

CITY OF KILLEEN TRANSPORTATION CAPITAL IMPROVEMENTS PROGRAM



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Prepared for the City of Killeen



Prepared by Alliance Transportation Group, Inc.



In Cooperation with the Thoroughfare Plan Steering Committee

Robert Ator- Hill Country Transit District, Director of Urban Operations
Clement Alade- City of Killeen Transportation Division, Engineering Technician
Brian Brank- City of Killeen Fire Department, Deputy Chief
Robert Alan Erwin- Fort Hood Directorate of Public Works- Real Property Planning Division, Master Planner
Keith J. Fruge- Fort Hood Directorate of Public Work- Real Property Planning Division, Chief- Master Planning Branch
Joe Hart- Killeen Independent School District, Director for Transportation Services
Charlotte Humpherys- City of Killeen Department of Planning and Development Services, Project Manager- Downtown Revitalization
Larry Longwell- City of Killeen Police Department, Assistant Chief of Police
Walker M. Veal- Killeen Independent School District, Chief of Police

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1

INTRODUCTION

Purpose, Planning Process, and Goals

WHAT IS A CAPITAL IMPROVEMENTS PROGRAM?

A **capital improvements program (CIP)** is used to coordinate the location, timing, and financing of capital improvements – like public infrastructure – over a specified time period. The CIP is the primary tool to program funds for implementing recommendations in the City of Killeen 2015 Thoroughfare Plan. The 2015 Thoroughfare Plan proposes a thoroughfare network consisting of new roadway segments and major improvements to existing roadways identified in local and regional plans. **Figure 1** shows the 2015 thoroughfare network.

While the 2015 Thoroughfare Plan proposes a long term vision for the transportation system in the City of Killeen over the next 25 years, the CIP prioritizes projects for more detailed design, engineering, and construction within the next five to ten years. Unlike the Thoroughfare Plan, the CIP details specific roadway improvements to be undertaken by the City of Killeen, and identifies funding requirements in an effort to coordinate community planning, financial capacity, and physical development. The CIP is meant to be a living document, and should be reassessed and revised annually to reflect any changes in community needs or priorities, or any changes in project readiness or funding availability.

HOW WAS THE CIP DEVELOPED?

The CIP was developed by first compiling an initial program of potential transportation projects. The projects originated from a variety of sources, including the 2010 Killeen Thoroughfare Plan; the results of the technical analysis performed as part of the 2015 thoroughfare planning process; the Killeen Temple Metropolitan Planning Organization's (KTMPO) 2040 Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP); feedback from the public and other key stakeholders; and meetings with a steering committee established to oversee the development of the thoroughfare plan and CIP.

The steering committee, which assumed a leadership role in the thoroughfare planning process and the development of the CIP, included representatives from the following agencies:

- City of Killeen Fire Department;
- City of Killeen Department of Planning and Development Services;
- City of Killeen Police Department;
- Fort Hood;
- Hill Country Transit District; and
- Killeen Independent School District.

Following the development of the initial program of projects, the next step in the CIP development process involved evaluating and ranking the initial program of projects. Transportation projects were scored and ranked based on their impact on future mobility and congestion, as assessed using the KTMPO TDM, as well as their perceived impacts on qualitative goals developed and weighted by the thoroughfare plan steering committee.

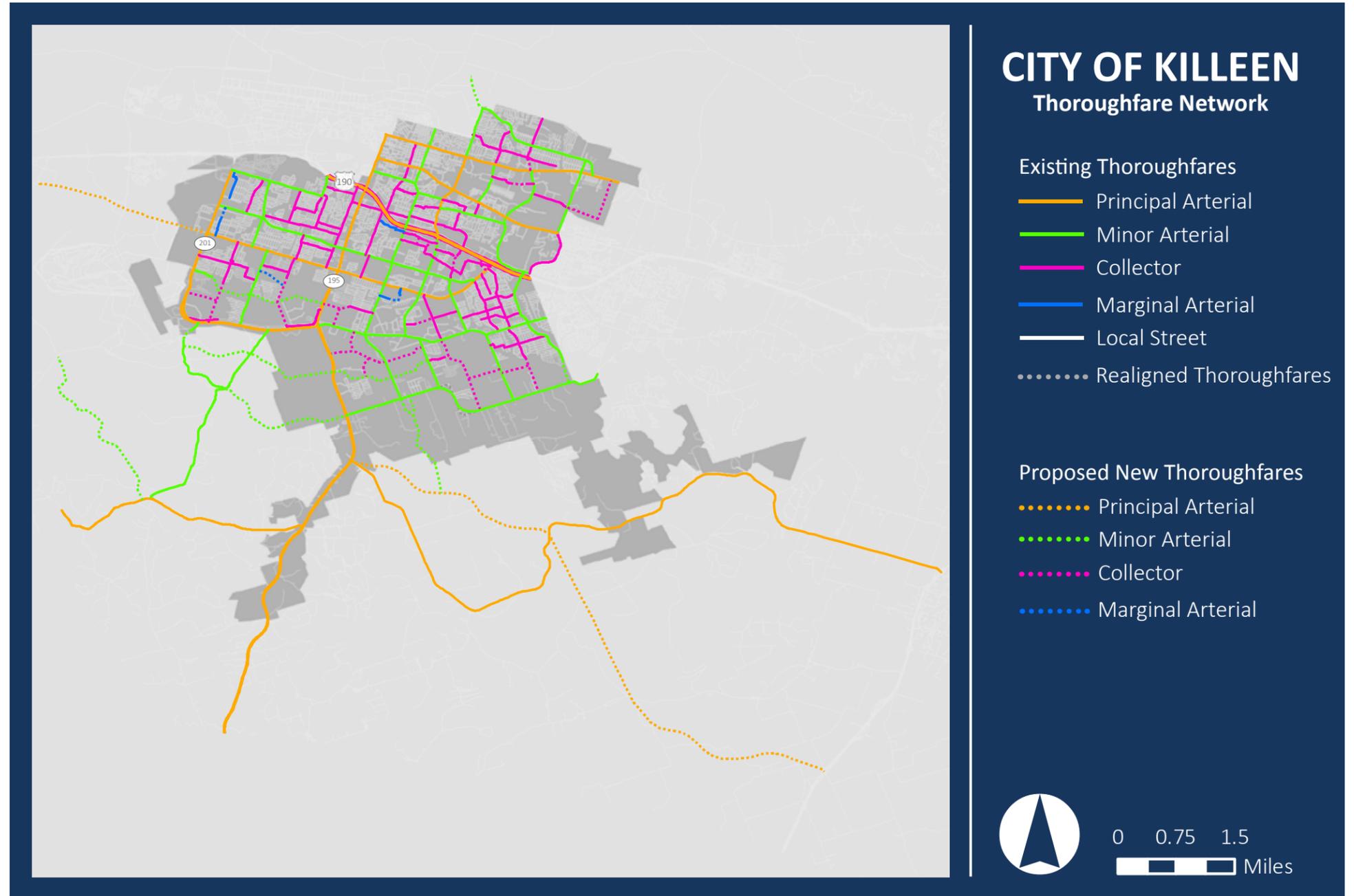


Figure 1: 2015 Thoroughfare Plan Network

These goals included:

- Provide safe and convenient travel options;
- Improve the local economy;
- Prioritize cost-effective improvements;
- Support land use goals; and
- Prioritize easy to implement improvements that provide early benefits.

The scores for each factor were averaged and weighted according to each measure's level of importance, as determined by the steering committee, and a final score was assigned to each project. The final ranking of projects was reviewed by the steering committee to ensure consistency with plan goals.

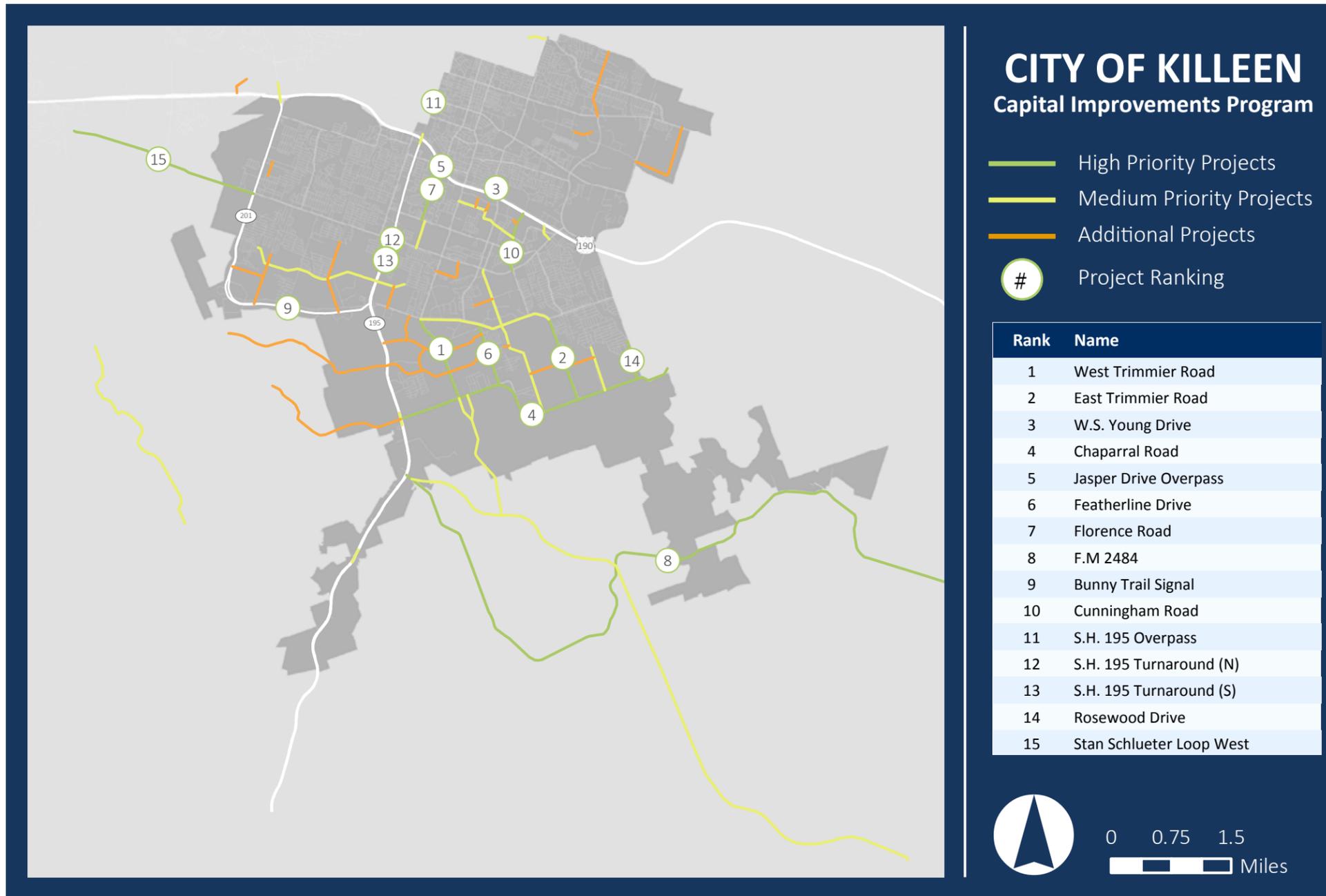


Figure 2: 2015 Transportation Capital Improvements Program.

IMPLEMENTATION OF THE CIP

The top 15 ranked projects comprise the high priority projects in the CIP. These projects, as shown in **Figure 2**, were determined to have the greatest impact on future mobility and other plan goals. The remaining projects were divided between medium priority projects and additional projects.

High priority projects are recommended for implementation over the lifespan of the CIP (five to ten years). The order in which the high priority projects are implemented will depend on a variety of factors, including project readiness and construction phasing. In addition to the high priority projects, medium priority projects and additional projects were also included in the CIP to account

for shifting community goals and objectives, or changes to project details. As such, the CIP should be used as a general framework for implementing future transportation improvements, not as a rulebook. As conditions change over time, projects may be moved between priority levels and implemented based on other considerations related to plan goals such as project readiness, the identification of cost sharing partners, or the development potential of surrounding parcels.

Transportation Funding

In cities and states around the country, the need for transportation improvements is far outpacing the availability of transportation funds. While many of the projects in the CIP represent important and necessary improvements to the transportation system, the City of Killeen will only be able to fund a limited number of projects. However, constrained city funding can be extended by taking advantage of cost sharing opportunities, including funding from state and federal programs and opportunities to partner with local developers.

Federal Funding

KTMPO, which acts as the regional planning entity for a three-county region in Central Texas, is responsible for distributing federal transportation funds through the development of a Metropolitan Transportation Plan (MTP) and Transportation Improvement Program (TIP). Federal regulations require the MPO to update the MTP and TIP once every five years, and once every two years, respectively. Mobility 2040, the current MTP, was adopted by KTMPO on May 14, 2014. It includes several projects in the City of Killeen and its ETJ.

To help ensure projects identified in the City's CIP are strong candidates for inclusion in the KTMPO MTP, every effort was made to keep City performance measures aligned with the KTMPO regional performance measures.

Category 7 Funding

Category 7 funds are part of the federal Surface Transportation Program that is set aside for urbanized regions with populations greater than 200,000. Projects that are 'shovel ready' are more likely to qualify for Category 7 funding. Therefore, the City of Killeen should ensure that draft schematics, plans, preliminary engineering specifications, and right-of-way (ROW) requirements have been developed for at least two to four candidate projects at all times, which could then be submitted, as opportunities arise, for funding under Category 7.

Public-Private Partnerships/ Cost Sharing Partners

Transportation improvements not only benefit the residents and businesses of the City of Killeen in the form of improved mobility and safety, but they also have the potential to bring direct benefits to land owners, area developers, and other organizations/ agencies. Public-private partnerships are a fiscally responsible way to conserve public resources by working with third party groups to fund all or a portion of transportation improvements in proportion to the benefits each party is anticipated to receive. Working with cost sharing partners eases the financial burden on the City and maximizes benefits to the public.

HOW TO USE THE PLAN

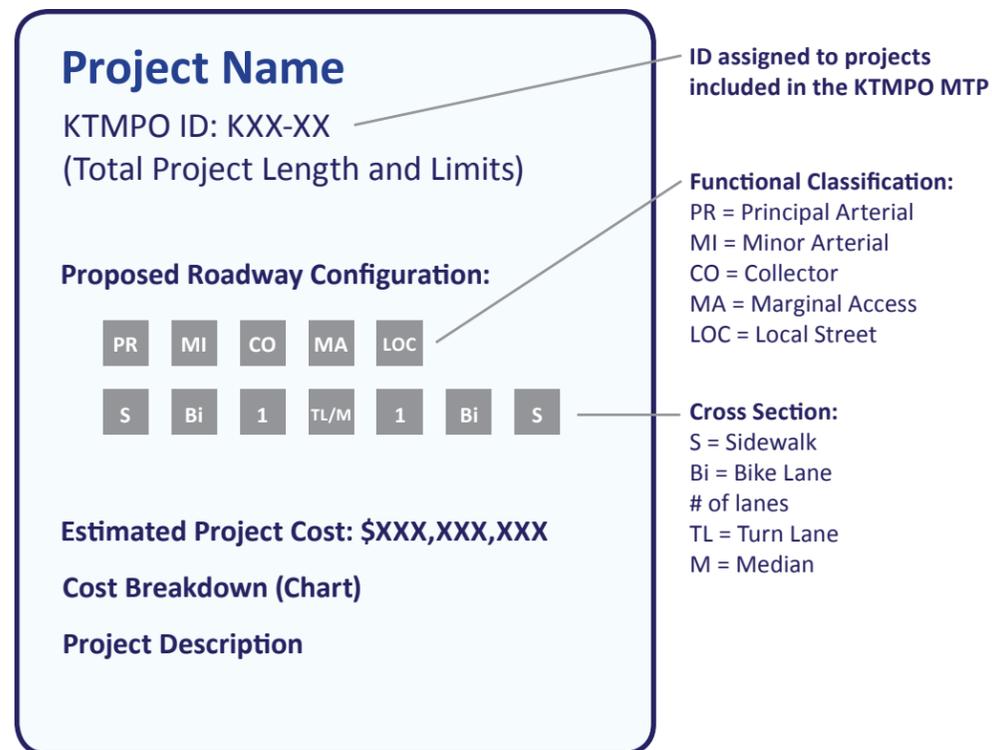
Project sheets were developed for the high priority projects. The project sheets contain a dashboard on the left-hand side with vital information about the project, including:

- Project name;
- Functional classification;
- Proposed roadway configuration;
- Estimated project cost; and
- Project description.

Figure 3 below is a legend of the dashboard to guide users of the CIP:

The remainder of the project sheet provides images of the street as it currently appears, a location map to help orient users within the City, and diagrammatic schematics that provide a general sense of the proposed roadway configuration and how the project would interact with surrounding land uses. These images are not final construction plans — they are conceptual images intended to help users better understand the scope of the projects as they are proposed. The final alignment and the actual configuration of roadways is subject to review and adjustment by the city engineer to ensure facility design is coordinated with adjacent development and existing roadways.

For the medium priority projects and additional projects, tables are included that list the projects by rank along with a description of the roadway before and after the proposed improvements. A map showing the location of the projects is also included to assist users of the CIP. Finally, a series of appendices includes additional safety projects identified as potential candidates for funding through the Highway Safety Improvement Program (Appendix D), projects from the CIP that are of particular interest to Fort Hood (Appendix E), and potential planning and engineering studies (Appendix F). Planning and engineering study scopes were developed to assist the City of Killeen in identifying appropriate solutions to transportation issues identified as part of the thoroughfare planning process.



2

HIGH PRIORITY PROJECTS

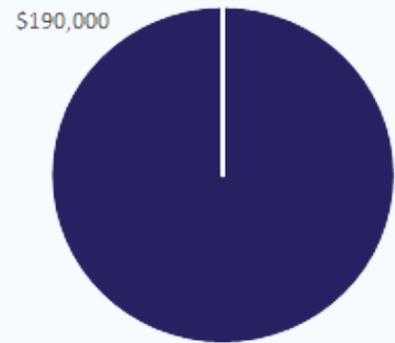
Bunny Trail Signal

KTMPO ID: KXX-XX
 At Clear Creek Road (S.H. 201)
 (0 Miles)

Configuration:

PR	MI	CO	MA	LOC		
S	Bi	#	TL/M	#	Bi	S

Estimated Project Cost*: \$190,000



- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

This project scope will include the installation of a traffic signal at the intersection of Bunny Trail and S.H. 201 (Clear Creek Road). The new traffic signal will accommodate increased traffic from the new Walmart at the intersection. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMPO Regional Bicycle/ Pedestrian Plan.



A. Facing West at Bunny Trail

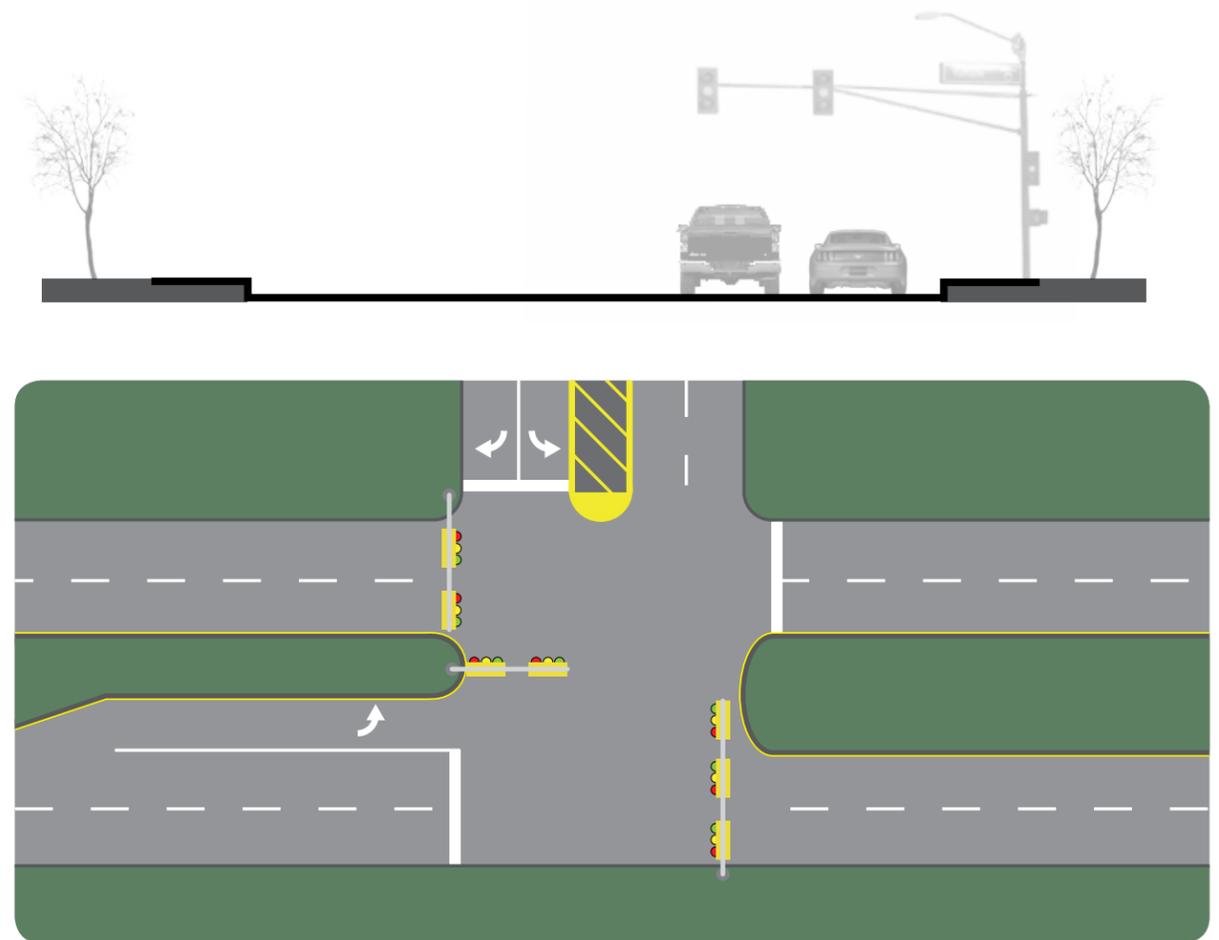


B. Facing North At Clear Creek Road (S.H. 201)

Regional Context



Proposed Improvement



Schematic not to scale

*These estimates represent program-level costs for budgeting purposes only. Actual project costs are dependent on market conditions, and will not be known until the time of bid.

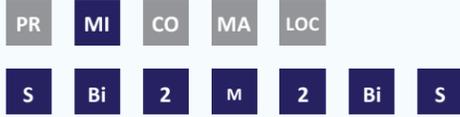


Chaparral Road

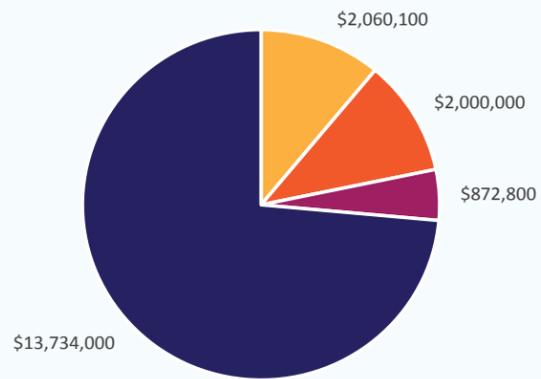
KTMO ID: K30-13

Fort Hood Street (S.H. 195) To F.M. 3481
(5.84 Miles)

Configuration:



Estimated Project Cost*: \$18,666,900

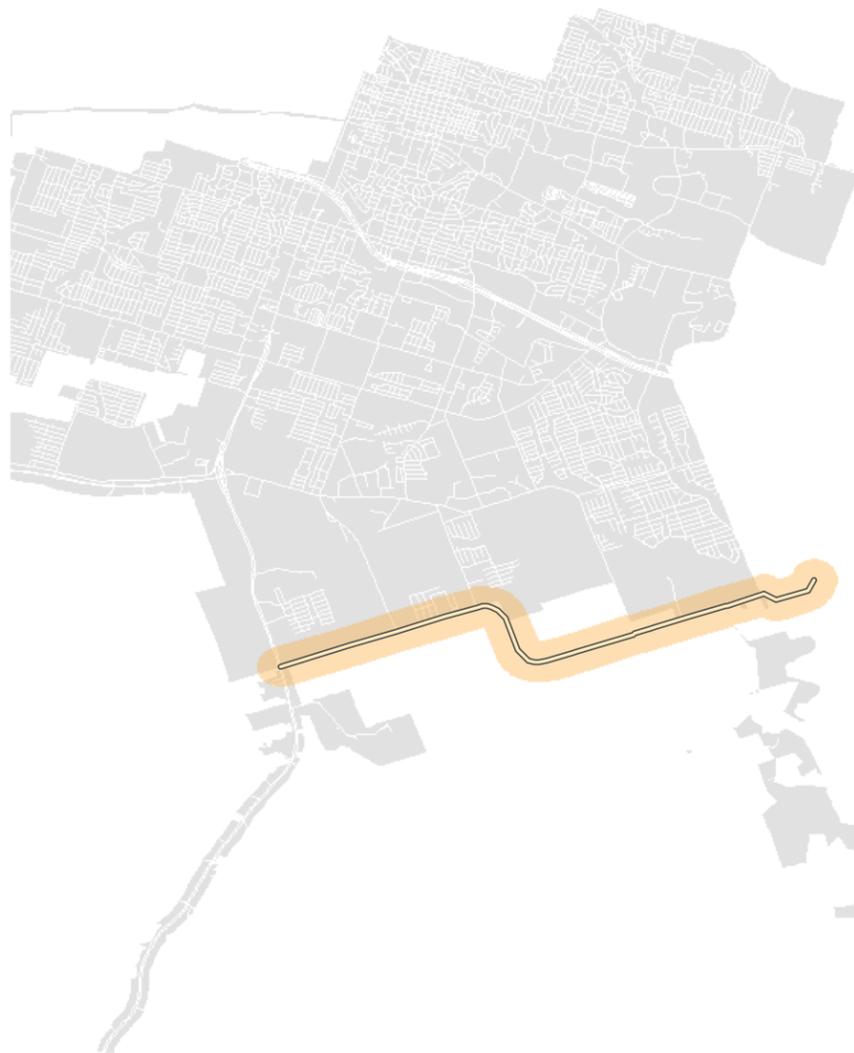


- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

This project scope includes the widening and reconstruction of existing portions of Chaparral Road from the planned intersection of Rosewood Drive on the east and the intersection with Fort Hood Street (S.H. 195) on the west. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMO Regional Bicycle/ Pedestrian Plan.



Regional Context



Proposed Improvements



Schematic not to scale

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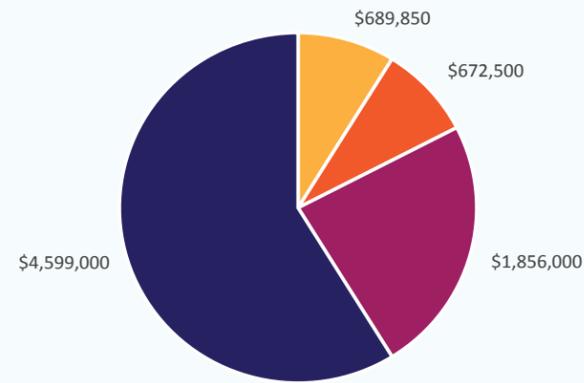
Cunningham Road

KTMPD ID: K25-01, K30-24
 Stan Schlueter Loop (F.M. 3470) to
 Central Texas Expressway (U.S. Hwy 190)
 (2.09 Miles)

Configuration:



Estimated Project Cost*: \$7,817,350



- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

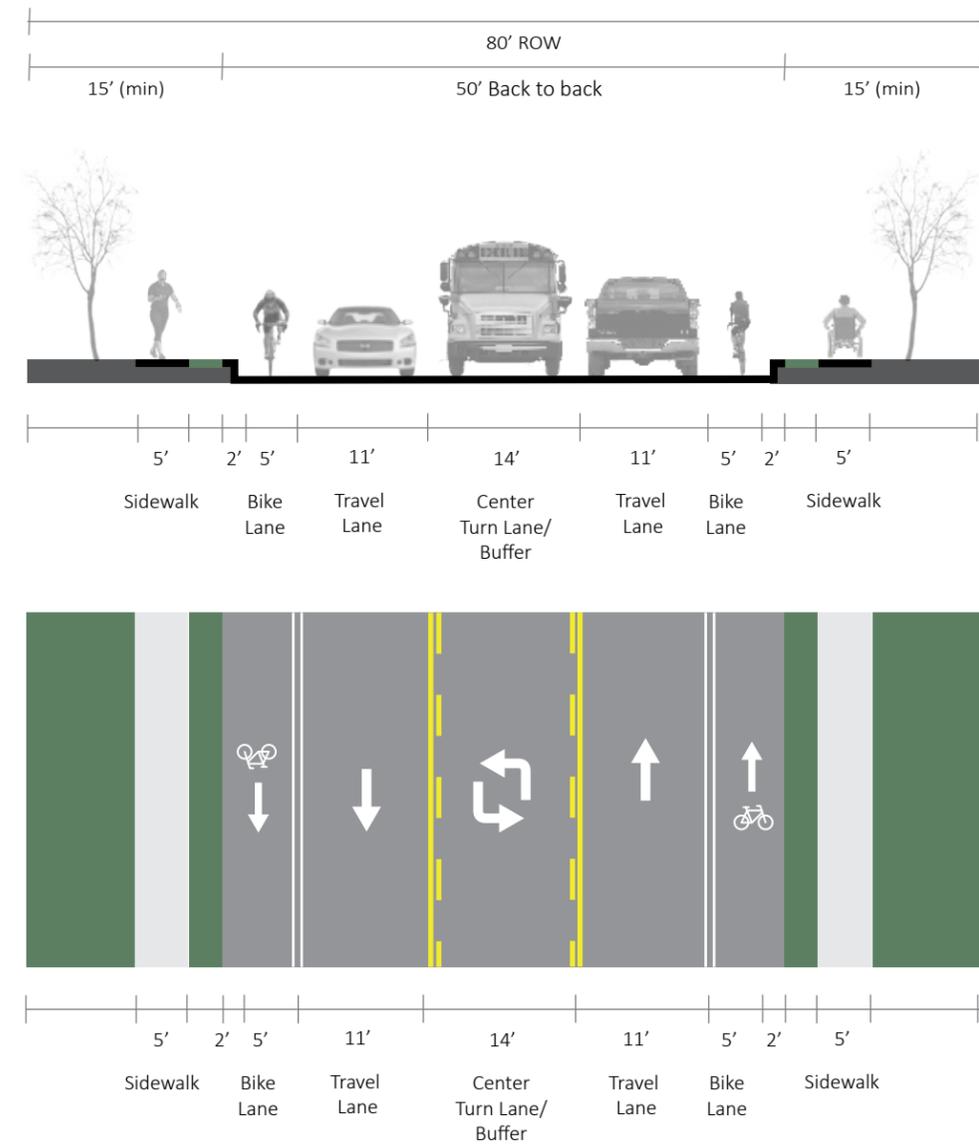
This project scope will provide a more efficient and safe route for north-south movement, and traffic relief along Stan Schlueter Loop (F.M. 3470), W.S. Young Drive, and Elms Road. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMPD Regional Bicycle/ Pedestrian Plan.



Regional Context



Proposed Improvements



Schematic not to scale

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E. Trimmier Road

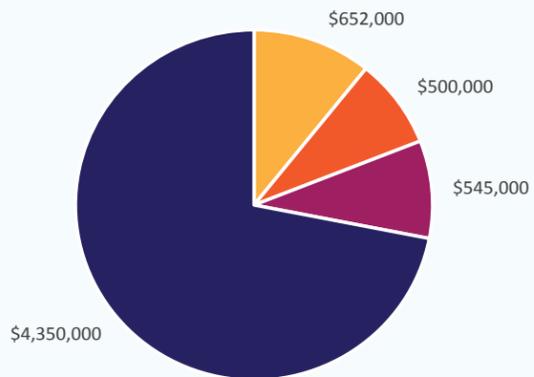
KTMPD ID: K40-16

Stagecoach Road To Chaparral Road
(1.81 Miles)

Configuration:



Estimated Project Cost*: \$6,047,000



- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

This project scope will include the widening and reconstruction of E. Trimmier Road between Stagecoach Road and Chaparral Road. Enhancements to this roadway are required to accommodate increased traffic from new residential subdivisions in Killeen and Harker Heights. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMPD Regional Bicycle/ Pedestrian Plan.



A. Facing North At Stagecoach Road



B. Facing North At Private Drive

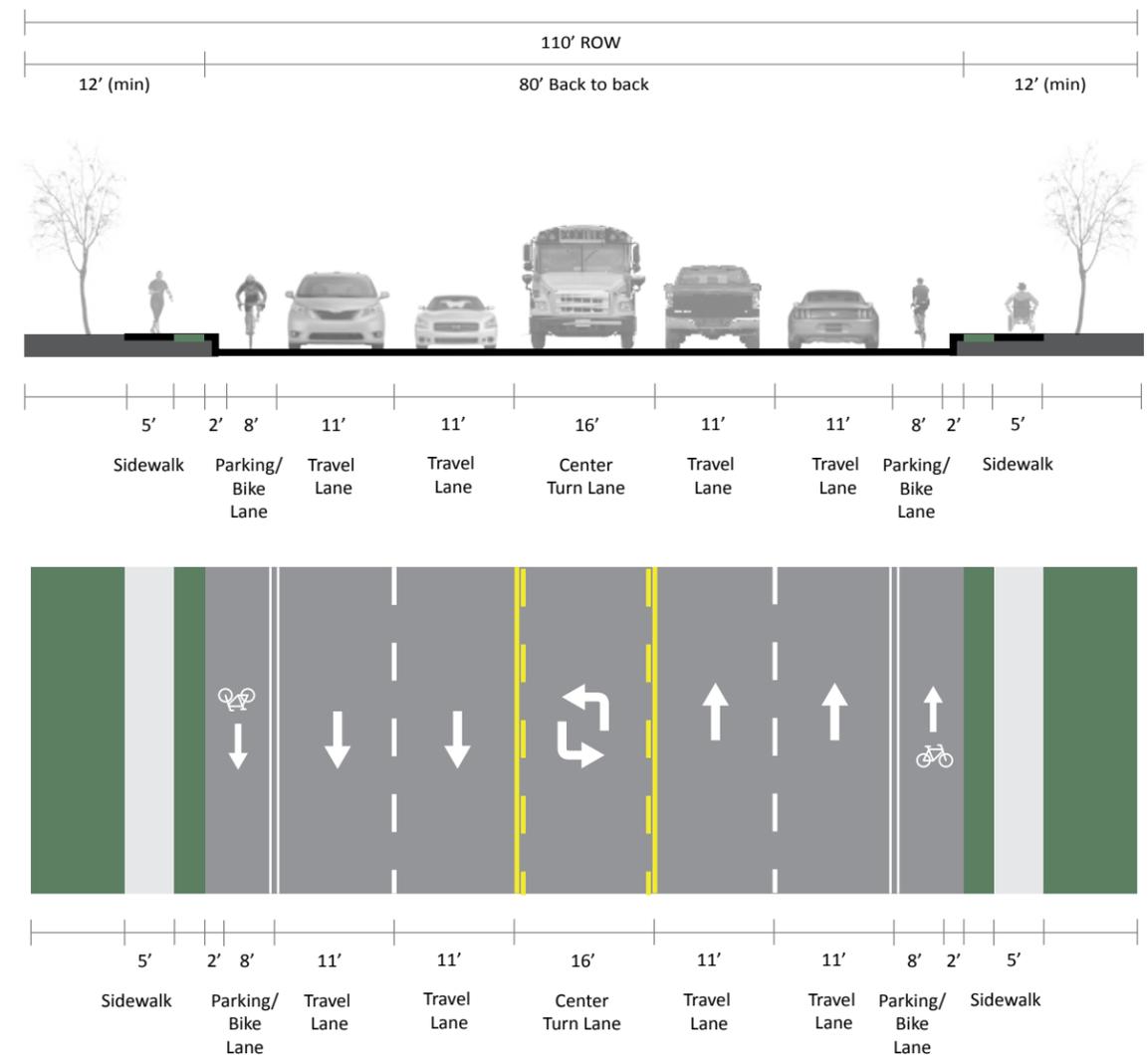


C. Facing South At Chaparral Road

Regional Context



Proposed Improvements



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Featherline Drive

KTMO ID: KXX-XX

Stagecoach Road To Chaparral Road
(1.34 Miles)

Configuration:



Estimated Project Cost*: \$7,886,382



- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

This project scope will involve expanding Featherline Drive from two to four lanes (including a center turn lane) between Stagecoach Road and Chaparral Road. They project will also involve constructing roundabouts at Featherline Road’s intersection with Stagecoach Road and with W.S. Young Drive. In June 2014, the Killeen City Council adopted a resolution designating a continuous flow configuration for Stagecoach Road and its intersections with W.S. Young Drive and Featherline Road. The resolution is attached as Appendix A. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMO Regional Bicycle/ Pedestrian Plan.



A. Facing North At Chaparral Road



B. Facing South At Police Headquarters

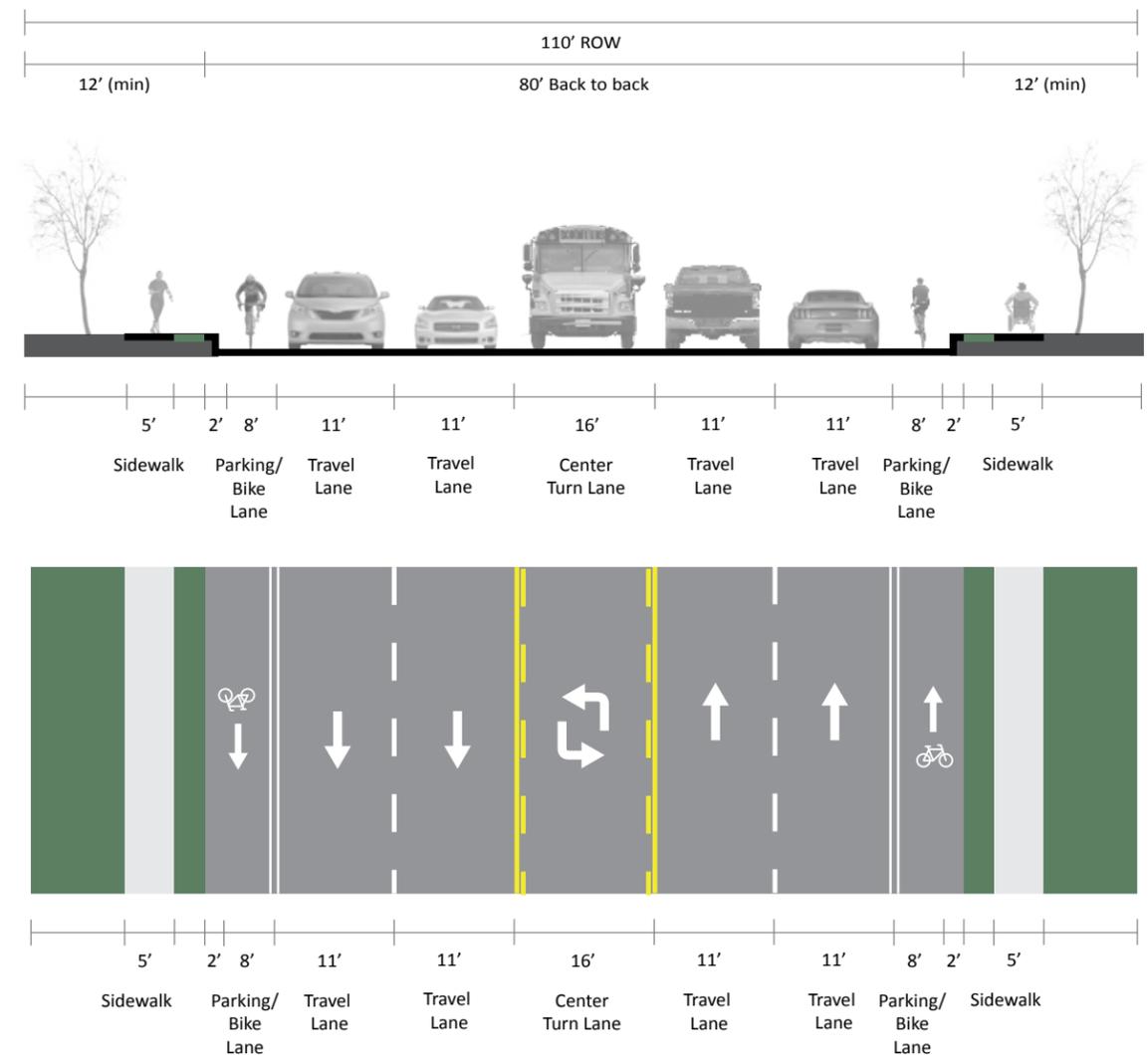


C. Facing South At Stagecoach Road

Regional Context



Proposed Improvements



Schematic not to scale

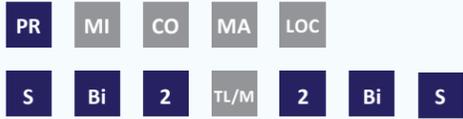
*These estimates represent program-level costs for budgeting purposes only. Actual project costs are dependent on market conditions, and will not be known until the time of bid.



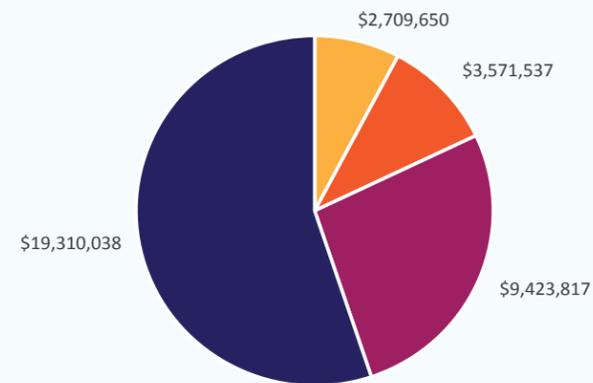
F.M. 2484

KTMPD ID: K40-06
S.H. 195 to I.H. 35
(18.6 Miles)

Configuration:



Estimated Project Cost*: \$35,000,000



- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

This project will expand F.M. 2484 from S.H. 195 to I.H. 35 from a 2-lane rural roadway to a four lane major arterial. This expansion will facilitate increased mobility as the city expands to the south and east, and provide an improved connection to I.H. 35 for residents in the southern part of the city. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMPD Regional Bicycle/ Pedestrian Plan.



A. Facing East at S.H. 195



B. Facing West at the Lampasas River



C. Facing East at I.H. 35

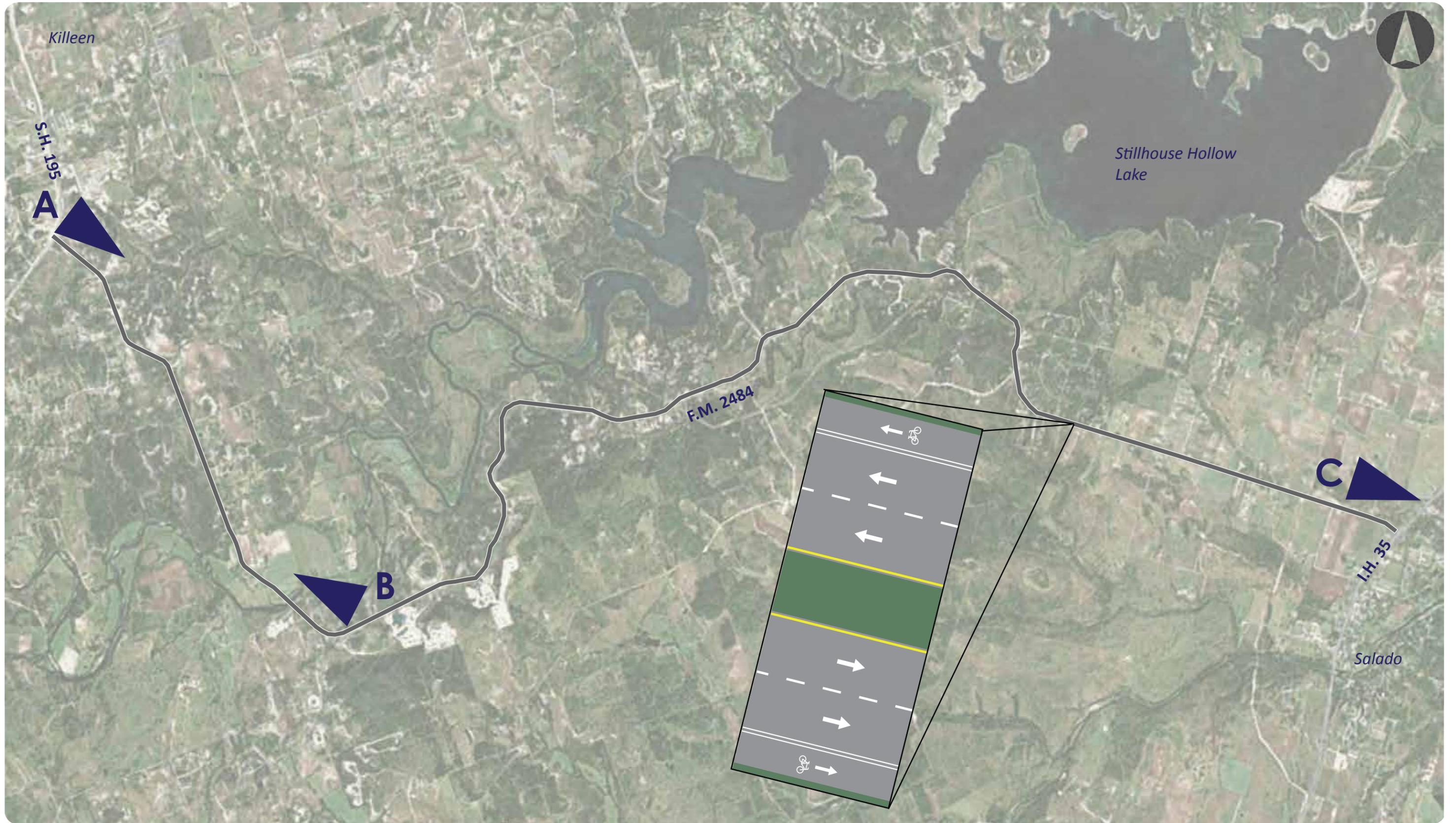
Regional Context



Proposed Improvements



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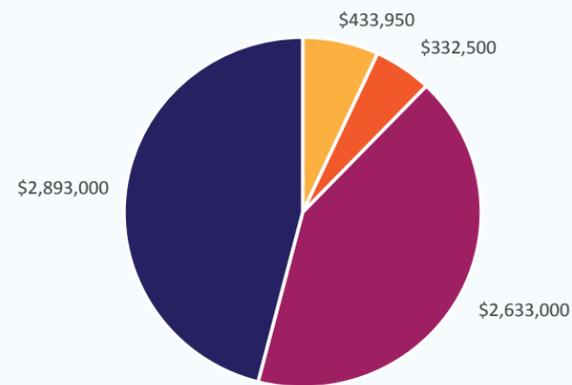
Florence Road

KTMPO ID: K25-05
Elms Road To Jasper Drive
(1.21 Miles)

Configuration:



Estimated Project Cost*: \$6,292,450



- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

This project scope will involve widening Florence Road between Elms Road and Jasper Drive, near the U.S. Hwy 190 frontage road. When TxDOT reconstructs the Jasper Drive overpass at U.S. Hwy 190, the traffic volumes will exceed the capacity of Florence Road unless the City adds additional capacity. The scope will also realign the offset between Florence Road and Old Florence Road at Elms Road. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMPO Regional Bicycle/ Pedestrian Plan.



A. Facing North At W. Jasper Drive



B. Facing South At Granada Drive

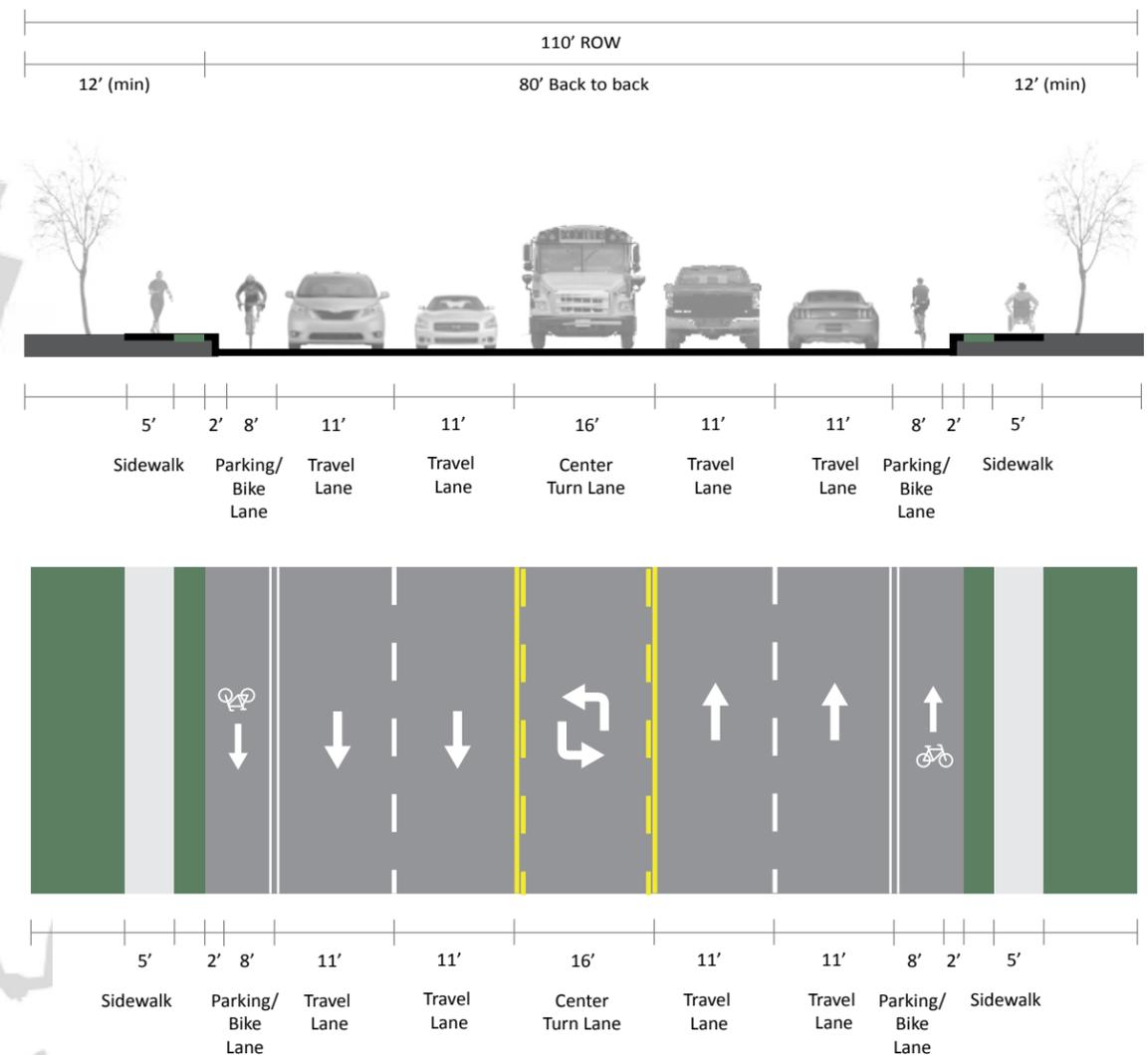


C. Facing South At Elms Road

Regional Context



Proposed Improvements



Schematic not to scale

*These estimates represent program-level costs for budgeting purposes only. Actual project costs are dependent on market conditions, and will not be known until the time of bid.



Jasper Drive Overpass

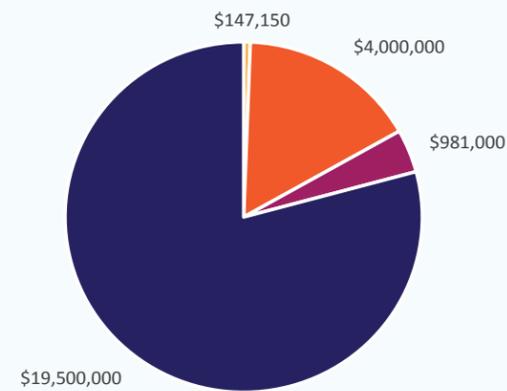
KTMPO ID: K30-23

Daisy Drive To S. 2nd Street (0.08 Miles)

Configuration:



Estimated Project Cost*: \$24,628,150



- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

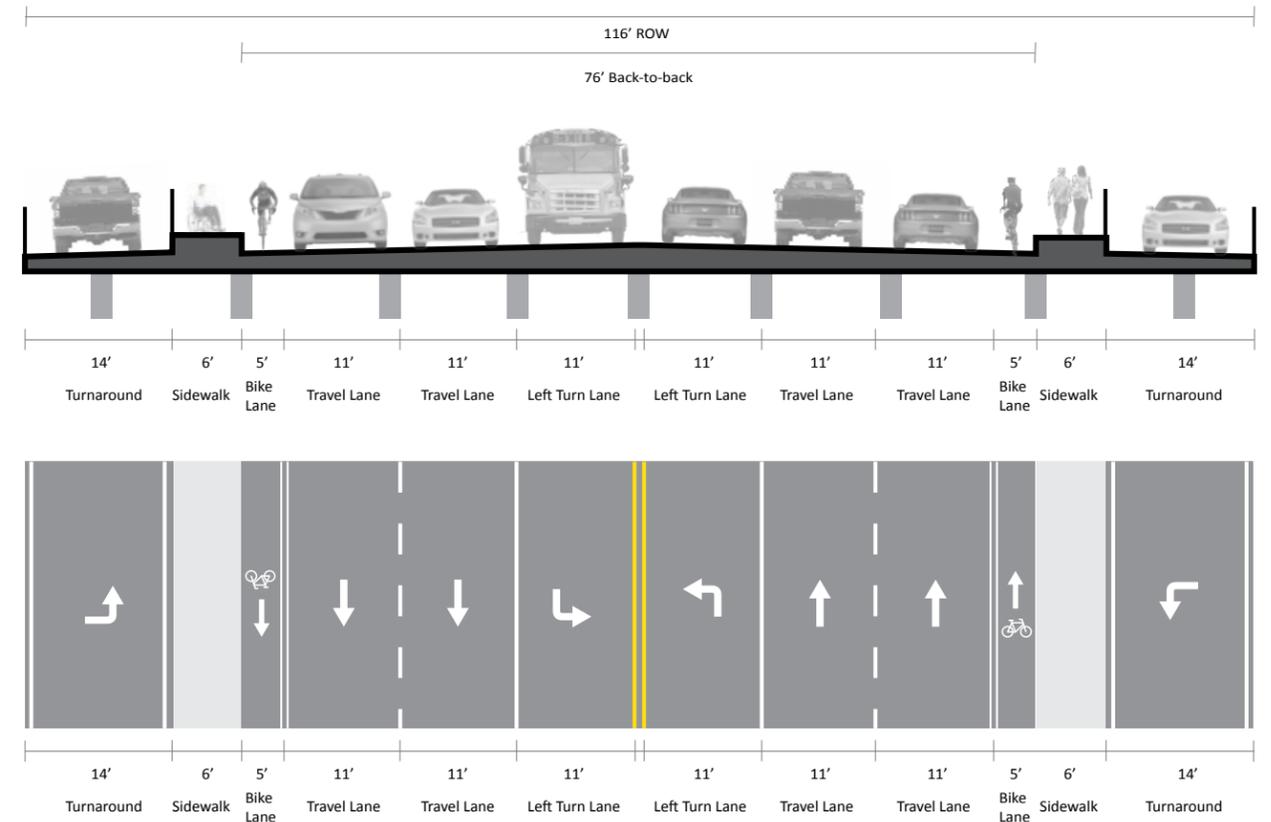
This project scope involves the reconstruction of the Jasper Drive overpass at U.S. Hwy 190. Reconstruction of the overpass is necessary to improve the safety and movement capacity in this area where Florence Road and Jasper Drive intersect to cross U.S. Hwy 190. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMPO Regional Bicycle/ Pedestrian Plan.



Regional Context



Proposed Improvements



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Rosewood Drive

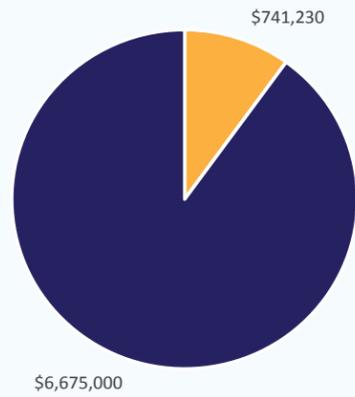
KTMPO ID: K30-02

Serpentine Drive To Chaparral Road
(0.95 Miles)

Configuration:



Estimated Project Cost*: \$7,416,230



- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

This project will extend Rosewood Drive from its current terminus just south of Serpentine Drive to Chaparral Road. Early implementation of the Rosewood Drive project will provide a suitable detour route during the upgrade of other major north-south arterials in the area. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMPO Regional Bicycle/ Pedestrian Plan. The extension of Rosewood Drive is a carryover project from the previous Capital Improvements Program (CIP). The memorandum approving the CIP projects and the Issuance of Certificates of Obligation is included in Appendix B.

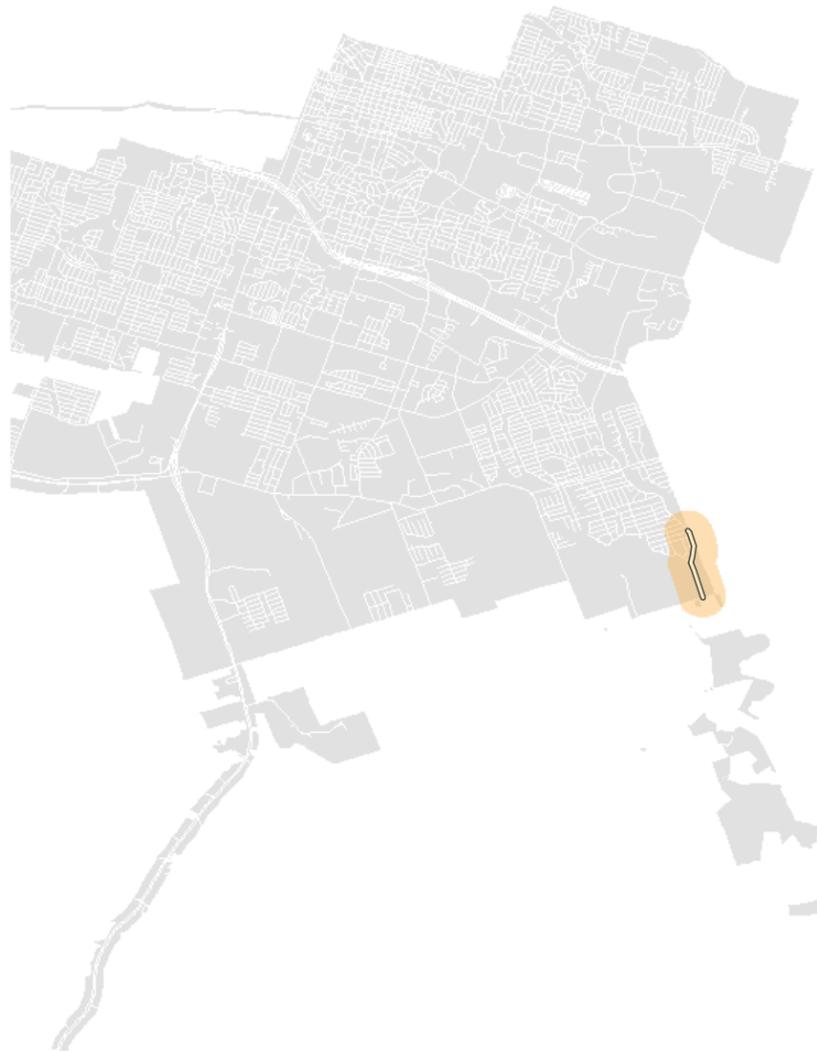


A. Facing South At Serpentine Drive

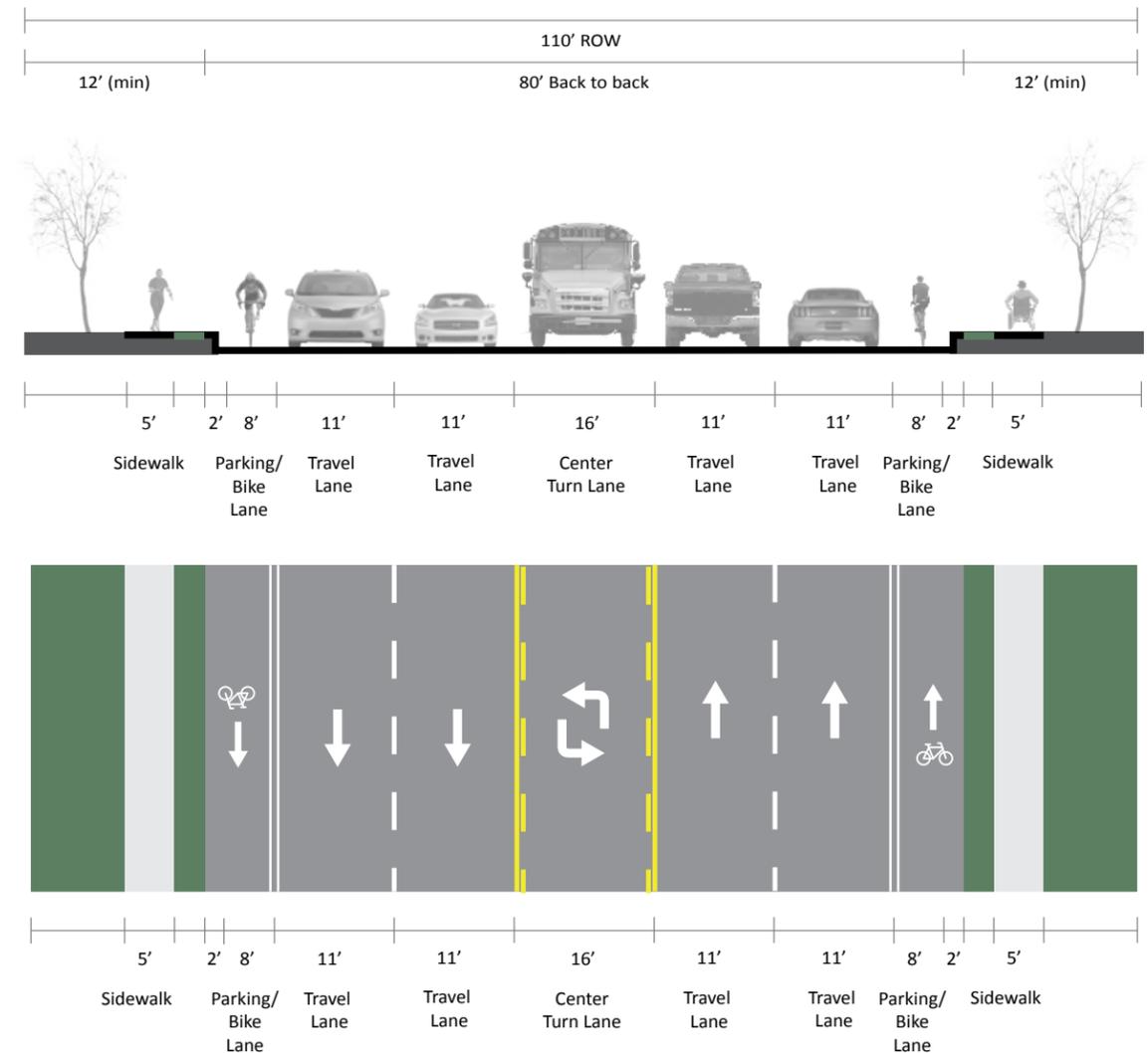


B. Facing Northwest At Chaparral Road

Regional Context

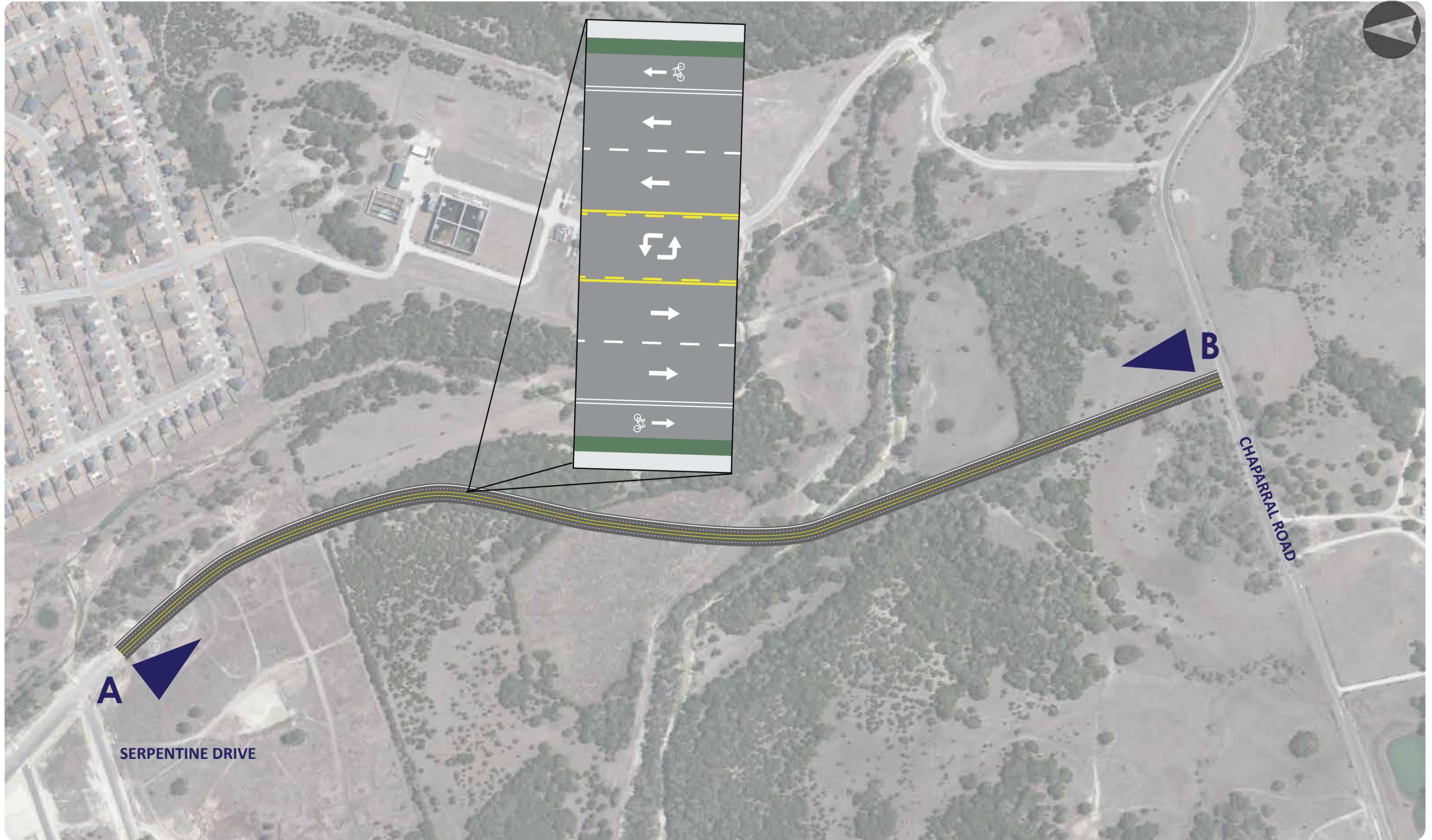


Proposed Improvements



Schematic not to scale

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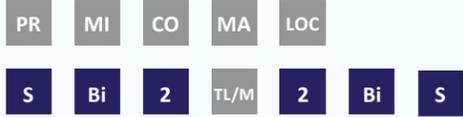


S.H. 195 Overpass

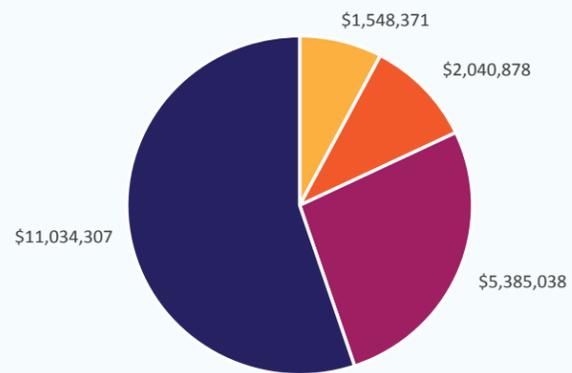
KTMPO ID: K24-04

At Business Hwy 190/BNSF Railway
(0.20 Miles)

Configuration:



Estimated Project Cost*: \$20,000,000



- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

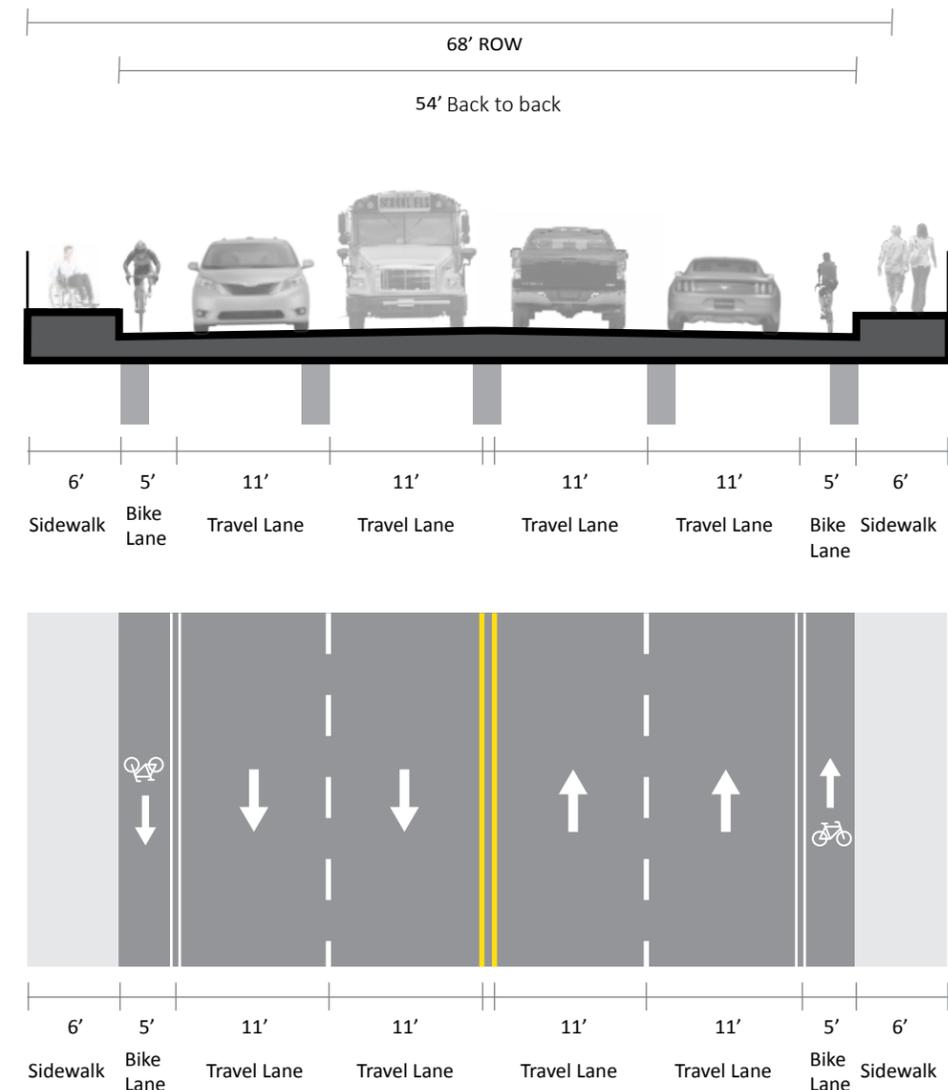
Fort Hood Street (S.H. 195) is one of the primary access routes to Fort Hood. This project will address congestion at the intersection with Business 190, which is made worse by the proximity of the at-grade crossing of BNSF railway. The project will include an overpass for Fort Hood Street (S.H. 195) over both Business 190 and the railroad, improving travel times and accessibility to Fort Hood. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMPO Regional Bicycle/ Pedestrian Plan.



Regional Context



Proposed Improvements



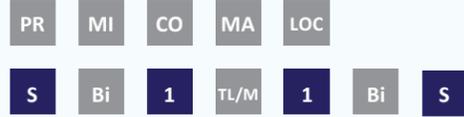
*These estimates represent program-level costs for budgeting purposes only. Actual project costs are dependent on market conditions, and will not be known until the time of bid.



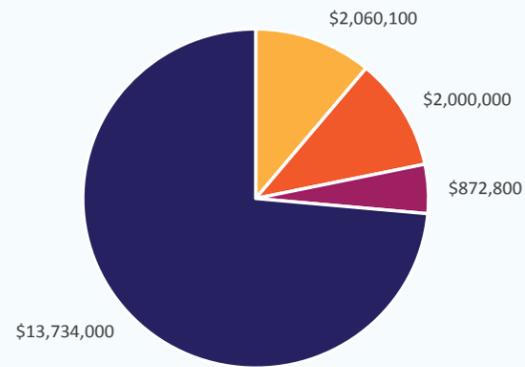
S.H. 195 Turnarounds

KTMPO ID: K30-27 and K30-28
 At Stan Schlueter Loop (FM 3470)
 (0 Miles)

Configuration:



Estimated Project Cost*: \$400,000 ea



- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

The scope of this project involves the construction of two turnarounds at the grade separated interchange of Fort Hood Street (S.H. 195) and Stan Schlueter Loop (F.M. 3470). The turnarounds will improve accessibility for businesses located opposite Fort Hood Street (S.H. 195). The project will also enhance pedestrian connectivity at the intersection. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMPO Regional Bicycle/ Pedestrian Plan.



Regional Context



Example Turnarounds



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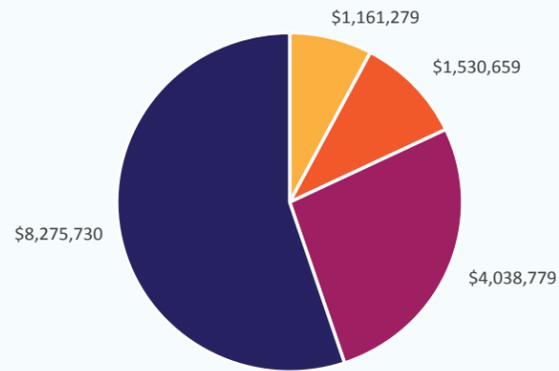
Stan Schlueter Loop (F.M. 3470)

KTMO ID: K40-03
 Clear Creek Road (S.H. 201) to
 U.S. 190 Bypass (4.72 Miles)

Configuration:



Estimated Project Cost*: \$15,000,000

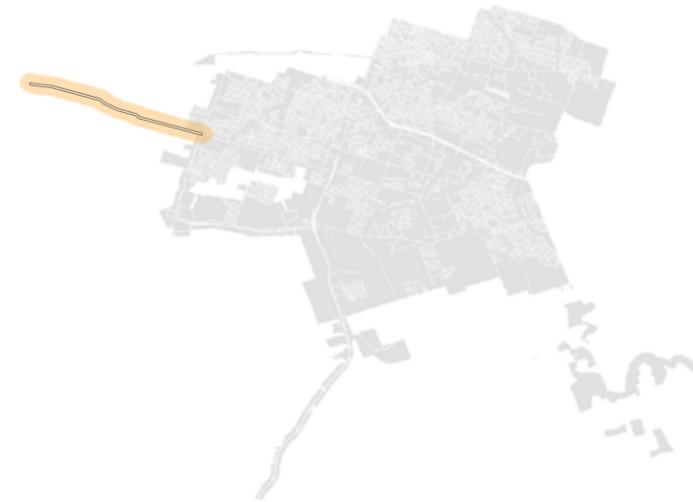


- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

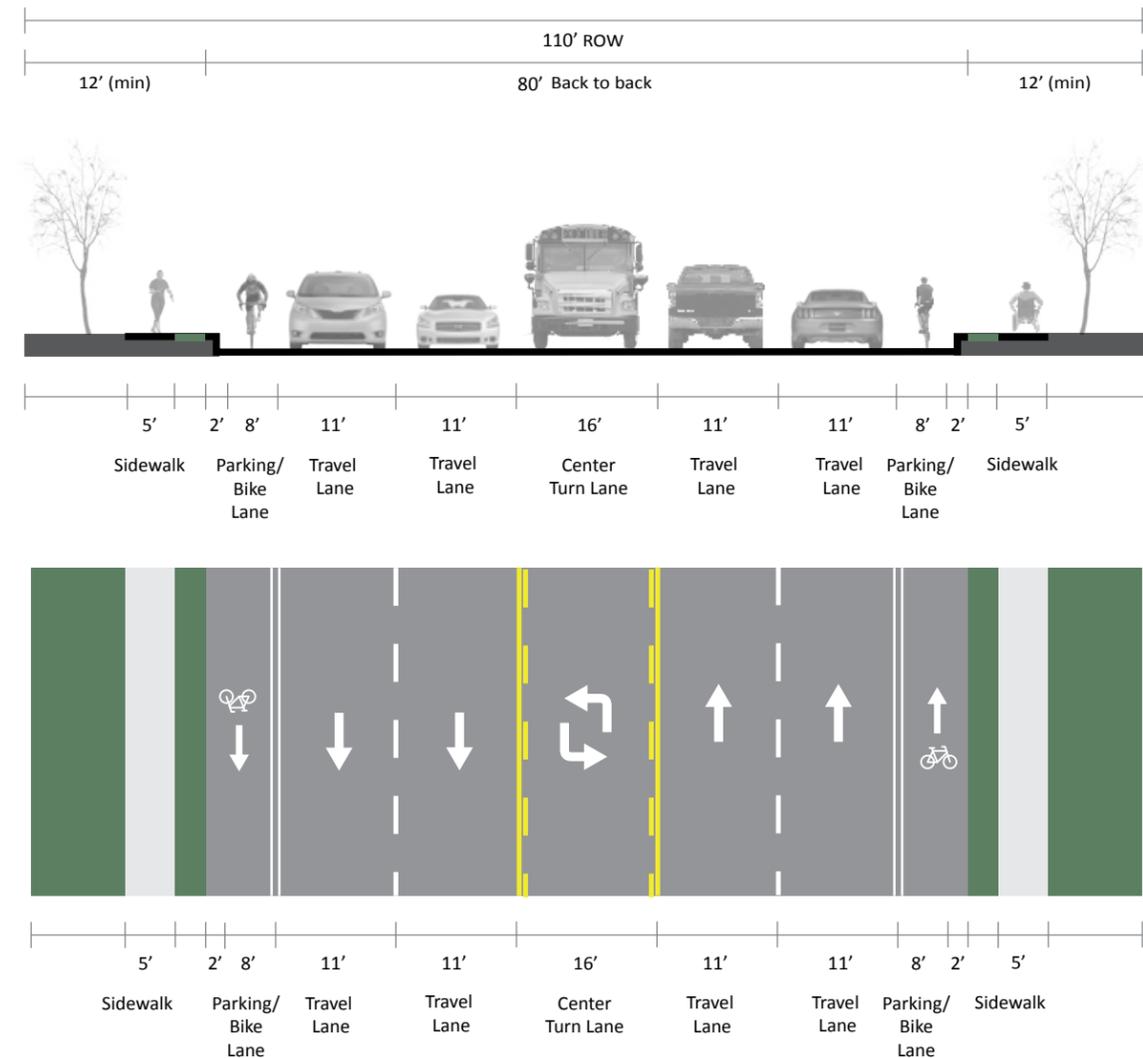
This project will upgrade Stan Schlueter Loop (F.M. 3470) to the west of the city limits to connect Clear Creek Road (S.H. 201) with the new U.S. 190 Bypass in Copperas Cove. The project will provide an alternative route to and from Fort Hood for commuters to the west, and would improve regional mobility. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMO Regional Bicycle/ Pedestrian Plan.



Regional Context



Proposed Improvements



Schematic not to scale

*These estimates represent program-level costs for budgeting purposes only. Actual project costs are dependent on market conditions, and will not be known until the time of bid.



W. Trimmier Road

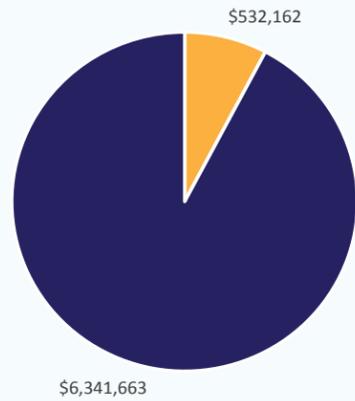
KTMPO ID: K40-17

Stagecoach Road To Chaparral Road
(1.85 miles)

Configuration:



Estimated Project Cost*: \$6,873,825

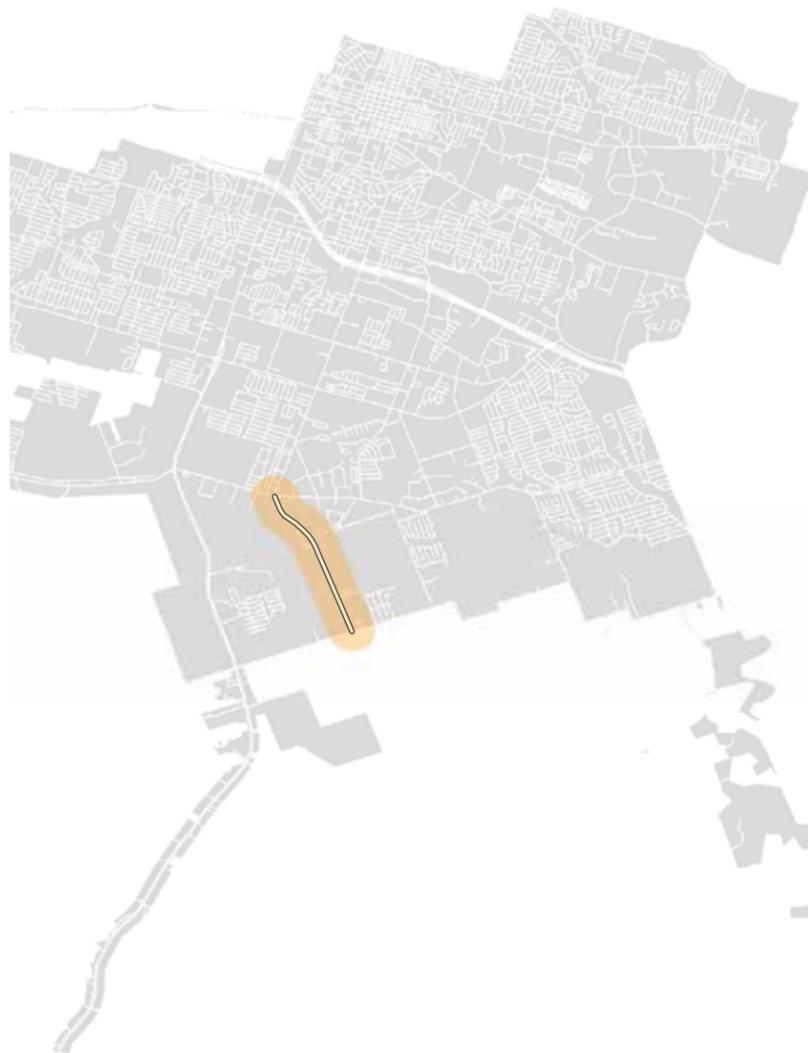


- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

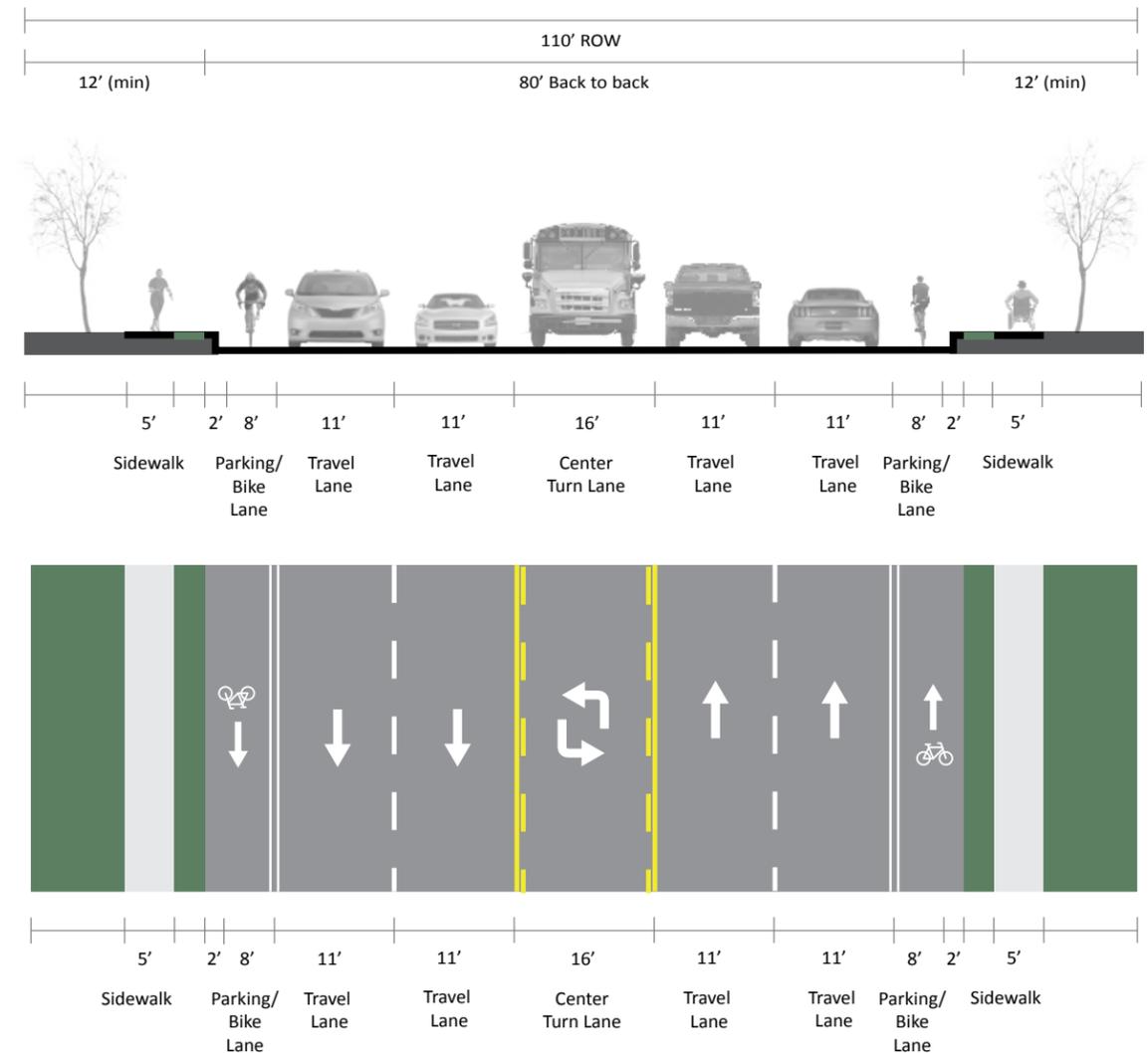
Expansion and improvements are needed to accommodate increased traffic from new developments and from the new, large education complex at Stagecoach Road. The project will expand W. Trimmier Road from two lanes to a four-lane divided roadway with a median. KISD represents a potential cost-sharing partner in the implementation of this project. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMPO Regional Bicycle/ Pedestrian Plan.



Regional Context

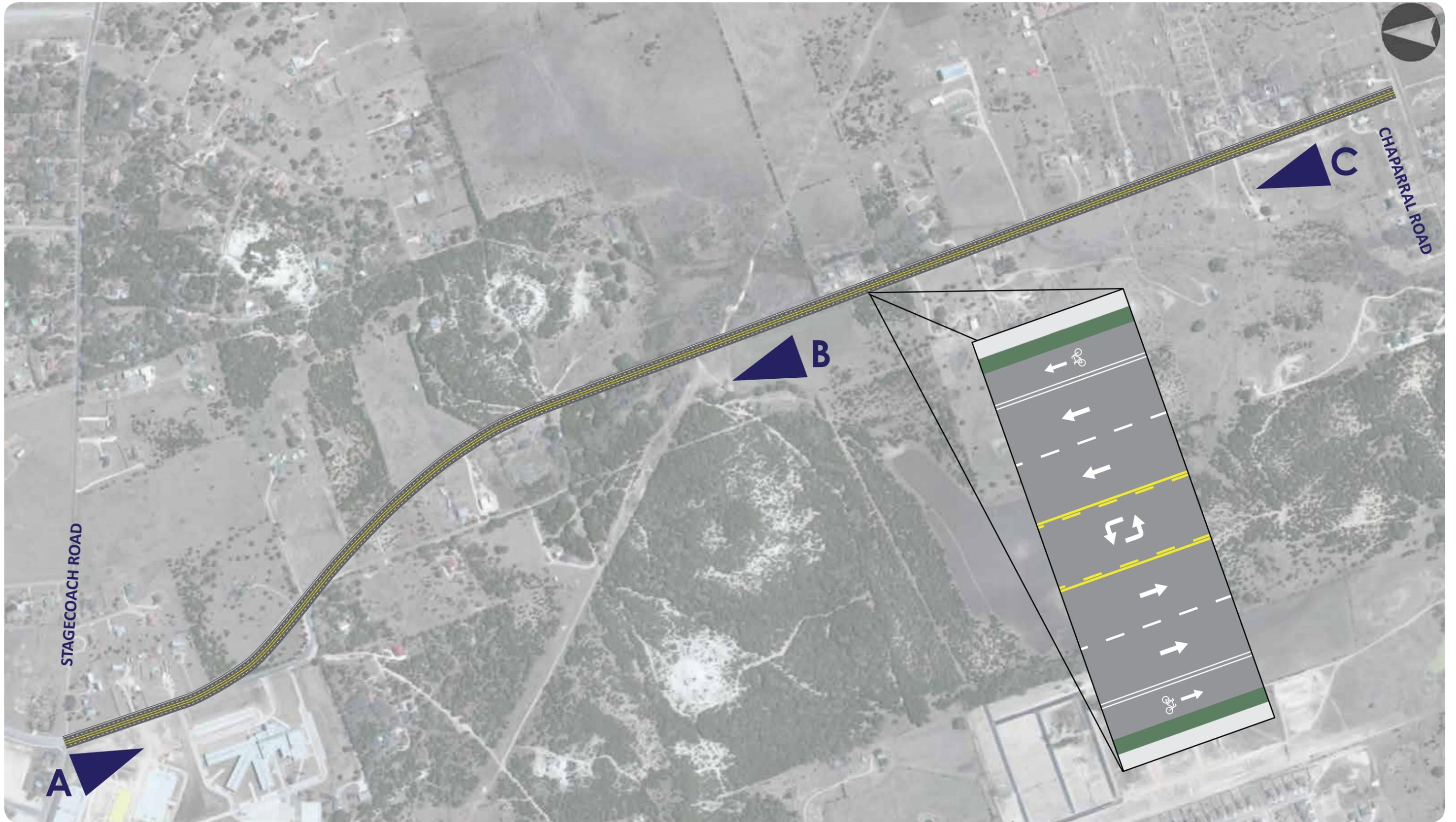


Proposed Improvements



Schematic not to scale

*These estimates represent program-level costs for budgeting purposes only. Actual project costs are dependent on market conditions, and will not be known until the time of bid.

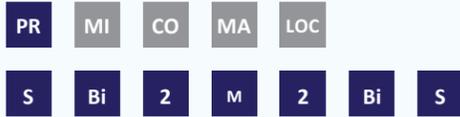


W.S. Young Drive

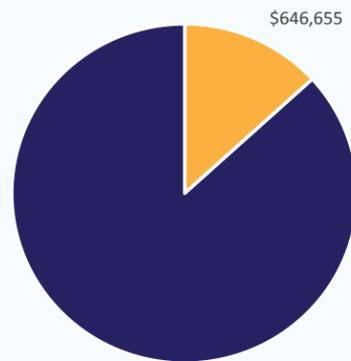
KTMPO ID: K40-11

Central Texas Expressway (U.S. Hwy 190)
To Illinois Avenue (0.56 Miles)

Configuration: Mall Signal



Estimated Project Cost*: \$4,889,546



- Engineering
- Utility Relocation
- ROW/Environmental
- Construction

This project scope will provide a more efficient and safe mode for north-south movement. The reconfiguration of the traffic signals along with the added median improvements will help manage access to businesses and relieve traffic congestion along S. W.S. Young Drive. A needs assessment will determine the appropriateness of bicycle and pedestrian facilities along the corridor, as well as the exact configuration of those facilities if appropriate. Examples of facilities include sidewalks, pedestrian signals, crosswalks, dedicated bike lanes, shared bike lanes, and multi-use paths. Consideration will be given to recommendations in the KTMPO Regional Bicycle/ Pedestrian Plan.



A. Facing South At Central Texas Expressway (U.S. Hwy 190)



B. Facing South At A.J. Hall Blvd



C. Facing North At Illinois Avenue

Regional Context

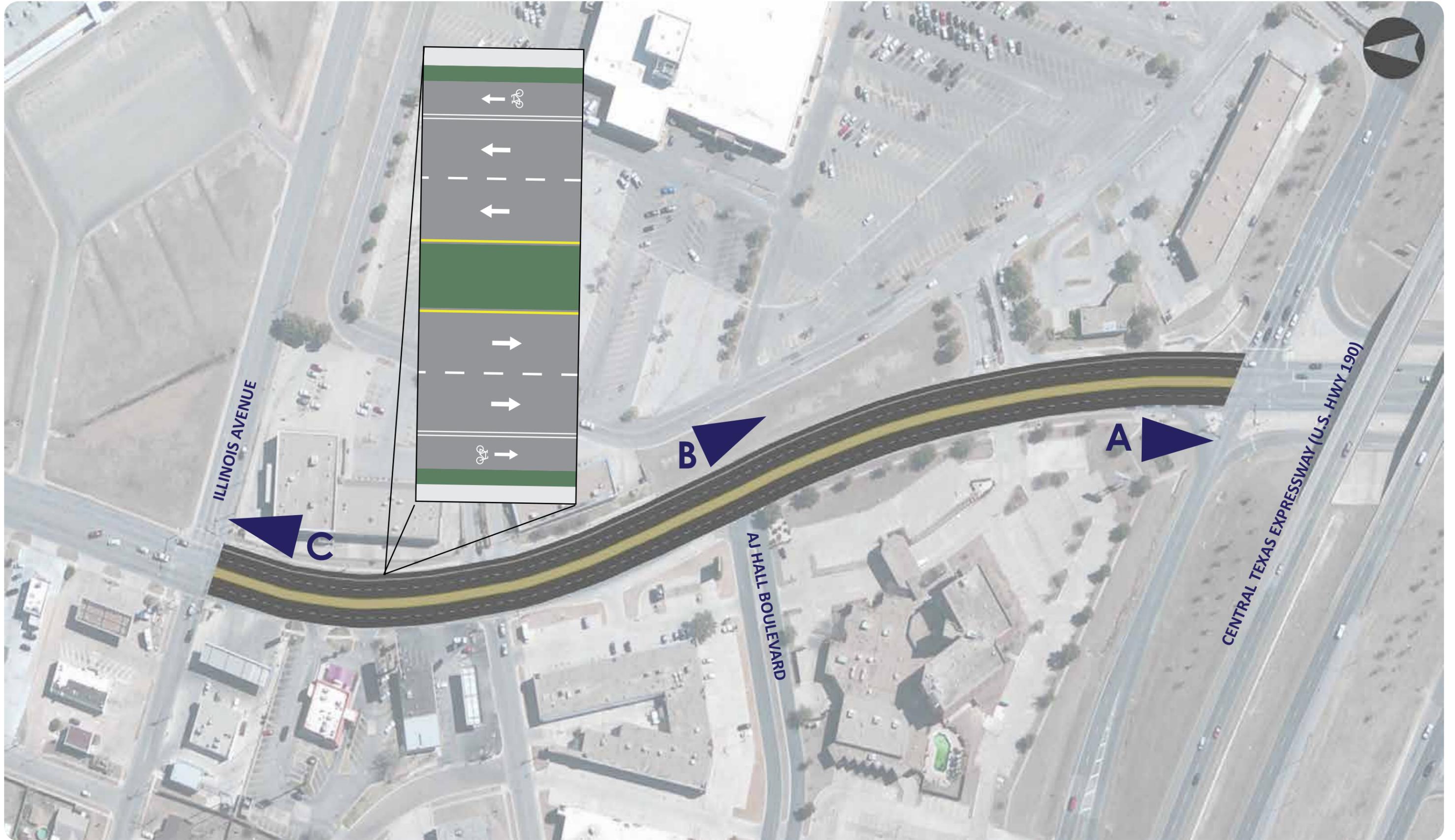


Proposed Improvements



Schematic not to scale

*These estimates represent program-level costs for budgeting purposes only. Actual project costs are dependent on market conditions, and will not be known until the time of bid.



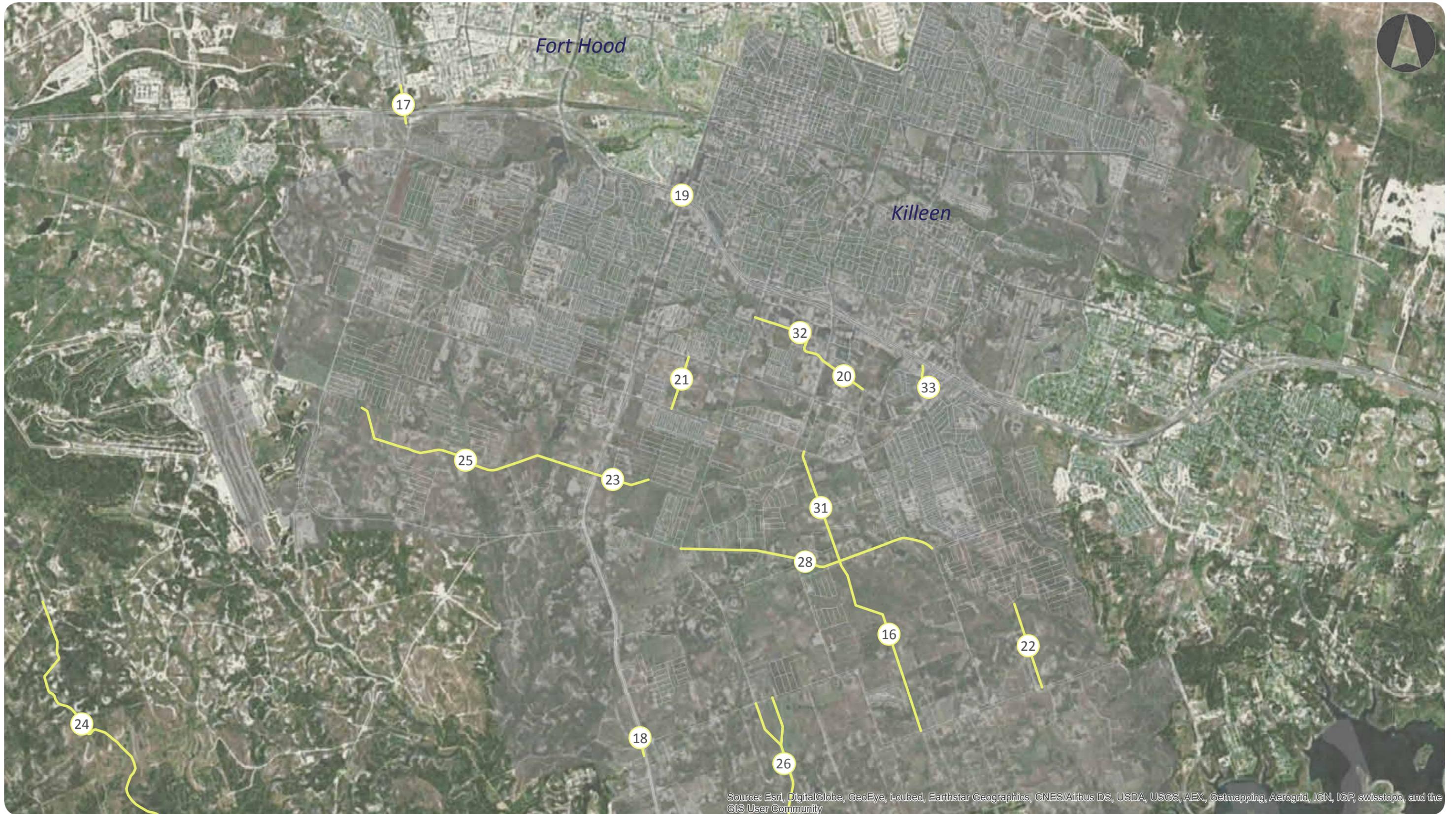
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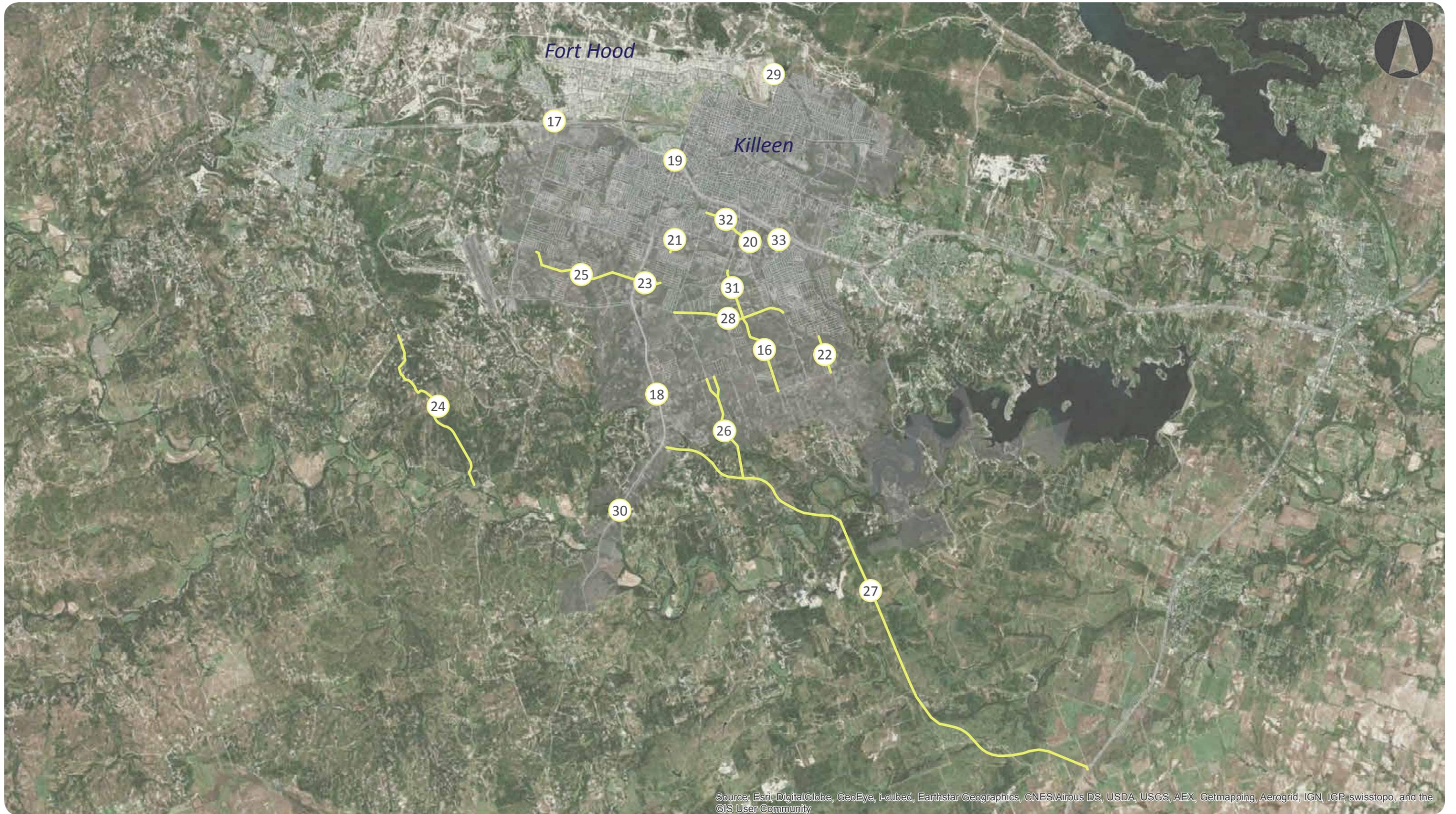
3

MEDIUM PRIORITY PROJECTS

Medium Priority Projects

Rank	Name	Limits From	Limits To	Roadway Before Project	Roadway After Project
16	Onion Road	Stagecoach Road	Chaparral Road	None	2 lanes & center turn lane
17	Clear Creek/ Main Gate Interchange	Clear Creek Road	Main Gate, Fort Hood	None	Construct interchanges at Clear Creek Road and Fort Hood Main Gate
18	S.H. 195 Overpass	At Chaparral Road		4 lanes	4 lanes
19	S.H. 195	Old F.M. 440 Road	Pershing Drive	6 lanes	10 lanes & turn-arounds
20	Little Nolan Road	W.S. Young Drive	Cunningham Road	2 lanes	2 lanes & center turn lane
21	Old Florence Road	Elms Road	F.M. 3470 (Stan Schlueter Loop)	2 lanes	2 lanes & center turn lane. Realign offset of Old Florence Road and Florence Road at Elms Road
22	Platinum Drive	Siltstone Loop	Chaparral Road	None	4 lanes
23	Atlas Avenue	S.H. 195	Existing Atlas Avenue	None	4 lanes
24	Future E/W Arterial	F.M. 116	F.M. 2670	None	4 lanes & median
25	Mohawk Drive	S.H. 201	S.H. 195	None	4 lanes & center turn lane
26	West Trimmier Road	Chaparral Road	Major E/W Arterial	None	4 lanes & median
27	Major E/W Arterial	S.H. 195	I.H. 35	None	4 lanes & median
28	Stagecoach Roundabouts	At Cunningham Road	At East Trimmier Road	None	None
29	Westcliff Road	Westcliff Road	Fort Hood	None	4 lanes & center turn lane
30	C.R. 2670	C.R. 2670	S.H. 195	2 lanes	Construct overpass
31	Onion Road	F.M. 3470 (Stan Schlueter Loop)	Stagecoach Road	2 lanes	2 lanes & center turn lane
32	Bacon Ranch Road/ Little Nolan Road	West Trimmier Road	W.S. Young Drive	2 lanes	2 lanes & center turn lane
33	Bacon Ranch Road Exit (Option 1)	U.S. Hwy 190 Access Road	F.M. 3470 (Stan Schlueter Loop) at Greenlee Drive	None	2 lanes from U.S. Hwy 190 Access Road to Bacon Ranch Road, 4 lanes from Bacon Ranch Road to Stan Schlueter Loop (F.M. 3470) at Greenlee Drive
33	Bacon Ranch Road Exit (Option 2)	U.S. Hwy 190 Access Road	F.M. 3470 (Stan Schlueter Loop) at Greenlee Drive	None	Right Hand Turn Lane at U.S. Hwy 190 Access Road and Stan Schlueter Loop (F.M. 3470)





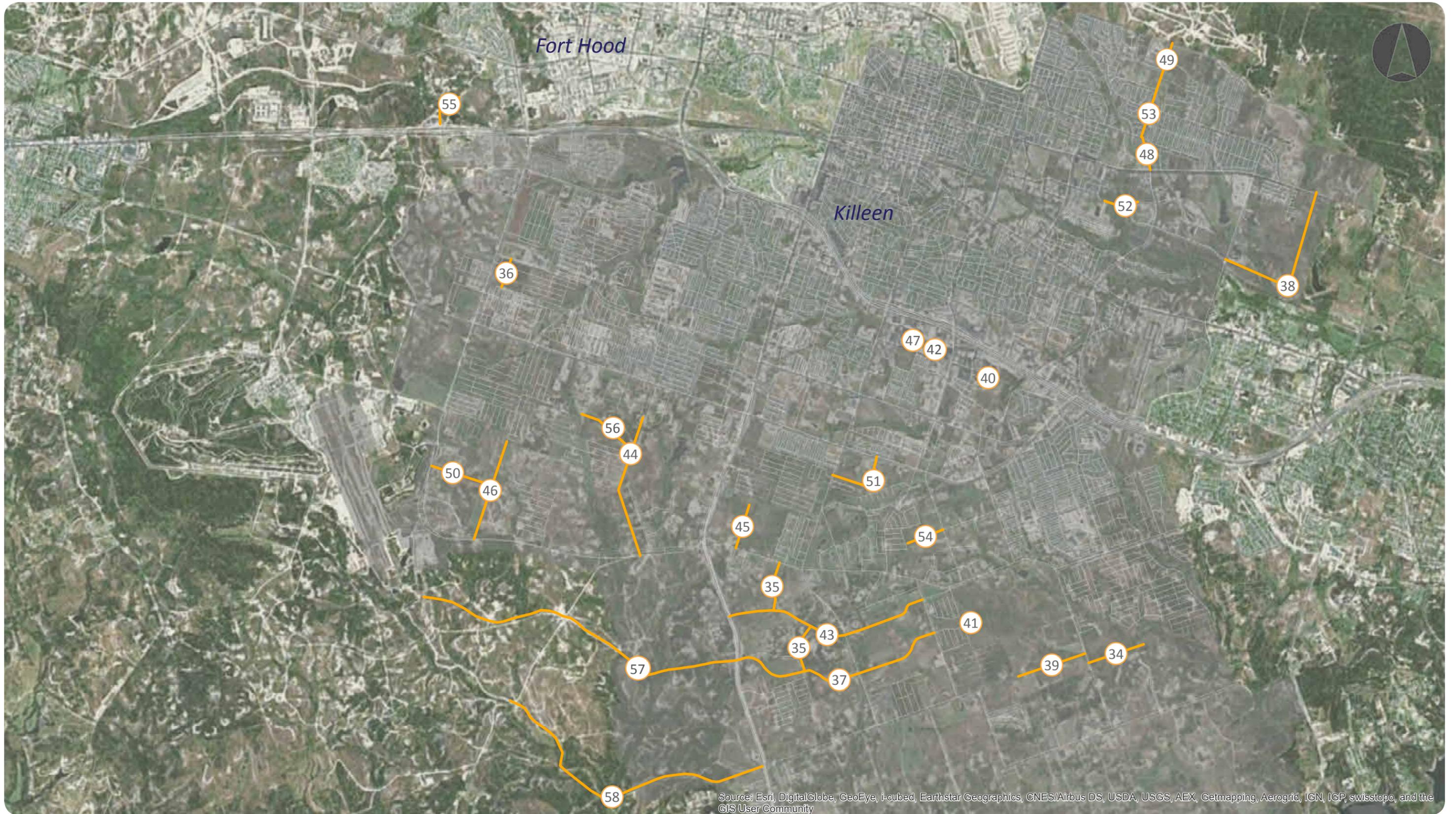
Source: Esri, DigitalGlobe, GeoEye, i-cubed, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

4

ADDITIONAL PROJECTS

Additional Projects

Rank	Name	Limits From	Limits To	Roadway Before Project	Roadway After Project
34	Future E/W Collector	East Trimmier Road	Platinum Drive Extension	None	4 lanes & median
35	Future N/S Collector	Stagecoach Road	Future E/W Arterial	None	4 lanes
36	Barrington Trail	W Elms Road	Jim Avenue	None	4 lanes
37	Future E/W Arterial	S.H. 195	Featherline Road	None	4 lanes
38	Future E/W and N/S Collector	Roy J. Smith	East Rancier Avenue	None	4 lanes & center turn lane
39	Future E/W Collector	Onion Road	East Trimmier Road	None	4 lanes
40	Bacon Ranch Road	W.S. Young Drive	Cunningham Road	None	2 lanes & center turn lane
41	Malmaison Road	Shimla Drive	Onion Road	None	4 lanes
42	Lowes Boulevard/ Bacon Ranch Road Collector	Lowes Boulevard	Bacon Ranch Road	None	2 lanes
43	Future E/W Collector	S.H. 195	Featherline Road	None	2 lanes & center turn lane
44	Future N/S Collector	John Helen Drive	S.H. 201	None	4 lanes
45	Future N/S Collector	Atlas Avenue	Stagecoach Road	None	4 lanes
46	Bridgewood Drive	Bridgewood Drive	S.H. 201	None	4 lanes
47	Lowes Boulevard/ Bacon Ranch Road Collector	Lowes Boulevard	Bacon Ranch Road	None	2 lanes
48	North Twin Creek Drive	Rancier Avenue	Lake Road	None	2 lanes & center turn lane
49	60th Street	Hilliard Avenue	Northcest Drive	2 lanes	2 lanes & center turn lane
50	Future E/W Collector	S.H. 201	Bridgewood Drive	None	4 lanes
51	Lions Club Park Road	West Trimmier Road	Stan Schlueter Loop (F.M. 3470)	None	2 lanes
52	Atkinson Drive	North 52nd Street	Alan Circle	2 lanes	2 lanes & center turn lane
53	60th Street	Lake Road	Hilliard Avenue	2 lanes	2 lanes & center turn lane
54	Love Road	Horne Drive	Onion Road	None	2 lanes & center turn lane
55	Bell Tower Drive	Bell Tower Drive	U.S. Hwy 190	None	2 lanes & median
56	Turland Road	Bunny Trail	Future N/S Collector	None	TBD
57	Future E/W Arterial	Mayberry Park Road	S.H. 195	None	TBD
58	Mayberry Park Road	Maxdale Road	S.H. 195	None	TBD



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APPENDIX A

City Council Memorandum for Resolution |
Resolution Amending the City's Thoroughfare Plan to
Include Designating Featherline Road as a Minor
Arterial and Designating a Continuous Flow Configuration
for Stagecoach Road at its Intersections with W.S. Young
Drive and Featherline Road to Preserve North-South
Mobility, and Expressing Intent to Prioritize Featherline
Road as Part of a Future Community Improvement
Project Within the Next Five Years, Subject to
Identification of Funding for the Same.

Regular 06-10-14
Item # CA-14-076
CCM/R 14-076R

CITY COUNCIL MEMORANDUM FOR RESOLUTION

AGENDA ITEM

RESOLUTION AMENDING THE CITY'S THOROUGHFARE PLAN TO INCLUDE DESIGNATING FEATHERLINE ROAD AS A MINOR ARTERIAL AND DESIGNATING A CONTINUOUS FLOW CONFIGURATION FOR STAGECOACH ROAD AT ITS INTERSECTIONS WITH W.S. YOUNG DRIVE AND FEATHERLINE ROAD TO PRESERVE NORTH-SOUTH MOBILITY, AND EXPRESSING INTENT TO PRIORITIZE IMPROVEMENTS TO FEATHERLINE ROAD AS PART OF A FUTURE COMMUNITY IMPROVEMENT PROJECT WITHIN THE NEXT FIVE YEARS, SUBJECT TO IDENTIFICATION OF FUNDING FOR THE SAME

ORIGINATING DEPARTMENT

PUBLIC WORKS/TRANSPORTATION DIVISION

BACKGROUND INFORMATION

The City's Thoroughfare Plan establishes the transportation network for the City of Killeen and establishes a framework for the orderly development of roadways to include their alignments, connections, and transportation linkages. As the City grows, it becomes necessary to amend or revise the Thoroughfare Plan accordingly.

The City of Killeen is bordered by Fort Hood to the north and west, Copperas Cove to the west and Harker Heights to the east. Therefore, the City can only grow to the south. This places critical importance on preserving and enhancing the functionality of north-south arterials.

According to the City's Thoroughfare Plan, the three major arterial streets spanning the City limits north to south are:

- State Highway 195, the principal arterial for the City of Killeen with its limits being the north City limits and south City limits.
- Trimmer Road, a minor arterial with its limits being Rancier Avenue to the north and Chaparral Road to the south.
- W.S. Young Drive, a minor arterial with its limits being Westcliff Road to the north and Stagecoach Road to the south.

A minor arterial street is primarily used for higher speed and higher volume traffic. Routes for such streets are primarily used to facilitate cross-town circulation and through-town

movements. W.S. Young Drive currently terminates at Stagecoach Road and does not continue south to the City limits. The nearest street for traffic traveling south from the terminus of W.S. Young Drive at Stagecoach Road is Featherline Road, a collector street. A collector street's primary function is to carry traffic from minor streets to major streets. This offset poses a significant functionality issue due to the lack of alternate routes located in this area. Additionally, the residential development to the north and south of the W.S. Young Drive/Stagecoach Road intersection, and constraints from neighboring cities, limit the ability to connect the W.S. Young Drive and Featherline arterials. Anticipating that development and population will continue to push south, City staff predicts that the traffic at these intersections will become severely congested and inefficient in the coming years.

DISCUSSION/CONCLUSION

Since the alignment of W.S. Young Drive and Featherline Road are not contiguous, City staff believes the most economical, practical and prudent solution is to tie these intersections together in continuous flow configurations. The feasibility of this solution is predicated on preserving and protecting the right-of-way from development on the corners of these intersections, as the footprint required for a continuous flow through both intersections would require additional right-of-way than that needed by the conventional intersections currently scoped into the Stagecoach, Phase II project.

City staff has been involved in negotiations with Mr. Bruce Whitis to secure right-of-way needed for the Stagecoach, Phase II project that is currently underway. As part of those negotiations, Mr. Whitis, who is the primary owner of the needed right-of-way and the additional right-of-way at both intersections on Stagecoach Road, has verbally committed to donating the needed right-of-way and the additional right-of-way for the continuous flow configuration if the City will commit to preserving the right-of-way and express intent to prioritize improvements to Featherline Road as a future community improvement project, including constructing the continuous flow configurations within the future improvement of Featherline Road. If accepted, this donation would allow the City to acquire an estimated \$434,727 in currently needed right-of-way and right-of-way needed for the contemplated future project at no cost, which would preserve the additional right-of-way for the future improvements and allow Stagecoach, Phase II construction to proceed without the necessity of a potential condemnation action.

As additional information, on September 21, 2010, City Council passed Resolution (10-106R) authorizing a professional services agreement with Walker Partners, L.L.C. to design improvements on Stagecoach Road and Cunningham Road. Improvements to Cunningham Road and Stagecoach Road, Phase I, have been completed. Stagecoach, Phase II improvements are currently under construction. As part of the existing design, right-of-way must be acquired from Mr. Whitis for the standard intersections designed for Stagecoach, Phase II at this time.

As part of the Stagecoach Road design, Walker Partners has analyzed the W.S. Young Drive/Stagecoach Road and Featherline Road/Stagecoach Road intersections. Based on Walker Partners' transportation engineering expertise, they are endorsing the continuous flow configurations as a viable solution to future traffic concerns in this area. Walker Partners' recommendation is rooted in the ability to remove the dominance of any one movement through an intersection; thereby creating continuity in traffic routes. The continuous flow

configuration would reduce traffic delays, improve safety and aesthetics, and reduce operation and maintenance costs.

As mentioned, the continuous flow configurations would require the acquisition of additional right-of-way consisting of approximately eight to ten parcels surrounding these intersections, of which 3 are owned by Mr. Whitis and would be donated. The exact right-of-way needed cannot be determined without additional surveying and engineering, which is proposed to be completed by Walker Partners as additional services to the existing design contract. The acquisition requirements at the intersections discussed above will be determined once additional surveying and engineering is performed by Walker Partners.

FISCAL IMPACT

The amendment to the Walker Partners' professional services agreement to secure additional surveys and engineering would be \$49,000, which is within the City Manager's statutory authorization to approve, with funds available in Account #343-3490-800.58-36, Certificate of Obligation 2011 Stagecoach Road Improvements Project.

RECOMMENDATION

Staff recommends that the City Council modify the City's Thoroughfare Plan designating Featherline Road as a minor arterial and designating continuous flow configurations for Stagecoach Road at its intersections with W.S. Young Drive and Featherline Road, to be included within the future improvement of Featherline Road, and securing additional right-of-way in order to preserve future north-south mobility in this area, and expressing intent to prioritize improvements to Featherline Road as part of a future community improvement project within the next five years, subject to identification of funding for the same.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF KILLEEN:

That the above stated recommendation is hereby approved and authorized.

PASSED AND APPROVED at a regular meeting of the City Council of the City of Killeen, Texas, this the 10th day of June, 2014, at which meeting a quorum was present, held in accordance with the provisions of V.T.C.A., Government Code, § 551.001 *et seq.*

APPROVED

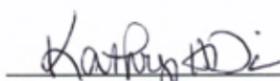

Scott Cospers
MAYOR



ATTEST:


Dianna Barker
CITY SECRETARY

APPROVED AS TO FORM:


Kathryn H. Davis
CITY ATTORNEY

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APPENDIX B

City Council Memorandum |
Approve Prioritized Proposed Street Improvement
Projects and Related Issuance of Certificates of Obligation

REG 8-24-10
ITEM # CA-8
CCM/R 10-095R

CITY COUNCIL MEMORANDUM

AGENDA ITEM **APPROVE PRIORITIZED PROPOSED STREET
IMPROVEMENT PROJECTS AND RELATED
ISSUANCE OF CERTIFICATES OF OBLIGATION**

ORIGINATING **PUBLIC WORKS/PLANNING AND DEVELOPMENT
DEPARTMENT** **SERVICES**

BACKGROUND

On October 13, 2009, the City Council passed a resolution prioritizing fourteen projects to be included in a future bond package. On August 17, 2010, the Transportation Committee conducted a special meeting at which time the following projects were identified as the highest priority projects to be funded through the issuance of Certificates of Obligation:

1. Stagecoach Road – From State Highway 195 on the west to the Harker Heights city limits on the east;
2. Bunny Trail – From Stan Schlueter Loop (FM 3470) on the north to Clear Creek Road (SH 201) on the south;
3. Elms Road – From Carpet Lane on the west to SH 195 on the east;
4. Cunningham Road – From Stan Schlueter Loop (FM 3470) on the north to Stagecoach Road on the south;
5. Lowe’s Boulevard Extension – From Florence Road on the west to Trimmier Road on the east; and
6. Rosewood - From Stagecoach Road on the north to Chaparral Road on the south.

On August 17, 2010, the City Council reviewed the recommendations of the Transportation Committee and discussed a recommendation that projects 1- 4 be funded through the issuance of Certificates of Obligation in the amount of \$30 million. City Council members further discussed and agreed that, upon completion of projects 1-4, any bond funds remaining should be utilized to complete projects 5 and 6.

DISCUSSION/CONCLUSION

All projects identified for funding have been previously identified in the Transportation Capital Improvement Plan. Furthermore, projects 1-4 have been identified and ranked as transportation funding priorities by the City Council in Resolution 09-156-R. Preliminary construction estimates suggest that projects 1-4 can be designed and constructed with the anticipated bond proceeds. It is further anticipated that, through the use of City-Owner agreements, in accordance with Resolution number 06-214R, some opportunities for combining city funding with private funding may be available, maximizing the extent to which all projects can be successfully funded and completed.

FISCAL IMPACT

The Certificate of Obligations would be paid back by property tax revenues. The tax supported obligations on the FY 2010-2011 Interest and Sinking Tax Rate is approximately 4.78 cents for an anticipated issuance of \$30 million dollars of Certificate of obligation.

RECOMMENDATION

Recommend that the City Council approve the list of prioritized projects and the intent to issue of Certificates of Obligation in the amount of \$30 million to fund the identified transportation improvement projects.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF KILLEEN:

That the above-stated recommendation is hereby approved and authorized.

PASSED AND APPROVED at a regular meeting of the City Council of the City of Killeen, Texas this 24th day of August, 2010, at which meeting a quorum was present, held in accordance with the provisions of V.T.C.A., Government Code, § 551.001 *et seq.*

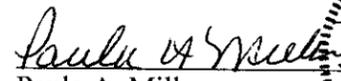
APPROVED


Timothy L. Hancock
MAYOR

APPROVED AS TO FORM:


Kathryn H. Davis
CITY ATTORNEY

ATTEST:


Paula A. Miller
CITY SECRETARY



APPENDIX C

City Council Memorandum |
Approval of City/ Owner Agreement Funding Policy

Special 10-31-06
Item # SP-4
CCM/R 06-214R

CITY COUNCIL MEMORANDUM

AGENDA ITEM **APPROVAL OF CITY/OWNER AGREEMENT FUNDING POLICY**

ORIGINATING DEPARTMENT **FINANCE**

BACKGROUND INFORMATION

The City of Killeen may sometimes require new development to construct street infrastructure that is "over-sized," if analyses of the future needs in the area of the development show a need for over-sizing. An "over-sized" public improvement is one that is built larger (or with greater capacity) than the minimum size necessary to serve the particular development. If over-sizing is warranted and is required by the minimum standards established in the Thoroughfare Plan, the City may choose to participate in the cost of the over-sizing. When cost sharing of an extension or over-sizing project is proposed, the Owner/Developer will be required to obtain and submit itemized engineer's estimates and construction bids based upon development project requirements and extended or oversized requirements. The City Engineer is responsible for evaluating the information provided and making recommendation to the City Council for any cost sharing for extensions or over-sizing by the City. The City may not enter an agreement to participate in a City /Owner Agreement to share costs without identification of an available funding source.

DISCUSSION/CONCLUSION

The Finance Director and the City Manager have briefed the City Council on the need to establish a policy to fund city/owner agreements as they come before the City Council for consideration. In the past, the City has issued debt instruments, to include general obligation bonds and certificate of obligations, to fund city/owner agreements. This process has allowed the City to participate in cost-sharing for infrastructure improvements to meet the guidelines in the Thoroughfare Plan and to meet the needs of future growth. At the October 17, 2006 City Council workshop, the City Council directed staff to prepare a policy statement to clarify future funding for city/owner agreements.

POLICY STATEMENT:

City/Owner Agreements may be funded through the issuance of certificates of obligation with an amortization period not to exceed ten (10) years, as deemed necessary and approved by a majority of the City Council.

RECOMMENDATION

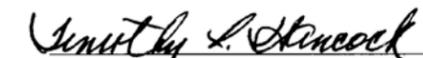
The staff recommends that the City Council adopt the City/Owner Agreement Funding Policy Statement.

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF KILLEEN:

That the above stated staff recommendation is hereby approved and authorized;

^{special}~~regular~~
PASSED AND APPROVED at a ~~regular~~ meeting of the City Council of the City of Killeen, Texas this 31st day of October, 2006, at which meeting a quorum was present, held in accordance with the provisions of V.T.C.A. Government Code, Section 551.001 et. seq.

APPROVED


Timothy L. Hancock, MAYOR

ATTEST:


Paula A. Miller
CITY SECRETARY



APPROVED AS TO FORM


Kathy Davis
CITY ATTORNEY

APPENDIX D

Safety Projects

SAFETY

This appendix to the Capital Improvement Plan recommends several projects that address safety on Killeen’s thoroughfare network. Funding for these projects could come from the federal Highway Safety Improvement Program (HSIP), and would require the city to submit a competitive application to TxDOT to receive funding. This section will address the requirements of the application process and introduce the projects that the city could submit for consideration.

THE HIGHWAY SAFETY IMPROVEMENT PROGRAM

The federal government, through the Moving Ahead for Progress in the 21st Century Act, or MAP-21, authorizes funding for roadway safety projects to be distributed by the states on a discretionary basis. According to the Federal Highway Administration (FHWA), the goal of the Highway Safety Improvement Program is to significantly reduce traffic fatalities and serious injuries on all public roads – including those not owned by states (referred to as off-network roads). The HSIP requires a data-driven, strategic approach to improving highway safety.

The State’s Strategic Highway Safety Plan (SHSP) distinguishes between three types of serious crashes:

- Fatal Injury Crashes (Type K);
- Incapacitating Injury Crashes (Type A); and
- Non-incapacitating Injury Crashes (Type B).

The plan seeks to reduce crashes involving various circumstances, including run-off the road crashes, head-on collisions, intersection crashes, work zone incidents, and conflicts with at-grade railroad crossings. The plan also tries to address the root causes of many crashes, such as DUIs, excessive speed, lack of restraint, and distracted driving.

Eligible Projects

Projects eligible to receive HSIP funds from TxDOT include the following for on-system roads (roads which TxDOT owns and maintains):

- Widening;
- Rumble strips;
- Grade separation;
- Curve improvements;
- Intersections; and
- Barriers and metal beam guard fences.

For roads located off-system, some examples of projects eligible for HSIP funding include:

- Traffic signals;
- Raised medians;
- Warning signals and signs (particularly on curves);
- High-friction surface treatments; and
- Safety lighting.

The City of Killeen is also eligible to receive funds for pedestrian and bicycle projects. Pedestrian projects include signals, crosswalks, safety lighting, sidewalks, and pedestrian overpasses. Bicycle projects include bike lanes, roadway shoulders, crosswalks, other intersection improvements, and signage.

Applying For Funding

TxDOT publishes a call for HSIP project applications in February each year. The deadline to submit applications is in April, although some TxDOT district offices require earlier submission deadlines to ensure proper processing. Selected projects are announced by September. The amount of funding set aside for HSIP projects in Texas in 2015 is \$155 million. TxDOT received applications for \$973 million for safety projects in 2013 and \$1.2 billion in 2014, so competition for these funds is strong. For projects located off-system, HSIP requires a 10% local match.

POTENTIAL KILLEEN HSIP PROJECTS

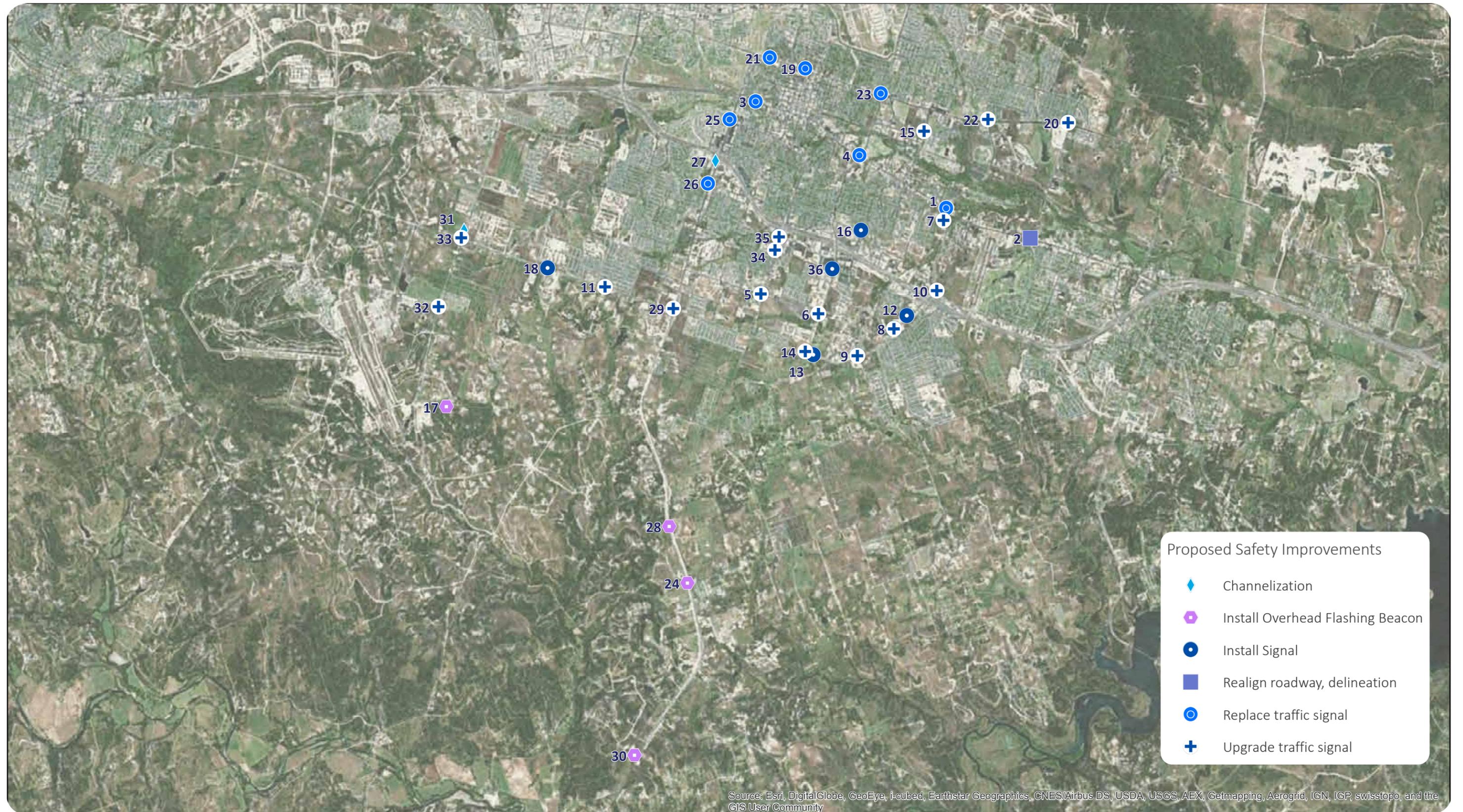
The following pages provide more details on the safety projects that are recommended for consideration by the City of Killeen for HSIP funding.

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Safety Projects

ID	Description of Project	Street 1	Street 2	Type of Work 1	Type of Work 2
1	Replace traffic signal	Business Highway 190	FM 2410		
2	Realign roadway, delineation	Business Highway 190	Roy Reynolds Drive	Upgrade traffic signal	Change to FYA and upgrade/add ped
3	Replace traffic signal	Business Highway 190	South Gilmer Street		
4	Replace traffic signal	Business Highway 190	WS Young Drive		
5	Upgrade traffic signal	Elms Road	West Trimmier Road	Change to FYA* and upgrade/add peds**	Replace all & add signal heads (w/back)
6	Upgrade traffic signal	Elms Road	WS Young Drive	Change to FYA and upgrade/add peds	Add signal heads
7	Upgrade traffic signal	FM 2410	Zephyr Road	Change to FYA and upgrade/add peds	Add signal heads
8	Upgrade traffic signal	FM 3470 (Stan Schlueter Loop)	Chantz Drive	Change to FYA, add RADDs*** and peds	Add signal heads
9	Upgrade traffic signal	FM 3470 (Stan Schlueter Loop)	Cunningham Road	Change to FYA, add RADDs	Add signal heads
10	Upgrade traffic signal	FM 3470 (Stan Schlueter Loop)	FM 2410	Change to FYA and upgrade/add peds	Add signal heads
11	Upgrade traffic signal	FM 3470 (Stan Schlueter Loop)	Littlerock Drive	Change to FYA and upgrade/add peds	Add signal heads
12	Install Signal	FM 3470 (Stan Schlueter Loop)	Mesa Drive		
13	Install Signal	FM 3470 (Stan Schlueter Loop)	Onion Road		
14	Upgrade traffic signal	FM 3470 (Stan Schlueter Loop)	WS Young Drive	Change to FYA, add RADDs and peds	Add signal heads
15	Upgrade traffic signal	FM 439	Atkinson Avenue	Change to FYA and upgrade/add peds	Add signal heads
16	Install Signal	Illinois Avenue	Becker Drive		
17	Install Overhead Flashing Beacon	Ivy Mountain Road	SH 201	Modify vertical grades to improve sight distance	
18	Install Signal	Jake Spoon Road	FM 3470 (Stan Schlueter Loop)		
19	Replace traffic signal	Rancier Avenue	4th Street		
20	Upgrade traffic signal	Rancier Avenue	Roy Reynolds Drive	Change to FYA and upgrade/add peds	Add signal heads
21	Replace traffic signal	Rancier Avenue	North Gilmer Street		
22	Upgrade traffic signal	Rancier Avenue	Twin Creek Drive	Change to FYA, add RADDs and peds	Add signal heads
23	Replace traffic signal	Rancier Avenue	WS Young Drive		
24	Install Overhead Flashing Beacon	SH 195	Chaparral Road		
25	Replace traffic signal	SH 195	Hallmark		
26	Replace traffic signal	SH 195	Jasper Drive		
27	Channelization	SH 195	Pershing	No left turns onto SH 195 (Fort Hood St)	
28	Install Overhead Flashing Beacon	SH 195	Splawn Ranch Road		
29	Upgrade traffic signal	SH 195	FM 3470 (Stan Schlueter Loop)	Change to FYA and upgrade/add peds	Add signal heads
30	Install Overhead Flashing Beacon	SH 195	Walnut		
31	Channelization	SH 201	John David	Reduce number of turning movements	
32	Upgrade traffic signal	SH 201	Mohawk Drive	Add Advanced Warning End-Of-Green (AWEGS)	Add signal heads
33	Upgrade traffic signal	SH 201	FM 3470 (Stan Schlueter Loop)	Change to FYA and upgrade/add peds	Add signal heads
34	Upgrade traffic signal	Trimmier Road	Bacon Ranch Road	Change to FYA and upgrade/add peds	Add signal heads
35	Upgrade traffic signal	Trimmier Road	Lowes Boulevard	Change to FYA and upgrade/add peds	Add signal heads
36	Install Signal	WS Young Drive	Bacon Ranch Road		

* Flashing Yellow Arrow ** Pedestrian Facilities *** Radar Advance Detection Devices



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APPENDIX E

Fort Hood Projects

FORT HOOD PROJECTS

With more than 50,000 employees, Fort Hood is without question one of the most important drivers of economic activity in the City of Killeen. As such, maintaining access to and from Fort Hood has been a critical component of the Killeen Thoroughfare and Capital Improvement Plans. As Fort Hood continues to grow (and the City along with it), several projects will need to be developed to ensure that the City's transportation system can adequately meet the demands of soldiers and civilian employees alike. The following projects that were ranked in the CIP would have a direct benefit for mobility to and from Fort Hood:

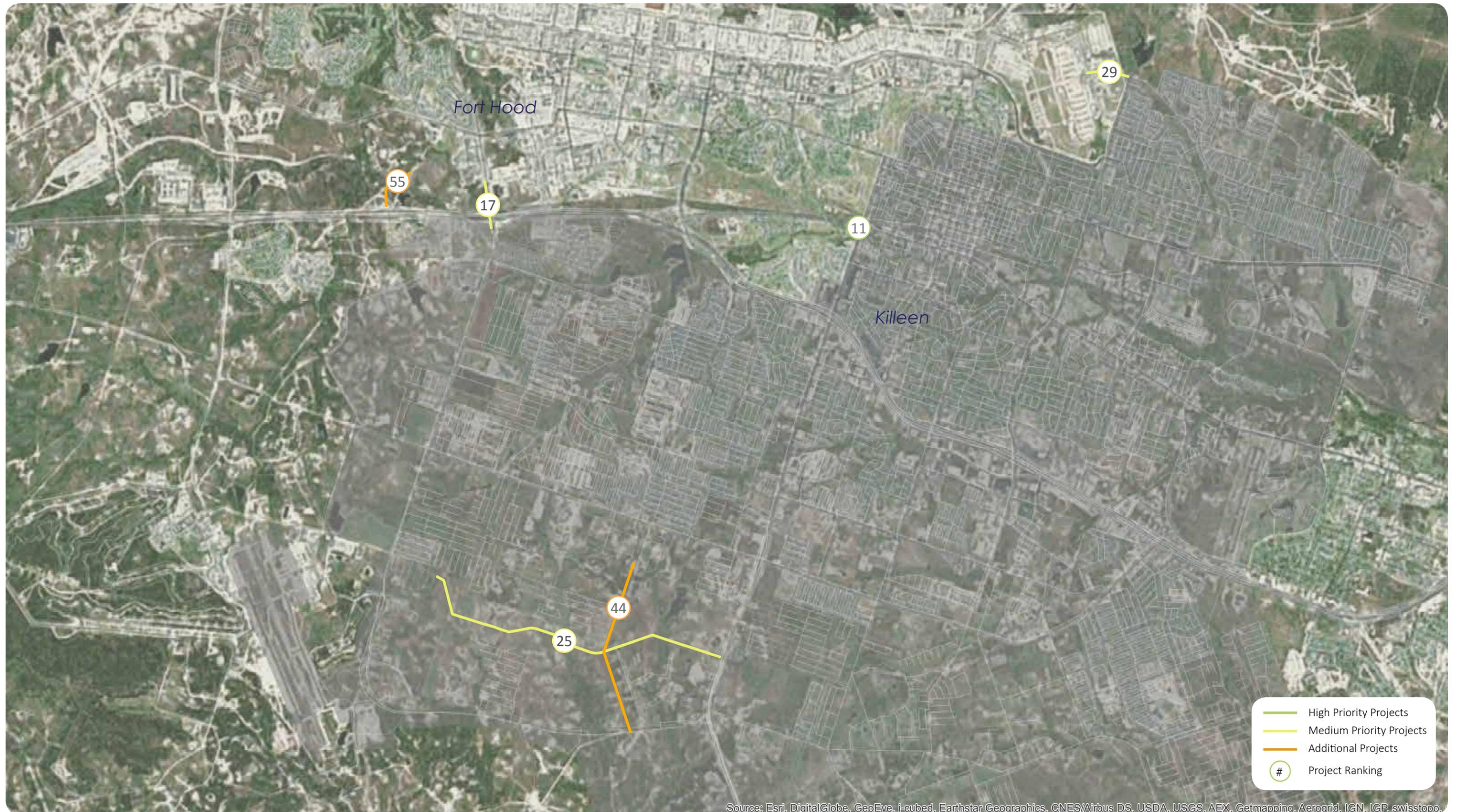
- Clear Creek/Main Gate Interchanges;
- Bell Tower Drive (New access to Fort Hood);
- S.H. 195 Overpass at Business Highway 190 (including bridge over BNSF Railroad);
- Mohawk Drive – From S.H. 201 to S.H. 195;
- Westcliff Road (New access to Fort Hood); and
- Maxdale Road – Mohawk Drive to Reese Creek Road.



Table of Projects

Rank	Name	Limits From	Limits To	Roadway Before Project	Roadway After Project
11	S.H. 195 Overpass	Business Highway 190	BNSF Railroad	4 lanes	Construct overpass over Business Highway 190 and the BNSF Railroad
17	Clear Creek/ Main Gate Interchange	Clear Creek Road	Main Gate, Fort Hood	None	Construct interchanges at Clear Creek Road and Fort Hood Main Gate
25	Mohawk Drive	S.H. 201	S.H. 195	None	4 lanes & center turn lane
29	Westcliff Road	Westcliff Road	Fort Hood	None	4 lanes & center turn lane
44	Future N/S Collector	John Helen Drive	S.H. 201	None	4 lanes
55	Bell Tower Drive	Bell Tower Drive	U.S. Hwy 190	None	2 lanes & median

Because of the interconnected nature of Fort Hood's future growth planning and the City's transportation needs, Fort Hood officials and City staff will continue to work closely to adjust and refine transportation projects (both in the Thoroughfare Plan and the Capital Improvement Plan) when necessary. Maintaining a strong working relationship will ensure that both entities can grow harmoniously well into the future.



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APPENDIX F

Planning and Engineering Studies

STUDIES

The CIP recommends projects for which planning has already occurred and that are largely ready for detailed design and construction. However, due to the diverse needs of Killeen's road network and its rapid growth, this section outlines projects for which detailed planning has not been undertaken but which may still be beneficial to explore using a small portion of CIP funding. These studies would identify the appropriate improvements to make to specific facilities, make recommendations about project prioritization, and define timelines for implementation.

FEDERAL PLANNING FUNDS

While the majority of funding set aside for planning studies in the CIP will come from the City, federal planning funds administered by the Killeen-Temple Metropolitan Planning Organization (KTMPPO) may be available for some or all of the studies included in this section. Planning funds are dedicated in accordance with the MPO's Unified Planning Work Program (UPWP), which describes, schedules, and budgets for specific planning tasks to be accomplished in the current and upcoming fiscal year.

LIST OF STUDIES

The following studies are recommended for funding as part of the CIP:

- Fort Hood Access Study
- Killeen Transit Center/Park-and-ride Study
- Rancier Avenue Corridor Study
- Clear Creek/SH 201 Corridor Study
- Commercial Corridor Access Study
- S.H. 195 South Corridor Study
- One-Way Street Conversion Study
- Killeen- Fort Hood Joint Land Use Study

The following pages provide sample scopes of work to give a sense of the kind of analysis that will take place for each study. The amount of funds needed for each individual study will depend on the details of the scope and the availability of funding partners but in the aggregate the CIP calls for allocating \$500,000 for the collective list of studies.

Fort Hood Access

Regional Study

Limits: City of Killeen and Fort Hood

Objective

As the economic engine of the Killeen area, Fort Hood generates unique transportation demands on the City of Killeen. This study would evaluate Fort Hood-specific travel demand on the Killeen roadway network, identify deficiencies resulting from Fort Hood traffic, and propose potential improvements to mitigate identified deficiencies. The study would take into account future growth planned at Fort Hood, as well as exploring different scenarios that may affect Fort Hood traffic.

Context Map



Study Scope

Phase 1: Traffic data collection

- AM and PM turning movement counts at intersections that access Fort Hood
- 24 hour bi-directional traffic counts at locations along routes to Fort Hood gates
- Geometric and Traffic Control Inventory

Phase 2: Traffic impact analysis

- Existing conditions - Evaluate AM and PM peak Level of Service (LOS) at all intersections where traffic counts are performed (peak periods shall coincide with Fort Hood shift changes)
- Future conditions
 - Estimate future traffic at the study intersections
 - Perform intersection analyses under future conditions for study intersections
 - Analyze operational results to determine impacts of any future Fort Hood projects and accompanying traffic on surrounding study area roadways.
 - Identify geometric and/or operational improvements which would be required in order to accommodate project generated traffic
 - Determine probable cost of anticipated improvements
 - Assess the impact of various scenarios that could impact Fort Hood traffic access
 - Fort Hood realignment/downsizing
 - Changes in shift schedules
 - Other (in consultation with Fort Hood officials and City of Killeen)
 - Develop recommendations for infrastructure needs

Phase 3: Traffic Access Report

- Prepare draft Fort Hood Traffic Access Report presenting the findings from the study
- Address review comments and prepare final Fort Hood Traffic Access Report

Phase 4: Meetings/administration

- Kickoff meeting with City and Fort Hood staff to finalize contract details, schedule, and list of deliverables
- Up to three progress meetings with City and Fort Hood staff to review status of work
- Public involvement as needed
- Stakeholder meeting(s) as needed

New Killeen Transit Center

Regional Study
Limits: City of Killeen

Objective

Transit centers that provide a location for transferring between various transportation modes, as well as a from one public transit bus to another, can serve to enhance the quality of public transit and urban transportation programs in general. A transit center can provide a variety of amenities, some of which extend beyond public transportation. Examples of amenities include retail and office space, open spaces or parks, park and ride facilities, and multi-modal transportation access. This study would explore the appropriateness of such a transit center, and explore the suitability of various sites and designs.

Context Map



Study Scope

Phase 1: Background and Existing Conditions

- Review transportation plans and programs, such as thoroughfare plans, transit routes and programs, and area revitalization programs.
- Inventory area transit modes, including taxi services, public transit systems, inter-city bus services, shuttle services, airport connectivity programs, and other multi-modal transportation services.
- Inventory land use and existing and planned pedestrian/ bicycle facilities.
- Review existing transit ridership data and available forecasts. Collect additional data as necessary.

Phase 2: Site Investigation/ Evaluation

- Use a GIS process to identify a general geographical area to focus the study's attention using socio-economic and transit-related geographic parameters including but not limited to population density, location of Killeen destination, location of employers, and location of low to moderate income individuals.
- Conduct parcel level suitability analysis within the selected geographical area, keeping in mind size constraints, development constraints, impact on transit route structure, and opportunities for synergy with existing or potential land use and ridership patterns.
- Select sites for further review based on site visits and a more subjective analysis by representatives from the Hill Country Transit District, City of Killeen Planning and Development services department, and other stakeholders.
- Develop criteria/ measures of effectiveness to use in evaluating each of the potential sites, such as
 - Safety and security
 - ADA accessibility
 - Surrounding existing land use
 - Future land use
 - Environmental impacts
 - Public utility requirements
 - Need for additional traffic control
 - Need for site grading
 - Relationship to existing system/ ridership
- Select three sites for conceptual planning and cost analysis

Phase 3: Conceptual Plans

- Develop design criteria in cooperation with the transit agency, City of Killeen Planning and Development Services Department, and other stakeholders. Consider:
 - Inclusion of retail space
 - Potential for diverse commercial use
 - Public amenities such as waiting areas, rooms with lighting and HVAC, space for transit personnel to provide information, lockers, bicycle storage, and the sale of fare media
 - Technical amenities such as locations for charging personal phones or computer equipment, internet access, etc.
 - Public restrooms
 - Code compliance
 - Aesthetics and visual appeal
 - Sightlines, way-finding, pedestrian-friendly sidewalks and access, use of public spaces, and use of natural features and foliage
 - Parking
- Cost Analysis
 - Develop construction and maintenance costs associated with each site
 - Consider economic impacts to the surrounding area
 - Financing options

Phase 4: Final Report

- Prepare a final Project Report. Present the draft report to City Council. After final acceptance of the report by the City, present findings to agencies as desired by the City.

Rancier Avenue

Corridor Study

Limits: Fort Hood to Killeen City Limit

Objective

The objective of this study is to identify existing deficiencies and opportunities for improvement along the Rancier Avenue corridor from Fort Hood to the Killeen city limits. The corridor currently experiences congestion caused by a variety of factors including poorly timed traffic lights and heavy traffic accessing Fort Hood. The results of the study will include alternatives which will improve mobility and safety.

Context Map



Study Scope

Phase 1: Pre-Study

- **Data Collection:** Develop and execute a Data Collection Plan, which will include (at a minimum) traffic volumes, turning movements, collision history, roadway geometric characteristics (number of lanes, lane widths, ROW width, etc.), traffic control characteristics (signals and signage), as well as inventory land use, traffic generators, transit and pedestrian facilities.
- **Study Area Definition, Characteristics, and Influence Delineation:** Identify current and planned infrastructure and development projects in the project area that may impact traffic on the corridor. This data will be populated into a GIS mapping tool and submitted to the City for review. Results of this mapping will be used to refine study methodology, goals and objectives.

Phase 2: Existing Conditions

- **Analyze Current Conditions:** Evaluate current traffic operations to confirm known operational and capacity deficiencies within each roadway segment and at major and minor intersections. Analyze crash data, signal timing and interconnectivity, vehicle mix on the corridor, and special generator impact on operations. Identify access management issues within the corridor, such as driveway spacing density and document their impact on operations. Identify issues with pedestrian, bicycle, and transit usage along the corridor.
- **Define Impacts:** Results of the existing conditions analysis will be reviewed, and the adverse impacts of the operational deficiencies will be qualitatively assessed to define impacts of congestion on residents, the environment, the economy, and commerce.
- **Technical Memorandum:** A Technical Memorandum will be prepared that defines key findings of this study phase. This Memorandum will be submitted to the City for review and approval.

Phase 3: Future Conditions

- **Identify Corridor Growth:** Determine anticipated traffic growth in the study area, as well as already-planned infrastructure changes that will impact the corridor (including roadway, transit, pedestrian and bicycle). This data will be presented to the City in tabular and GIS mapping format.
- **Determine Deficits and Alternatives:** Analyzing the data and projections, define any additional anticipated system deficiencies in the future analysis year caused by the project corridor growth.

Phase 4: Analysis and Recommendations

- **Analyze Traffic Findings:** Identify deficiencies for the corridor. These will be ranked by severity and a prioritized list of corridor needs will be developed.
- **Develop Alternatives:** Develop alternative solutions to mitigate identified deficiencies. Alternatives will be defined based on anticipated traffic impact, project cost estimate, implementation time frame and identification of responsible agency. Each alternative will be reviewed against project goals to ensure conformance. Each developed alternative will include implementation constraints. Developed alternatives will be clearly depicted in graphical and tabular exhibits sufficient to clearly explain to the City the intent of the proposed improvements.
- **Review Alternatives with Stakeholders and Public:** After City review and comment on proposed improvements, discuss proposed improvements with agencies, identified stakeholders, and if desired present to the public. Feedback from such efforts will be summarized for the City, and any desired changes incorporated.
- **Prepare Implementation Plan:** Upon City acceptance of proposed alternatives, develop a short, medium and long term corridor implementation plan, to include scope of improvements, cost of improvements, timing and potential funding sources.

Phase 5: Report Production

- **Prepare Final Project Report:** Prepare a final Project Report. Present draft report to City staff. After final acceptance of the report by the City, present findings to agencies as desired by the City.

Clear Creek Road/S.H. 201

Corridor/Access Management Study

Limits: Fort Hood to Stan Schlueter Loop (F.M. 3470)

Objective

The objective of this study is to determine existing deficiencies and identify opportunities for operational improvements along the Clear Creek Road (S.H. 201) corridor from Fort Hood to Stan Schlueter Loop (F.M. 3470). The corridor currently experiences congestion caused by a variety of factors including poorly timed traffic lights and heavy traffic accessing Fort Hood. This study includes collection of traffic data, signal timing, land use, and driveway density; analysis of data; development of mobility solutions; and presentation of findings/recommendations.

Context Map



Study Scope

Phase 1: Pre-Study

- *Data Collection:* Develop and execute a Data Collection Plan, which will include (at a minimum) traffic volumes, turning movements, collision history, roadway geometric characteristics (number of lanes, lane widths, ROW width, etc.), traffic control characteristics (signals and signage), as well as inventory land use, traffic generators, transit and pedestrian facilities.
- *Study Area Definition, Characteristics, and Influence Delineation:* Identify current and planned infrastructure and development projects in the project area that may impact traffic on the corridor. This data will be populated into a GIS mapping tool and submitted to the City for review. Results of this mapping will be used to refine study methodology, goals and objectives.

Phase 2: Existing Conditions

- *Analyze Current Conditions:* Evaluate current traffic operations to confirm known operational and capacity deficiencies within each roadway segment and at major and minor intersections. Analyze crash data, signal timing and interconnectivity, vehicle mix on the corridor, and special generator impact on operations. Identify access management issues within the corridor, such as driveway spacing density and document their impact on operations. Identify issues with pedestrian, bicycle, and transit usage along the corridor.
- *Define Impacts:* Results of the existing conditions analysis will be reviewed, and the adverse impacts of the operational deficiencies will be qualitatively assessed to define impacts of congestion on residents, the environment, the economy, and commerce.

Phase 3: Future Conditions

- *Identify Corridor Growth:* Determine anticipated traffic growth in the study area, as well as already-planned infrastructure changes that will impact the corridor (including roadway, transit, pedestrian and bicycle). This data will be presented to the City in tabular and GIS mapping format.
- *Determine Deficits and Alternatives:* Analyzing the data and projections, define any additional anticipated system deficiencies in the future analysis year caused by project corridor growth.

Phase 4: Analysis and Recommendations

- *Analyze Traffic Findings:* Identify deficiencies for the corridor. These will be ranked by severity and a prioritized list of corridor needs will be developed.
- *Develop Alternatives:* Develop alternative solutions to mitigate identified deficiencies. Alternatives will be defined based on anticipated traffic impact, project cost estimate, implementation time frame and identification of responsible agency. Each alternative will be reviewed against project goals to ensure conformance. Each developed alternative will include implementation constraints. Developed alternatives will be clearly depicted in graphical and tabular exhibits sufficient to clearly explain to the City the intent of the proposed improvements. Anticipated improvements include, but are not limited to:
 - driveway consolidation
 - raised medians
 - acceleration lanes
 - addition of thru lanes, turn bays/turn lanes
 - TSM improvements
 - access management
 - pedestrian, bike, transit improvements, and
 - signal additions/modifications/interconnection
- *Review Alternatives with Stakeholders and Public:* After City review and comment on proposed improvements, discuss proposed improvements with agencies, identified stakeholders, and if desired present to the public. Feedback from such efforts will be summarized for the City, and any desired changes incorporated.
- *Prepare Implementation Plan:* Upon City acceptance of proposed alternatives, develop a short, medium and long term corridor implementation plan, to include scope of improvements, cost of improvements, timing and potential funding sources.

Phase 5: Report Production

- *Prepare Final Project Report:* Prepare a final Project Report. Present draft report to City Council. After final acceptance of the report by the City, present findings to agencies as desired by the City.

Commercial Corridor Access

Corridor/Access Management Study

Limits: See also map below

- Trimmier Road: Jasper Dr (N) to Elms Rd (S)
- W.S. Young Drive: Illinois Ave (N) to Bacon Ranch (S)
- Lowe's Blvd: Trimmier Rd (W) to W.S. Young Dr (E)
- Bacon Ranch Rd: Trimmier Rd (W) to W.S. Young (E)

Objective

The purpose of this study is to determine existing deficiencies and identify potential operational improvements which could be implemented to enhance access to the commercial core located along Central Texas Expressway (U.S. Hwy 190) between Trimmier Road and W.S. Young Drive.

Context Map



Study Scope

Phase 1: Pre-Study

- *Data Collection:* Develop and execute a Data Collection Plan, which will include (at a minimum) traffic volumes, turning movements, collision history, roadway geometric characteristics (number of lanes, lane widths, ROW width, etc.), traffic control characteristics (signals and signage), as well as inventory land use, traffic generators, transit and pedestrian facilities.
- *Study Area Definition, Characteristics, and Influence Delineation:* Identify current and planned infrastructure and development projects in the project area that may impact traffic on the corridor. This data will be populated into a GIS mapping tool and submitted to the City for review. Results of this mapping will be used to refine study methodology, goals and objectives.

Phase 2: Existing Conditions

- *Analyze Current Conditions:* Evaluate current traffic operations to confirm known operational and capacity deficiencies within each roadway segment and at major and minor intersections. Analyze crash data, signal timing and interconnectivity, vehicle mix on the corridor, and special generator impact on operations. Identify access management issues within the corridor, such as driveway spacing density and document their impact on operations. Identify issues with pedestrian, bicycle, and transit usage along the corridor.
- *Define Impacts:* Results of the existing conditions analysis will be reviewed, and the adverse impacts of the operational deficiencies will be qualitatively assessed to define impacts of congestion on residents, the environment, the economy, and commerce.

Phase 3: Future Projections

- *Identify Corridor Growth:* Determine anticipated traffic growth in the study area, as well as already-planned infrastructure changes that will impact the corridor (including roadway, transit, pedestrian and bicycle). This data will be presented to the City in tabular and GIS mapping format.
- *Determine Deficits and Alternatives:* Analyzing the data and projections, define any additional anticipated system deficiencies in the future analysis year caused by the project corridor growth.

Phase 4: Analysis and Recommendations

- *Analyze Traffic Findings:* Identify deficiencies for the corridor. These will be ranked by severity and a prioritized list of corridor needs will be developed.
- *Develop Alternatives:* Develop alternative solutions to mitigate identified deficiencies. Alternatives will be defined based on anticipated traffic impact, project cost estimate, implementation time frame and identification of responsible agency. Each alternative will be reviewed against project goals to ensure conformance. Each developed alternative will include implementation constraints. Developed alternatives will be clearly depicted in graphical and tabular exhibits sufficient to clearly explain to the City the intent of the proposed improvements.
- *Review Alternatives with Stakeholders and Public:* After City review and comment on proposed improvements, discuss proposed improvements with agencies, identified stakeholders, and if desired, present to the public. Feedback from such efforts will be summarized for the City, and any desired changes incorporated.
- *Prepare Implementation Plan:* Upon City acceptance of proposed alternatives, develop a short, medium and long term corridor implementation plan, to include scope of improvements, cost of improvements, timing and potential funding sources.

Phase 5: Report Production

- *Prepare Final Project Report:* Prepare a final Project Report. Present draft report to City Council. After final acceptance of the report by the City, present findings to agencies as desired by the City.

S.H. 195 South

Corridor Study

Limits: Clear Creek Drive (S.H. 201) to F.M. 2484

Objective

The objective of this study is to identify design and operational improvements, including access management solutions, to respond to anticipated future traffic demand due to regional growth along the S.H. 195 corridor from Clear Creek Road (S.H. 201) to F.M. 2484. This study includes collection of traffic data, evaluation of intersection spacing and sight distances, land use, and driveway density; analysis of data; development of design and/ or mobility solutions; and presentation of findings/recommendations.

Context Map



Study Scope

Phase 1: Pre-Study

- *Data Collection:* Develop and execute a Data Collection Plan, which will include (at a minimum) traffic volumes, turning movements, collision history, roadway geometric characteristics (number of lanes, lane widths, ROW width, etc.), traffic control characteristics (signals and signage), as well as inventory land use, traffic generators, transit and pedestrian facilities.
- *Study Area Definition, Characteristics, and Influence Delineation:* Identify current and planned infrastructure and development projects in the project area that may impact traffic on the corridor. This data will be populated into a GIS mapping tool and submitted to the City for review. Results of this mapping will be used to refine study methodology, goals and objectives.

Phase 2: Existing Conditions

- *Analyze Current Conditions:* Evaluate current traffic operations to confirm known operational and capacity deficiencies within each roadway segment and at major and minor intersections. Analyze crash data, signal timing and interconnectivity, vehicle mix on the corridor, and special generator impact on operations. Identify access management issues within the corridor, such as driveway spacing density and document their impact on operations. Identify issues with pedestrian, bicycle, and transit usage along the corridor.
- *Define Impacts:* Results of the existing conditions analysis will be reviewed, and the adverse impacts of the operational deficiencies will be qualitatively assessed to define impacts of congestion on residents, the environment, the economy, and commerce.

Phase 3: Future Conditions

- *Identify Corridor Growth:* Determine anticipated traffic growth in the study area, as well as already-planned infrastructure changes that will impact the corridor (including roadway, transit, pedestrian and bicycle). This data will be presented to the City in tabular and GIS mapping format.
- *Determine Deficits and Alternatives:* Analyzing the data and projections, define any additional anticipated system deficiencies in the future analysis year caused by the project corridor growth.

Phase 4: Analysis and Recommendations

- *Analyze Traffic Findings:* Identify deficiencies for the corridor. These will be ranked by severity and a prioritized list of corridor needs will be developed.
- *Develop Alternatives:* Develop alternative solutions to mitigate identified deficiencies. Alternatives will be defined based on anticipated traffic impact, project cost estimate, implementation time frame and identification of responsible agency. Each alternative will be reviewed against project goals to ensure conformance. Each developed alternative will include implementation constraints. Developed alternatives will be clearly depicted in graphical and tabular exhibits sufficient to clearly explain to the City the intent of the proposed improvements. Anticipated improvements include, but are not limited to:

- driveway consolidation
- raised medians
- acceleration lanes
- addition of thru lanes, turn bays/turn lanes
- TSM improvements
- access management
- pedestrian, bike, transit improvements
- signal additions/modifications/interconnection, and/ or
- grade separations

- *Review Alternatives with Stakeholders and Public:* After City review and comment on proposed improvements, discuss proposed improvements with agencies, identified stakeholders, and if desired present to the public. Feedback from such efforts will be summarized for the City, and any desired changes incorporated.
- *Prepare Implementation Plan:* Upon City acceptance of proposed alternatives, develop a short, medium and long term corridor implementation plan, to include scope of improvements, cost of improvements, timing and potential funding sources.

Phase 5: Report Production

- *Prepare Final Project Report:* Prepare a final Project Report. Present draft report to City Council. After final acceptance of the report by the City, present findings to agencies as desired by the City.

One-Way Street Conversion

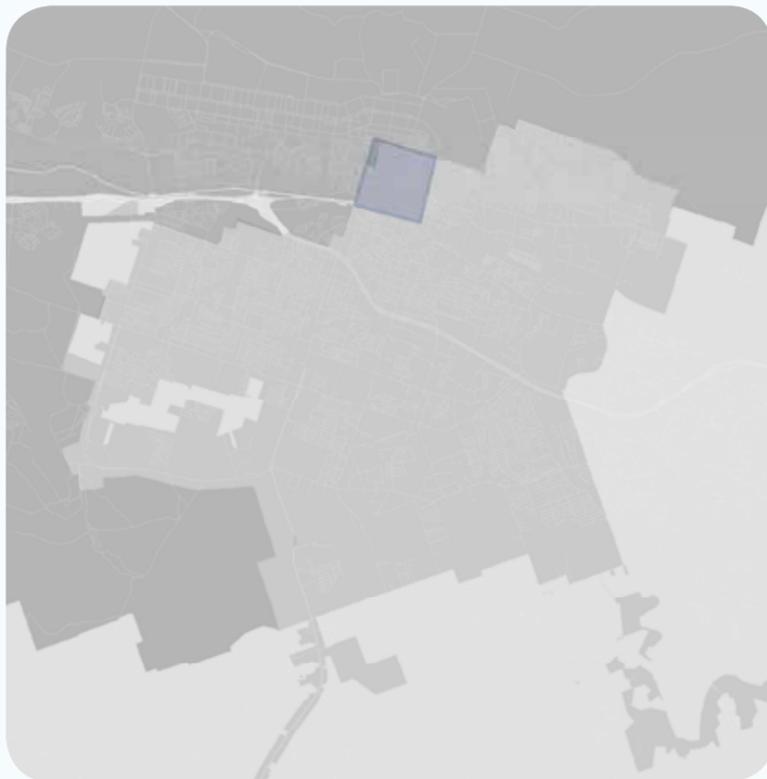
Corridor Study

Limits: Downtown Killeen

Objective

The objective of this study is to explore the feasibility of converting some downtown streets from two-way operation (current) to one-way operation. The study would identify which streets are candidates for conversion, analyze the impacts on the transportation network and local economy that would result from those conversions, and make recommendations for conversions that would have a positive impact on the transportation network and economic vitality.

Context Map



Study Scope

Phase 1: Pre-Study

- *Data Collection:* Develop and execute a Data Collection Plan, which will include (at a minimum) traffic volumes, turning movements, collision history, roadway geometric characteristics (number of lanes, lane widths, ROW width, etc.), traffic control characteristics (signals and signage), as well as inventory land use, traffic generators, transit and pedestrian facilities.
- *Study Area Definition, Characteristics, and Influence Delineation:* Identify current and planned infrastructure and development projects in the project area that may impact traffic flow and orientation. This data will be populated into a GIS mapping tool and submitted to the City for review. Results of this mapping will be used to refine study methodology, goals and objectives.

Phase 2: Existing Conditions

- *Analyze Current Conditions:* Evaluate current traffic operations to confirm known operational and capacity deficiencies within each roadway segment and at major and minor intersections. Analyze crash data, signal timing and interconnectivity, vehicle mix in the study area, and any special generators within the study area. Identify access management issues within the study area, such as driveway spacing density and document their impact on operations. Identify issues with pedestrian, bicycle, and transit usage within the study area.
- *Define Impacts:* Results of the existing conditions analysis will be reviewed, and the adverse impacts of the operational deficiencies will be qualitatively assessed to define impacts of congestion on residents, the environment, the economy, and commerce.
- *Technical Memorandum:* A Technical Memorandum will be prepared that defines key findings of this study phase. This Memorandum will be submitted to the City for review and approval.

Phase 3: Analysis and Recommendations

- *Identify Corridor Growth:* Determine anticipated traffic growth in the study area, as well as already-planned infrastructure changes that will impact the study area (including roadway, transit, pedestrian and bicycle).
- *Evaluate Alternatives:* Assess the impact of converting streets from two-way to one-way operation. This evaluation could include all streets within the downtown, or portions of streets. The evaluation will consider access impacts and travel time impacts due to conversion to one-way operation, as well as estimated safety benefits due to reduced vehicular conflicts. The breadth of the potential conversions will be clearly depicted in graphical and tabular exhibits sufficient to clearly explain to the City the intent of the proposed improvements.

- *Review Alternatives with Stakeholders and Public:* After City review and comment on proposed improvements, the CONTRACTOR will discuss proposed improvements with agencies, identified stakeholders, and present to the public. Feedback from such efforts will be summarized for the City, and any desired changes incorporated.
- *Prepare Implementation Plan:* Upon City acceptance of proposed alternatives, develop an implementation plan, to include scope of improvements, cost of improvements, timing and potential funding sources.

Phase 5: Report Production

- *Prepare Final Project Report:* Prepare a final Project Report. Present draft report to City Council. After final acceptance of the report by the City, present findings to agencies as desired by the City.

Killeen - Fort Hood Joint Use Study (JLUS)

Regional Land Use Study

Limits: Fort Hood and City of Killeen

Objective

The objective of this study is to create a collective regional dialogue on balancing Fort Hood’s military operational demands with the communities’ land use plans, economic development, and infrastructure needs. Fort Hood has never participated in the JLUS program. Meanwhile, the Killeen-Temple Metropolitan Area has experienced a 14% population growth in the past five years, resulting in new commercial and residential development as well as new road construction adjacent to the base. In addition to Killeen, the communities of Copperas Cove, Harker Heights, and Gatesville will be invited to participate in the JLUS program.

Context Map



Study Scope

At the time of this document’s approval, the Department of the Army has nominated Fort Hood for participation in the 2015 JLUS program. The study scope will be refined over time, but the Office of Economic Adjustment does provide an illustrative study outline that Killeen and other municipal participants can use as a basis for ensuring the study design addresses all elements of the JLUS program. The illustrative outline is presented below.

1. Study Purpose
 - a. Problem/Issues Statement
 - b. Study Goals (e.g., protection of public health, safety, and welfare, and sustainability of military mission)
 - c. Objective and Expectations of Participants
 - i. Military
 - ii. Jurisdictions (cities, counties, States)
 - iii. Other interests (e.g., development, conservation, natural resource protection)
 2. Organization
 - a. Planning Area, Participating Agencies, and Jurisdictions
 - b. Organizational Structure (include chart)
 - i. Sponsor
 - ii. Policy Committee
 - iii. Working group
 - iv. Others as applicable
 - c. Organizational Roles & Responsibilities
 - d. Public Participation
 - i. Advisory group(s)
 - ii. Public forums, meetings, workshops, hearings
 - iii. JLUS Program Brochure
 - iv. Newsletter
 - v. Media relations, press packets, news releases
 3. Background Information
 - a. Chronology of Events Leading Up to a JLUS
 - b. Economic Impacts of the Installation on the Region
 - c. Current Community & Regional Plans/Studies – Relationship to the JLUS
 - d. Current AICUZ/ONMP/RAICUZ & Base Master Plan – Relationship to the JLUS
 - e. Land Stewardship Agreements (e.g., endangered species, environmentally sensitive areas)
 4. Technical Information
 - a. Planning Area Profile
 - i. Existing land use
 - ii. Water, sewer, gas utilities
 - iii. Existing development controls (zoning, building codes, height restrictions, easements, moratoriums, conservation/preservation)
 - iv. Projections (population by age, employment by SIC code, land use by category, traffic [highway & air], utility extensions)
 - b. Military Missions
 - i. Current or projected
 - ii. Reasonable full use scenario
 - c. Military Operations & Impacts on Community
 - i. Economic impact on adjacent communities
 - ii. Environmental & safety impacts (AICUZ/ONMP/RAICUZ): noise (aircraft, artillery, other); flight tracks; aircraft accident potential; height restrictions; traffic; off-base maneuvers; other (e.g., dust, smoke, light); natural habitat, conservation.
 - iii. Current measures to mitigate impacts
 - iv. Potential operational changes to mitigate impacts
 - d. Civilian Development Impacts on Mission Accomplished
 - i. Existing incompatible development, potential for incompatible development under existing controls & growth scenarios
 - ii. Transportation (highways & airports)
 - iii. Other (electromagnetic interference, light, dust, birds, wildlife, pollution)
 - iv. Development control enforcement record
 - e. State Legislation Permitting or Impeding Use of Development Controls
 - i. Areas of critical concern
 - ii. Land conservation/preservation program
 - iii. Real estate disclosure
 - iv. Special land use/zoning districts
 5. Recommendations
 - a. General Recommendations
 - i. Land uses
 - ii. Transportation improvements
 - iii. Community facilities, infrastructure, & services
 - iv. Intergovernmental planning coordination
 - v. Regulation
 - vi. State legislative actions required
 - b. Community Specific Recommendations
 - i. Land use & zoning
 - ii. Transportation
 - iii. Community facilities, infrastructure, & services
 - iv. Regulation (e.g., building codes, disclosure)
 - c. Installation Specific Recommendations
 - i. Operational patterns
 - ii. Mitigation measures
 6. Implementation strategies: What should be done, Who is responsible, and When
 7. Monitoring Plan
 - a. Responsibility for Monitoring Implementation Activities
 - b. Procedures for Follow-Up on Implementation Slippage
 8. Study Phasing (chart of graph)
 - a. Tasks, Milestones, Target Dates, & Responsibilities
 - b. Preliminary Schedule of Implementation activities
- Project Cost & Funding Sources (90% federal share, 10% local match required)

Source: United States Department of Defense – Office of Economic Adjustment, “Joint Land Use Study Program Guidance Manual,” November 2006

APPENDIX G

Thoroughfare Development Manual

THOROUGHFARE DEVELOPMENT MANUAL

The purpose of the City's Thoroughfare Development Manual is to guide the expansion and enhancement of the local surface transportation network. The document details street development standards and defines required street features by functional classification. Street design criteria covered by the manual are consistent with the American Association of State Highway Transportation Officials (AASHTO) policy on the Geometric Design of Highways and Streets (more commonly known as the AASHTO Green Manual).

A supporting function of the City's Thoroughfare Development Manual is to guide access management decisions and discipline vehicular access to the surface transportation network through sound engineering practices that protect and enhance public health, safety, and welfare. These engineering practices are also rooted in guidelines established by AASHTO and serve as the benchmark for the City of Killeen's access management standards. Overall transportation planning is addressed in the City's adopted Thoroughfare Development Manual. As properties continue to develop throughout the City, emphasis will continue to be placed on the safe, efficient use of these transportation corridors for pedestrians, motorists, cyclists, and public transit vehicles.

The Thoroughfare Development Manual can be accessed on the City of Killeen's website at <http://www.killeentexas.gov/files/ThoroughfarePlanManual.pdf>.