop	Operations and safety	Corridor wide	Yes	0	0	1	1	0	0	0	2	12.50	0	0	0	0	0	0	0	0.00	0	0	0	0	1	1	6.00	18.50	Low	Systems Engineering

**Appendix B**  
**Planning Level Cost Estimates**

Bid Item Group	Roadway Element	Unit	Cost	Notes
Site Prep	Preparing ROW	Station	\$ 2,500.00	Varies depending on quantity
	Removing Stab Base & Asph Pav	Square Yard	\$ 10.00	
	Excavation	Cubic Yard	\$ 12.00	
	Embankment	Cubic Yard	\$ 17.00	
	Soil Retention Blanket	Square Yard	\$ 2.00	
Payment Items	Removing Concrete	Square Yard	\$ 30.00	
	Removing Asphalt or Base	Square Yard	\$ 20.00	
	Flexible Base	Cubic Yard	\$ 75.00	Varies with type, quantity, and depth
	Lime	Ton	\$ 210.00	
	Lime Treated Subgrade	Square Yard	\$ 5.00	
	Ashphalt	Gallon	\$ 6.00	
	Prime	Gallon	\$ 6.00	
	Aggregate	Cubic Yard	\$ 115.00	
	HMAC Surface Course	Ton	\$ 130.00	
	Plane Asphalt Concrete (2")	Square Yard	\$ 60.00	
	Concrete Pavement	Square Yard	\$ 60.00	
	Driveways and Intersections	Square Yard	\$ 150.00	
	Concrete Curb and Gutter	Linear Foot	\$ 30.00	
	Eliminate Linear Striping	Linear Foot	\$ 10.00	
	Linear Striping	Linear Foot	\$ 30.00	
	Shared Use Path	Square Yards	\$ 75.00	
	Raised Median	Square Yards	\$ 85.00	
	Lane Reduction	Linear Foot	\$ 650.00	
Traffic Operations and Control	Traffic Signal Installation	Each	\$ 350,000.00	
	Traffic Signal Coordination	Each	\$ 20,000.00	
	Speed Trailer	Each	\$ 10,000.00	
Adgacent Infrastructure	Large Streetscape Enhancements	Each	\$ 10,000.00	
	Pocket Park	Square Foot	\$ 3.50	
	Gateway Features	Each	\$ 20,000.00	
Additional Items Required for all Projects	Safety Allowance	Lump Sum/Mile	\$ 90,000.00	
	Barricades, Signs, and Traffic Control	Per Month	\$ 10,000.00	Dependent on project control complexity
	Engineering and Design	Lump Sum	30%	Varies depending on type and quantity
	Mobilization	Lump Sum	10%	
	Construction Contingency	Lump Sum	20%	
	Construction Engineering and Inspection	Lump Sum	15%	

**Appendix C**  
**Feasibility and Local Priorities**



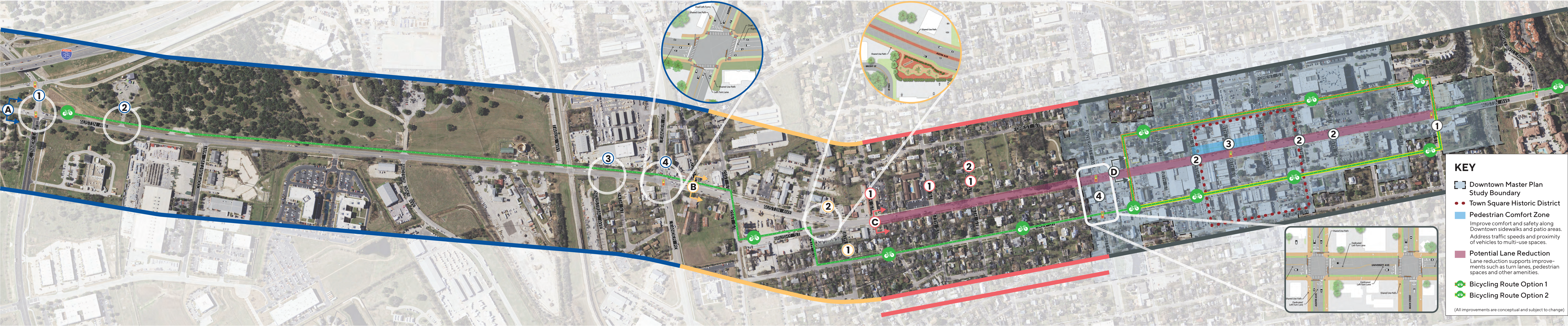
Action	Action Summary	Location	City Department Lead
Priority 1: Vehicular Transportation - Intersections			
Downtown Improvements	a) Provide permitted/protected left-turn phasing b) Build dedicated left-turn lanes at EB and WB approaches.	University Ave and Main St	Systems Engineering
Northern Gateway Improvements	a) Provide dual left-turn lanes at NB approach	Austin Ave and Lakeway Dr/NE Inner Loop	TxDOT
	a) Complete traffic signal warrant analysis b) Build dedicated left-turn lanes at all approaches.	Austin Ave and IH 35 NBFR Slip/Apartment Dwy	TxDOT
	a) Complete traffic signal warrant analysis b) Build dedicated left-turn lanes at all approaches when signal is warranted.	Austin Ave and Old Airport Rd/Stadium Dr	TxDOT
	a) Extend NB left b) Extend NB right-turn lanes c) Extend EB left-turn lane.	Austin Ave and Weir Rd/Northwest Blvd (along Northwest Blvd)	Systems Engineering
	Install traffic signal with pedestrian crossing treatments	Austin Ave and Chamber Way	Systems Engineering
	Evaluate entries of N. Myrtle St and N. Church St	NB (east) Austin Ave from N. Myrtle St to N. Church St	Systems Engineering
San Gabriel Intersection Improvements	Construct a two-lane roundabout.	Austin Ave and San Gabriel Village Blvd	Systems Engineering
	a) Provide permitted/protected phasing on all approaches b) Extend NB left-turn lane c) Build EB and WB left-turn lanes.	Austin Ave and Morrow St	Systems Engineering
	Close entrance to Brushy St	Austin Ave and Brushy St	Systems Engineering
Southern Gateway Intersection Improvements	Modify geometry to provide one through and one dedicated right-turn lane for the NB approach	Austin Ave and E 18th St	Systems Engineering
Industrial and Institutional Intersection Improvements	Evaluate entries to 24th and Industrial Ave	Austin Ave at 24th St and Industrial Ave	Systems Engineering
	a) Provide phasing for permitted/protected NB left-turn and protected-only SB left-turn b) Build SB dual left-turn lanes and WB right-turn lane c) Extend EB left-turn lane	Austin Ave and Leander Rd/FM 1460	Systems Engineering
	Provide SB right-turn overlap phasing, build EB through lane and extend WB through lane.	Austin Ave and SE Inner Loop	TxDOT
	Optimize signal timing to improve intersection operations and coordination along the corridor	Austin Ave: NE Inner Loop to SE Inner Loop	Systems Engineering
Priority 2: Vehicular Transportation - Lane Reduction			
Lane Reduction through Downtown	a) Reduce NB and SB Austin Ave to one-lane b) Extend the curb and pedestrian area c) Install a paved or landscaped raised median d) Provide permitted/protected phasing and build dedicated NB and SB left-turn lanes at the intersection of Austin Ave and: -2nd, 3rd, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 16th, 17th and University Ave	SB and NB Austin Ave from 2nd St to W. 18th	Systems Engineering
Lane Reduction through Old Town	a) Reduce NB and SB Austin Ave to one-lane b) Extend the curb and pedestrian area c) Install a paved or landscaped raised median at intersections only d) Provide permitted/protected phasing and build dedicated NB left-turn lane only at W 18th St.	SB and NB Austin Ave from 2nd St to W. 18th	Systems Engineering
Priority 3: Vehicular Transportation - General			
Access Management Analysis and Policy	a) Perform preliminary engineering analysis for access management/driveway consolidation. b) Develop access management policies and construction plans to encourage consolidation of driveways.	Austin Ave: NE Inner Loop to SE Inner Loop	Systems Engineering
Speed Awareness Monitoring Devices	Install speed (awareness) monitoring device	Austin Ave from University Ave to W 18th	Police Department
Drainage Improvements	Perform preliminary engineering analysis for drainage improvements	Austin Ave: NE Inner Loop to SE Inner Loop	Systems Engineering
Priority 4: Active Transportation			
Build a Shared-Use Path on Austin Ave	a) Build 10 ft shared-use path on NB and SB b) Construct bicycle and pedestrian connections to E. or W. 2nd St c) Install pedestrian barricades on SB Austin Ave between 7th and 9th St. d) Construct bicycle and pedestrian connections to Old Town Park on E. 16th e) Construct bicycle and pedestrian connection to transit facility at CARTS	Austin Ave: NE Inner Loop to SE Inner Loop	Systems Engineering
Sidewalk Master Plan Priority Projects	Implement priority projects in the study area identified in the Sidewalk Master Plan	Austin Ave: NE Inner Loop to SE Inner Loop	Systems Engineering
Construct Sidewalks Connecting to Sidewalk Master Plan Priorities	Construct sidewalks from Austin Avenue connecting to the priority projects identified in the Sidewalk Master Plan	Austin Ave: W.4th St, E. 18th St, E.19th St, E. 20th St, W. 21st St	Systems Engineering
Pedestrian Right-of-Way Zones	Improve separation of sidewalk and travel way between 7th and 9th Streets by implementing the Downtown Master Plans recommended pedestrian Right-of-Way Zones, street trees, planters and elements of sidewalk hierarchy.	Austin Ave: 2nd St to University Ave	Systems Engineering
Priority 5: Placemaking / Quality of Life			
Incorporate Aesthetic Enhancements	Implement corridor wide aesthetic enhancements (landscaping, street lighting, signage and wayfinding)	Austin Ave: NE Inner Loop to SE Inner Loop	Systems Engineering
Incorporate Streetscape Enhancements	Fund streetscape enhancements at key roadway transition points	Austin Ave: NE Inner Loop to SE Inner Loop	Parks
Parklets and Pocket Parks	Install parklets and pocket parks where space allows	Austin Ave: NE Inner Loop to SE Inner Loop	Parks
Incorporate Gateway Features	Install gateway feature to delineate lane-reduction/Heritage Zone.	Austin Ave from San Gabriel Village Boulevard to 3rd St	Systems Engineering

**Appendix D**  
**Corridor Map**

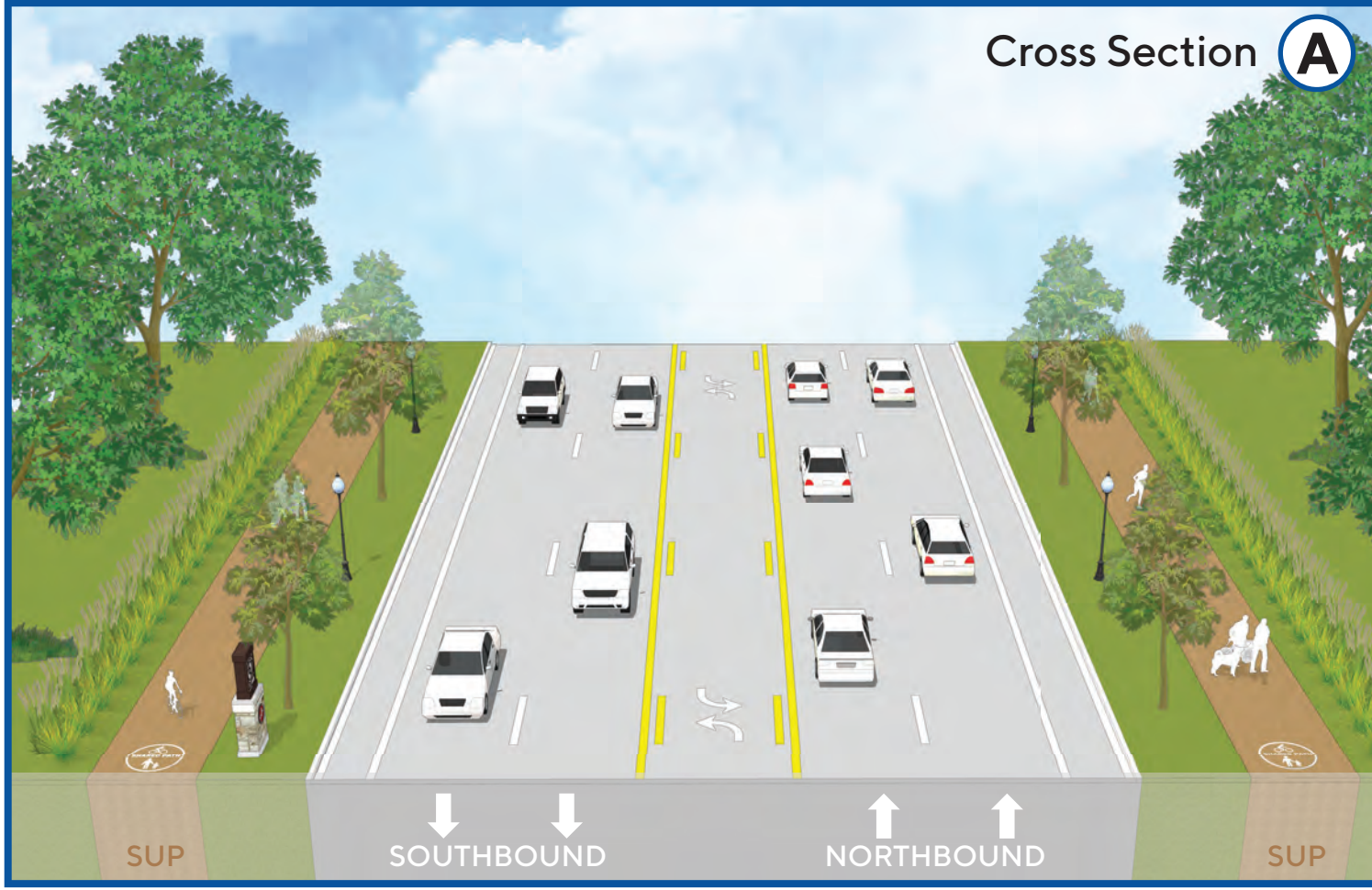


# SE INNER LOOP TO 2ND STREET

## AUSTIN AVENUE CORRIDOR STUDY



### INDUSTRIAL & INSTITUTIONAL



#### Key Concepts

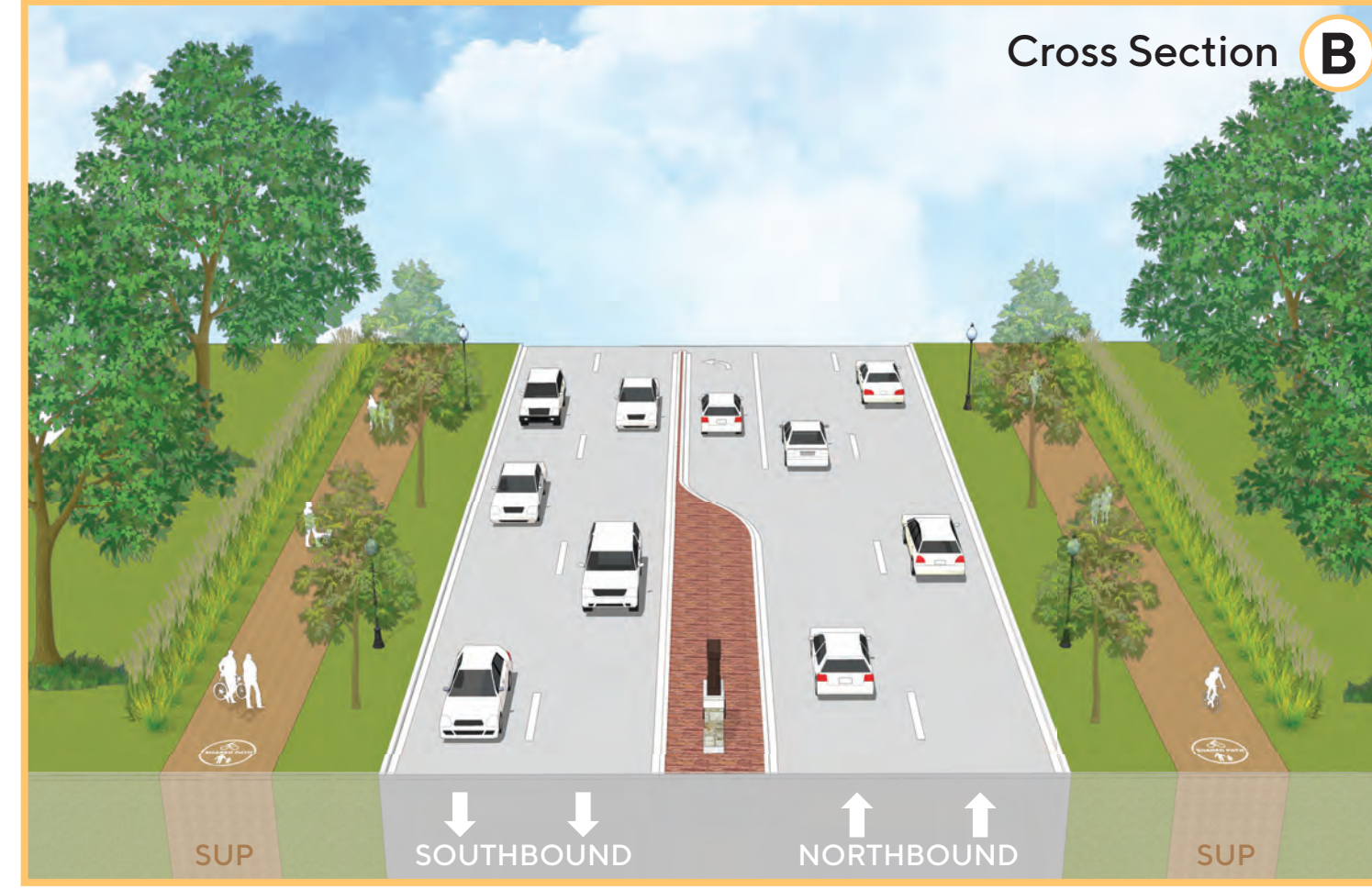
**SE Inner Loop to Leander Rd.**  
Coordinate with ongoing TxDOT widening project.

- SE Inner Loop**  
Improve traffic signal operations.
- CARTS Station**  
Build multi-modal connection.
- 24th St./Industrial Ave.**  
Address safety issues through access management policy.
- Leander Road**  
Improve traffic signal operations.

#### Benefits

- Signal Improvements**  
Improves traffic flow and safety.
- Access Management**  
Reduces conflict points and improves safety.
- Dedicated Turn Lanes**  
Reduces congestion, improves traffic flow and safety.
- Shared-Use Path**  
Provides protected facility for active modes and improves connectivity and equality.

### SOUTHERN GATEWAY



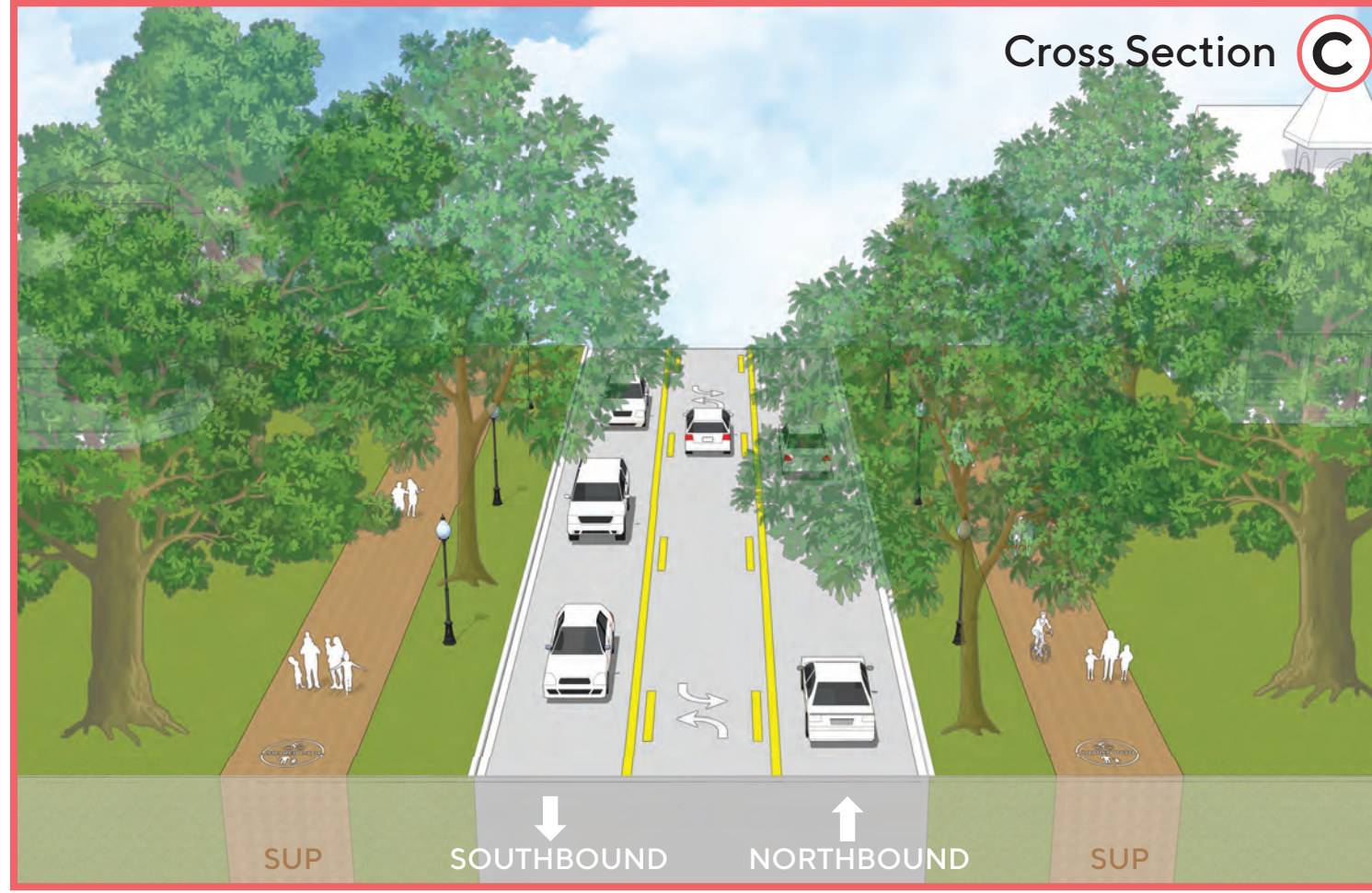
#### Key Concepts

- 18th Street**  
Modify lane configuration to tie into lane reduction.
- Brushy Street**  
Close Brushy Street at Austin Avenue and evaluate placemaking opportunity.

#### Benefits

- Access Management**  
Reduces conflict points and improves safety.
- Placemaking**  
Enhances corridor character.

### OLD TOWN



#### Key Concepts

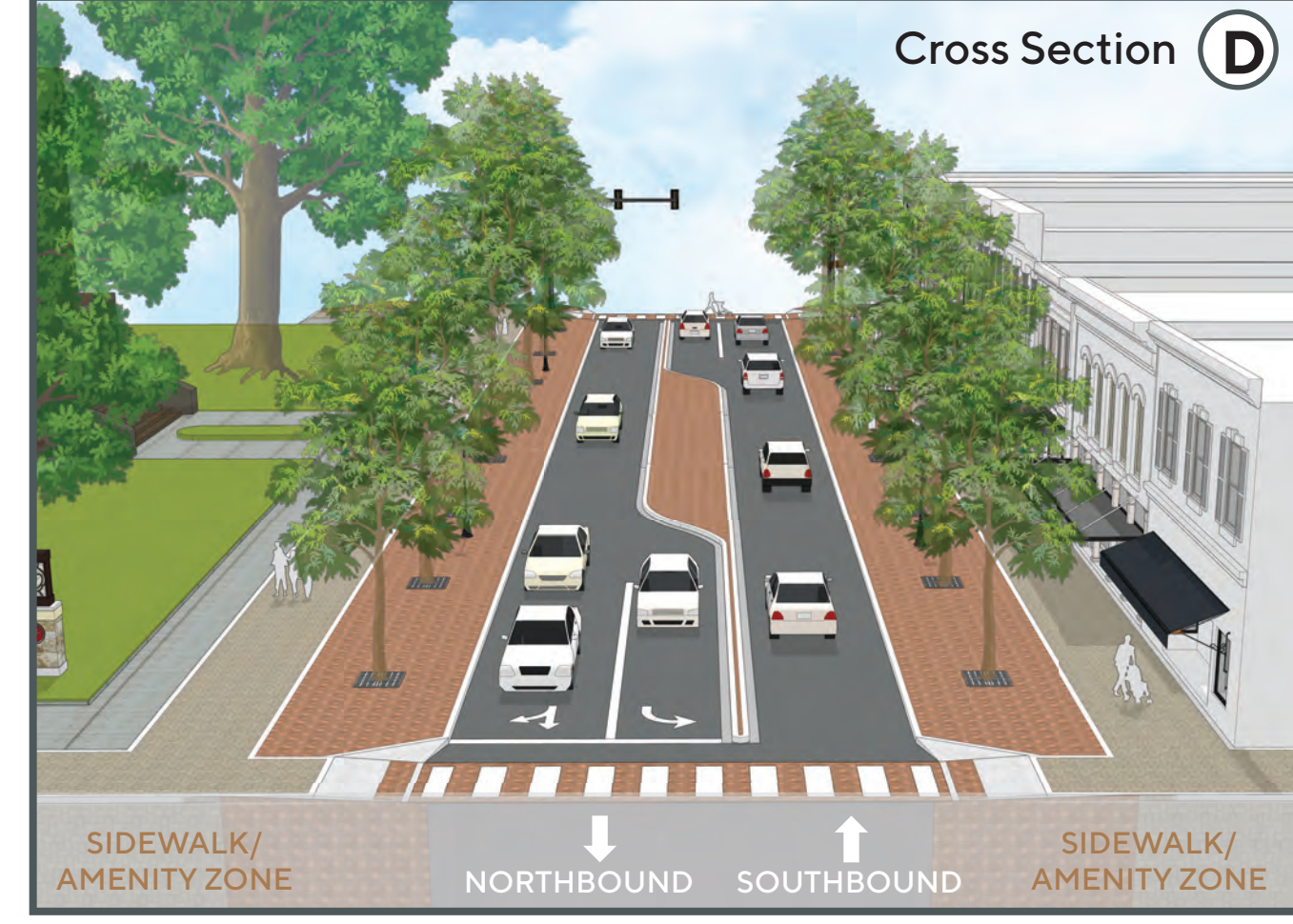
**18th St. to University Ave.**  
Lane reduction with center turn lane. Install speed monitoring and management device.

- 16th/17th/18th Streets**  
Provide dedicated left-turn lanes.
- Old Town Park/16th St.**  
Connect shared-use path to Old Town Park.

#### Benefits

- Lane Reduction**  
Reduces driver speeds and enhances character.
- Dedicated Turn Lanes**  
Reduces congestion, improves traffic flow and safety.
- Speed Monitoring**  
Reduces driver speeds and improves safety.
- Shared Use Path**  
Provides protected facility for active modes and improves connectivity and equality.

### DOWNTOWN



#### Key Concepts

**Subarea Gateway**  
Install gateway feature to delineate lane reduction/Heritage Zone.

**Throughout subarea**  
Enhance the streetscape and sense of place.

- 2nd Street**  
Build ped/bike connections to trails.
- 9th/6th/5th Streets**  
Provide protected pedestrian crossings.
- Between 7th and 9th Streets**  
Develop design policy for pedestrian zones. Enhance separation of sidewalk and travel way.
- University Avenue and Main Street**  
Improve traffic operations at the intersections.

#### Benefits

- Placemaking**  
Enhances corridor character.
- Lane Reduction/Raised Median**  
Reduces driver speeds; supports mixed-use and improves safety.
- Pedestrian Zones**  
Improves pedestrian comfort and provides protected space for walking and recreation.
- Protected Pedestrian Crossings**  
Improves safety and connectivity.
- Dedicated Turn Lanes**  
Reduces congestion, improves traffic flow and safety.
- Shared Use Path**  
Provides protected facility for active modes and improves connectivity and equality.

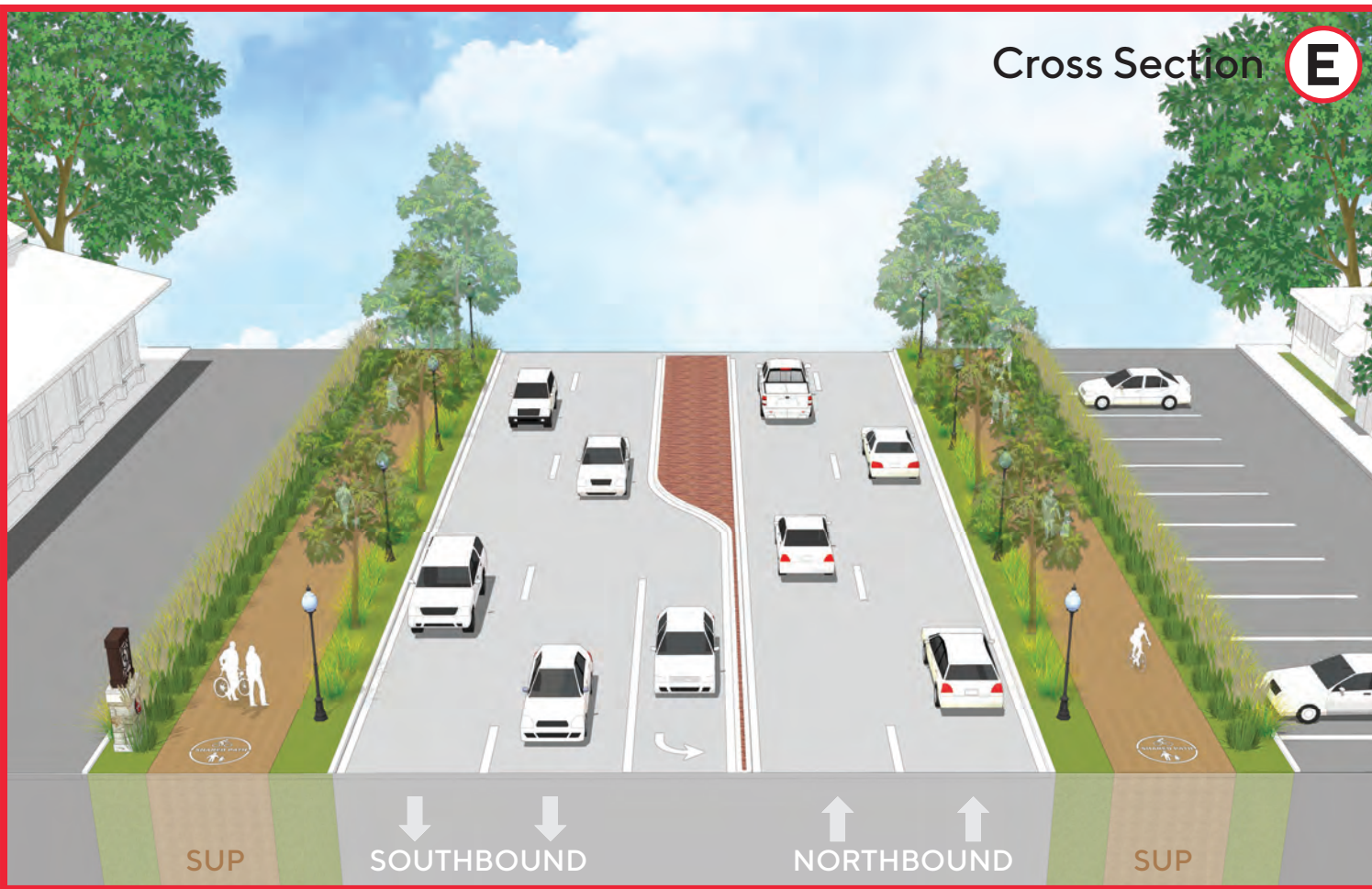


# 2ND STREET TO NE INNER LOOP

## AUSTIN AVENUE CORRIDOR STUDY



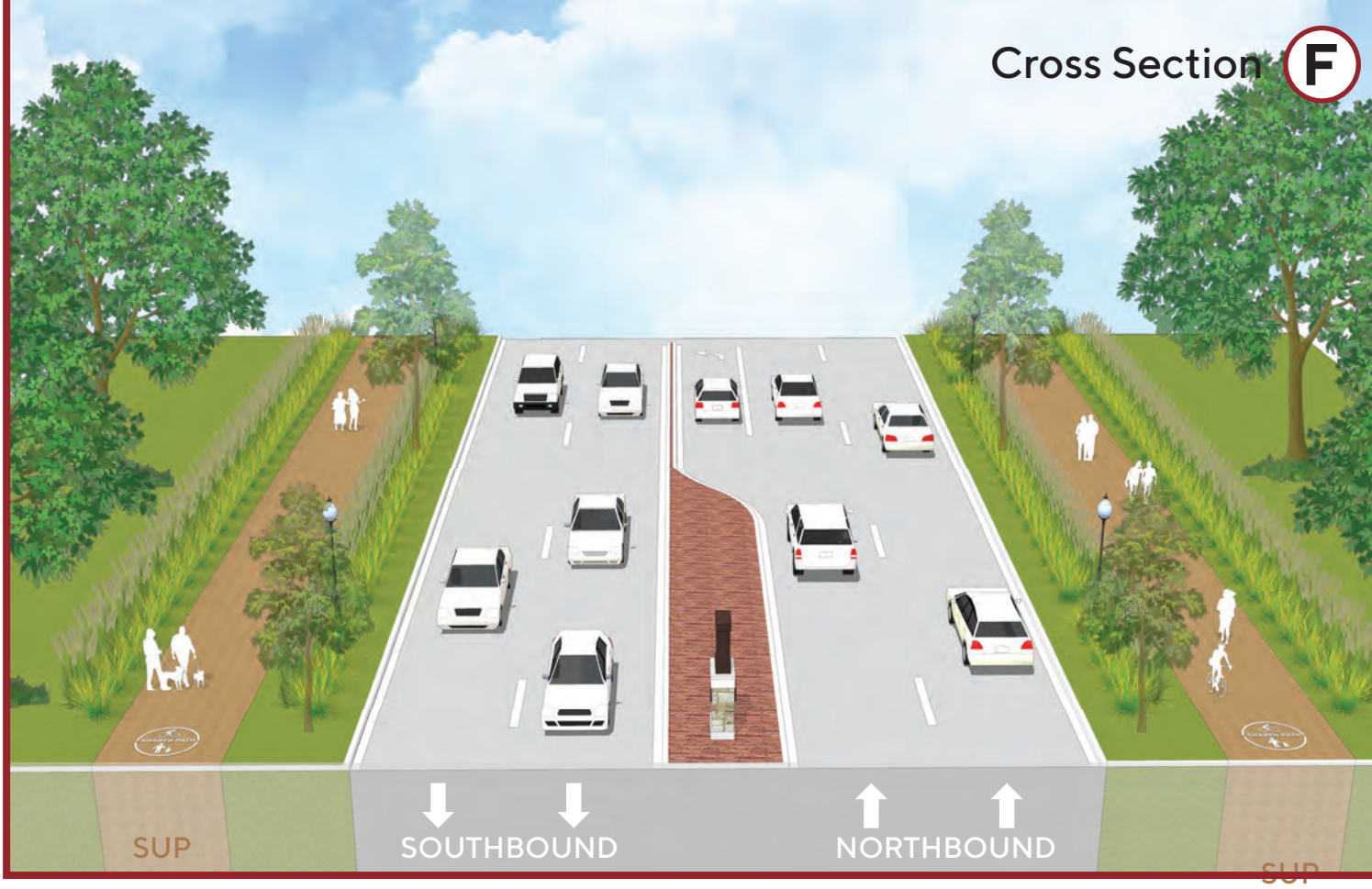
### SAN GABRIEL



- Key Concepts**
- 1 San Gabriel Village Blvd. Build roundabout to improve traffic operations.
  - 2 Austin Avenue Bridges Coordinate with ongoing projects.
  - 3 Williams Drive Coordinate with ongoing TxDOT project.
  - 4 N. Church and N. Myrtle Steets Evaluate consolidation of access points.
  - 5 Chamber Way Provide a traffic signal and protected pedestrian crossing.

- Benefits**
- Roundabout** Reduces conflict points and improves traffic flow and safety.
  - Access Management** Reduces conflict points and improves safety.
  - Protected Pedestrian Crossing** Improves safety and connectivity.
  - Raised Median** Reduces conflict points and improves traffic flow and safety.
  - Dedicated Turn Lanes** Reduces congestion, improves traffic flow and safety.
  - Shared Use Path** Provides protected facility for active modes and improves connectivity and equality.

### NORTHERN GATEWAY



- Key Concepts**
- 1 Weir Road/Northwest Blvd. Improve intersection operations.
  - 2 Old Airport Road/Apple Creek Drive Embankment improvements to accommodate shared-use path.
  - 3 Georgetown High School Driveways Improve accessibility for pedestrians and cyclists at driveways.
  - 4 I-35 NB Ramp Frontage Road Improve traffic operations and safety.
  - 5 NE Inner Loop Improve intersection operations.

- Benefits**
- Raised Median** Reduces conflict points and improves traffic flow and safety.
  - Dedicated Turn Lanes** Reduces congestion, improves traffic flow and safety.
  - Signal Improvements** Improves traffic flow and safety.
  - Shared Use Path** Provides protected facility for active modes and improves connectivity and equality.