



TECHNICAL ADVISORY COMMITTEE MEETING

Monday, April 22, 2019
University Park, Suite 300
3300 N. IH 35, Austin, Texas 78705
2:00 p.m.

AGENDA

1. Certification of Quorum – Quorum requirement is 13 members.....Chair Mike Hodge

ACTION:

2. [Approval of March 25, 2019 Meeting Summary](#)Mr. Ashby Johnson, CAMPO
Mr. Johnson will seek TAC approval of the March 25, 2019 meeting summary.
3. [A. Recommendation on Draft Regional Transportation Demand Management Plan](#)
.....Mr. Chad McKeown, Cambridge Systematics, Inc.
Mr. McKeown will provide a presentation for a recommendation to the Transportation Policy Board for approval of the Draft Regional Transportation Demand Management Plan.

[B. Recommendation on Proposed Transportation Demand Management Policy and Amendment of the 2040 Plan](#)Mr. Ashby Johnson, CAMPO
Mr. Johnson will initiate a discussion with the TAC for a potential recommendation to the Transportation Policy Board for approval of a proposed Transportation Demand Management Policy and Amendment of the 2040 Plan.

INFORMATION:

4. [Presentation of Draft 2020-2021 Unified Planning Work Program](#)
.....Ms. Theresa Hernandez, CAMPO
Ms. Hernandez will provide an overview of the Draft Unified Planning Work Program for fiscal years 2020-2021.
5. [Discussion on Spring Amendments Cycle and Requested Amendments](#)
.....Mr. Ryan Collins, CAMPO
Mr. Collins will facilitate a discussion on the Spring Amendments Cycle and requested amendments.
6. [Presentation of Luling Transportation Study](#)Mr. Nirav Ved, CAMPO
Mr. Ved will provide an overview of the Luling Transportation Study.
7. [Status Update on Project Connect](#) Mr. Joe Clemens, Capital Metro
Mr. Clemens will provide a status update on Capital Metro's Project Connect Transit Plan.

8. Report on Transportation Planning Activities
9. TAC Chair Announcements
 - Next TAC Meeting – May 20, 2019
10. Adjournment



**Capital Area Metropolitan Planning Organization
Technical Advisory Committee
Meeting Summary
March 25, 2019**

1. Certification of Quorum.....Mr. Ashby Johnson, CAMPO

The CAMPO Technical Advisory Committee was called to order by Mr. Ashby Johnson at 2:00 p.m.

A quorum was announced present.

Present:

	Member	Representing	Member Attending	Alternate Attending
1.	Stevie Greathouse	City of Austin	Y	
2.	Cole Kitten	City of Austin	N	Tien-Tien Chan
3.	Robert Spillar	City of Austin	Y	
4.	Tom Gdala	City of Cedar Park	Y	
5.	Ray Miller	City of Georgetown	Y	
6.	Trey Fletcher	City of Pflugerville	Y	
7.	Gary Hudder	City of Round Rock	Y	
8.	Laurie Moyer	City of San Marcos	Y	
9.	Julia Cleary	Bastrop County	Y	
10.	Amy Miller	Bastrop County (Smaller Cities)	N	Jerry Palady (via phone)
11.	Greg Haley	Burnet County	Y	
12.	Mike Hodge	Burnet County (Smaller Cities)	Y	
13.	BJ Westmoreland	Caldwell County	N	
14.	Dan Gibson	Caldwell County (Smaller Cities)	Y	(via phone)
15.	Jerry Borcharding	Hays County	Y	
16.	Howard Koontz	Hays County (Smaller Cities)	Y	

17.	Charlie Watts	Travis County	Y	(via phone)
18.	Amy Pattillo	Travis County (Smaller Cities)	Y	Alex Amponsah
19.	Bob Daigh	Williamson County	Y	
20.	Sally McFeron	Williamson County (Smaller Cities)	Y	Samuel Ray
21.	David Marsh	CARTS	N	Ed Collins
22.	Justin Word	CTRMA	Y	
23.	Todd Hemingson	Capital Metro	N	
24.	Marisabel Ramthun	TxDOT	N	Brandon Marshall

Other Participants Via Phone: Nina Guidice

2. Election of Officers for Chair and Vice Chair of the CAMPO Technical Advisory Committee
.....Mr. Ashby Johnson, CAMPO

Mr. Ashby Johnson reminded the Committee that the terms for the offices of Chair and Vice Chair are (1) year. Mr. Johnson informed the Committee that Vice Chair Amy Miller appointed a Nominating Committee which included Mr. Tom Gdala (City of Cedar Park), Mr. Gerald Pohlmeier (City of Round Rock), and Commissioner B.J. Westmoreland (Caldwell County) to develop recommendations for the offices of Chair and Vice Chair. The Nominating Committee met via conference call and recommended Mr. Mike Hodge (City of Marble Falls) for the office of Chair and Ms. Julia Cleary (Bastrop County) for the office of Vice Chair. Mr. Johnson later requested nominations from the floor. No nominations were presented from the floor.

Mr. Johnson later entertained a motion to approve by acclamation Mr. Mike Hodge for the office of Chair and Ms. Julia Cleary for the office of Vice Chairman.

Mr. Bob Daigh moved for approval.

Mr. Justin Word seconded the motion.

The motion prevailed unanimously.

Mr. Hodge continued as Chair and proceeded to the next order of business.

3. Approval of the February 25, 2019 Meeting SummaryChair Mike Hodge

Chair Hodge entertained a motion for approval of the February 25, 2019 meeting summary, as presented.

Mr. Ed Collins moved for approval.

Ms. Laurie Moyer seconded the motion.

The motion prevailed unanimously.

4. Presentation on Air Quality Status in CAMPO Region

.....**Mr. Walker Williamson & Ms. Jamie Zech, Texas Commission on Environmental Quality**

Mr. Walker Williamson, Section Manager of Air Quality Planning and Ms. Jamie Zech, Air Quality and Transportation Conformity for the Texas Commission on Environmental Quality (TCEQ) provided a detailed overview on Transportation Conformity and the air quality status in the CAMPO region.

Mr. Williamson discussed the National Ambient Air Quality Standards (NAAQS) and processes for the State Implementation Plan (SIP) requirements, designation and revised designations, and the MPO's role in a non-attainment designation status. Mr. Williamson highlighted the Austin area's ozone history, monitoring, and design values. Mr. Williamson noted that the Austin area is not in jeopardy of receiving a non-attainment status any time soon. Question and answer with comments followed.

Ms. Zech later informed the Committee that an area is required to demonstrate transportation conformity one (1) year after officially being designated non-attainment. Ms. Zech added that Transportation Conformity brings transportation planning agencies together with air quality agencies on a local, state and federal level. The goal of Transportation Conformity is to ensure that federal dollars spent on road planning do not negatively impact air quality in the area. Ms. Zech also discussed how Transportation Conformity impacts the Regional Transportation Plan (RTP), Transportation Improvement Program (TIP) and SIP.

5. Presentation on City of Austin's Draft Hazardous Materials Route

.....**Mr. Rob Spillar, City of Austin**

Mr. Rob Spillar, Director of Transportation for the City of Austin discussed the initial findings of the City of Austin's Regional Non-Radioactive Hazardous Materials Route Designation Study. Mr. Spillar defined a hazardous materials route as the transport of chemicals that could potentially pose environmental health risks through the communities by which they pass. Mr. Spillar noted that petrochemicals or non-radioactive materials are primarily being transported through the densest areas of our communities. Mr. Spillar added that the City of Austin is ready to move forward with a formal notification to cities within a 25-mile radius of the draft hazardous materials route. The City of Austin is still in a public input process for the draft hazardous materials route.

Mr. Jim Harvey, Vice President of Planning for the Alliance Transportation Group, Inc., identified and discussed the recommended hazardous materials routes and provided an overview of the next steps. Question and answer with comments followed.

6. Presentation on CAMPO Congestion Management Process

.....**Mr. Jeff Kaufman, Texas Transportation Institute**

Mr. Jeff Kaufman, Associate Research Scientist for the Texas Transportation Institute provided a brief overview of the CAMPO Congestion Management Process (CMP). Mr. Kaufman informed the Committee that MPOs are required by federal law to have a CMP.

Mr. Kaufman discussed congestion management approaches, key components, CMP Networks, performance and measurement. Mr. Kaufman also highlighted congestion management strategies and discussed the next steps in the CMP process. Question and answer with comments followed.

7. Status Update on Regional Arterials Plan and MoKan/Northeast Subregional Study

.....**Mr. Kelly Porter, CAMPO**

Mr. Kelly Porter, Regional Planning Manager provided a brief overview of the Regional Arterials Study (RAS) and MoKan/Northeast Subregional Study.

Mr. Porter informed the Committee that the RAS is a part of the Platinum Planning process and will serve as an update to Transportation Plans for Burnet, Bastrop, and Caldwell Counties. Mr. Porter reported that a Regional Arterials Steering Committee was formed to offer guidance and direction in the planning process. The Committee developed a vision and goals and objectives for the RAS which are included in the packet. Mr. Porter noted that CAMPO is in Phase 2 of the RAS planning process. Eight (8) Local Government meetings and public meetings were held in Phases 1 and 2. Mr. Porter later highlighted the Arterial Network in the region. A completed final draft of the RAS is anticipated for April was noted in conclusion of the update. Question and answer with comments followed.

Mr. Porter later reported that the MoKan/Northeast Subregional Study is a subcomponent of the RAS which focuses on the area bound by IH 35, SH 29, US 290 and SH 95. Mr. Porter informed the Committee that the MoKan Corridor is an abandoned railroad right-of-way from 51st Street to Georgetown which affords an opportunity to provide North and South connectivity. Staff has conducted several elected official briefings in the region, a bus tour, and other planning staff coordination. Mr. Porter also discussed the next steps for the MoKan/Northeast Subregional Study. A completed draft and final report are anticipated in May and June was noted in conclusion of the update.

8. Discussion on TDC Applications for FY 2018 Federal Transit Administration (FTA) 5310 Funding Awards

.....**Mr. Ryan Collins, CAMPO**

Mr. Ryan Collins, Short-Range Planning Manager provided an overview of the Transportation Development Credits (TDC) Program and highlighted key points. Mr. Collins reported that a total of two (2) applications were received for the FY 2018 FTA 5310 Project Call and provided an award and match breakdown for those applications. Mr. Ashby Johnson later discussed the next steps for the funding awards process. Question and answer with comments followed.

9. Report on Transportation Planning Activities

Mr. Ryan Collins also reported that the Spring Amendment Cycle opened on March 22, 2019 and closes on April 19, 2019. Mr. Collins also provided a timeline for the Spring Amendment Cycle.

Mr. Collins further reported that the deadline for preliminary applications for the TxDOT Project Call for Transportation Set Aside (TASA) and Safe Routes to School (SRTS) is April 12, 2019 at 5:00 p.m. Mr. Collins also provided a timeline for the TASA/SRTS Project Call and noted that Mr. Sean Linton, TASA/SRTS Coordinator is the contact for the Project Call. Question and answer with comments followed.

10. TAC Chair Announcements

Chair Hodge announced that the next TAC meeting is scheduled for April 22, 2019 at 2:00 p.m.

11. Adjournment

The March 25, 2019 meeting of the Technical Advisory Committee was adjourned at 4:18 p.m.



Date: April 22, 2019
Continued From: February 25, 2019
Action Requested: Recommendation

To: Technical Advisory Committee
From: Mr. Chad McKeown, Cambridge Systematics, Inc.
Agenda Item: 3A
Subject: Presentation on Regional Transportation Demand Management Plan

RECOMMENDATION

Staff seeks recommendation for adoption of the Draft Regional Transportation Demand Management Plan.

PURPOSE AND EXECUTIVE SUMMARY

This item provides a presentation to the Technical Advisory Committee (TAC) on the draft final Regional Transportation Demand Management (TDM) Plan. The plan provides TDM vision and goals for the region, recommendations on how to achieve those goals which includes establishing a TDM subcommittee within TAC, and a revised TDM Category selection criteria for the Transportation Improvement Program call for projects.

FINANCIAL IMPACT

Not applicable.

BACKGROUND AND DISCUSSION

Over the past decade, the CAMPO region has experienced significant growth and prosperity which has also resulted in further traffic congestion on the region's roadway system. Transportation Demand Management (TDM) is a collection of operational and behavior changing strategies designed to reduce automobile trips, roadway congestion and parking demand by redirecting travel towards alternate modes, times and routes.

In creating this plan, CAMPO convened a steering committee consisting of regional transportation stakeholders to define a unified vision, objectives and priorities for advancing TDM policies, projects and initiatives.

SUPPORTING DOCUMENTS

Attachment: Draft Regional Transportation Demand Management Plan

REGIONAL TRANSPORTATION DEMAND MANAGEMENT PLAN

Capital Area Metropolitan Planning
Organization (CAMPO)
Executive Brief

CAMPO

CAPITAL AREA METROPOLITAN
PLANNING ORGANIZATION

CENTRAL  TEXAS



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INTRODUCTION



The Capital Area Metropolitan Planning Organization (CAMPO) is the Metropolitan Planning Organization (MPO) for Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson Counties (“the region”). CAMPO is responsible for transportation planning efforts that improve the mobility of the region.

Over the past decade, the six county CAMPO region has experienced significant growth and prosperity, with thriving businesses, economic growth, and a growing population to match. This rapid growth has caused further traffic congestion on the region’s roadway system, compounding the impacts of roadway construction and diminishing the mobility, safety, and reliability for travelers in the region.

Transportation Demand Management (TDM) is a collection of strategies designed to reduce automobile trips, roadway congestion, and parking demand by redirecting travel towards alternative modes, times, and routes. TDM programs, plans, and policies address congestion, safety, mobility, and travel time reliability issues by considering operational strategies, implementing mobility solutions, and providing choices for travelers.

TDM programs often focus on strategies to reduce vehicle demand on roadways by increasing the use of modes other than driving. However, TDM programs can also involve changing commuter’s traveling behavior by improving attitudes toward transit, carpooling, biking, walking, and work routine schedules (e.g., telecommuting and flex scheduling). TDM programs range in

size, location, mode emphasis, and other variables based on the needs and infrastructure of a region; they encompass various initiatives along a spectrum, from operational strategies to traveler behavior shifts. TDM strategies for operational improvements, such as diamond lanes and transit vehicles running on shoulders, are important concepts when developing a regional TDM plan. Outreach is often integral to successful TDM programs, where public relations and educational campaigns can have an influential impact on how travelers approach their trips.

In creating this plan, CAMPO convened a TDM Steering Committee, consisting of regional transportation stakeholders, to define a unified vision, objectives, and priorities for advancing TDM policies, projects, and initiatives. The committee provided significant input and guidance in the creation of this plan to increase TDM policies and programs in the near term for the region.

Specifically, the TDM planning effort will:

- ▶ Encourage the implementation of TDM concepts within the CAMPO planning process by incorporating revised TDM project scoring criteria to support and promote TDM projects in the call for projects process;
- ▶ Promote a regional view that advances TDM practices throughout the CAMPO region for safer mobility, increased choice, and improved system reliability by defining a vision and goals for the region;
- ▶ Establish a TDM Subcommittee within CAMPO's Technical Advisory Committee to advance TDM in the region across the full spectrum of applications and processes; and
- ▶ Support the CAMPO 2045 planning effort with actionable steps to advance TDM in the region.

This TDM plan will guide the region in its TDM work over the next five years. It formalizes a subcommittee within CAMPO's Technical Advisory Committee dedicated and focused on

CAMPO TDM Steering Committee

Movability (TMA)

City of Austin (also represents program Smart Trips Austin)

Capital Area Council of Governments (also represents provider myCommuteSolutions)

Travis County

Texas Department of Transportation

Bastrop County

Capital Metropolitan Transportation Authority (Office of Mobility)

City of San Marcos

Central Texas Regional Mobility Authority

congestion, mobility, safety, and reliability issues. The committee is tasked with incorporating TDM practices within their agencies, supporting outreach to the region's employers to encourage and partner on commuter-based programs, and working together on TDM solutions that will directly impact peak hour travel, mode choice, and enhanced mobility.

PART I

CAMPO REGION'S TRANSPORTATION DEMAND MANAGEMENT PRIORITIES



The Federal Highway Administration (FHWA) provided a workshop in August 2018, which was hosted by CAMPO and attended by regional planning partners, transportation professionals, and TDM stakeholders. The workshop provided an overview of contemporary approaches for influencing travel behavior and planning for demand management. Attendees participated in a self-assessment exercise to review existing TDM strategies and capabilities in the region and identify steps and actions to elevate the TDM capabilities in the region. Overall, participants noted a lack of consistency between TDM strategies, goals, and metrics throughout the region. Breakout groups participated in exercises to identify actions that will advance TDM applications from ad-hoc activities to well-defined approaches and formalize a regional vision, goals, and objectives. Breakout groups then discussed the current status and advancement strategies for measuring the performance of the current TDM program in the region and ways to incorporate TDM into planning efforts and funding programs. This TDM plan addresses two of the actions identified in the workshop, which were to develop an overarching vision for TDM in the region with specific goals for the region and to assess and update the project selection criteria for TDM.

In January 2019, the TDM Steering Committee heard about TDM best practices from agencies around the country. Each presentation incorporated a discussion of how the CAMPO region

might adapt approaches or elements from the various peer locations. The Steering Committee learned the lessons gained from previous TDM activities at peer locations and discovered the emerging tools, resources, and technology helping travelers with their transportation choices. The



discussions with the committee focused on the strengths and challenges in the region and clarified the Steering Committee's priorities for advancing TDM in the region.

Stakeholder interviews were conducted to further explore what TDM means to the CAMPO region. In-depth interviews were conducted to gather input on perspectives, resources, and priorities as they relate to TDM projects and strategies. The team coordinated with steering committee members, major employers in the region, and representatives from planning agencies to schedule and conduct 14 individual interviews between February 6 and February 19, 2019. Interviews took place in-person or via conference call and lasted approximately one hour.

Organizations from both the public and private sectors were represented in interviews and had varying levels of experience, resources, and involvement related to the implementation of TDM applications. Representatives from CAPCOG, TxDOT, Travis and Bastrop Counties, the Cities of San Marcos and Austin, CTRMA, CapMetro, Movability, the Greater Austin Chamber of Commerce, Samsung Semiconductor, Google, and Whole Foods participated in the interview process.

While the interview process was tailored to the organization's level of expertise and involvement in implementing TDM practices, the interviews generally began with a brief introduction to TDM concepts, the planning process, and desired outcomes of the plan. Interviewees were asked to describe their organization's impact on mobility in the region and their role in implementing existing TDM strategies, as well as their priorities and desired outcomes for potential TDM strategies that could be deployed in the region.

High-level themes emerged throughout the interview process as organizations identified TDM needs and priorities in the context of the region, including:

- ▶ Incorporation of transit features into future roadway projects
- ▶ Expanded transit service
- ▶ Addition of diamond or non-tolled managed lanes
- ▶ Increased availability of micro mobility options
- ▶ Improved data collection and sharing
- ▶ Strategies to mitigate transportation demand during construction
- ▶ Outreach and education initiatives to motivate a mode shift
- ▶ Dedicated funding to support TDM strategies

TDM Priorities

Pulling together the discussions and inputs from the Steering Committee and the inputs received via the interviews a clear direction evolved for next steps for TDM in the region. Through collaborative efforts with the TDM Steering Committee, CAMPO and its partners identified the following priorities as needs and focus areas in advancing a TDM agenda for the region:

- ▶ Address transit projects and programs that address service gaps, such as increasing access to park-and-ride facilities, guaranteed ride home programs, and ensuring connections to the “last mile” portion of a trip;
- ▶ Support TxDOT to implement diamond or non-tolled managed lanes along key corridors inundated with congestion and travel time reliability challenges;

- ▶ Increase outreach and public education programs that promote the value and opportunities available in TDM programs and alternate transit options;
- ▶ Investigate projects and programs that address and reduce peak-time congestion on priority corridors to provide for peak spreading and work zone queue mitigation;
- ▶ Develop employer-based programs for raising employees' awareness about travel options and the commute cost, distributing commuter bonus vouchers, spreading work hours, telecommuting, and flex time programs to address peak hour travel on key corridors; and
- ▶ Develop data collection and sharing programs and procedures to advance the planning and implementation efforts of member agencies to address TDM priorities.

Central to conducting an effective TDM program is having a plan to guide it. This plan documents the region's vision and key objectives for the advancement of TDM in the CAMPO region and provides the roadmap for those important focus areas. With inputs from the Steering Committee members and other important regional stakeholders, CAMPO defined the priorities, leading to a roadmap with implementation approaches for TDM. This plan will:

- ▶ Promote the programs, policies, and projects that will be the most effective;
- ▶ Further the region's TDM goals on reducing drive-alone trips;
- ▶ Serve the needs of TDM audiences (residents, commuters, students, employers, and tourists);
- ▶ Address the conditions the region faces in the future;
- ▶ Measure and evaluate program results, so that activities can be effectively adjusted as needed; and
- ▶ Foster partnerships and collaborations with transit agencies, regional planning agencies, TxDOT, and the business community.

PART II

TRANSPORTATION DEMAND MANAGEMENT VISION AND GOALS



The Regional TDM Plan provides a regional framework with supporting priorities that will guide the identification and development of projects and strategies to manage traffic congestion using demand management practices to accommodate the population and employment growth that strains the transportation system in the region. The TDM framework will focus on addressing traveler behavior and mobility choice, with a secondary focus on coordinating and incorporating TDM applications when infrastructure investments and development occurs.

A vision statement should fully capture the aspirational goals that the CAMPO TDM Steering Committee and TDM Program would like to accomplish. The vision, goals, and objectives for the TDM plan were developed with input from the Steering Committee. Through the committee's inputs, stakeholder interviews, and early workshop findings, CAMPO and its partners defined the below vision statement and supporting goals.

Vision

The Regional Transportation Demand Management Plan provides a regional framework of priorities that identify cost-effective and innovative projects, programs, and strategies to manage congestion as population and employment growth put additional pressure on the regional transportation network. These projects and strategies focus on travel behavior, along with

strategic investments in transportation programs and infrastructure, where appropriate, and provide residents and visitors with more information and options for deciding how, where, and when to travel within the CAMPO region.

Goals

CAMPO, in coordination with the TDM Steering Committee, developed five primary goals to support the vision for the region. These goals capture the priorities expressed by the committee and provide the foundation for the project selection criteria. The goals are shown in order of importance.

1. **Regional Coordination:** Document a collaborative plan where all TDM stakeholders have ownership and contribute to developing and maintaining a regional TDM system that benefits the entire CAMPO region;
2. **Incorporate TDM into the transportation planning process:** Develop CAMPO policies with its partner agencies that promote and prioritize both programmatic and infrastructure investments in TDM projects and strategies;
3. **Provide Education and Outreach:** Expand outreach and education to travelers, providing the transportation options available to them for getting from point A to point B;
4. **Improve the Transportation System:** Enhance the performance of the region's multimodal transportation system, especially during peak periods; and
5. **Increase Mobility Choices for Travelers:** Provide a range of transportation options throughout the region.

PART III

MOVING GOALS FORWARD



For each of the five goals defined in Part II, CAMPO and its partners developed associated objectives to further guide each goal in its implementation. Often the objectives underpinning each goal need to be embraced and enacted by specific (or multiple) stakeholder agencies. CAMPO provides stewardship by working with the regional stakeholders to move the regional TDM goals forward and aligning TDM applications to meet the objectives.

Regional Coordination

Document a collaborative plan where all TDM stakeholders have ownership and contribute to developing and maintaining a regional TDM system that benefits the entire CAMPO region.

To date, TDM measures and efforts for several stakeholder agencies have advanced at disparate paces. This goal proposes that CAMPO organize and facilitate TDM efforts, so that each agency has ownership of various TDM programs and efforts, but the TDM vision for the whole region vision can be measured and advanced.

Specific objectives to advance regional coordination are outlined below.

- Develop regional solutions to transportation system congestion that cross jurisdictional lines;

- ▶ Establish protocols for sharing transportation data and TDM options between agencies;
- ▶ Develop a unified information source where travelers can access all elements of TDM in the region;
- ▶ Promote greater regionalism and cooperation in the CAMPO region by working toward shared TDM goals;
- ▶ Promote a quality of life that will attract new businesses and residents to the region; and
- ▶ Establish a TDM Subcommittee of CAMPO's Technical Advisory Committee, with regular meetings to monitor and ensure the implementation of regional TDM programs.

Incorporate TDM into the Transportation Planning Process

Develop CAMPO policies with its partner agencies that promote and prioritize both programmatic and infrastructure investments in TDM projects and strategies.

Successfully integrating TDM into agency programs across the region requires a greater emphasis on TDM in programmatic and infrastructure planning and investment. Objectives that advance this goal focus on ensuring that TDM is considered in the planning, policy, and programming stages of all agency programs. Advancing this goal will include preparing policy and planning recommendations for the CAMPO 2045 Regional Transportation Plan (RTP). These objectives position CAMPO and its stakeholders to have a strong TDM agenda that can be included in the upcoming cycle for 2045.

Specific objectives to better incorporate TDM into transportation decision-making are outlined below.

- ▶ Consider TDM projects and strategies before capacity projects when developing corridor studies, long range plans, and other planning documents;

- ▶ Incorporate TDM measures into capacity expansion projects; examples include transit use on managed lanes, high-occupant vehicle or diamond lanes, and expanded intelligent transportation systems (ITS);
- ▶ Dedicate a set funding amount or percentage of the Transportation Improvement Program and Long-Range Transportation Plan to TDM measures;
- ▶ Reward local agencies that implement specific TDM programs in project selection criteria; and
- ▶ Incentivize cities and counties to update development codes that better incorporate TDM elements.

Provide Education and Outreach

Expand outreach and education to travelers, providing on the transportation options available to them for getting from point A to point B.

A central theme for advancing TDM in the region is the need to engage, inform, educate, and reach out to travelers, commuters, tourists, and employers in the region; many TDM measures are rooted in changing travel behaviors. The first step in changing behavior is travelers education; this encompasses not only educating travelers about available options (transit, car share, altering travel times, changing a route or mode, or forgoing the trip) but also promoting the principles of TDM and the transportation community's efforts to help preserve the safety, mobility, and travel time reliability in the region.

One strategy to advance this goal is engaging employers directly. Steering Committee member Movability Austin works with major employers in the region to help them make mobility connections and provide educational materials on best practices for developing and implementing custom mobility plans for commuter challenges that employers can impact. Other TDM Steering Committee members see great value in engaging the region's major employers as a great first step towards enacting TDM practices that influence traveler behavior and choice.

Specific objectives to provide the necessary education and outreach to advance TDM by influencing traveler behavior are outlined below.

- ▶ Communicate directly to travelers about regional programs and options that already exist;
- ▶ Promote the development of tailored TDM programs across the region;
- ▶ Educate interested employers on options, including variable schedules and teleworking;
- ▶ Market TDM programs through advertising and dynamic message signs; and
- ▶ Encourage employers to provide incentives to their employees who practice TDM strategies.

Improve the Transportation System

Enhance the performance of the region's multimodal transportation system, especially during peak periods.

TxDOT has the largest ownership and impact on the regional roadway network. As regional TDM stakeholders address the demands on the system, it must be acknowledged that the region is still building out infrastructure to address safety, mobility, and reliability. This goal area recognizes this reality while incorporating TDM practices in new capacity and infrastructure projects. When traditional roadway projects occur, this goal encourages a coordinated effort to include TDM strategies in the design and operation of the network.

The region also recognizes that the continued build out of the transportation system often disrupts travel times and mobility because of traffic management (detours, work zone queues, etc.) approaches. This goal encourages a greater focus on traffic management during construction.

Specific objectives to improve the transportation system are outlined below.

- ▶ Reduce the number of single-occupant vehicles to ensure efficient use of the roadway network;
- ▶ Support greater use of transit, shared rides, and active transportation modes;
- ▶ Improve the reliability of the transportation network through improved incident management;
- ▶ Enhance the reliability of travel times by shifting trips to off-peak periods;

- ▶ Provide travelers with incident information and alternate route options through ITS and other outreach;
- ▶ Target corridors of regional importance for strategic infrastructure investment, such as diamond or non-tolled managed lanes;
- ▶ Reduce crashes and enhance safety by shifting single-occupant vehicle trips to transit; and
- ▶ Document and evaluate performance measures over time to identify effective strategies.

Increase Mobility Choices for Travelers

Provide a range of transportation options throughout the region.

This goal and its associated objectives enhance and inform travelers about mobility choice. Projects that advance TDM in the region should focus on understanding how people make their transportation decisions and champion projects that will improve and support those decisions. Mobility choices also help travelers understand and use the existing systems and infrastructure, such as transit, ridesharing, walking and biking routes, and teleworking.

Specific objectives to provide for greater mobility choices for traveler in the region are outlined below.

- ▶ Optimize existing transit services throughout the region that provide alternatives to driving alone;
- ▶ Implement projects that encourage everyday use of active transportation for commuting or other trips;
- ▶ Provide information to travelers about joining carpools or vanpools;
- ▶ Partner with transportation providers to expand first/last mile connections to reduce the need for driving; and
- ▶ Improve safety by providing options to travelers with mobility challenges, including impaired drivers.

PART IV

CAMPO TDM PROJECT SELECTION CRITERIA



Measuring Performance

Performance measures provide documentation of results and progress relative to an agency, program, or project goal or objective. The Federal Highway Administration (FHWA) defines performance measures as “the use of statistical evidence to determine progress toward specific defined organizational objectives. This includes both evidence of actual fact, such as measurement of pavement surface smoothness, and measurement of customer perception such as would be accomplished through a customer satisfaction survey.”¹ Good measures should be meaningful to the customer, tell the story on how well goals and objectives are met, and provide simple, logical, and easily understandable information that captures a trend of performance.

In general, agencies’ ability to measure congestion and reliability directly lagged other planning goal areas due to lack of data. Pavement and bridge performance have been linked to direct field measurements and have been widely used to help prioritize investments. Safety has a long

¹ Performance Measurement Fundamentals. https://ops.fhwa.dot.gov/perf_measurement/fundamentals/index.htm accessed 4/2/2019.

history of performance measurement based on actual crash experience and corresponding evaluation of safety countermeasures. In contrast, TDM and mobility performance measurement has had to rely on surrogate measures, such as demand levels and estimates of available capacity to infer actual performance.

Measuring and reporting program effectiveness of TDM for the CAMPO region will have two distinct categories for measuring performance: how the region is doing as a whole as it tracks to, and makes progress with, the five goals established in this TDM plan, and how specific projects measure up to the project specific goals. For instance, a specific project along a congested corridor may measure success in terms of a reduced travel time on the corridor, improved travel time reliability, or an increase in transit ridership on the corridor. Success in achieving CAMPO's goals for TDM might be in TDM project development being planned, funded, and managed by several member agencies showing greater collaboration to accomplish TDM in the region.

TDM Strategy Success

An example of an Austin area TDM success where before and after measures were in place has been documented with the CTRMA MoPac express lanes. Express and variable priced lanes are both TDM operational strategies. CTRMA reports that the express lanes have had average speeds of 50 miles per hour and have allowed travelers commutes that are 50% faster. Also, the toll-free access for Capital Metro transit vehicles have pointed to a 73% increase of Express Bus ridership on the MoPac route.

MoPac Express Lane Fact Sheet.

www.mobilityauthority.com/upload/files/resources/Roads/MIP_Fact_Sheet_01_04_19.pdf, accessed 4/2/2019.

CAMPO Project Selection

CAMPO is responsible for allocating certain federal and state funds for transportation projects in the six-county region. In order to administer these funding programs and ensure an effective and equitable distribution to project sponsors, CAMPO has developed a project evaluation and selection process with an emphasis on several key factors: regional perspective; transparent decision-making in allocating funding for regional projects; objective evaluations that

emphasizes performance-based, results-driven outcomes; data supported project applications and evaluation processes; and accountability. Each year CAMPO follows a cycle of steps in soliciting agencies for projects, referred to as the call for projects, by conducting a review, scoring, and selection process.

The first part of the selection process evaluates project readiness. Projects are then scored with a combination of planning factors and cost-benefit analysis. There are six project types of which TDM is one of the six. Previous cycles of project selection have not included a strong benefit cost analysis of TDM projects. Revisions to the scoring incorporate a greater accountability for TDM performance reporting as shown in Table 1.

Table 1. TDM Planning Factors and Scoring Elements (revised April 2019)

Criteria	Value	Performance Measure
Planning	10	The project or activity has undergone a comprehensive planning process or is identified as a priority in a local or regional transportation plan.
	10	The planning process or document identifies an outreach component addressing commuting patterns and employer engagement.
Regional Impact	10	The project or activity is located on or directly affects an existing or proposed regionally significant corridor.
Safety	10	The project or activity addresses transportation safety.
Congestion and Mobility	5	The project or activity directly reduces vehicle miles traveled.
	5	The project or activity reduces or spreads peak period travel.
	10	The project or activity includes operational and travel time reliability improvements such as ITS implementation, signal optimization, corridor improvements, managed lanes, or park and rides.
Social and Environmental Impacts	10	The project or activity has a positive impact (e.g. reduction in transportation costs and emissions, improvements on public health) on underserved populations including low-income, minority, elderly, disabled, and limited English proficiency households.
Multimodal Elements	10	The project or activity increases the use of alternate modes or increases transit access and demonstrates a shift away from single-occupant vehicles.

Criteria	Value	Performance Measure
Interagency Coordination	10	The project or activity includes the direct participation of other federal, state, and local jurisdictions.
	5	The project or activity includes participation from regional employers impacting work force commuting patterns.
Funding	5	The project or activity's local cost share is overmatched. (5% = 1 point)
Total Points	100	

Additional Planning Factor Information – TDM Projects

Planning (10) – The project or activity should be identified in locally or regionally adopted transportation plans, including state, city, or county thoroughfare plans, city comprehensive plans or CAMPO documents including the long-range Regional Transportation Plan (RTP).

Planning (10) - Planning efforts should also include and identify specific outreach goals and coordination activities conducted with employers in the region to promote TDM principles. Provide the name of the plan(s) in which the project is included, and its date of adoption or approval. The projects or activity should also include the identification of employers approached, the types of efforts used to engage and coordinate with them, and the measure to determine program effectiveness.

Regional Impact – Note if the project or activity is located on or directly affects a facility designated on the National Highway System or is a Principal Arterial in CAMPO's 2040 RTP or Regional Arterials Plan

Safety – Describe safety enhancements that the project or activity will include to reduce the potential for crashes and create a safer, more secure experience for travelers.

Congestion and Mobility (5) – Provide detail and documentation on how the project or activity reduces vehicle miles traveled (VMT). For example, provide documentation detailing number of participants in the project or activity and/or anonymized origin-destination data to calculate the amount of VMT reduction.

Congestion and Mobility (5) – Provide detail and documentation on how the project or activity reduces congested peak period travel. For example, provide documentation detailing employers or travelers participating in the project or activity that altered departure times based on the project.

Congestion and Mobility (10) – Provide detail and documentation on how the project or activity includes operational improvements such as ITS implementation, signal optimization, corridor improvements, managed lanes, or park and rides.

Social and Environmental Impacts – Provide documentation and analysis that demonstrates that the project or activity will directly benefit underserved populations. Refer to Environmental Justice analysis tools provided by the Environmental Protection Agency, Federal Highway Agency, and the Texas Department of Transportation Environmental Division.

Multimodal Elements – Refer to CAMPO's Regional Active Transportation Plan and note how the project or activity advances its goals. Alternatively, if a project or activity is not in the regional plan but is included in a locally-adopted active transportation plan, provide the plan name and date of adoption or approval and describe the ways in activity or project or activity uses alternative modes or increases transit access

Interagency Coordination (10) – Provide documentation, in the form of resolutions, inter-local agreements, or memoranda of understanding among local agencies and employers that demonstrates a combined effort in the project or activity such as pooling resources and data sharing programs.

Interagency Coordination (5) – Provide documentation, in the form of a signed agreement or other official documentation, demonstrating employer commitment to the project or activity such as the provision of transit incentives, telework or flexible work schedule policies, carpool incentives, or other TDM strategies of project activities that will engage regional employers to impact work force commuting patterns.

Funding (5) – Describe how the project or activity's local cost share goes beyond the funding match requirements. Provide documentation that identifies committed funding for the project.

Measuring Performance for Selected Projects

Projects selected for funding using the CAMPO criteria should have a level of accountability for reporting project results. Since projects will take many forms, there will be as many forms of reporting qualitative and anecdotal results as well as technical analysis to report on a project's return on investment.

Research indicates there are two general approaches to estimating the impacts of TDM strategies – sketch planning and modeling. Currently, there are four TDM-specific models that have been developed in the United States:

- ▶ EPA COMMUTER Model
- ▶ TDM Effectiveness Evaluation Model (TEEM)
- ▶ Worksite Trip Reduction Model (WTRM)
- ▶ Trip Reduction Impacts of Mobility Management Strategies (TRIMMS)

As CAMPO enacts this TDM plan, additional criteria may be included in project selection and reporting. Understanding the return on investment from this project selection process will be important in advancing the TDM program. Robust benefit cost analysis

Measuring Progress on TDM Plan Goals

In addition to reporting performance on specific projects, as noted above, there exists an opportunity to measure and report on the progress on achieving the TDM goals established by the TDM Steering Committee. These goals and potential measures of success are shown in Table 2.

<< To all reviewers: Please review and comment on Measures presented in the table>>

Goal	Measuring Progress
<p>Regional Coordination: Document a collaborative plan where all TDM stakeholders have ownership and contribute to developing and maintaining a regional TDM system that benefits the entire CAMPO region.</p>	<ul style="list-style-type: none"> • Partner agencies document TDM projects and strategies into planning processes.
<p>Incorporate TDM into the transportation planning process: Develop CAMPO policies with its partner agencies that promote and prioritize both programmatic and infrastructure investments in TDM projects and strategies</p>	<ul style="list-style-type: none"> • Prepare TDM position for the CAMPO 2045 Plan • Advance agreed upon vision to partner agency's efforts •
<p>Provide Education and Outreach: Expand outreach and education to travelers, providing the transportation options available to them for getting from point A to point B.</p>	<ul style="list-style-type: none"> • Develop a toolbox of outreach and education materials for major employers • Work with X employers to implement TDM programs
<p>Improve the Transportation System: Enhance the performance of the region's multimodal transportation system, especially during peak periods.</p>	<ul style="list-style-type: none"> • Collaborate with TxDOT on work zone queue reduction efforts • Collaborate with agencies for greater real time traveler information
<p>Increase Mobility Choices for Travelers: Provide a range of transportation options throughout the region.</p>	<ul style="list-style-type: none"> • Develop an approach to defining and raising awareness of transportation options in the region

PART V

NEXT STEPS AND RECOMMENDATIONS



Next Steps

Continue development of a full TDM Plan containing foundational materials and backup resources.

Develop a roadmap of TDM strategies for CAMPO to lead

Prepare needed policy statement to include in the CAMPO 2045 Plan update.

The Capital Area Metropolitan Planning Organization (CAMPO)

3300 N. Interstate 35, Suite 630

Austin, Texas 78705

<https://www.campotexas.org/>

May 6, 2019



CAPITAL AREA METROPOLITAN
PLANNING ORGANIZATION

CENTRAL  TEXAS



Date: April 22, 2019
Continued From: February 25, 2019
Action Requested: Recommendation

To: Technical Advisory Committee
From: Mr. Ashby Johnson, CAMPO Executive Director
Agenda Item: 3B
Subject: Recommendation on Proposed Transportation Demand Management Policy and Amendment of the 2040 Plan

RECOMMENDATION

CAMPO staff has the following recommendations:

1. TDM project selection criteria be revisited and potentially modified so that any TDM projects submitted in the next TIP Call for Projects can also be evaluated on the same level playing field as the rest of the project funding categories
2. CAMPO staff supports the change in the TDM definition to more closely align with current Federal Highway Administration guidelines
3. CAMPO staff does not support the request to amend the 2040 Plan
4. CAMPO staff does not support the award of \$498,720 to current recipients of funds in the TDM category

PURPOSE AND EXECUTIVE SUMMARY

Travis County has requested an amendment to the existing 2040 Plan as it related to Transportation Demand Management (TDM). The amendment request is composed of three separate items: (1) an amendment to the 2040 Plan to change existing policy and create a 5% set aside of CAMPO funding for TDM; (2) a change in the definition of TDM activities; (3) an award of federal STBG funding in the amount of \$498,720. The Travis County request also asks that any potential changes be carried over automatically to the 2045 Plan and the 2020-2023 Transportation Improvement Program.

This item was discussed at the February 11, 2019 Transportation Policy Board meeting. A copy of the cover memo for the TPB materials that addresses this item is attached for your review.

FINANCIAL IMPACT

The Transportation Policy Board held \$498,720 in abeyance when they selected a program of activities for the 2019-2022 TIP in May 2018. The Policy Board stipulated that the funding would be held for future TDM activities but did not specify that the funding would go to any particular existing or future programs/activities.

SUPPORTING DOCUMENTS

Attachment A – February TPB Meeting Cover Memo

Attachment B – Memo from Judge Sarah Eckhardt, Travis County, Chair of Clean Air Coalition

Attachment C – TDM Policy Proposal-Final Document



TO: CAMPO Transportation Policy Board Members
FROM: Ashby Johnson, CAMPO Executive Director
SUBJECT: February 11, 2019 Agenda Items
DATE: February 7, 2019

The February 11, 2019 Transportation Policy Board (TPB) agenda contains four significant action items. The first is the Policy Board's election of officers (chair and vice chair) to fill the remaining term of Chairman Conley due to his resignation. Chairman Conley's resignation also triggers the succession of Vice Chair Adler to the chair position thereby creating a vacancy in the Vice Chair position. CAMPO legal counsel, Tim Tuggey recommends that the Transportation Policy Board entertain a motion to affirm the succession of Vice Chair Adler to the Chair position and to elect a vice chair after nominations have been received from the membership. Upon the conclusion of the election, the new chair will immediately assume responsibility.

The second action item is a request from CAMPO staff to approve a contract for consultant services to perform a feasibility study and schematic development for the FM 150/Yarrington Road corridors in Caldwell County. Caldwell County and CAMPO staff have entered into an agreement for CAMPO staff to manage the consultant contract on their behalf since they currently do not have staff at Caldwell County with the expertise to do the work. Caldwell County and CAMPO staff are also asking for the TPB approval of an Interlocal Agreement that transfers funding from Caldwell County to CAMPO staff to satisfy the local match requirements of the \$1,725,000 in federal Surface Transportation Block Grant funding that Caldwell County received from the TPB in the May 2018 Transportation Improvement Program adoption. The consultant contract recommendation and Interlocal Agreement will have gone to the Caldwell County Commissioners Court for concurrence prior to the February 11, 2019 TPB meeting.

The third item is a CAMPO staff request for TPB approval of the new CAMPO draft final Public Participation Plan (PPP). Federal rules require the update of the PPP and CAMPO staff performed this task in late 2018. In keeping with past practice and state and federal requirements, the draft document was the subject of an extensive public outreach campaign and was presented to the Technical Advisory Committee. The TAC took action to recommend approval of the draft final PPP to the TPB at its December 17, 2018.

The last action item is a Travis County request to amend CAMPO's current 2040 Regional Transportation Plan to make changes to an existing policy on Transportation Demand Management. CAMPO staff does not support this long-range plan amendment request for the following reasons:

1. The Transportation Demand Management Study (\$300,0000) that the Policy Board funded in May 2018 is underway and due to produce recommendations by May 2019. CAMPO staff would like the Policy Board to have the benefit of the results of the study before considering making changes to this policy;
2. There are timing and process issues related to this long-range plan amendment request. It has been the TPB's practice since 2014 to follow the following process for action items especially as it concerns an amendment to the long-range plan and/or the Transportation Improvement Program:



- a. The item goes to the Technical Advisory Committee as an information item;
- b. The item goes to the Transportation Policy Board as an information item;
- c. In a subsequent month, the item goes to the Technical Advisory Committee again as an action item for potential recommendation to the TPB;
- d. After the TAC has made a recommendation to the TPB, a public hearing is held during a TPB meeting and staff notifies the TPB that a round of public outreach will be conducted so that the public has the opportunity to comment on the proposed Plan amendment;
- e. After public comment has been completed and the TPB has been provided a summary of public comment the item comes back to the TPB for potential approval.

The Travis County 2040 Plan amendment request has not gone to the TAC or the TPB as an information item nor has the requested plan amendment gone out for public comment. This plan amendment request does not fall within the administrative amendment category that is within the CAMPO Executive Director's purview to sign and process as it relates to policy and to financial matters.

Additionally, CAMPO staff is working on the draft 2045 Regional Transportation Plan and currently expect to have a draft ready and out for public comment by January 2020. Additionally, two TPB workshops on goals and objectives for the 2045 Plan will take place at the next two TPB meetings and this item can be discussed during those workshops. Finally, CAMPO staff will request TPB discussions at future meetings this year on the totality of the existing policies in the existing 2040 Plan and their potential relationship to the draft 2045 Plan.

Because of the reasons listed above, CAMPO staff requests that the Transportation Policy Board hold this 2040 Plan amendment request in abeyance at least until the Transportation Demand Management Study is completed and/or this item has been reviewed by the TPB and the TAC and been the subject of public outreach.

Lastly, CAMPO staff has asked experts from its General Planning Consultant team to conduct a workshop on goals and objectives in preparation for the development of the CAMPO 2045 Regional Transportation Plan that must be adopted by the TPB no later than May 2020.

Memo

To: CAMPO Policy Board
From: Sarah Eckhardt, Judge of Travis County, Chair of Clean Air Coalition
Date: January 28, 2019
Subject: Proposed Transportation Demand Management Policy Amendments

We have real challenges that Transportation Demand Management (TDM) efforts are well-suited to address. Targeted updates to CAMPO's 2040 Plan and related policies can help guide near-term TDM planning, and inform development of CAMPO's upcoming Regional TDM Plan. As the Federal Highways Administration (FHWA) states, "few question the need to manage travel demand these days as growth in travel continues to exceed our ability to accommodate it with new capacity," and stating that, "many transportation plans appropriately place TDM very high in policy-level discussions."¹

We are barely in attainment of federal air quality standards. We are currently maximally congested at peak times on our regional highways and in the urban core of our Metropolitan Statistical Area (MSA). We have limited options to car travel. We are experiencing increasing unreliability in travel times. All of these challenges are affecting our environment, our quality of life, and our economy.

TDM has often been defined too narrowly; current TDM best practices cover a wide range of actions to maximize the efficiency of a multi-modal system. TDM includes both programmatic and infrastructure (including capital investment) elements to achieve the overarching goal of travel reliability:

- Examples of Infrastructure TDM
 - Congestion Priced Toll Lanes
 - HOV/HOT dedicated lanes
 - Bus pull-outs/dedicated lanes
 - Synchronized signalization
 - Park & Ride lots
 - Expansion of the fleet of transit buses and/or vanpools
 - Bike/ped infrastructure
- Examples of Programmatic TDM
 - Flexible work schedules
 - Ridesharing
 - Transit utilization
 - Parking policies
 - Telecommuting
 - Pricing incentives for multi-modal travel and disincentives for SOV travel
 - Education and outreach to residents, employees, and institutions

Incorporating TDM into the planning process can optimize the use of scarce funding. Programmatic TDM projects can be implemented quickly, are relatively inexpensive, and are readily adaptable to changing

¹ <https://ops.fhwa.dot.gov/publications/fhwahop12035/fhwahop12035.pdf>

needs. Infrastructure TDM projects need more lead time and are more costly, but they provide the fundamentals that allow Programmatic TDM to work effectively.

Contemporary TDM: Definitions and Examples

“The acts of creating a most efficient multi-modal transportation system that moves people with the goal of reducing congestion, improving air quality, and stimulating economic development.”

(Association of Commuter Transportation TDM definition)

“Managing demand is about providing travelers, regardless of whether they drive alone, with travel choices, such as work location, route, time of travel, and mode. In the broadest sense, demand management is defined as providing travelers with effective choices to improve travel reliability.”

(Federal Highways Administration TDM definition)

Recent local projects demonstrate how TDM (programmatic and/or infrastructure) elements can improve system reliability and travel efficiency.

- MoPac Express Lane – Since the Central Texas Regional Mobility Authority (CTRMA) opened Mopac Express Lane in October 2017, Capital Metro Express Bus service using the lanes has increased ridership by 65%; personal vehicle drivers using the lanes are saving up to 25 minutes in travel time. Both bus riders and personal vehicle drivers are experiencing more reliable travel times.
- Bicycle and Pedestrian Accommodations--CTRMA designs, constructs, and implements multi-modal, pedestrian and cyclist friendly facilities like Shared Use Paths, sidewalks, and cross-street connections as part of every project whenever feasible. More than 70 lane miles of sidewalks and shared use paths are planned or in place.
- MetroRideShare (regional vanpool program) – Capital Metro’s MetroRideShare has grown dramatically since January 2014, when the program began operating with a contracted service provider. It has grown from 102 to 253 vanpool groups, and more than 1,345 program participants. The average round-trip commute is 75 miles. Anticipated program growth will require 20 additional vanpools per year. Capital Metro is planning a pilot project to expand eligible vanpool coverage area.
- The Round Rock Transit Master Plan (TMP) – Developed in 2015, the TMP is a 10-year blueprint to improve local mobility and regional connectivity, and to map future transit options. Round Rock City Council can implement TMP elements incrementally, as expansion is needed and funds are available. The TMP allowed Round Rock to partner with Capital Metro to operate three fixed bus routes and one commuter bus route that began in Fall 2017. The Commuter Route uses the MoPac Express Lanes from Round Rock to downtown Austin. The fixed routes connect Round Rock to Howard Station and Tech Ridge, and serve the ACC Round Rock Campus. The fixed routes also include: medical facilities, downtown, high school, neighborhoods, Dell and Walmart.
- Smart Trips Austin - engages communities to try multi-modal transportation options and shift away from driving alone. The program focuses on personal interactions and helps individuals to overcome real and perceived barriers through hand-delivered transportation information and incentives, community tabling, and walking/biking/transit events.

- Movability - Central Texas' first and only transportation management association, working with employers to improve the regions' economic vitality by connecting commuters with mobility options that save time and money. Movability has over 50-member organizations from both the private and public sector, representing over 60,000 commuters. The staff of the non-profit provide professional services directly to employers, including strategic mobility planning, developing telework and commute benefit policies, designing communication plans, assisting with employee education, program tracking, and more.
- Commute Solutions – the Commute Solutions program is a regional transportation demand management tool for addressing transportation challenges in the region. The program aims to be a “one-stop” sustainable transportation resource in Central Texas, promoting options such as carpools, vanpools, transit, bicycling, teleworking and walking. Partnering employers have access to resources including training for employees, comprehensive regional commute website, ride matching/data collection tool, and regional trip reduction contests and incentives.

Please see Attachment D for more information on these and other TDM initiatives in the region.

Measuring Success

Measuring success for integrated TDM is difficult; there is not a one size fits all metric. Fortunately, there is a body of work outlining which metrics work best for various TDM strategies and purposes. The region can incorporate metric identification options into the CAMPO/Movability Regional TDM Plan (which received STP funding in 2018), and into the work of the regional TDM Coordinating Committee hosted by CAPCOG.

Policy Considerations

Urbanized MSAs have long recognized the value of both programmatic and infrastructure TDM. Their MPOs invest in TDM using Federal Surface Transportation Program (STP) or Congestion Mitigation/Air Quality (CMAC) funds, coupled with Transportation Development Credits (TDCs). For example, AAMPO awarded STP funds and TDCs to AACOG for their Commute Solutions program.

TDM infrastructure and programmatic efforts are woven into the long-range transportations plans for the Houston, Dallas/Ft. Worth and San Antonio MSAs. MPOs and COGs both take advantage of investing in TDM opportunities. HGAC, NCTCOG, and AAMPO/AACOG have engaged in TDM efforts continuously for more than 20 years.

CAMPO has a long history of support for programmatic TDM; there are many examples in the CAMPO 2040 Plan. Investment in infrastructure TDM is ample, although these projects are usually not identified specifically as a regional strategy for managing transportation demand.

From 1994-2017 CAMPO's acclaimed Commute Solutions promoted multiple TDM options. Funding came through STP funds, planning funds (PL), and local dollars. TDCs were not used. CAMPO relocated Commute Solutions to CAPCOG in 2017. In its new institutional home Commute Solutions is working to secure sustainable funding, and is exploring funding mechanisms other COGs have used successfully.

In 2018, CAMPO Board awarded STP funds for TDM projects to CAPCOG (for Commute Solutions), Capital Metro, and City of Austin. Both CAPCOG and Capital Metro applied for TDCs to use for local match; to date neither agency has been awarded the requested TDCs.

Proposed Policy Revisions for Integration into Applicable CAMPO Documents

Our challenges are best addressed through a holistic TDM strategy that merges, and recognizes the importance of, both programmatic and infrastructure TDM projects and programs.

We propose amending the CAMPO 2040 Plan, and carrying forward to the CAMPO 2045 Plan and applicable documents and policies, the following revisions to achieve this holistic strategy:

- 1) CAMPO 2040 Plan Glossary (Appendix B)
 - a) Revise the definitions of Transportation Demand Management and Transportation Systems Management to reflect the following melded definition of Transportation Demand Management:
 - Transportation Demand Management (TDM) comprises programmatic and infrastructure components that contribute to an optimally efficient, multi-modal transportation system. TDM provides travelers, including those who drive alone, with choices. It prioritizes moving people. TDM's goals are to: improve travel reliability and air quality, manage congestion, and stimulate economic development.
- 2) CAMPO 2040 Plan Congestion Management and Transportation Demand Management Policies (Appendix C)
 - a) Amend Policy 3 to state "Use transportation investments to support continued reduction of per capita vehicle miles and vehicle hours traveled, and improved travel time reliability."
- 3) CAMPO 2040 Plan Compliance and Funding Policies (Appendix C)
 - a) Add Policy 2.1 to state "Target 5% of available CAMPO discretionary federal funding (STP) to programmatic TDM projects and programs, and allow the use of TDCs for local match if the applicant supplies either a secondary project (their own or from another agency) or an adequate qualitative demonstration."
 - b) Add Policy 2.2 to state "In project calls for available CAMPO discretionary federal funding, the scoring criteria will award extra points for infrastructure projects that incorporate TDM elements."

Attachment A – Current CAMPO 2040 Plan Definitions and Policies

Attachment B - CAMPO 2040 Plan Definitions and Policies – Proposed Revisions, Redline Version

Attachment C - CAMPO 2040 Plan Definitions and Policies – Proposed Revisions, Clean Version

Attachment D - Regional TDM Initiatives

Current CAMPO 2040 Plan Definitions and Policies

TSM and TDM Definitions – (Appendix B, page 219)

Transportation Systems Management (TSM): A program to reduce congestion and improve traffic flow through traffic signal synchronization, freeway operations improvements (e.g., changeable message signs and ramp metering), and incident management (clearing accidents and breakdowns quickly). Other methods can include bus pullouts, intersection improvements and queue jumper lanes, where appropriate.

Travel Demand Management (TDM): Achieving greater transportation system efficiency by managing or decreasing the demand for auto-related travel. This typically includes alternatives to single occupant vehicles (transit, carpool, vanpool), incentives/disincentives (congestion pricing, HOV lanes), and alternative work environments (teleworking, flex scheduling).

Congestion Management and Transportation Demand Management Policies (Appendix C, page 220)

Policy 3. Use transportation investments to support continued reduction of per capita vehicle miles traveled.

Policy 4. Consider transportation improvements that increase person-carrying capacity, rather than vehicle-carrying capacity of the regional transportation system.

Policy 5. Expand the public, and other, transportation systems to keep up with the region's mobility needs over time.

Plan Compliance and Funding Policies (Appendix C, page 220)

Policy 1. Target 50 percent of available CAMPO discretionary federal funding (STP-MM) to support development of the mixed-use activity centers indicated on the CAMPO Centers Map. (The same project may address both the 15 percent bicycle and pedestrian, and the 50 percent Centers target policies.)

Policy 2. Target 15% of available CAMPO discretionary federal funding (STP-MM) to bicycle and pedestrian projects through the CAMPO TIP process. (The same project may address both the 15 percent bicycle and pedestrian, and the 50 percent Centers target policies.)

CAMPO 2040 Plan Definitions and Policies – Proposed Revisions, Redline Version

TSM and TDM Definitions – (Appendix B, page 219)

Transportation Systems Management (TSM): A program to reduce congestion and improve traffic flow through traffic signal synchronization, freeway operations improvements (e.g., changeable message signs and ramp metering), and incident management (clearing accidents and breakdowns quickly). Other methods can include bus pullouts, intersection improvements and queue jumper lanes, where appropriate.

Travel Demand Management (TDM): Achieving greater transportation system efficiency by managing or decreasing the demand for auto-related travel. This typically includes alternatives to single-occupant vehicles (transit, carpool, vanpool), incentives/disincentives (congestion pricing, HOV lanes), and alternative work environments (teleworking, flex scheduling).

Transportation Demand Management (TDM) comprises programmatic and infrastructure components that contribute to an optimally efficient, multi-modal transportation system. TDM provides travelers, including those who drive alone, with choices. It prioritizes moving people. TDM's goals are to: improve travel reliability and air quality, manage congestion, and stimulate economic development.

Congestion Management and Transportation Demand Management Policies (Appendix C, page 220)

Policy 3. Use transportation investments to support continued reduction of per capita vehicle miles and vehicle hours traveled, and improved travel time reliability.

Policy 4. Consider transportation improvements that increase person-carrying capacity, rather than vehicle-carrying capacity of the regional transportation system.

Policy 5. Expand the public, and other, transportation systems to keep up with the region's mobility needs over time.

Plan Compliance and Funding Policies (Appendix C, page 220)

Policy 1. Target 50 percent of available CAMPO discretionary federal funding (STP-MM) to support development of the mixed-use activity centers indicated on the CAMPO Centers Map. (The same project may address both the 15 percent bicycle and pedestrian, and the 50 percent Centers target policies.)

Policy 2. Target 15% of available CAMPO discretionary federal funding (STP-MM) to bicycle and pedestrian projects through the CAMPO TIP process. (The same project may address both the 15 percent bicycle and pedestrian, and the 50 percent Centers target policies.)

Policy 2.1 Target 5% of available CAMPO discretionary federal funding (STP) to programmatic TDM projects and programs, and allow the use of TDCs for local match if the applicant supplies either a secondary project (their own or from another agency) or an adequate qualitative demonstration.

Policy 2.2 In project calls for available CAMPO discretionary federal funding, the scoring criteria will award extra points for infrastructure projects that incorporate TDM elements.

CAMPO 2040 Plan Definitions and Policies - Proposed Revisions, Clean Version

Transportation Demand Management Definition (Appendix B, page 219) Delete current TDM and TSM definitions and replace with the following definition.

Transportation Demand Management: Transportation Demand Management (TDM) comprises programmatic and infrastructure components that contribute to an optimally efficient, multi-modal transportation system. TDM provides travelers, including those who drive alone, with choices. It prioritizes moving people. TDM's goals are to: improve travel reliability and air quality, manage congestion, and stimulate economic development.

Congestion Management and Transportation Demand Management Policies (Appendix C, page 220) Revise Policy 3

Policy 3: Use transportation investments to support continued reduction of per capita vehicle miles and vehicle hours traveled, and improved travel time reliability.

Plan Compliance and Funding Policies (Appendix C, page 220) Add Policies 2.1 and 2.2

Policy 2.1 Target 5% of available CAMPO discretionary federal funding (STP) to programmatic TDM projects and programs, and allow the use of TDCs for local match if the applicant supplies either a secondary project (their own or from another agency) or an adequate qualitative demonstration.

Policy 2.2 In project calls for available CAMPO discretionary federal funding, the scoring criteria will award extra points for infrastructure projects that incorporate TDM elements.

Regional TDM Initiatives

Metro Ride Share

The MetroRideShare program is Austin's regional vanpool program. The program provides eligible groups of 5-12 riders with a month-to-month vanpool lease agreement including vehicle (7, 8 and 12-seats), insurance, maintenance, 24-hour roadside assistance and an optional fuel purchasing program. The program is operated by a contracted service provider and subsidized by Capital Metro. The goal of the program is to reduce the use of single occupant vehicles during peak travel times to reduce congestion and improve air quality.

Since January 2014, the RideShare program has been operated by a contracted service provider to provide turn-key vanpool services. Over five-years, the program has grown from 102 to 253 vanpool groups, with more than 1,345 program participants. The average round-trip commute is 75 miles. The future growth of the program is anticipated to be 20 additional vanpools per year.

Capital Metro offers monthly subsidies to two types of vanpool groups: (1) In-Service-Area (ISA) groups that operate entirely within the Capital Metro service area (2) Out-of-Service-Area (OSA) groups with at least an origin or destination inside the Capital Metro service area. In-Service-Area groups receive a \$500 monthly subsidy, while Out-Of-Service-Area groups receive a \$450 monthly subsidy. The subsidy is used to help offset the monthly lease cost. Program participants share the cost of the monthly lease, fuel, tolls and any other commute-related expenses. The monthly cost is based on the vehicle type chosen by the group, commute distance and the number of paying riders. Currently, there are 84 ISA groups and 169 OSA groups.

Round Rock Transit Master Plan

The Round Rock Transit Master Plan (TMP) was developed in 2015 to provide a blueprint for improving local mobility and regional connectivity over the next 10 years. The TMP is a road map of future transit options the city council can implement incrementally, as expansion is needed, and funds are available. It looks at all options available for providing transit services, continued third-party contracting, bringing the service in-house, and contracting with Capital Metro. The TMP options also takes into consideration regional transit activities, such as Project Connect; other public transportation providers, such as Capital Metro and CARTS; and other municipality's transit activities, such as Georgetown and Pflugerville. In addition, the City will continue to partner with community entities who desire to bring more transportation options to the region.

In 2017, Round Rock entered into an Interlocal Agreement (ILA) with Capital Metro to operate three fixed routes and one commuter bus route. This fixed route service began in August 2017 and the commuter bus route started in November 2017. The four routes have nearly 48,000 boardings. The

Route 980 North MoPac Express is a commuter route into downtown Austin, utilizing the MoPac managed lanes. Capital Metro and the City of Round Rock share the cost of the commuter route. The Route 50 Round Rock Howard Station travels north and south, between Austin Community College's Round Rock Campus and connecting Capital Metro at MetroRail Howard Station. The Route 51 Round Rock Circulator travels east and west within Round Rock serving medical facilities, downtown, high school, neighborhoods, Dell and Walmart. The Route 52 Tech Ridge Limited is a reverse commute service from Tech Ridge to the industrial southwest corner of Round Rock. This route travels from the Tech Ridge Park & Ride to the Round Rock Transit Center, with limited stops. Paratransit service is also offered through the City of Round Rock in a 1.5-mile radius, the maximum allowed by law, of routes 50 and 51.

Previously, the City of Round Rock contracted with CARTS for transit services. Beginning in June 2012, the City began providing Demand Response Bus Service under a turnkey contract for citizens living in the city limits. In 2013, the City expanded the service beyond its city limits and, in 2014, added a job-access reverse commute route from Capital Metro's Tech Ridge Park and Ride to Sears Teleserv in Round Rock.

Round Rock also built an Intermodal Transit Facility that includes a ticket office and parking garage with 110 spaces. All bus routes travel through this facility for connectivity. In partnership with CARTS, they moved their operations to the Intermodal Transit Facility. This provides additional connectivity for people travelling into and out of the Williamson County area, as well as improves access to Greyhound bus system.

HOW MOBILITY PROGRAMS BENEFIT EMPLOYERS

• • • • •

Employers throughout Central Texas feel the impacts of traffic congestion. New infrastructure can help, but it is a slow and costly process. Implementing transportation demand management (TDM) is something every employer can do almost immediately at a low cost.

"Solving traffic in the Austin area takes all of us: government agencies, transportation providers, private sector employers, and commuters who can choose each day to be part of the solution." - Austin Mayor Steve Adler

RECRUITMENT AND RETENTION

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of American workers want mobility benefits. Employers with mobility policies and commuter benefits are better able to recruit talented employees.



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of workers see better commutes as a reason to switch jobs. Movability members enjoy higher retention rates, some of them well above the national average.

COST SAVINGS



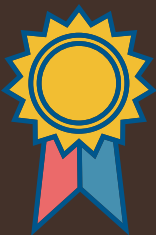
45-60 minutes

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\$10 billion

in lost time and fuel are wasted annually sitting in traffic. Driving alone also drives up parking costs for employers. Save money when employees use commute alternatives, reducing the demand for parking and saving time.



LEAD THE WAY

3 in 5

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- Julie Fisher, Samsung Austin Semiconductor

Attachment A

Regional TDM Initiatives

Metro Ride Share

The MetroRideShare program is Austin's regional vanpool program. The program provides eligible groups of 5-12 riders with a month-to-month vanpool lease agreement including vehicle (7, 8 and 12-seats), insurance, maintenance, 24-hour roadside assistance and an optional fuel purchasing program. The program is operated by a contracted service provider and subsidized by Capital Metro. The goal of the program is to reduce the use of single occupant vehicles during peak travel times to reduce congestion and improve air quality.

Since January 2014, the RideShare program has been operated by a contracted service provider to provide turn-key vanpool services. Over five-years, the program has grown from 102 to 253 vanpool groups, with more than 1,345 program participants. The average round-trip commute is 75 miles. The future growth of the program is anticipated to be 20 additional vanpools per year.

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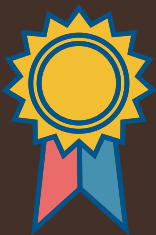
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Date: April 22, 2019
Continued From: N/A
Action Requested: Information

To: Technical Advisory Committee
From: Ms. Theresa Hernandez, Finance & Administration Manager
Agenda Item: 4
Subject: Discussion on Draft 2020-2021 Unified Planning Work Program (UPWP)

RECOMMENDATION

None. This item is for informational purposes only.

PURPOSE AND EXECUTIVE SUMMARY

This item is to allow comments on the Draft 2020-2021 UPWP (**Attachment A**).

FINANCIAL IMPACT

The budget for the FYs 2020-2021 UPWP is based on anticipated FHWA PL 112 and 5303 funds. In FY 2019, CAMPO received a total of \$2,567,931 of Section 5303 and PL 112 funds. CAMPO has programmed these funds, along with other funds among the five main tasks.

BACKGROUND AND DISCUSSION

The UPWP is the federally-required document that identifies work tasks to be completed in the CAMPO region.

The document is divided into five main task areas:

- Task 1 - Administration
- Task 2 - Data Development and Maintenance
- Task 3 - Short Range Planning
- Task 4 - Metropolitan Transportation Plan and
- Task 5 - Special Studies

Funding Proposed in FYs 2020 and 2021 UPWP

FUNDING SOURCE	FY 2020	FY 2021	TOTAL
FHWA PL112 & 5303	2,563,298	2,563,298	5,126,596
FTA 5304	25,000	25,000	50,000
STBG	11,342,745	-	11,342,745
STATE	19,882,414		19,882,414
*LOCAL	16,115,686	-	16,115,686
GRAND TOTAL	49,929,143	2,588,298	52,517,441
*CAMPO and other agencies combined local funds			

SUPPORTING DOCUMENTS

Attachment A – Draft FYs 2020 & 2021 Unified Planning Work Program

FY 2020 & 2021

UNIFIED PLANNING WORK PROGRAM

CAPITAL AREA METROPOLITAN PLANNING ORGANIZATION

Approved by the Transportation Policy Board: Xx

Credit and Disclaimer Statement

Prepared in cooperation with the Texas Department of Transportation and the U.S. Department of Transportation, Federal Highway Administration and Federal Transit Administration. This report was funded in part through grant[s] from the Federal Highway Administration [and Federal Transit Administration], U.S. Department of Transportation. The views and opinions of the authors [or agency] expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation.

I. **INTRODUCTION** - The Federal Aid Highway Act of 1962 promulgated the requirement that all urban areas of 50,000 or more population develop and maintain a comprehensive, cooperative, and continuing (3-C) transportation planning process. The process would establish a transportation plan and provide the procedure by which it would be maintained and revised on a continuing basis.

A. **PURPOSE** - The Unified Planning Work Program (UPWP) provides descriptive details for the Capital Area Metropolitan Planning Organization (CAMPO) planning process for FYs 2020- 2021. This activity is required under federal law defining the responsibilities of Metropolitan Planning Organizations (MPO). The UPWP serves as the document for identifying ways to carry out the continuing, cooperative and comprehensive transportation planning process in the six-county Capital Area in Central Texas. An MPO is required to perform all planning tasks set forth in federal laws and regulations, many of which are conducted annually. However, some tasks require more than one year to complete and are carried forward from one UPWP to the next. To effectively identify all work tasks, CAMPO prepares this UPWP with input from federal, state and local jurisdictions and transportation providers in the CAMPO region.

The appendices contain the following:

- Appendix A: Transportation Policy Board Membership
- Appendix B: Metropolitan Area Boundary Map
- Appendix C: Debarment Certification
- Appendix D: Lobbying Certification
- Appendix E: Certification of Compliance
- Appendix F: Certification of Internal Ethics and Compliance

FAST Act Planning Factors

FAST Act contains ten broad planning areas that should be considered when developing plans and programs. The work tasks contained in the FYs 2018 - 2019 UPWP have considered the following ten areas, some more directly than others:

1. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system for motorized and non-motorized users;
3. Increase the security of the transportation system for motorized and non-motorized users;
4. Increase accessibility and mobility of people and freight;
5. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;

6. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
7. Promote efficient system management and operation;
8. Emphasize the preservation of the existing transportation system;
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation; and
10. Enhance travel and tourism.

Further, the work tasks consider the federal performance goals in the following seven areas:

1. Safety
2. Infrastructure Condition
3. Congestion Reduction
4. System Reliability
5. Freight Movement and Economic Vitality
6. Environmental Sustainability
7. Reduced Project Delivery Delays

- B. DEFINITION OF AREA** - The CAMPO planning area includes all of Bastrop, Burnet, Caldwell, Hays, Travis and Williamson Counties (**Appendix B**) and the cities and villages in each of the six counties (a comprehensive list of these jurisdictions can be found at www.campotexas.org). By federal definition, CAMPO's planning area must at least include the urbanized area (as defined by the U.S. Bureau of the Census) and the contiguous area that may reasonably be expected to become urbanized in the next 20 years.

During the 2010 census, a very small portion of Guadalupe County was included as a part of the newly urbanized area of San Marcos. San Marcos intends to remain part of CAMPO. Therefore, an agreement was developed between CAMPO and the Alamo Area MPO (AAMPO) regarding the roles and responsibilities of each MPO concerning this portion of Guadalupe County. CAMPO agrees that staff will meet as needed to review progress of planning efforts to discuss key findings from program activities and to discuss the scope, plans, and implementation of activities. To help ensure continuity of federal and state funds, CAMPO agrees to abide by the methodology and process used to allocate funds to the respective MPOs. CAMPO agrees to abide by the methodology and process currently used to allocate federal transportation planning funds to the respective MPOs. CAMPO agrees to work with the AAMPO to identify the need for corridor projects that cross the CAMPO and AAMPO planning area boundary.

- C. ORGANIZATION** – The Transportation Policy Board (**Appendix A**), provides policy direction for CAMPO. The Policy Board consists of 20 elected and appointed county, city, Texas Department of Transportation (TxDOT) and Capital Metropolitan Transportation Authority (CMTA) officials.

The Policy Board also has several committees for which the CAMPO staff provides administrative support and technical assistance. Some of these committees have members who do not currently serve on the Policy Board but who represent stakeholders in the community:

- The Technical Advisory Committee (TAC) the committee's purpose is to advise the Transportation Policy Board in its development of the long-range metropolitan transportation plan; the Transportation Improvement Program, including review of and recommendations on candidate projects for the TIP; the Unified Planning Work Program; and other transportation planning activities, as directed by the Transportation Policy Board or CAMPO's Executive Director.
- The Executive Committee are members of the Transportation Policy Board who make recommendations on transportation planning issues, projects and the process as directed by the Transportation Policy Board.
- The Finance Committee was formed to become fully educated and explore long-term financing options for potential modal components of a comprehensive transportation system.
- The Transit Working Group (TWG) was formed to analyze and evaluate the potential for high capacity transit in Central Texas, and the optimal role for transit as part of the comprehensive regional transportation plan.
- The Budget, Audit and Finance Committee was formed to review and make recommendations to the Transportation Policy Board for the CAMPO annual planning budget.
- The SH 45 (SW) Committee was formed to analyze options for the future development of SH 45(SW) and address issues surrounding the further planning of the corridor.

Other committees, task forces or study groups may be formed from time-to-time throughout the year as necessary.

CAMPO currently operates with various professional staff positions. The professional staff covers the tasks listed in the UPWP. Depending on the budget and/or work tasks to be completed, CAMPO may employ a varying number of consultants, interns, permanent, or temporary personnel.

Functional Responsibilities of Planning Agencies

For the transportation planning process to function properly, the agencies involved must work together cooperatively. The Transportation Policy Board (TPB), the Transportation Department of Transportation (TxDOT), Central Texas Regional Mobility Authority (CTRMA), Capital Metro, Capital Area Rural Transportation System (CARTS) and the local governments within the planning area are responsible for carrying out the urban transportation planning process consistent with local agreements. This process includes planning for roadways, bicycling facilities,

pedestrian facilities, freight movement, passenger rail, and transit.

The following descriptions of functional responsibilities for each agency are not intended to limit the participation of any agency or local government in the study. Rather, they are brief descriptions of primary responsibilities.

Metropolitan Planning Organization - The MPO, in cooperation with the TxDOT, CTRMA, mass transit operators, planning agencies and local governments:

- 1) Is responsible for carrying out and maintaining the urban transportation planning process to include:
 - a. Cooperative decision-making, principally, by elected officials of local governments.
 - b. Unified Planning Work Program (UPWP),
 - c. Transportation Improvement Program (TIP),
 - d. Metropolitan Transportation Plan (MTP), and
 - e. Congestion Management Process (CMP).
- 2) Executes contracts and/or agreements necessary to carry out the work outlined in the UPWP.
- 3) Develops and maintains transportation databases and analytical tools.

MPO staff has the following general responsibilities:

- 1) Provide staff support to the Transportation Policy Board (TPB), the Technical Advisory Committee (TAC), and committees of the Policy Board and TAC;
- 2) Review and report on items on the agenda(s) for the TPB, TAC, and appropriate committees;
- 3) Coordinate and perform the planning and data collection activities contained in the UPWP;
- 4) Prepare and submit an annual budget outlined in the UPWP for approval;
- 5) Receive and review all bills from consultants that the MPO has contracted with to perform work outlined in the UPWP;
- 6) Submit requests for reimbursement to the appropriate federal and/or state agencies for work performed according to the UPWP;
- 7) Prepare and submit grant applications for federal/other assistance in transportation planning, and related fields, as appropriate;
- 8) Prepare and submit the annual performance and expenditure report and annual project listing;
- 9) Coordinate the activities for the development and maintenance of the Unified Planning Work Program, the long-range metropolitan transportation plan and the Transportation Improvement Program;
- 10) Refine and maintain a process for engaging the public in the transportation planning process; and
- 11) Perform any other administrative duties as required by the

- Transportation Policy Board; and,
- 12) Ensure compliance with Title VI Civil Rights, Environmental Justice and other federal requirements related to CAMPO's operations, activities and programs.

Texas Department of Transportation - The Texas Department of Transportation (TxDOT), within the realm of transportation planning, has the following varied responsibilities for the CAMPO planning area:

- Highway planning;
- Participating and lead agency in appropriate transportation studies and environmental documents;
- Review of all FTA Section 5307, 5310 and Section 5311 capital grant applications that may involve state funding; and

In addition, TxDOT maintains certain transportation database files and forecasting models, and coordinates its planning efforts with the MPO through the UPWP.

Capital Area Rural Transportation System (CARTS)

CARTS is the rural public transportation provider for this region and has primary responsibility for rural transit planning and operations in the study area.

Capital Metropolitan Transportation Authority (Capital Metro)

Capital Metro is a provider of public transportation in the region. Capital Metro has primary responsibility for conducting various short and long-range transit studies, maintaining all transit data, and is responsible for transit planning and operation in the urban portion of the study area.

Counties

Williamson County acts as our fiscal agent and provides support for human resources, benefits, accounting, and information technology.

The Counties of Bastrop, Burnet, Caldwell, Hays, Travis and Williamson have the primary responsibility for the planning of all roads outside incorporated areas that are not on the State system. This is done cooperatively with the State. The County coordinates its planning with TxDOT and incorporated areas in extraterritorial jurisdictional areas.

Cities

All jurisdiction cities in our planning area have the responsibility for the planning of all roads within their incorporated area or extraterritorial jurisdiction not on the state

system, and some have negotiated agreements with TxDOT to plan for roads on the state system as well in cooperation with TxDOT.

Public/Public and Public/Private Partnerships

Over the last few years, the CAMPO region continues partnerships with TxDOT, CARTS, CMTA, CAPCOG and its member jurisdictions and has actively pursued various partnerships with entities established to advance planning for and improve the area's transportation infrastructure. This includes partnerships with the area's Regional Mobility Authority (Central Texas Regional Mobility Authority).

- D. PRIVATE SECTOR INVOLVEMENT** – Consultants have been and will continue to be used on an as-needed basis in CAMPO's transportation programs and planning processes. In the past, CAMPO has used private sector consultants for a variety of services ranging from legal services to improvements to the regional travel demand model. These efforts will continue as well.
- E. PLANNING ISSUES AND EMPHASIS** – The Federal Highway Administration and Federal Transit Administration have jointly issued Planning Emphasis Areas (PEAs). The PEAs are planning topical areas for MPOs and State DOTs to develop and identify work tasks for FY 2020 and 2021. The Planning Emphasis Areas are:
1. **MAP-21 Implementation - Transition to Performance Planning and Programming:** although performance measures have not yet been adopted at the federal and state levels, the MPO identified performance indicators in the 2040 Metropolitan Transportation Plan Update and continues to monitor federal and state efforts. Updated requirements as outlined in the FAST Act will move towards implementation.
 2. **Regional Models of Cooperation - Ensure a regional approach to transportation planning by promoting cooperation and coordination across transit agency, MPO and state boundaries:**
CAMPO will continue to strive to improve the effectiveness of transportation decision making by working with regional partners to think beyond traditional borders and adopt a coordinated approach to transportation planning that supports common goals and capitalizes on opportunities related to project delivery, congestion management, safety, freight, livability, and commerce across boundaries. Improved multi-jurisdictional coordination promises to reduce project delivery time and enhance the efficient use of resources. Enhanced cross-jurisdictional communication will improve collaboration, policy implementation, technology usage, and performance management.
 3. **Ladders of Opportunity – Access to essential services:**
Through the transportation planning process, CAMPO will work with regional partners to identify connectivity gaps in accessing essential services, including

employment, health care, schools/education, and recreation. Staff will research analytical methods to identify gaps in the connectivity of the transportation system and identify infrastructure and operational solutions that provide the public, especially the traditionally underserved populations, with adequate access to essential services. Potential tasks include: evaluating the effectiveness of public transportation plans for engaging transportation disadvantaged communities in the transportation decision making process; updating the Section 5310 Coordinated Human Services Public Transportation Plan; assessing the safety and condition of pedestrian and bicycle facilities; and evaluating compliance with the Americans with Disabilities Act, particularly around schools, concentrations of disadvantaged populations, social services, medical and transit facilities.

CAMPO will work cooperatively with TxDOT, CARTS and Capital Metropolitan Transportation Authority (CMTA) to define performance measures that emphasize these seven federal goals:

1. Safety
2. Infrastructure Condition
3. Congestion Reduction
4. System Reliability
5. Freight Movement and Economic Vitality
6. Environmental Sustainability
7. Reduced Project Delivery Delays

II. TASK 1.0 – ADMINISTRATION AND MANAGEMENT

- **OBJECTIVE**

To accomplish, on a continuing basis, the plans and programs necessary to administer federal transportation planning requirements and maintain the transportation planning process in and for the Capital Area Metropolitan Planning Organization's planning area.

- **EXPECTED PRODUCTS**

Certified transportation planning process;
Updated or new documents and reports including Public Participation Plan, Limited English Proficiency Plan, and Title VI Plan;
FY 2019 & FY 2020 Single Audit;
Unified Planning Work Program (FYs 2020 & 2021) and amendments;
Unified Planning Work Program (FYs 2022 & 2023);
FY 2019 & 2020 Annual Project Listing;
FY 2019 & 2020 Annual Performance and Expenditure Report;
New equipment and computer hardware/software

- **PREVIOUS WORK**

Performed general administrative functions;
FY 2018 & 2019 Unified Planning Work Program and amendments;
FY 2017 & 2018 Annual Project Listing;
FY 2017 & 2018 Annual Performance and Expenditure Report;
FY 2017 & 2018 Single Audit;
Updated Public Participation Plan;
Updated Limited English Proficiency Plan;
Updated Title VI Plan
Coordinated transportation planning and implementation activities with other agencies and organizations;
Conducted a public involvement process compliant with federal and state regulations;
Provided support for all meetings of the transportation planning process;
Implemented policies to maintain the transportation planning process;
Provided staff access to courses, conferences, workshops and seminars

- **SUBTASKS**

Subtask 1.1 MPO Staff Work for Task 1.0

The primary activities which will take place under MPO Staff Work include the following:

1.1.1 Program Administration: This activity includes development and implementation of those policies and guidelines necessary to carry out and maintain the transportation planning process; maintenance of the FY 2020 & 2021

Unified Planning Work Program, development of the Annual Performance and Expenditure Report (APER) and Annual Project Listing (APL), development of the FY 2022 & 2023 Unified Planning Work Program, sponsoring and conducting meetings including providing support to policy and advisory bodies; coordinating and working with other agencies and organizations involved in planning, programming and implementation of transportation projects.

1.1.2 Public Participation: This activity supports the implementation of the MPO's Public Participation Plan to include the conduct of community outreach and public meetings/hearings as needed with emphasis on Environmental Justice populations and the development/review processes of the Transportation Improvement Program, Metropolitan Transportation Plan and other planning products; develop and use of questionnaires, online surveys, newsletters and other participation techniques; and provide bilingual materials and translations as appropriate.

1.1.3 Title VI Civil Rights/Environmental Justice (EJ): This activity supports monitoring and evaluating Title VI/EJ guidance and requirements, developing and implementing documents and procedures to ensure CAMPO's plans, programs and activities comply with Title VI/EJ guidance and requirements, collecting and analyzing data related to minority, low income, limited English proficiency and other populations vulnerable to potential disproportional adverse impacts from the planned transportation system and transportation projects, identifying possible strategies to minimize, avoid or mitigate potential disproportional adverse impacts on the EJ populations, maintaining, coordinating efforts to develop the Regional Toll Network Analysis that evaluates the impacts of the regional toll network on the EJ and non-EJ populations (see Task 2.0), implementing the CAMPO Limited English Proficiency Plan and updating that plan as needed.

1.1.4 Travel and Training: This activity supports staff development in the technical activities associated with the transportation planning process through travel to and attendance at appropriate conferences, courses, seminars, and workshops (AMPO, APA, ESRI, TransCad, TxDOT, TRB, UT at Austin, CNU, etc). CAMPO will seek prior approval from TxDOT for Out-of-State travel.

1.1.5 Equipment & Computer Hardware/Software : This activity is for the upgrade/addition of equipment and computer hardware or software to ensure program efficiency. A description of equipment purchases in excess of \$5,000 will be submitted to the Texas Department of Transportation for approval prior to acquisition. The MPO understands that split costs are not allowed.

Responsible Agency:	Capital Area Metropolitan Planning Organization
Funding Requirement:	\$3,152,432 PL
Product(s):	Certified transportation planning process; Updated or new documents and reports including Public

Participation Plan, Limited English Proficiency Plan, etc.;
New equipment and computer hardware/software

Subtask 1.2 Legal Services – Consultant Work

1.2.1 Legal Services: This activity is for legal services that are necessary for planning purposes.

Responsible Agency: Capital Area Metropolitan Planning Organization
Funding Requirement: \$60,000 PL
Product(s): Legal opinion(s) and counsel, as necessary and appropriate, with prior approval from TxDOT and FHWA

Subtask 1.3 Audit Costs – Consultant Work

1.3.1 Audit Services: This activity is for audit services that are necessary to comply with the Single Audit Act.

Responsible Agency: Capital Area Metropolitan Planning Organization
Funding Requirement: \$50,000 PL
Product(s): Single Audit Report, financial statements

Subtask 1.4 General Planning Consultant – Consultant Work

1.4.1 General Planning Consultant

Consultant to assist in the overall activities related to regional transportation planning in the CAMPO planning boundary that includes the counties of Bastrop, Burnet, Caldwell, Hays, Travis, and Williamson.

Responsible Agency: CAMPO
Funding Requirement: \$240,000 STP MM and \$60,000 Local

- **FUNDING SUMMARY**

Task 1.0 - FY 2020 & FY 2021

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ¹		STBG		Local		Total		Grand Total
		2020	2021	2020	2021	2020	2021	2020	2021	2020&2021
1.1	CAMPO	1,576,216	1,576,216					1,576,216	1,576,216	3,152,432
1.2	CAMPO	30,000	30,000					30,000	30,000	60,000
1.3	CAMPO	25,000	25,000					25,000	25,000	50,000
1.4	CAMPO			240,000	-	60,000	-	300,000	-	300,000
TOTAL		1,631,216	1,631,216	240,000	-	60,000	-	1,931,216	1,631,216	3,562,432

¹ TPF – This includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

III. TASK 2.0 - DATA DEVELOPMENT AND MAINTENANCE

- **OBJECTIVE**

Provide updated information, demographic data and analysis to support the Metropolitan Planning Organization's planning efforts.

- **EXPECTED PRODUCTS**

Series of technical reports documenting the ongoing GIS data updates on traffic counts and mapping

Transportation related air quality data collection and analysis, air quality planning and outreach products;

2045 Plan related performance measures

Demographic forecasts and travel demand model for the 2045 Plan updates;

Interactive Web Viewer updates

UrbanSim (Demographic Allocation Tool)

Development 2050 Travel Demand Model

- **PREVIOUS WORK**

Updated demographic forecasts and travel demand model for the 2045 Plan;

2040 Plan related performance measures

Development 2045 Travel Demand Model

Regional Arterial Plan Modeling

UrbanSim (Demographic Allocation Tool)

Interactive Web Viewer – Regional Arterial Plan

- **SUBTASKS**

Subtask 2.1 MPO Staff Work for Task 2.0

2.1.1 General Administration: This subtask allows for administrative activities related to data development and maintenance including procurement, contract management and appropriate review/processing of monthly billings for work related to Task 2, as well as conducting the activities in subtasks 2.1.2, 2.1.3, 2.1.4, and 2.1.5 and developing related performance measures.

2.1.2 General GIS: Specific activities will include reviewing and providing direction on the development and dissemination of geospatial databases on residential and commercial growth and transportation data; mapping databases supporting CAMPO programs; maintenance of the demographic and modeling databases of the 2045 Plan and 2019-2022 TIP amendments; develop and maintain the interactive web viewer for sharing GIS data on growth and projects; develop maps and materials for work group and public meetings; develop technical memoranda documenting work completed.

2.1.3 Demographic Forecasting: Run UrbanSim for producing demographic

forecasts for 2050 Plan and TIP amendments. Specific activities will include production and review of demographic forecasts to be used for required 2045 Plan. Develop the datasets for running the Allocation Tool for the 2045 Plan.

2.1.4 Travel Demand Modeling: Run CAMPO's FTA-compliant and time-of-day model. Specific activities will include coordination with TxDOT on development of the new 2020 base year model, performing model runs for the amendments of the 2045 Plan, 2019-2022 TIP and the development of the 2050 Plan; refinements of in-house modeling capabilities; and regular updates of computer hardware, software, and necessary peripherals for supporting the demographic forecasting and travel demand modeling activities.

2.1.5 Environmental Analysis: This subtask includes facilitating planning and environmental linkages by participating in NEPA related studies and Planning and Environmental Linkages (PEL) studies, monitoring and evaluating the effect of CAMPO plans and programs on the environment, identifying potential mitigation activities and locations where they might occur, coordinating outreach with resource agencies and working groups, developing and updating GIS analyses using GISST, and other relevant data. CAMPO is participating in NEPA related studies to facilitate the proper integration of planning outcomes in the environmental process.

Responsible Agency:	Capital Area Metropolitan Planning Organization
Funding Requirement:	\$320,176 PL
Product(s):	Technical memoranda, final reports, PEL and NEPA related reports and analyses.

Subtask 2.2 GIS, Demographic Forecast, & Travel Demand – Consultant Work

2.2.1 Demographic Forecast and Travel Demand Modeling Projects for 2045 Plan

Conduct activities related to the travel demand model in support of development of the 2045 Plan. It is noted that the demographic forecasting and travel demand modeling procedures applied in the CAMPO area are integrated. Conduct activities related to the production of the regional employment and population profiles for inclusion in the CAMPO travel demand model and the 2045 toll analysis.

Responsible Agency:	Capital Area Metropolitan Planning Organization
Product(s):	Interactive Web Viewer, UrbanSim, Development 2045 Travel Demand Model, Model files for development of the 2045 RTA, draft and final 2045 RTA document.

- **FUNDING SUMMARY**

Task 2.0 - FY 2020 & FY 2021

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ¹		FTA Sect. 5304		Local		Total		Grand Total
		2020	2021	2020	2021	2020	2021	2020	2021	2020&2021
2.1	CAMPO	160,088	160,088					160,088	160,088	320,176
2.2	CAMPO	-	-					-	-	-
2.3	CAMPO	-	-					-	-	-
TOTAL		160,088	160,088					160,088	160,088	320,176

¹TPF – This includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

IV. TASK 3.0 - SHORT RANGE PLANNING

- **OBJECTIVE**

Conduct short-range transportation and transportation-related planning activities with short-term planning and implementation focus, including the development and administration of the Transportation Improvement Program.

- **EXPECTED PRODUCTS**

2019-2022 TIP Amendments
Intelligent Transportation Systems (ITS)
2021-2024 TIP
Project Selection/Readiness Criteria
HB20 10 Year Plan
Performance Measure Development
Project Tracking
2021-2024 Project Call

- **PREVIOUS WORK**

Transportation Improvement Program (TIP) FYs 2019 – 2022
Project Tracking
Ongoing development of related performance measures
Congestion Management Process (CMP) Plan
2019-2022 Project Call

- **SUBTASKS**

Subtask 3.1 MPO Staff Work for Task 3.0

3.1.1 General Administration: This subtask allows for MPO staff support for administrative activities related to short range planning, including the development and management of agency contracts; procurement, development and management of consultant contracts for projects in Task 3; and the review and processing of monthly billings for work related to Task 3.

3.1.2 General Activities: Specific activities will include, but are not limited to, maintenance of the FY 2019-2022 Transportation Improvement Program, development of the FY 2021-2024 Transportation Improvement Program, along with related performance measures.

3.1.3 Public Participation: This subtask includes MPO staff participation in public outreach activities including video production, developing website information, writing newsletter articles, developing other printed materials, and public meeting facilitation as needed.

3.1.4 Congestion Management Process (CMP), Intelligent Transportation

Systems (ITS) and Operations Planning: This subtask covers activities related to conducting the CMP, ITS and Operations Planning. Specific activities include, but are not limited to, developing, updating, refining and implementing the CMP, incorporating congestion analysis results into the regional planning process, and incorporating ITS, systems management and operations into the planning process

3.1.5 Transportation Improvement Program: The four-year Transportation Improvement Program (TIP) lists surface transportation projects that are funded with federal dollars and are consistent with the long-range plan developed for the area. The TIP may also include non-federally funded projects that are regionally significant. The TIP development process includes public involvement activities and opportunities for public review and comment on all aspects of the program.

Responsible Agency: Capital Area Metropolitan Planning Organization
 Funding Requirement: \$417,382 PL
 Product(s): Contract procurement materials and billing packages, meeting packages and materials, technical memos

- FUNDING SUMMARY**

Task 3.0 - FY 2020 & FY 2021

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ¹		Local		Total		Grand Total
		2020	2021	2020	2021	2020	2021	
3.1	CAMPO	208,691	208,691			208,691	208,691	417,382
3.2	CAMPO	-	-			-	-	-
3.3	CAMPO	-	-			-	-	-
TOTAL		208,691	208,691			208,691	208,691	417,382

¹TPF – This includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

V. TASK 4.0 - METROPOLITAN TRANSPORTATION PLAN

- **OBJECTIVE**

To develop, maintain and update a multi-modal Regional Transportation Plan for the CAMPO planning area for a 25-year horizon that meets federal requirements and regional goals.

- **EXPECTED PRODUCTS**

Maintenance and amendments of the 2040 Plan

Development of the 2045 Plan

Maintenance of the Coordinated Public Transit – Health and Human Services

Transportation Plan

Performance Measures

- **PREVIOUS WORK**

2040 Regional Transportation Plan Amendments

2040 Regional Transportation Plan implementation products initial work products related to the development of the 2045 Regional Transportation Plan

Develop a regional bicycle and pedestrian plan

Regional Active Transportation Plan

Walkability Action Plan

- **SUBTASKS**

Subtask 4.1 MPO Staff Work for Task 4.0

4.1.1 General Administration: This subtask allows for MPO staff support for administrative activities related to long range planning including procurement, development, management of consultant contracts for projects in Tasks 4.1, 4.2, 4.3, and 4.4, review and processing of monthly billings for work related to Tasks 4.1, 4.2, 4.3, and 4.4, conduct access management, safety, sub-regional traffic management, and other related corridor studies, participation in study oversight committee meetings, amending and maintaining the CAMPO 2040 Regional Transportation Plan, developing the CAMPO 2045 Regional Transportation Plan and supporting materials and cooperatively developing related performance measures.

4.1.2 Public Participation: This subtask includes MPO staff participation in public outreach activities including video production, developing website information, newsletter articles, other printed materials, and public meeting facilitation as needed.

4.1.3 Regional Public Transportation Coordination: This subtask allows for MPO staff support for regional public transportation coordination including coordinating the Regional Transit Coordination Committee (RTCC) and associated activities, and implementing, maintaining and updating the Capital Area Coordinated Transit –

Health and Human Services Transportation Plan.

4.1.4 Bicycle and Pedestrian Planning: This subtask includes coordinating the Active Transportation Advisory Committee, conducting planning activities related to bicycle and pedestrian facilities, developing a regional active transportation plan, and updating the regional bicycle and pedestrian facility inventory.

4.1.5 Safety Planning: This subtask includes access management and corridor studies for the region, crash data hot spot analyses for regional and local governments, coordinating the regional safety coalition and its safety emphasis area team's associated activities, including, but not limited to, regional workshops, Safety Summits, data analyses, and updating and maintaining the safety analysis tool.

Responsible Agency:	Capital Area Metropolitan Planning Organization
Funding Requirement:	\$967,616 PL
Product(s):	Planning documents, data sets, contract procurement materials and billing packages, and networks

Subtask 4.2 2045 Metropolitan Transportation Plan

4.2.1 2045 Metropolitan Transportation Plan Development - Consultant Work
CAMPO contracted a General Planning consultant to assist with the development of the CAMPO 2045 Regional Transportation Plan, including the public involvement and outreach, corridor and project prioritization, and draft plan documents. (see Task 1.4).

Responsible Agency:	Capital Area Metropolitan Planning Organization
Product(s):	Public participation plan, meeting materials, technical report(s), draft plan documents

Subtask 4.3 Regional Transit Coordination - Related MPO and Consultant Work

4.3.1 Regional Transit Coordination

This subtask provides support for regional public transportation coordination including the Regional Transit Coordination Committee and associated activities, implementing, maintaining and updating the Capital Area Coordinated Transit-Health and Human Services Transportation Plan.

Responsible Agency:	Capital Area Metropolitan Planning Organization
Funding Requirement:	\$50,000 FTA 5304
Product(s):	Reports, memos, agendas

Subtask 4.4 Planning Studies – Other agencies in the CAMPO region (MPO Staff Work is not applicable)

4.4.1 RM 2243 Corridor Study

Feasibility study.

Responsible Agency: TxDOT
Funding Requirement: \$575,282 State Funds

4.4.2 Central Texas Turnpike (CTTS) Capital Improvement

Feasibility study – Central Texas Turnpike System Capital Improvement Plan.

Responsible Agency: TxDOT
Funding Requirement: \$9,858,734 State Funds

4.4.3 US 77 Feasibility Study

Fayette CL to N. of Industrial Park Rd./S. of CR 327 to Milam CL.

Responsible Agency: TxDOT
Funding Requirement: \$2,251,866 State Funds

4.4.4 SH 21 Feasibility Study

Paint Creek to Burleson CL.

Responsible Agency: TxDOT
Funding Requirement: \$2,914,780 State Funds

4.4.5 RM 620 Corridor Study

Colorado River to US 183 N.

Responsible Agency: TxDOT
Funding Requirement: \$4,281,752 State Funds

4.4.6 FM 685 at Kelly Lane Intersection Preliminary Engineering Study

Analyze near-term and long-range intersection improvement options; including O/D study, geometric possibilities, and cost/benefit concerns.

Responsible Agency: City of Pflugerville
Funding Requirement: \$140,000 Local Funds

4.4.7 FM 685/Dessau Corridor Engineering Study

SH130 to Southern City limits or beyond - Analyze innovative intersection/widening improvement options; including traffic analysis, ROW & geometric possibilities, and cost/benefit concerns.

Responsible Agency: City of Pflugerville
Funding Requirement: \$140,000 Local Funds

4.4.8 Rowe Lane Overpass/Rowe Lane Corridor Study

Heatherwilde to Eastern City Limits - Overpass preliminary engineering study in conjunction with corridor/alignment study from Heatherwilde to SH130 and east of Hodde.

Responsible Agency: City of Pflugerville
Funding Requirement: \$200,000 Local Funds

4.4.9 Pecan Street Preliminary Engineering Study

Impact Way to FM 973 - Overpass preliminary engineering study in conjunction with corridor/alignment study through high-growth areas of our ETJ.

Responsible Agency: City of Pflugerville
Funding Requirement: \$100,000 Local Funds

4.4.10 Pecan Street Preliminary Engineering Study

Central Commerce to FM 973 - Preliminary engineering study for urbanizing a high-speed 5-lane rural section highway – pedestrian/adjacent schools/downtown.

Responsible Agency: City of Pflugerville
Funding Requirement: \$100,000 Local Funds

4.4.11 Cele Road Corridor Study

Weiss Lane to FM 973 - Corridor/alignment study through high-growth areas of our ETJ.

Responsible Agency: City of Pflugerville
Funding Requirement: \$100,000 Local Funds

4.4.12 Project Connect System Plan Project Development

Determine modes and alignments and define locally preferred alternatives (LPA) for several high-capacity transit corridors.

Responsible Agency: Capital Metro
Funding Requirement: \$11,000,000 Local Funds

4.4.13 Public Transportation Origin and Destination Study 2020

An origin and destination study every five years to collect comprehensive, statistically valid information about public transportation usage in Central Texas to collect more than 10,000 on-board surveys regarding rider's travel patterns.

Responsible Agency: Capital Metro
Funding Requirement: \$500,000 Local Funds

4.4.14 North Lamar / Airport Blvd Grade Separation Design and Environmental

Conduct the environmental process and develop preliminary and final design for a grade separation of the Capital Metro Red Line at the point where it crosses North Lamar Blvd. The purpose of the project is to develop a feasible design to mitigate the existing rail crossing of North Lamar Blvd. as MetroRail service levels increase over time, requiring additional delays to vehicular traffic including Capital Metro buses.

Responsible Agency: Capital Metro
Funding Requirement: \$4,697,745 STBG Funds \$1,174,436 Local Funds

4.4.15 Corridor Mobility Development Program

Assess a specific corridor's mobility and safety deficiencies, and identify a vision for the long-term modernization of the corridor based on anticipated growth and City of Austin transportation policy.

Responsible Agency: City of Austin
Funding Requirement: \$1,000,000 Local Funds

4.4.16 Austin Core Transportation Plan

An update to the 2002 Downtown Access and Mobility Plan. It will serve as a decision-making tool for transportation planning, project development, operations, and demand management, with the goal of making decisions more transparent and predictable for all stakeholders. Outcomes include the identification of TDM strategies, multimodal projects, priority segments, and spatial needs to support mobility to, from, and within downtown for all users.

Responsible Agency: City of Austin
Funding Requirement: \$350,000 Local Funds

- FUNDING SUMMARY

Task 4.0 - FY 2020 & FY 2021

Sub task	Responsible Agency	Transportation Planning Funds (TPF) ¹		FTA Sect. 5304		STBG		STATE		LOCAL		Total		Grand Total
		2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021	
4.1	CAMPO	483,808	483,808									483,808	483,808	967,616
4.2	CAMPO	-	-									-	-	-
4.3	CAMPO			25,000	25,000							25,000	25,000	50,000
4.4	CAMPO	-				4,697,745	-	19,882,414	-	14,804,436	-	39,384,595	-	39,384,595
4.5	OTHER AGENCIES	-	-			-				-	-	-	-	-
TOTAL		483,808	483,808	25,000	25,000	4,697,745	-	19,882,414	-	14,804,436	-	39,893,403	508,808	40,402,211

¹TPF – This includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

VI. TASK 5.0 - SPECIAL STUDIES

- **OBJECTIVE**

To conduct special studies of transportation facilities and/or corridors and transportation-related topics and to implement specialized studies. Includes the assessment of capital investment and other strategies to preserve the existing and future transportation system and reduce the vulnerability of the existing transportation infrastructure to natural disasters.

- **EXPECTED PRODUCTS**

Continued analysis of corridors in the region
Regional Transit Plan
FM 150 /Yarrington Road Corridor Study and Schematic Development
Bergstrom Spur
San Marcos Platinum Planning Study
FM 1626/RM 957 Intersection
Garlic Creek Parkway
US 290/RM 12 & Mercer District

- **PREVIOUS WORK**

Regional Arterial and MoKan/Northeast Subregional
US 183 Luling Relief Route Alternative Analysis
Regional Incident Management Plan
Regional Transportation Demand Management (TDM) Study

- **SUBTASKS**

Subtask 5.1 MPO Staff Work for Task 5.0

5.1.1 General Activities: This subtask allows for MPO staff support for activities related to special transportation planning studies in Subtask 5.1 and 5.2. Specific activities will include participating in special studies. MOU/MOA or other similar documents will be developed to address specific written provision for cooperatively developing and sharing information related to transportation performance data; selection of performance targets; reporting performance targets; reporting and tracking progress.

Responsible Agency:	CAMPO
Funding Requirement:	\$158,990 PL
Product(s):	Contract procurement materials and billing packages, meeting packages and materials, technical memos

Subtask 5.2 Special Studies (undertaken by CAMPO and/or Consultant(s))

5.2.1 Regional Transit Study

Develop a long-range planning strategy for a network of potential regional high capacity transit services and supporting infrastructure for the CAMPO six-county region.

Responsible Agency: CAMPO
Funding Requirement: \$500,000 STBG \$150,000 Local Funds

5.2.2 FM 1626/RM 957 Intersection

Lane use and transportation nodal analysis.

Responsible Agency: CAMPO and City of Buda
Funding Requirement: \$160,000 STBG and \$40,000 Local Funds

5.2.3 Garlic Creek Parkway

Corridor and connectivity analysis.

Responsible Agency: CAMPO and City of Buda
Funding Requirement: \$280,000 STBG and \$70,000 Local Funds

5.2.4 Bergstrom Spur

Feasibility analysis of an abandoned rail corridor.

Responsible Agency: CAMPO and City of Austin
Funding Requirement: \$280,000 STBG \$70,000 Local Funds

5.2.5 US 290/RM 12 & Mercer District

Land use, corridor and node analysis.

Responsible Agency: CAMPO and City of Dripping Springs
Funding Requirement: \$360,000 STBG \$90,000 Local Funds

5.2.6 San Marcos Platinum Planning Study

Land use, corridor and node analysis.

Responsible Agency: CAMPO and City of San Marcos
Funding Requirement: \$800,000 STBG \$200,000 Local Funds

5.2.7 FM 150/Yarrington Road Corridor Study and Schematic Development

SH 21 to FM 142/SH 130, conduct feasibility study for new location roadway

Responsible Agency: CAMPO and Caldwell County
Funding Requirement: \$1,725,000 STBG and 431,250 Local Funds

Subtask 5.3 Corridor and Feasibility Studies (undertaken by agencies other than CAMPO in the CAMPO region)

5.3.1 MoKan Transportation Corridor Feasibility Study – Segment 2

Study is to assist in the mission of corridor preservation and to identify future operations for this segment of the regionally significant transportation corridor.

Responsible Agency: City of Round Rock
Funding Requirement: \$2,000,000 STBG 500,000 TDCs

5.3.2 DFW to Monterrey High Speed Rail Study

The effort to build high-speed trains connecting Dallas, Arlington, and Forth Worth – and eventually Waco, Austin, Laredo and possibly Monterrey, Mexico.

Responsible Agency: NCTCOG
Funding Requirement: \$300,000 STBG 200,000 Local

- FUNDING SUMMARY**

Task 5.0 - FY 2020 & 2021

Subtask	Responsible Agency	Transportation Planning Funds (TPF) ¹		STBG		Local		Total		Grand Total
		2020	2021	2020	2021	2020	2021	2020	2021	
5.1	CAMPO	79,495	79,495	-		-		79,495	79,495	158,990
5.2	CAMPO	-	-	4,105,000		1,051,250		5,156,250	-	5,156,250
5.3	OTHER Agencies	-	-	2,300,000		200,000		2,500,000	-	2,500,000
TOTAL		79,495	79,495	6,405,000	-	1,251,250	-	7,735,745	79,495	7,815,240

¹ TPF – This includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

VII. BUDGET SUMMARY - Include the following table which provides a summary of all funding requirements for this UPWP by task and source. Include sources of funding (including carryovers).

BUDGET SUMMARY - FY 2020 & 2021

UPWP Task	Description	TPF ¹ Funds	FTA Sect. 5304	STBG	Local Funds	STATE	Total Funds
1.0	Administration-Management	3,262,432		240,000	60,000		3,562,432
2.0	Data Development and Maintenance	320,176	-	-	-		320,176
3.0	Short Range Planning	417,382	-	-	-		417,382
4.0	Metropolitan Transportation Plan	967,616	50,000	4,697,745	14,804,436	19,882,414	40,402,211
4.5	MTP (other agencies)			-	-		-
5.0	Special Studies	158,990	-	6,405,000	1,251,250		7,815,240
TOTAL		5,126,596	50,000	11,342,745	16,115,686	19,882,414	52,517,441

¹TPF – This includes both FHWA PL-112 and FTA Section 5303 Funds. TxDOT will apply transportation development credits sufficient to provide the match for TPF. As the credits reflect neither cash nor man-hours, they are not reflected in the funding tables.

Combined Transportation Planning Funds ²	\$5,126,596
Estimated Unexpended Carryover	\$ 9,266
TOTAL TPF	\$5,135,862

² Estimate based on prior years' authorizations

APPENDIX A

POLICY COMMITTEE MEMBERSHIP

DRAFT

APPENDIX B

METROPOLITAN AREA BOUNDARY MAP
(GOVERNOR OR GOVERNOR'S DESIGNEE APPROVED)

DRAFT

APPENDIX C

DEBARMENT CERTIFICATION (Negotiated Contracts)

- (1) The _____ MPO as **CONTRACTOR** certifies to the best of its knowledge and belief that it and its principals:
- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public* transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity* with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application/proposal had one or more public transactions* terminated for cause or default.
- (2) Where the **CONTRACTOR** is unable to certify to any of the statements in this certification, such **CONTRACTOR** shall attach an explanation to this certification.

**federal, state or local*

Signature – Chairman, MPO Policy Committee

Title

Date

APPENDIX D

LOBBYING CERTIFICATION

CERTIFICATION FOR CONTRACTS, GRANTS, LOANS AND COOPERATIVE AGREEMENTS

The undersigned certifies to the best of his or her knowledge and belief, that:

- (1) No federal appropriated funds have been paid or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any federal contract, the making of any federal grant, the making of any federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclosure accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Signature – Chairman, MPO Policy Committee

Title

Agency

Date

APPENDIX E
CERTIFICATION OF COMPLIANCE

I, _____,
(Name and Position, Typed or Printed)

a duly authorized officer/representative of _____

(MPO)

do hereby certify that the contract and procurement procedures that are in effect and used by the forenamed MPO are in compliance with 2 CFR 200, "Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards," as it may be revised or superseded.

Date

Signature - Chairman, MPO Policy Committee

Attest:

Name

Title

APPENDIX F

CERTIFICATION OF INTERNAL ETHICS AND COMPLIANCE PROGRAM

I, _____,
(Name and Position, Typed or Printed)

a duly authorized officer/representative of _____

(MPO)

do hereby certify that the forenamed MPO has adopted and does enforce an internal ethics and compliance program that is designed to detect and prevent violations of law, including regulations and ethical standards applicable to this entity or its officers or employees and that the internal ethics and compliance program satisfies the requirements of by 43 TAC § 31.39 "Required Internal Ethics and Compliance Program" and 43 TAC § 10.51 "Internal Ethics and Compliance Program" as may be revised or superseded.

Date

Signature - Chairman, MPO Policy Committee

Attest:

Name

Title



Date: April 22, 2019
Continued From: N/A
Action Requested: Information

To: Technical Advisory Committee
From: Mr. Ryan Collins, Short-Range Planning Manager
Agenda Item: 5
Subject: Discussion on Spring 2019 Amendment Cycle for the Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP)

RECOMMENDATION

None. This item is for informational purposes only.

PURPOSE AND EXECUTIVE SUMMARY

The Capital Area Metropolitan Planning Organization (CAMPO) is holding the Spring 2019 Amendment Cycle for the 2019 – 2022 Transportation Improvement Program (TIP) and 2040 Regional Transportation Plan (RTP). The amendment cycle schedule is listed below:

Date	Description
3/22-4/19	Amendment Request Period
May	Public Outreach
4/22/2019	Technical Advisory Committee Information
5/6/2019	Transportation Policy Board Information and Public Hearing
6/10/2019	Transportation Policy Board Approval
7/23/2019	Statewide Transportation Improvement Program (STIP) Amendment Due

FINANCIAL IMPACT

None. This amendment cycle does not allocate any funding directly from the Transportation Policy Board but may reflect changes to project finances or add projects with other state, federal, or local sources.

BACKGROUND AND DISCUSSION

The amendment cycle is part of the regularly scheduled amendment process. This amendment cycle does not allocate any new CAMPO funding for projects and only provides an opportunity for project sponsors to make changes to existing projects, add projects, or remove projects currently listed.

SUPPORTING DOCUMENTS

None.



Date: April 22, 2019
Continued From: N/A
Action Requested: Information

To: Technical Advisory Committee
From: Mr. Nirav Ved, Special Assistant to the Executive Director
Agenda Item: 6
Subject: Presentation on Luling Transportation Study

RECOMMENDATION

None. This item is for information purposes only.

PURPOSE AND EXECUTIVE SUMMARY

This item provides a presentation to the Technical Advisory Committee on the Luling Transportation Study. Created to address increased traffic congestion in the downtown area, the study addresses current and future transportation needs within Luling, including the potential viability of a relief route.

The study recommends near term improvements mainly focused on intersection improvements and increased pedestrian connectivity. Proposed longer term improvements include the development of a new connector which includes a rail overpass and creates more efficient travel movements through, instead of around, Luling.

FINANCIAL IMPACT

Not applicable.

BACKGROUND AND DISCUSSION

Downtown Luling resides at the intersection of three major roadways, US 183, SH 80 and US 90 and serves as a crossroads for access to and from Austin, San Marcos, San Antonio and Houston. As activity in the Eagle Ford Shale has expanded, so has the presence of heavy trucks that must navigate tight turns and a Union Pacific rail line that bisects Luling. When a train is passing through during peak travel times, the resulting backup of heavy trucks and passenger vehicles can extend several miles in all directions.

The goals of the study were to identify needed safety improvements, enhance mobility in downtown for local and through traffic, evaluate the feasibility of a relief route, and promote the unique character of downtown.

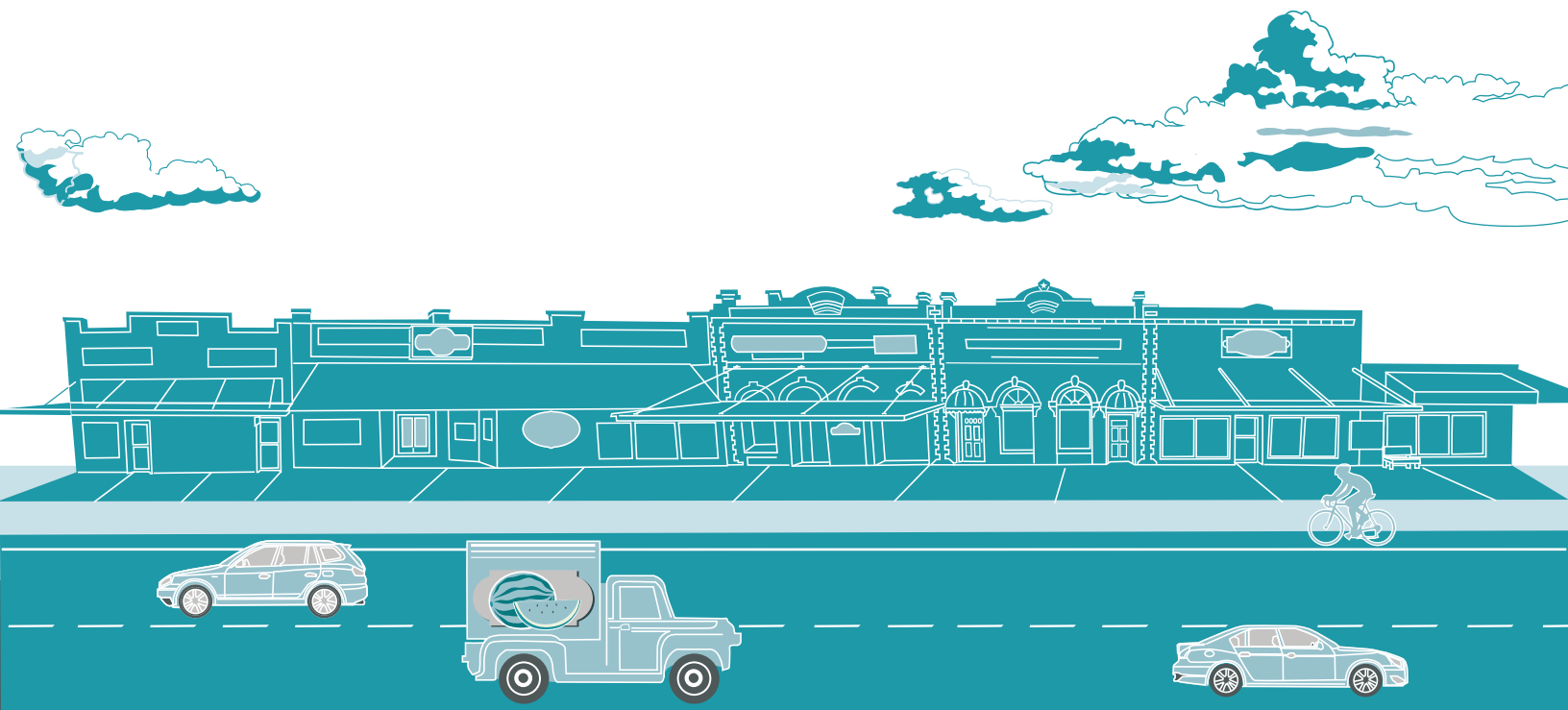
SUPPORTING DOCUMENTS

Attachments will be provided electronically

LULING

TRANSPORTATION STUDY

Community Survey Summary



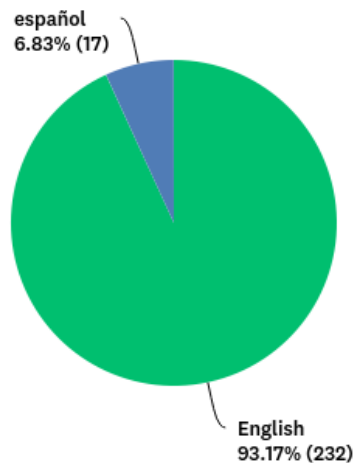
What We Heard

Community Survey

The community survey was developed in English and Spanish and was available online and in print from **January 13, 2019 to February 24, 2019**. Printed copies were available at several community events and distributed to community partners to share with postage-paid return envelopes. **243 English responses and 9 Spanish responses were completed.**

Survey Response Summary

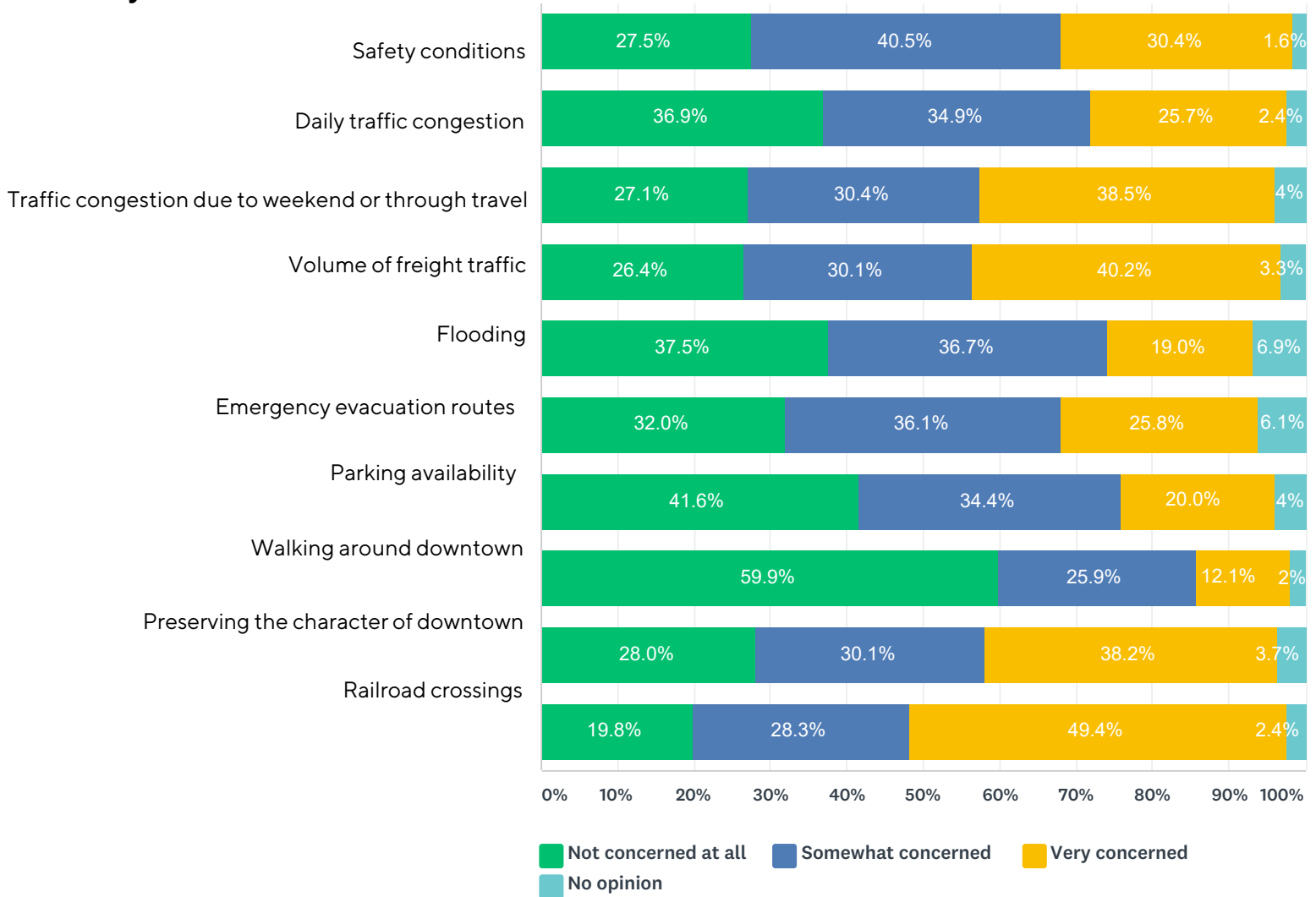
Do you prefer to respond to this survey in English or Spanish? (25 answered, 27 skipped)



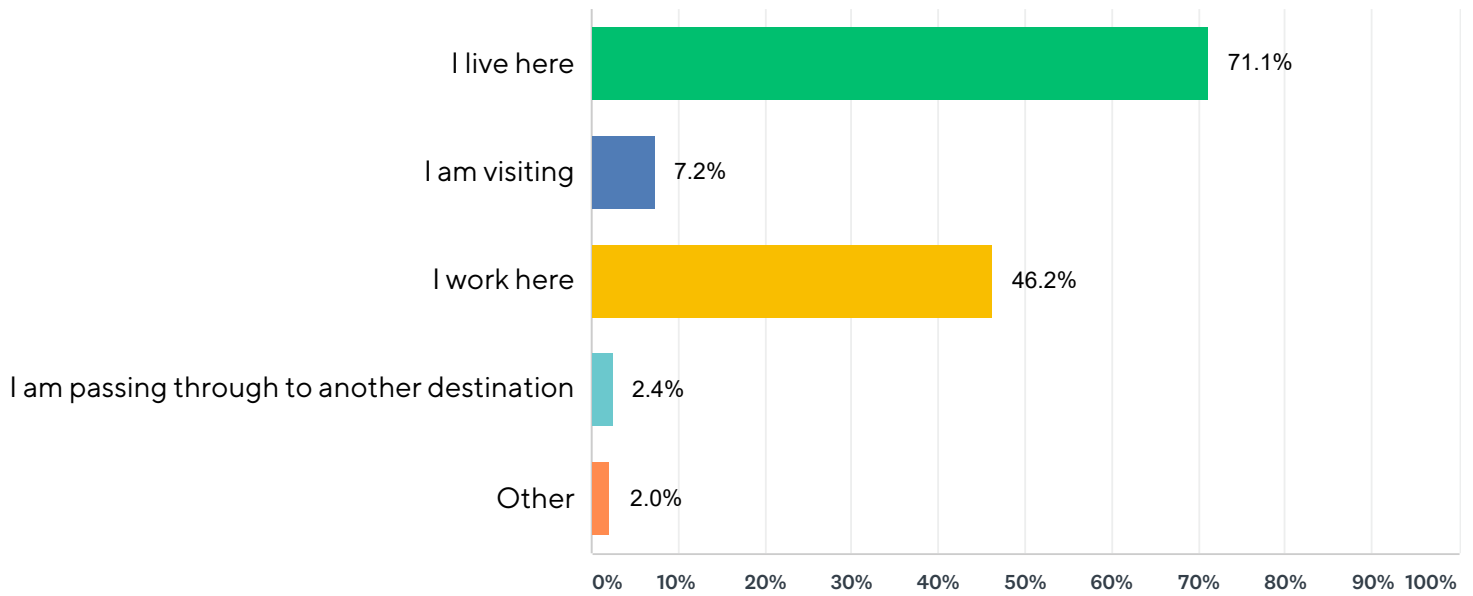
What We Heard

Survey Response Summary

Please share your input on transportation in Luling. How concerned are you with:



What brings you to Luling? (select all that apply)

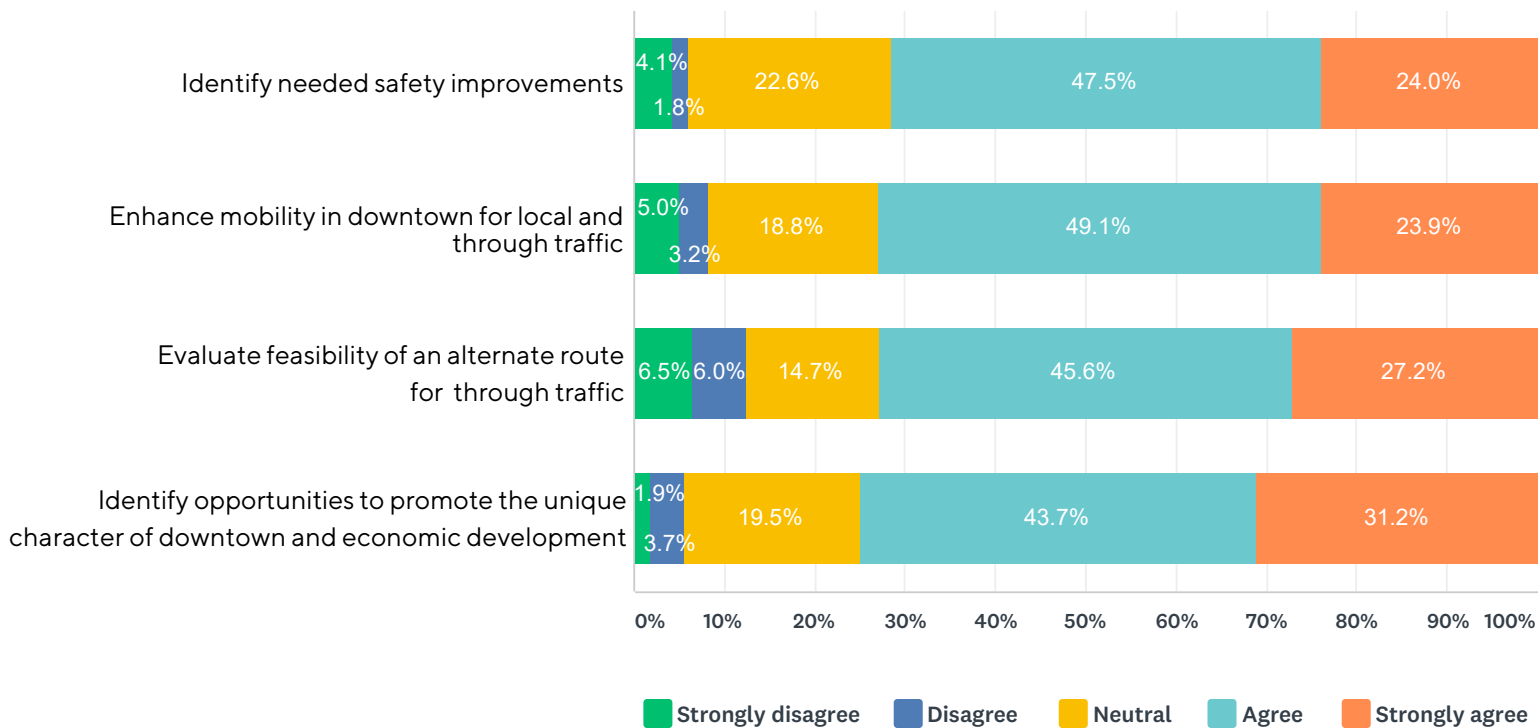


Zip Code	Responses
78648	8
78666	6
78629	6
78155	6
78644	4
78640	4
78130	4
78632	3
78616	3
78744	2
78731	2
78638	2
78622	2
78612	2
78239	2
78764	1
78759	1
78757	1
78660	1
78602	1
78244	1
78109	1
78102	1
77006	1
77539	1

Destination	Responses
Recreation, shopping, dining	5
School	4
Church	2
Austin	2
San Antonio	2
Gonzales	1
Wimberly	1

Frequency	Responses
Daily	10
4-6 times a week	22
1-3 times a week	7
3 times a month	4
1-2 times a month	6
1-2 times a year	4

Do you agree with the study goals?



Do you have any additional comments on transportation in Luling?

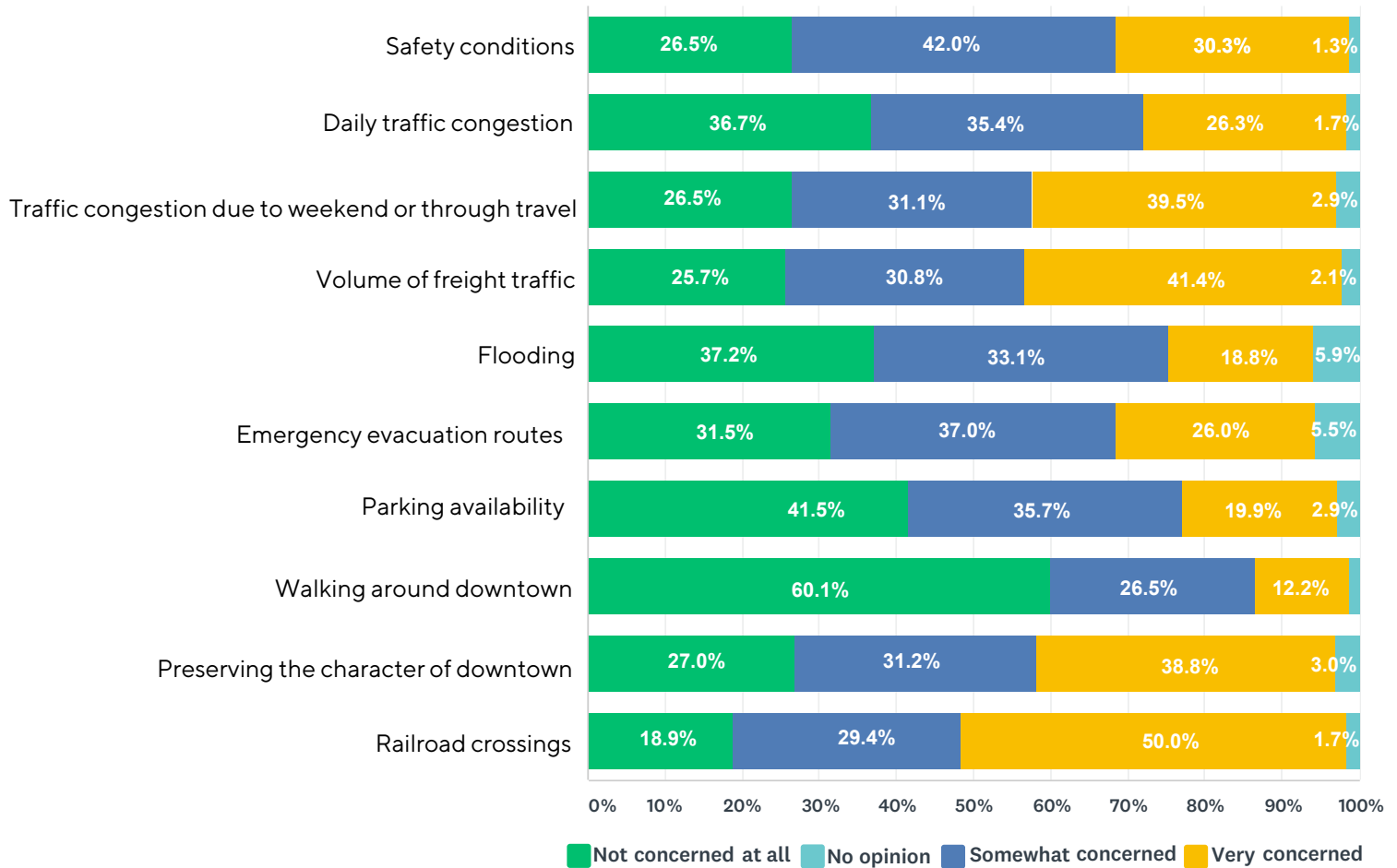
Common themes:

- Potholes and need for road maintenance
- Concern for freight traffic damaging roads
- Improved pedestrian safety and additional pedestrian crossings
- Improved access for emergency services
- Improved traffic signal timing
- Increased public transportation options
- Speeding concerns
- Opposition to building alternate route

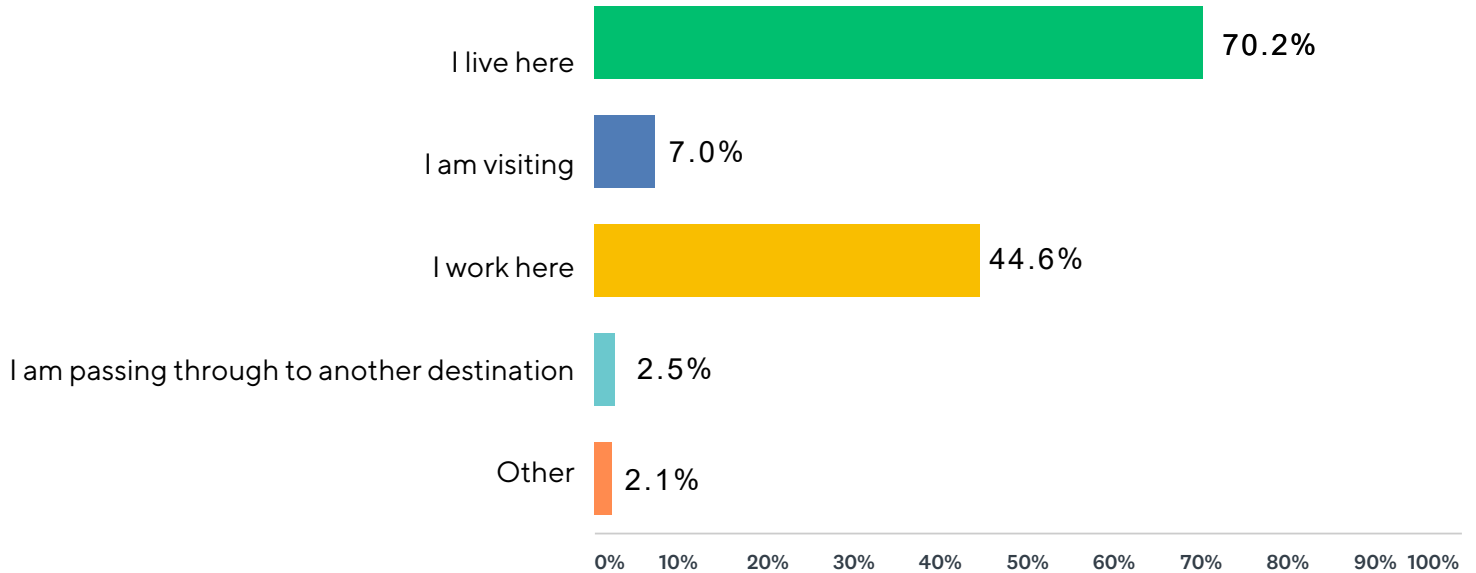
What We Heard

Survey Response Summary – English

Please share your input on transportation in Luling. How concerned are you with:



What brings you to Luling? (select all that apply)

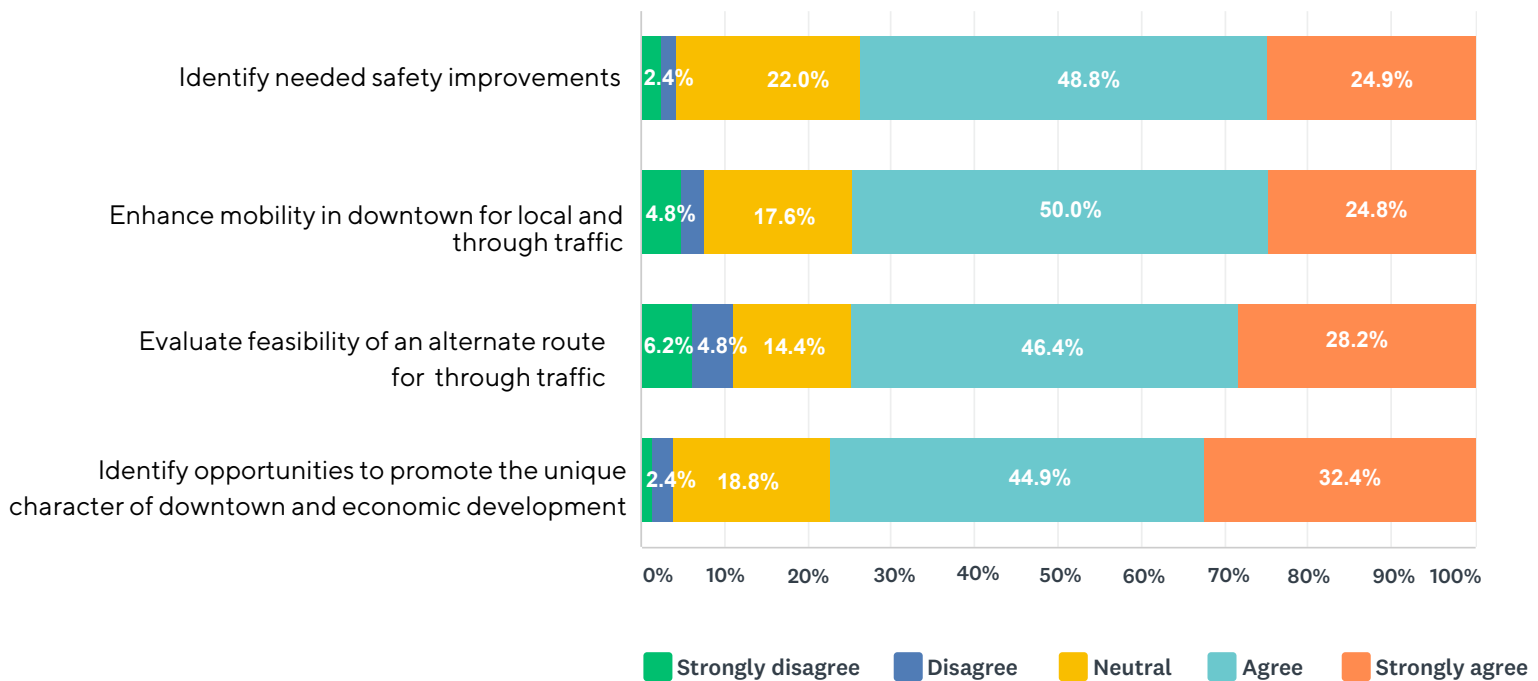


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78648	8
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Do you agree with the study goals?



Do you have any additional comments on transportation in Luling?

Common themes:

- Potholes and need for road maintenance
- Concern for freight traffic damaging roads
- Improved pedestrian safety and additional pedestrian crossings
- Improved access for emergency services
- Improved traffic signal timing
- Increased public transportation options
- Speeding concerns
- Opposition to building alternate route

Open-Ended Responses
road improvement needed
I feel that the students of Luling ISD need to be encouraged & controlled more in regards to the safety precautions of driving through the district. They speed. They do not get tickets and the administration does not do enough to hold them accountable.
Pedestrian crossings need push buttons
Traffic doesn't concern me. The many potholes do. Fix our streets. Traffic is good for business!!!
I believe that the road damage along where the railroad tracks are located should be fixed
It concerns me when our first responders can't get across tracks when there is a train
Specific areas of concern are on Hackberry Road between Hwy 80 & Hwy 90; it's in very poor condition and highly used by local and freight vehicles. Another area is pedestrians and traffic crossing at the intersection of Hwy 183 & Davis St. Big Positive- timed lights at 183/90 & 183/80 are excellent! Not pertaining to downtown Luling, but the 2 lane Hwy on 80 b/w Luling and San Marcos caused ridiculous and unnecessary backups. (needs to go back to 4 lanes!)
There needs to be a pedestrian crosswalk sign, markings, etc. On the intersection of Davis and Magnolia.
More school zones for kids going/leaving school- morning walker and afternoon walkers
It would be nice to have police officer watching the speed on bowie and walnut or put school zone signs. A lot of drivers speed thru and there are kids crossing or high school students driving crazy.
To have more security in school or police officers driving around so there won't be much speeding or kids fighting. Putting more school zone lights. Better streets and parking spaces.
Alternate truck route in school zone and Hackberry St. Reinforce school zone areas
Maintenance on truck route roads
Bus routes should have certain intersections for them. Hackberry roads need major fixing. Possibly widening the roads, bike lane is needed. We need more crosswalk guards or patrolling from local enforcement. Speed bumps in school zones. Bring back the safety gates they used to have in school areas.
Need more sidewalks and better roads.
I was born and raised here in Luling, Tx. I love this town! But threw commercial trucks such as 18 wheelers affect our roads a lot and my car is beat up from roads being ruined from big trucks.
The information center is a waste of our tax dollars, there is never a breathing human there. We need the streets with large pot holes and road cave in's properly fixed. The streets are causing vehicle issues and accidents
There should be at least one way for people on the opposite side of the tracks from the hospital to access the hospital in case of emergency.
More sidewalks. People have to walk in the street - more crosswalks.
While attempting to preserve the "small-town feel", Luling has hindered its residents with the minimal routes available in the town. I believe that additional routes, along w/ the businesses that accompany them (gas stations/stores) would enhance the quality of life & draw increased prospects of other people moving to Luling.
My car has been vandalized in the school parking lot :(
There needs to be a pedestrian/bicycle overpass to connect the neighborhood north of the railroad to the area of the Luling schools, hospital, community health clinic, post office, & main grocery store. My main concern is solely of students crossing the main streets & railroad to get to school or walk home from school.

I am concerned about the lack of pedestrian crosswalks, especially for students needing to cross the railroad tracks walking to & from school. Also, the crosswalks, or lack thereof, are an issue when the HS releases students for lunch.
Time the green lights longer
To many pot holes! Austin St., Hackberry, the alley beside the old laundry mat as if you are going to turn back onto Hackberry St. Rough railroad crossings.
Roads in the neighborhood could use a touch up. Rough around the railroad tracks.
It would be nice to have the potholes in the road patched up
Any way to get around RR
Luling needs a more reliable dedicated public transportation with longer hours.
more reliable public transportation - getting people to doctor, grocery, pharmacy, etc. The intersection @ Magnolia + 90 carries great volume, especially when commercial traffic is mixed in with the train! What can be done to relieve this congestion?
Free or cheap transportation for those without it. An over or underpass for emergency vehicles to cross railroad tracks (Northside)
Close RR crossing on Oak Street block.
I am very satisfied with Luling citizen 30 years. Thank you Luling
Signaled crosswalks @/to NW Corner E Pierce + Magnolia.
the pot holes down S. Hackberry St need help ASAP
Through traffic needs to be a primary focus. Local citizens have learned to navigate around the main streets, but there is no relief in downtown with traffic that is just trying to get through. Not much traffic is coming through to visit luling, but just to get around it. For those few that are trying to visit, our main street's congestion issues are overwhelming. Priority should be an alternate route for through traffic and adjustment of the intersection lights at the main intersection and flow of traffic.
Just highway traffic
Not that I can think of at this time
There is a serious lack of sidewalks in the town. This is not safe for children and it does not promote fitness and healthy which is imperative for the well being of residents.
1) There is a need for sidewalks and crosswalks for children headed to and from school. 2) There is a need for a truck route or enforcement of an existing truck route for the main intersection at hwy 183 and hwy 90 & hwy 80 - and then at red light heading to San Marcos
The train crossing create some problems
Back roads/potholes
Luling has no traffic problems, low taxes, and friendly people
I am concerned about the amount of trucks and trailers that travel hwy 80 and then turn south onto Hackberry or Magnolia to traverse through downtown Luling. The truck traffic seems to have increased in recent years. Also, these heavy trucks are damaging to the roads in our city. It would be great to have these trucks diverted to a route that bypasses our downtown area. This should relieve the congestion brought about by the trucks and pass-through traffic on weekends and holidays.
I would hate to see a loop around town as it would destroy the town we moved to 10 years ago!
We moved to Luling after many trips from Houston to Kyle and liked the small-town atmosphere. A loop around the town would harm Luling. All you have to do is look around at other small towns that have died once a loop was added.
No loops
No loop around town. It will kill us

The semi traffic through town is a huge problem. But I don't know of any good answer because Luling was built with zero growth in mind.
You will kill our town with a bypass. Look at any other small town that has implemented a bypass and it results in a loss of business.
Don't build by-pass Cross walk on Davis street across hwy 183/80
More signs for I-10 Coming to Luling from East trucks should use hwy 80 to go north
1230 River Park Road is a dirt road to my home. My neighbor and I always have to get our tires changed out. Would like to get it paved.
Better streets in Luling
Different routes for oversized loads and 18 wheelers
Roads are terrible in town and around town. The amount of truck traffic is concerning. Rail road crossings are constantly having maintenance issues
Upgrading street pavement. No other suggestions
Alternate route for oversized loads to travel on
Too many semi trucks running lights write some citations
Gravel trucks coming from San Marcos, through downtown are a hazard and general nuisance.
A bypass will not be beneficial for the town of Luling. Travelers through our town often stop in the stores. Our businesses need the income, and tax revenue benefits our town.
The place is old and needs an upgrade
Keep the traffic better than Austin, tx
Please install red lights at major busy intersections instead of way stops & stop lights
We need a bridge over the railroad tracks near the main 4-way stop. People are trapped when the train breaks down or just decides to stop in town. Can't get to schools or hospitals for anyone. Not the tracks. Heavy traffic on weekends and routed for I-10. Heavy equipment constantly driving through.
- Work on some type of second rail road system bridge) - Also all the large heavy equipment coming through town
Educate the town of the consequence of making right handed turns while an 18-wheeler is also trying to turn the same direction
Address trains and truck traffic
Move the 18 Wheeler's out of town
it's not the big city traffic jam, wait a few minutes and it clears up. If it is major I 10 wreck and traffic is diverted then its a problem but just for a day.
-Get them to use the existing truck route on Huckleberry; upgrade Huckleberry -Safety concerns for intersection of 80/183
Construct at least one underpass or overpass route with rail line for emergency services to utilize during train stoppages.
An overpass over the railroad track
If a bypass highway is constructed Luling will become a ghost town
Traffic on weekend is very heavy and when accidents on 10 and routed through Luling is a nightmare. We catch San Marcos to Port Aransas on Spring Break another nightmare. Along with Austin to the coast. One other problem is the stop sign on Milian St. to hospital. Should not have to stop at that extra stop sign when your in emergency.
The trains are horrible and traffic out by the Buccees light backs up bad in the summer
We don't need a. Bypass. We need all the business we can get. Luling people don't support businesses here
A loop to bypass Luling should not be an option. Stream line the truck traffic on Pierce St to the west end of town then to Hwy 80. Create a overpass over the railroad on the west end of

town. Separate the kids walking path north of the railroad from the hazardous truck route. I definitely want to be involved in any future discussions and planning to provide input. I have seen what Interstates 10 did to almost destroy the local economy, I don't want to see it happen again.

More traffic lights on Austin and 80

looking forward to a by-pass around town to help with congestion.

I would like to see crosswalks/crossing guards for the local school children. Some, if not most have to cross at least one-three major highways to get to school. We need to focus on the safety of our children in our community.

Connect Highway 80 with US 90 west of Luling

Improve walking traffic areas for safety. Main St & 183 Hwy there is no crosswalk or light. Hackberry & 90 Hwy A light for schoolchildren and crosswalk recommended. Study routes where seniors, handicap and children travel. Keep there stakeholder in-mind as you plan for change.

Train & trucking traffic creates safety concerns & traffic congestion. Can we consider a no noise ordinance for the train traffic and a reduction of the number of trains, and a possible bypass for truck traffic.

It's just very congested w/ all the 18 wheelers coming through from Hwy 80 to I-10

Consider what will happen with closing Oak Street railroad crossing. During Thump traffic is directed along Oak to 183 so people are familiar with the route.

Fix rough streets, such as Hackberry More police presence to decrease speeding vehicles!

Loss of traffic will KILL DOWNTOWN Without the traffic - our small business will die out - Due to flood zones there isn't any good place to relocate our downtown - & loss of the historic nature of our downtown would destroy attraction of tourists too! I suggest enforcing the existing truck route!

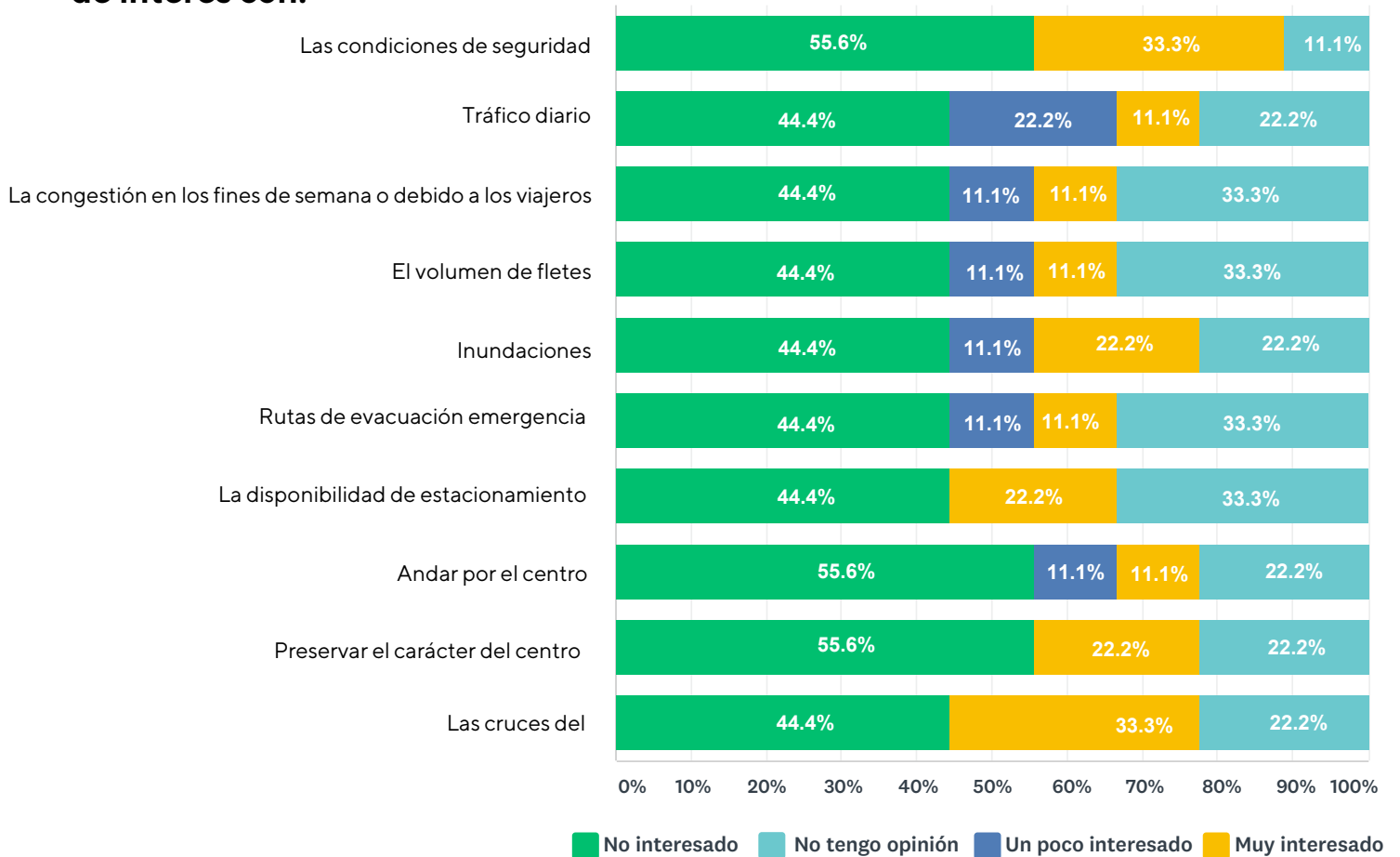
Hazmat on train 4 truck pedestrian, access from schools to 'north side' condition of R/R signals. Conditions of roads. Increased traffic due to 130. Funds being diverted to Lockhart. Overpass over railroad. I am concerned that we look at the overall needs of the area and not look at keeping city merchants busy.

Nothing, other than the fact that it gets crazy congested on Friday

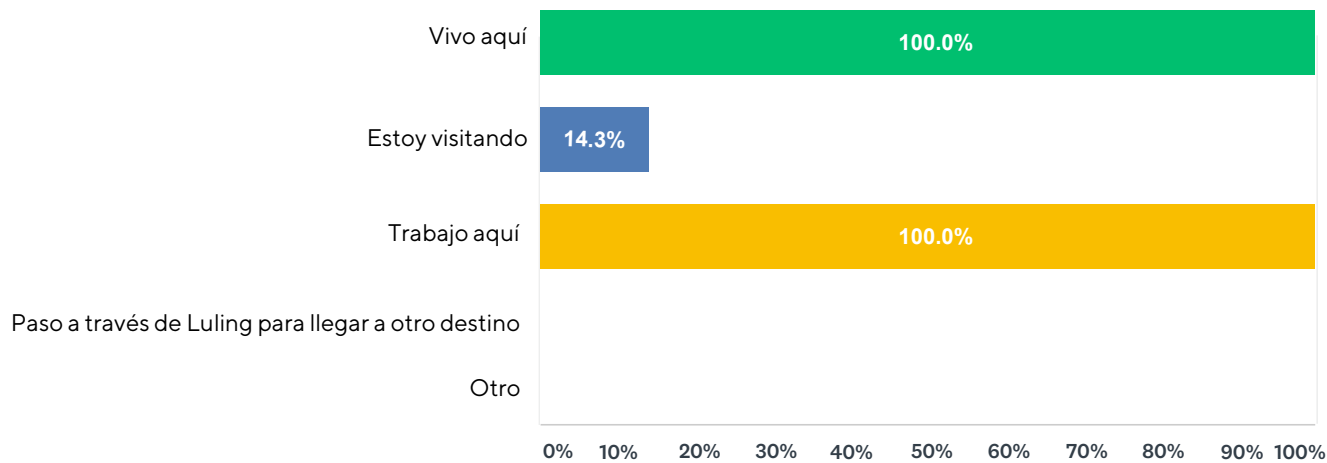
What We Heard

Survey Response Summary – Spanish

Favor de compartir sus opiniones sobre el transporte en Luling. Indique su nivel de interés con:



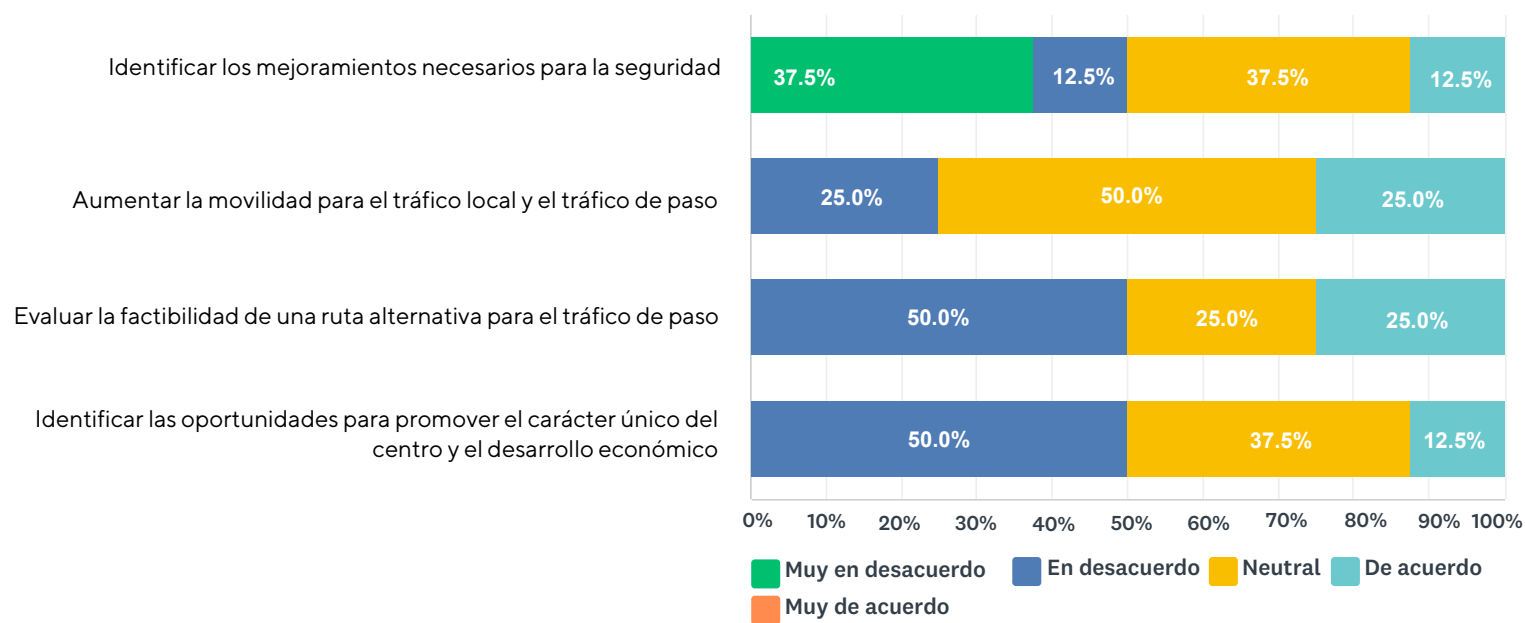
Qué le trae a Luling? (seleccione todas las que apliquen)



¿Qué le trae a Luling? (detalles adicionales)

No additional details

¿Está Usted de acuerdo con las metas del estudio?



¿Tiene algunos comentarios adicionales sobre el transporte en Luling?

No additional comments

LULING

TRANSPORTATION STUDY

Results Summary Document – April 2019



CAMPPO

CAPITAL AREA METROPOLITAN
PLANNING ORGANIZATION

CENTRAL  TEXAS

Study Goals and Objectives

The purpose of the Luling Transportation Study is to evaluate conditions and transportation needs in Luling, to identify needed improvements, and to set an implementation plan for those improvements. Four project goals and associated objectives were established through coordination with the project steering committee.

Goal 1: Identify needed safety improvements

Objectives: Evaluate and consider

- Crash traffic data
- Bicycle and pedestrian travel
- Union Pacific Railroad and crossings
- Local EMS travel and evacuation routes

Goal 2: Enhance mobility in downtown for local and through traffic

Objectives: Evaluate and consider

- Local travel, freight travel, and recreational through travel
- Near, mid, and long-term improvements
- Ease of travelling public and emergency response to cross railroad tracks

Goal 3: Evaluate feasibility of an alternate route for through traffic (relief route/bypass)

Objectives: Evaluate and consider

- Future impacts with and without an alternate route
- Various future growth scenarios for Luling

Goal 4: Identify and incorporate tools to promote the unique character of downtown and economic development opportunities

Objectives: Evaluate and consider

- Effects on businesses
- Types and ranges of visitors to downtown Luling



Transportation Issues/Needs

Several issues were identified through site observations and conversation with the steering committee, local business owners, emergency responders, and members of the general public, as shown in **Table 1**.

Table 1 - Transportation Issues

#	Issue	Analysis	Needs and Potential Solutions
1	Queuing at southbound and westbound approaches to US 183 / US 90 / SH 80 intersection during peak periods.	<ul style="list-style-type: none"> Insufficient capacity of two-lane approaches compared to traffic volume. Signal timing scheme provides equal green time to through, right, and left turn movements though peak demand is from southbound left and westbound right movements. 	<ul style="list-style-type: none"> Add capacity at US 183 / US 90 / SH 80 intersection. Improve signal timing and lane utilization scheme. Provide relief route around northeast quadrant.
2	Diversion of traffic onto local streets during periods of peak congestion. Some local streets were not built to accommodate high volumes or heavy vehicles.	<ul style="list-style-type: none"> Eastbound traffic on SH 80 diverts to parallel streets ahead of US 183 intersection if increased queuing is perceived. Westbound traffic on US 183 / US 90 diverts to parallel streets (Cedar Avenue, Oak Avenue) ahead of US 183 / US 90 / SH 80 intersection if increased queuing is perceived. Degradation of pavement quality due to unanticipated heavy vehicle use. 	<ul style="list-style-type: none"> Add capacity at US 183 / SH 80 / E Austin Street and US 183 / US 90 / SH 80 intersections. Traffic calming countermeasures on local streets. Improve wayfinding and route signage. Provide relief route around northwest and northeast quadrants. Improve Hackberry Avenue so that some heavy truck and vehicle traffic reroutes from US 183 between US 90 and SH 80 Provide direct grade-separated connection between SH 80 and US 90 (west of Hackberry Avenue)



#	Issue	Analysis	Needs and Potential Solutions
3	Trains crossings delay traffic approaching and departing north leg of 183 / US 90 / SH 80 intersection by several minutes	<ul style="list-style-type: none"> Several closures of at-grade crossing near 183 / US 90 / SH 80 intersection each hour and upwards of 50 closures every day, lasting around two to three minutes each. 	<ul style="list-style-type: none"> Grade separation of alternate route. Provide relief route around northwest and northeast quadrants; provide dynamic display signs to influence route choice for drivers.
4	Occasionally, trains stall within downtown, blocking multiple crossing locations and limiting vehicle and emergency service	<ul style="list-style-type: none"> Feedback from Steering Committee and stakeholder outreach During these events, options for crossing the railroad are often limited to the Davis Street crossing (west) and Elm Avenue (east) 	<ul style="list-style-type: none"> Grade separation of existing or alternate route. New at-grade crossing and auxiliary route outside of downtown; UPRR typically request closures of at least two at-grade crossing to approve a new at-grade crossing.
5	Unsafe conditions for pedestrians on US 183 between US 90 and SH 80. Frequent vehicle collisions on this stretch of road can exacerbate traffic congestion.	<ul style="list-style-type: none"> Feedback from Steering Committee and stakeholder outreach No marked crosswalk currently exists at Davis Street / US 183 and no continuous sidewalks link to the nearest protected crossings Crash data from 2012 – 2017 shows high concentration of rear-end, left-turn, and right-angle crashes. Two crashes involving a pedestrian at US 183 / Davis occurred during this time span 	<ul style="list-style-type: none"> Improve Hackberry Avenue so that some heavy truck and vehicle traffic reroutes from US 183 between US 90 and SH 80 Provide relief route around northwest and/or northeast quadrants. Provide direct grade-separated connection between SH 80 and US 90 (west of Hackberry Avenue) Pedestrian crossing treatment at US 183 / Davis Street. Extend sidewalks along US 183.
6	Heavy freight traffic headed east-west via SH 80 and US 183, encounters bottleneck at US 183 / SH 80 / Austin Street and US 183 / US 90 / SH 80 intersections	<ul style="list-style-type: none"> StreetLight data indicates that this is movement with the heaviest daily and peak hour freight demand 	<ul style="list-style-type: none"> Improve Hackberry Avenue so that some heavy truck and vehicle traffic reroutes from US 183 between US 90 and SH 80 Provide direct grade-separated connection between SH 80 and US 90 (west of Hackberry Avenue) Reconfigure lane assignment and signal timing at US 183 / US 90 / SH 80 intersection



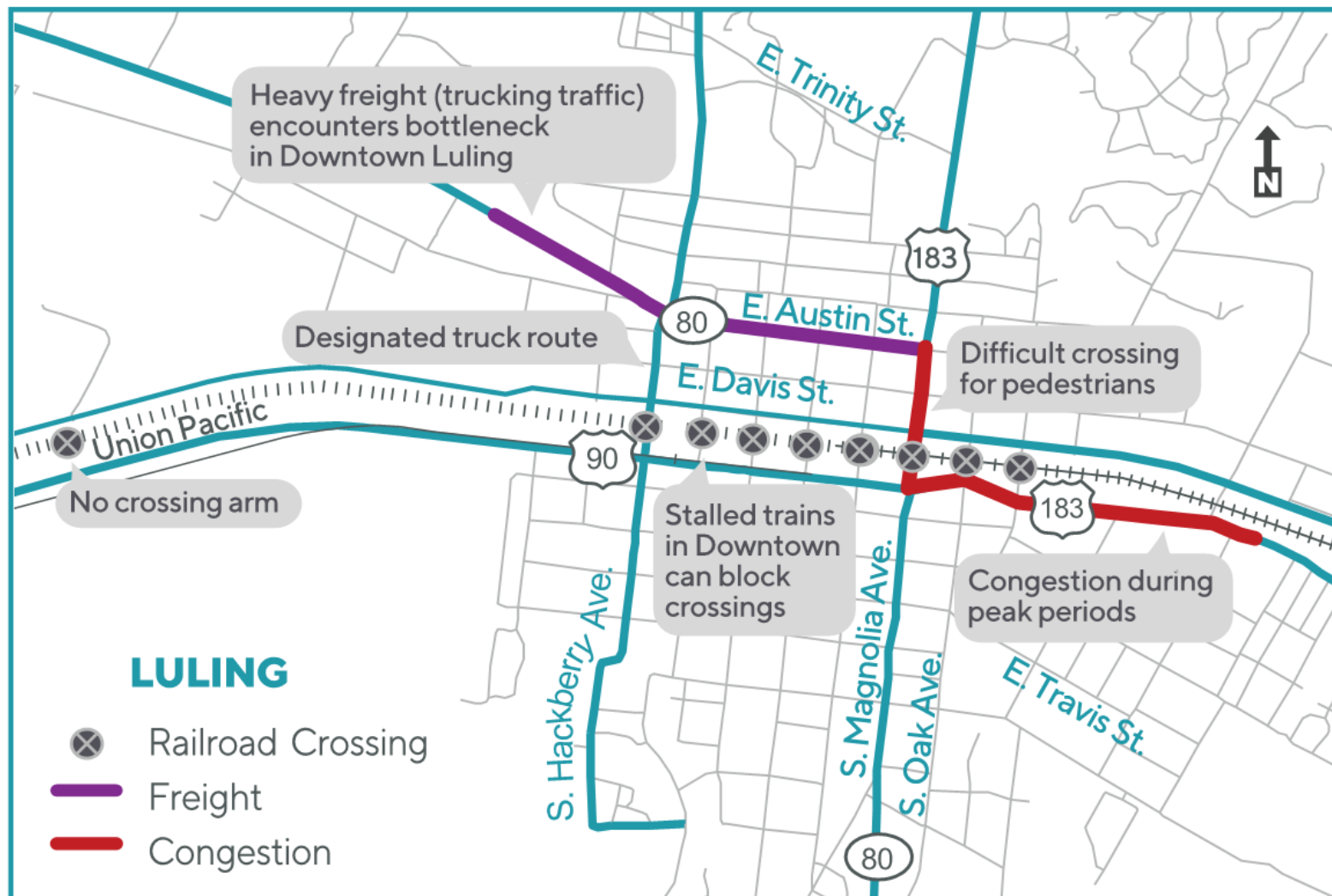


Figure 1 – Luling Issues Map



Traffic Data and Analysis

The following tables and figures display traffic counts and travel pattern information from several data sources. These counts were collected for the Luling study area to better understand traffic volume levels, truck activity, peaking characteristics, and directional distribution. Average annual daily traffic (AADT) counts from the TxDOT Traffic County Database System (TCDS) were compiled and summarized for approaching/departing study area roadways. Peak Period turning movement counts (TMCs) were collected for the five study area intersections in September 2018. Additionally, aggregated cell phone and GPS travel pattern data from StreetLight was extracted and analyzed to better understand peak Friday travel conditions and the most common routes of travel through the City.

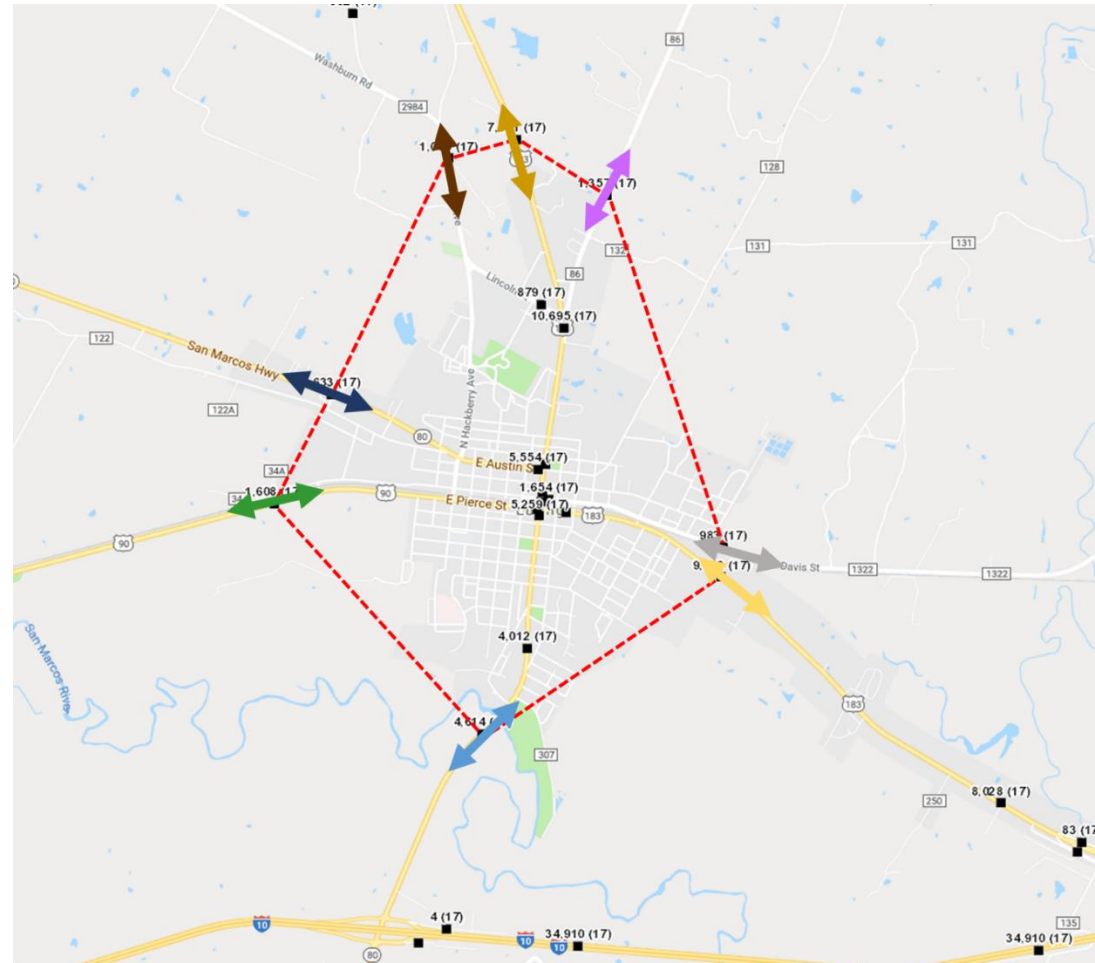


Figure 2 - 2017 Luling Study Area AADT (use with Figure 3)



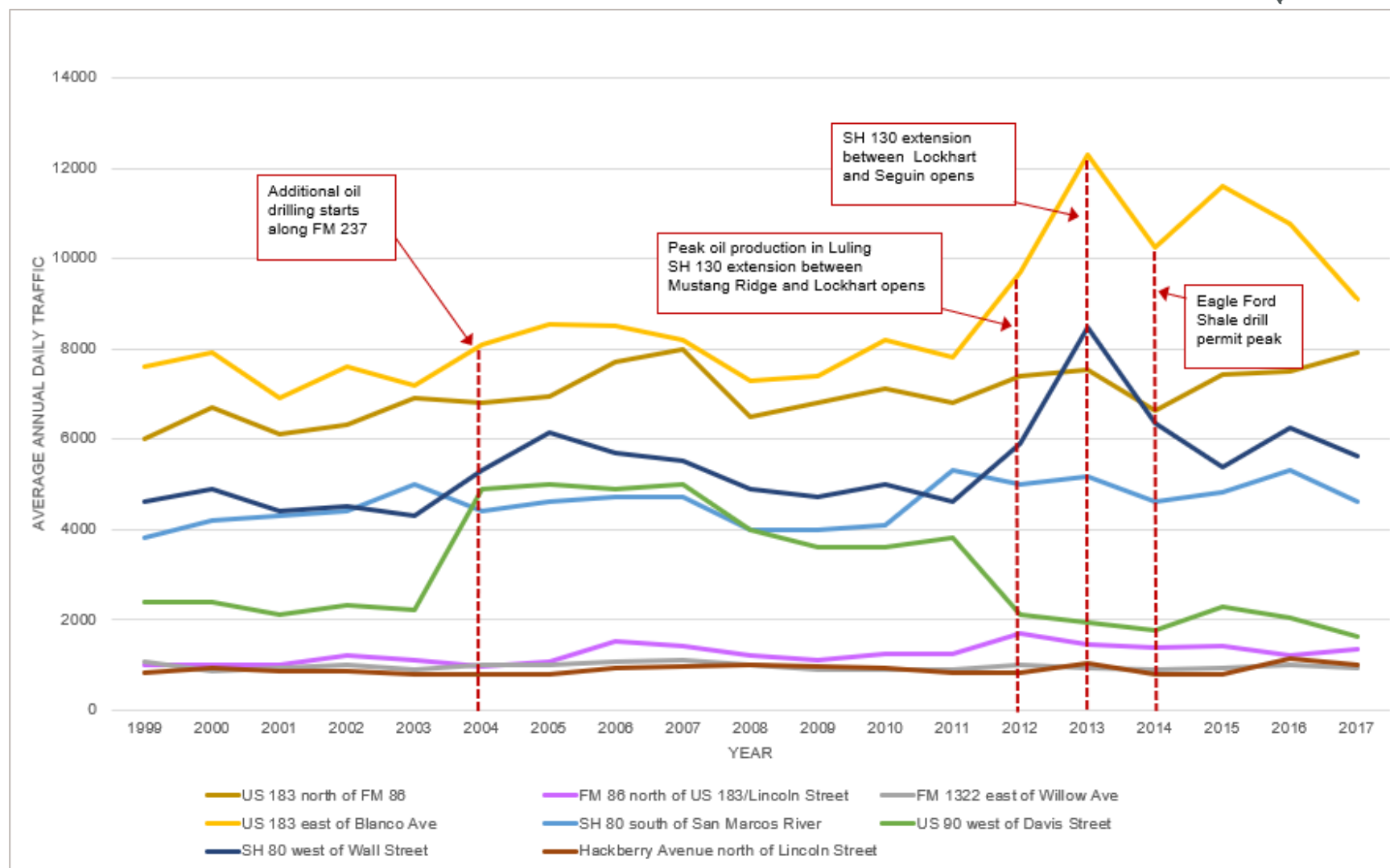


Figure 3 - Historic Counts Entering/Exiting Luling (use with Figure 2)



Table 2 - Thursday/Friday PM Peak Hour Volumes

Period Start	Thursday, September 27th						Friday, September 28th					
	SH 80 at Hackberry Avenue	US 183 & SH 80 & US 90	US 183 & SH 80	US 183 & SH 86	US 90 at Hackberry Avenue	Total (15-minutes)	SH 80 at Hackberry Avenue	US 183 & SH 80 & US 90	US 183 & SH 80	US 183 & SH 86	US 90 at Hackberry Avenue	Total (15-minutes)
16:00	241	381	346	236	179	1383	277	472	425	291	197	1662
16:15	217	351	347	254	108	1277	247	462	424	299	111	1543
16:30	189	383	348	259	98	1277	261	456	444	314	104	1579
16:45	205	368	348	253	102	1276	199	442	385	289	117	1432
17:00	178	382	333	243	108	1244	253	446	415	310	111	1535
17:15	190	378	349	266	111	1294	249	420	426	301	98	1494
17:30	191	379	345	241	104	1260	245	459	422	266	79	1471
17:45	201	344	310	200	108	1163	240	421	428	309	120	1518

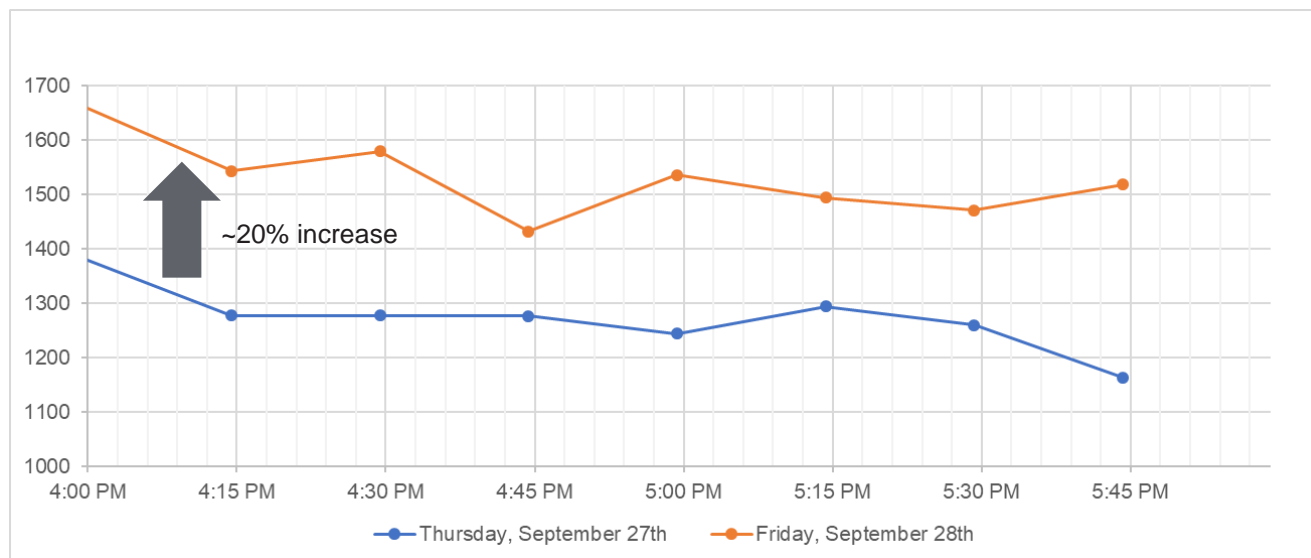


Figure 4 - Study Intersection 15-Minute Count Comparison





Figure 5 - Average Daily Traffic - 2017 (Friday Average) Total & Heavy Vehicles



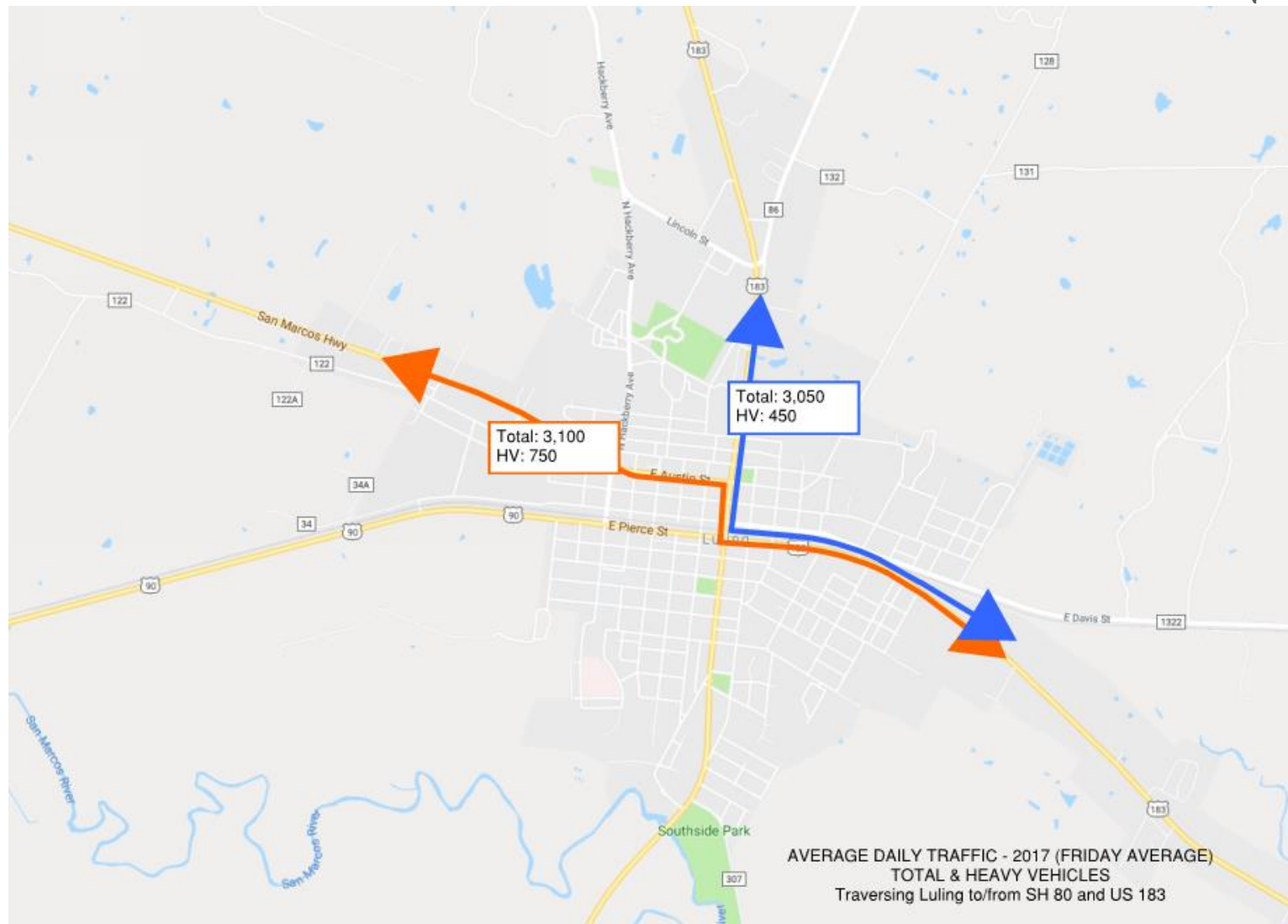


Figure 6 - Average Daily Traffic - 2017 (Friday Average) Total & Heavy Vehicles Traversing Luling to/from SH 80 and US 183



Environmental Constraints Mapping

Environmental constraints mapping is the process of identifying features related to land use, ecology, and geography that need to be considered during conceptual design and feasibility of a transportation project. Watersheds and floodplains were obtained from the Federal Emergency Management Agency (FEMA), and other sites were obtained from the Environmental Protection Agency's NEPAassist Tool. Parcel data was obtained from the Caldwell County Appraisal District. The list below provides definitions for special features contained on the map:

- Historic Sites – sites contained on the National Register of Historic Places.
- National Pollutant Discharge Elimination System – sites with federal permit to discharge pollutants into waters of the United States.
- Hazardous Waste Resource Conservation and Recovery Act Information – sites registered as having generators, transporters, treaters, storers, and disposers of hazardous waste.
- Toxic Releases Inventory – sites with toxic chemical releases and waste management activities reported annually by certain industries as well as federal facilities.
- Threatened and Endangered Species Occurrence – potential habitat of species classified as threatened or endangered by the Environmental Protection Agency.
- 100 year floodplain – land with a 1% annual chance of flood hazard.
- 500 year floodplain – land with a 0.2% annual chance of flood hazard.
- Parcels – division of property boundaries.



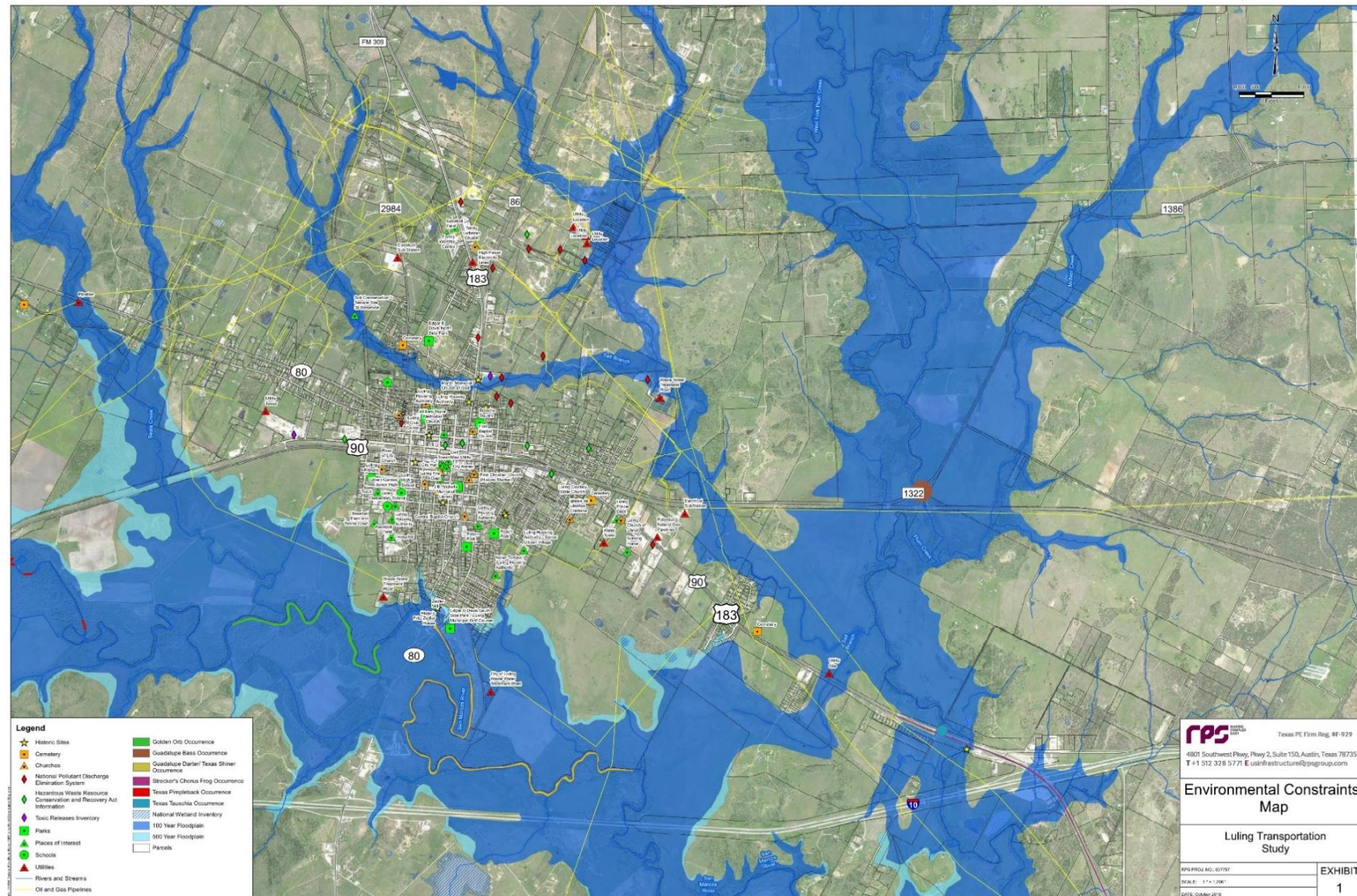


Figure 7 - Environmental Constraints Map



Performance Measures

A set of performance measures to assess potential options was developed in coordination with the project steering committee. The following table lists the four goals of the Luling Transportation Study, their associated performance measures, and the methods of calculation and data source for each measure.

Table 3 - Recommended Performance Measures

Goal	Performance Measure	Unit/Ranking	Method of Calculation	Data Source
Goal 1: Identify needed safety improvements	Predicted annual crash rates by severity	crashes/year	Highway Safety Manual (HSM) Predictive Method	<ul style="list-style-type: none"> ○ TxDOT Crash Records Information System ○ HSM crash modification factors clearinghouse ○ TxDOT Highway Safety Improvement Manual
	Presence of new or improved street crossing or walking path for pedestrians	<ul style="list-style-type: none"> ○ Number of protected crossings added in central Luling ○ Miles of sidewalk/walking paths added 	Geographic Information Systems	<ul style="list-style-type: none"> ○ City, County, and TxDOT shapefiles ○ Available aerial imagery
	Number of grade-separated (bridge) railroad crossings provided by improvements	Number of grade-separated crossings added	Geographic Information Systems	<ul style="list-style-type: none"> ○ City, County, and TxDOT shapefiles ○ Available aerial imagery
	Improvement to travel time and reliability for evacuation and emergency response travel (5-minute travel shed area)	Acres of coverage	Geographic Information Systems	<ul style="list-style-type: none"> ○ StreetLight GPS and cell phone data ○ Google maps travel time estimates ○ Turning movement counts collected in September 2018



Goal	Performance Measure	Unit/Ranking	Method of Calculation	Data Source
Goal 2: Enhance mobility in downtown for local and through traffic	Estimated daily entering traffic at US 183 / SH 80 / US 90 intersection	<ul style="list-style-type: none"> Total entering daily traffic Total entering daily traffic 	Apply growth rates from CAMPO Travel Demand Model to AADT collected by TxDOT	<ul style="list-style-type: none"> TxDOT Traffic Count Database System CAMPO Travel Demand Model
	Estimated average travel time for typical Friday PM peak hour conditions	minutes	Use StreetLight data to set existing baseline for travel time. Use Synchro outputs to determine increase/decrease.	<ul style="list-style-type: none"> StreetLight GPS and cell phone data Turning movement counts collected in September 2018
	Intersection level of service (LOS) for typical weekday and typical Friday PM peak hour conditions	<ul style="list-style-type: none"> LOS (A – F) Average delay/vehicle 	<ul style="list-style-type: none"> Synchro Highway Capacity Manual 	<ul style="list-style-type: none"> Turning movement counts collected in September 2018
	Average railroad crossing delay for typical weekday and typical Friday PM peak hour conditions	<ul style="list-style-type: none"> Daily Vehicle hours of delay at US 183 and Hackberry crossings Friday PM peak vehicle hours of delay at US 183 and Hackberry crossings 	Use StreetLight data to set existing baseline for railroad delay. Use Synchro outputs to determine increase/decrease.	<ul style="list-style-type: none"> StreetLight GPS and cell phone data Turning movement counts collected in September 2018



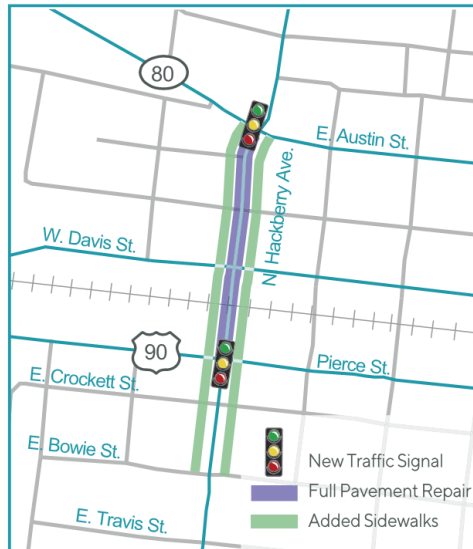
Goal	Performance Measure	Unit/Ranking	Method of Calculation	Data Source
Goal 3: Evaluate feasibility of an alternate route for through traffic	Estimated cost of each alternative including design, environmental compliance, right-of-way, and construction	Million \$	Generalized unit cost and quantities	Recent unit costs for Caldwell County, City of Luling, or TxDOT Austin District
	Environmental impacts in terms of network fuel consumption and greenhouse gas emissions (PM peak hour)	<ul style="list-style-type: none"> Gallons fuel consumed Kilograms carbon monoxide emitted 	<ul style="list-style-type: none"> Synchro Highway Capacity Manual 	<ul style="list-style-type: none"> Turning movement counts collected in September 2018 EPA Greenhouse Gas Equivalencies Calculator
	Overall environmental suitability of improvements (floodplains, land use, cultural resources, etc.)	Level of suitability 1 = low, many conflicts 2 = medium, some conflicts 3 = high, few conflicts	Qualitative, with Geographic Information Systems mapping	Shapefiles from City, County, TxDOT, FEMA, and Texas Parks and Wildlife Department (TPWD) shapefiles



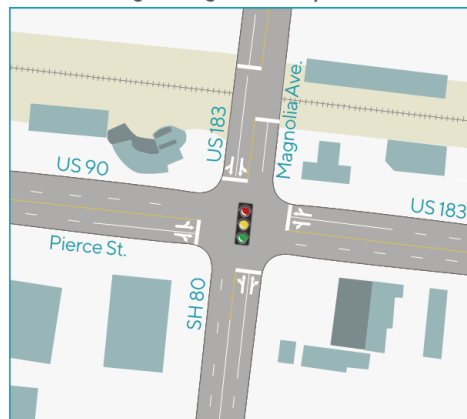
Goal	Performance Measure	Unit/Ranking	Method of Calculation	Data Source
Goal 4: Promote the unique character of downtown and economic development opportunities	Increase or decrease in number of automobiles and trucks passing downtown through US 183 / SH 80 / US 90 intersection; distinguish trips that stop in downtown from pass-through trips	<ul style="list-style-type: none"> Total AADT <ul style="list-style-type: none"> Local to Luling Pass-through Luling Daily heavy truck traffic <ul style="list-style-type: none"> Local to Luling Pass-through Luling 	Apply growth rates from CAMPO Travel Demand Model to AADT collected by TxDOT. Estimate likely traffic diversion with consideration to pass-through activity levels in StreetLight data.	<ul style="list-style-type: none"> TxDOT Traffic Count Database System CAMPO Travel Demand Model StreetLight GPS and cell phone data
	Improvement to main street connectivity along US 183 / Davis Street and US 183 / SH 80 / US 90 intersection	<ul style="list-style-type: none"> Number of protected crossings added in central Luling Miles of sidewalk/walking paths added 	Qualitative	Qualitative



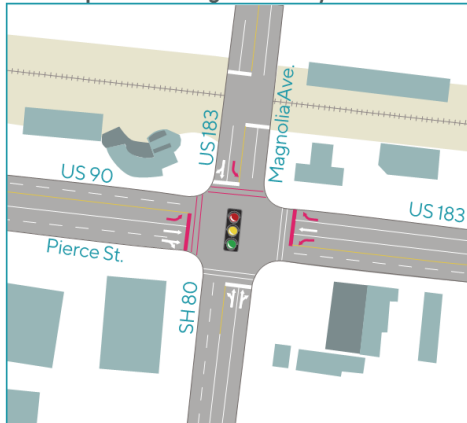
Short-Term Improvement Options – Elements and Rough Order of Magnitude



Existing at Magnolia Ave./Pierce St.



Proposed at Magnolia Ave./Pierce St.



**Table 4 – Short-Term Improvements
Rough Order of Magnitude**

#	Item	Cost Range (thousand \$)
Hackberry Improvements		
1	Two new signals at SH 80 and US 90 with controller, mast arms, striping, and curb ramps. TxDOT standards.	500
2	Repave 50 ksf of street (1000' long x 50' wide)- mill & overlay	125 - 250
3	Striping for centerline and intersection approaches	50
4	Construct 15 ksf of sidewalks (3000' long x 5' wide) within existing ROW	150
5	Advance warning and truck route signage on SH 80 EB and US 90 / US 183 WB	25
Subtotal		\$850 - 975
Magnolia / Pierce (US 183 / SH 80 / US 90) Improvements		
6	Restripe dedicated turn pockets and crosswalks	30
7	Signal head modifications (EB and WB approaches, only) and added crosswalk countdown timers	20 - 70
8	250 sf ROW on NW corner to improve WBR turn radii for large trucks (land values estimated from Caldwell CAD)	5 - 10
9	Reconstruct 4 curb ramps with widened WBR turn radii	40 - 60
10	Construct 2.5 ksf of sidewalks (500' long x 5' wide) within existing ROW	25
11	Relocate signal mast arm and gas station sign (NE corner)	5
Subtotal		\$125 - 200
Additional Studies		
12	Neighborhood traffic calming study	50
13	Safe routes to school plan	50
14	Four-way stop-sign evaluation at Walnut Avenue / Pierce Street intersection	5 - 15
Subtotal		\$105 - 115
TOTAL		\$1,180 - 1,290



Long-Term Improvement Options – Elements and Rough Order of Magnitude

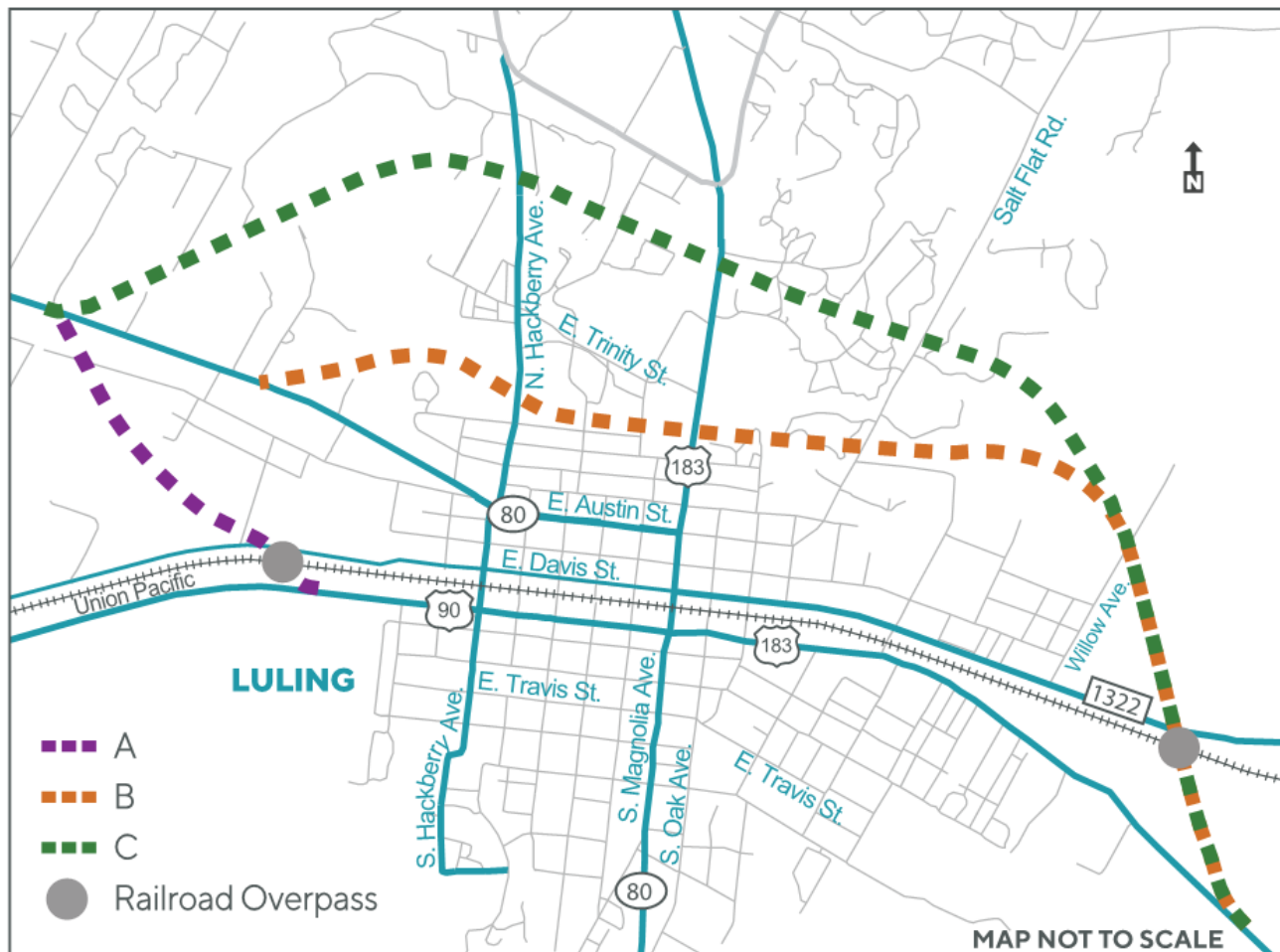


Table 5 – Option A – Rough Order of Magnitude

#	Item	Cost Range (thousand \$)
1	New two-lane roadway with approximately 100' cross-section (12' lanes, 10' shoulders, 28' clear zone/drainage each direction) – variable alignments 0.8 – 1.2 miles	3,500 – 5,200
2	ROW, 12 – 15 acres (land values estimated from Caldwell CAD)	850 – 1,050
3	Side-street stop-controlled intersection at new alignment intersection with SH 80, with channelized EBR turn	200
4	500' span bridge over Davis Street, UPRR, and US 90 (eastbound connector)	2,000 – 3,000
5	500' add lane on US 90 westbound for WB to NB connection; 500' drop lane on US 90 eastbound for SB to EB connection	200 - 400
6	Advance warning and truck route signage on SH 80 EB and US 90 / US 183 WB	50
TOTAL		\$6,800 – 9,900



Table 6 – Option B – Rough Order of Magnitude

#	Item	Cost Range (thousand \$)
1	New two-lane roadway with approximately 100' cross-section (12' lanes, 10' shoulders, 28' clear zone/drainage each direction) – variable alignments 3.5 – 4.0 miles	15,000 – 17,500
2	ROW, 35 – 40 acres (land values estimated from Caldwell CAD)	2,500 – 2,800
3	Side-street stop-controlled intersection at new alignment intersection with SH 80, with channelized EBR turn. Includes advance warning and truck route signage.	200
4	Side-street stop-controlled intersection at new alignment intersection with Hackberry. Includes advance warning and truck route signage.	200
5	New signalized intersection at new alignment intersection with US 183 north of Austin Street. TxDOT standards. Includes advance warning and truck route signage.	500 - 1000
6	500' span bridge over FM 1322 and UPRR	2,000 – 3,000
7	New signalized intersection at new alignment intersection with US 183 east of Blanco Avenue. TxDOT standards. Includes advance warning and truck route signage.	500
TOTAL		\$20,900 – 25,200

Table 7 – Option C – Rough Order of Magnitude

#	Item	Cost Range (thousand \$)
1	New two-lane roadway with approximately 100' cross-section (12' lanes, 10' shoulders, 28' clear zone/drainage each direction) – variable alignments 4.0 – 4.5 miles	17,500 – 20,000
2	ROW, 40 – 45 acres (land values estimated from Caldwell CAD)	2,800 – 3,150
3	Side-street stop-controlled intersection at new alignment intersection with SH 80, with channelized EBR turn. Includes advance warning and truck route signage.	200
4	Side-street stop-controlled intersection at new alignment intersection with Hackberry. Includes advance warning and truck route signage.	200
5	New signalized intersection at new alignment intersection with US 183 north of Austin Street. TxDOT standards. Includes advance warning and truck route signage.	500 – 1000
6	500' span bridge over FM 1322 and UPRR	2,000 – 3,000
7	New signalized intersection at new alignment intersection with US 183 east of Blanco Avenue. TxDOT standards. Includes advance warning and truck route signage.	500
8	Two bridges over Salt Branch (assume each 500' span)	4,000 – 6,000
TOTAL		\$27,700 – 34,050



Improvement Options – Performance Measurement

A performance measures matrix was created to visually convey how each option compares to the existing conditions and 2045 no build conditions, as well as to each other. The performance measures were calculated using the methods and data sources described in **Table 8** the data for each measure based on the condition of the study area. “High” and “low” traffic growth scenario were analyzed to account for uncertainty and to create a range of performance.

Generating “High” and “Low” Traffic Forecasts

The project team recognizes that there is not a clear indication of how transportation conditions will change through Luling over the next 25 years. The oil boom ended several years ago, so some of the historical data indicates that traffic and truck growth will proceed at the moderate rates observed during much of the last 20 years. However, it could be argued that the oil market is cyclical, and new production technologies or increase in domestic/global demand could result in more booms like the one experienced between 2011 and 2014.

Several data sources and traffic models were reviewed to determine a potential range of growth rates (low and high):

- *Historical traffic counts from TxDOT Traffic Count Database System (TCDS)*– for locations with two or more years of available AADT data, a logarithmic (trendline) growth rate was calculated. All study location had data spanning 1999 – 2019.
- *CAMPO 2040 Regional Transportation Plan (RTP) Model* – CAMPO maintains a regional transportation plan model for long range traffic forecasting. CAMPO provided directional ADT and peak hour volume outputs for the City of Luling for years 2010 and 2040. Growth rates between these two years were calculated for each approaching/departing roadway.

Growth rates were averaged for eight approach/departure roadways. The average growth rate for the TCDS historical data is 1%, and the average growth rate for the CAMPO RTP model outputs is 2.7%. The TCDS growth rate accounts for nearly 20 years of variation in traffic volumes, including the emergence and dissipation of the oil boom between 2011 and 2014. The CAMPO RTP model may have somewhat higher growth rates than the TCDS counts due to the expectation that population and employment growth in Caldwell County will begin to pick up as the areas surrounding Austin continue to develop. To capture a range of potential traffic growth scenarios, the 1% annual growth rate from the TCDS was assumed as a “low” scenario and the 2.7% CAMPO RTP rate as a “high” scenario.



Table 8 - Performance Measures Matrix

Goal	Measure	Unit	Existing	No Build		Near-Term Improvements		Option A		Option B/C	
				Low	High	Low	High	Low	High	Low	High
1	Predicted annual crash rates by severity	crash/yr	22	30	41	27	39	26	36	27	36
	Presence of new or improved street crossing or walking path for pedestrians	Number of protected crossings added in Central Luling	0	0		10		0		0	
		Miles of sidewalk/walking paths added	0	0		0.6		0		0	
	Number of at-grade and grade separated railroad crossings provided by improvements	Number of grade-separated crossings (bridges over rail) added	0	0		0		1		1	
	Improvement to travel time and reliability for evacuation and emergency response travel (5-minute travel shed area)	Acres of coverage	1892	823		2068		2169		2194	
2	Estimated daily entering traffic at US 183/ SH 80 /US 90 intersection	Total entering daily traffic	18500	23500	32100	23500	32100	23500	32100	18550	25300
		Total entering daily trucks	1600	2100	2850	2100	2850	2100	2850	700	900
	Estimated Friday PM travel time for automobiles (seconds)	SH 80 EB from Scenic View Drive to US 183 EB at Oakview Rd	9	11	17	6	7	4	5	6	6
		US 183 SB at FM 309 to US 183 EB at Oakview Rd	9	10	14	9	9	9	9	6	6
		US 183 WB at Oakview Rd to SH 80 WB at Scenic View Drive	9	13	21	7	8	6	6	6	6
		US 183 NB at Oakview Rd to US 183 NB at FM 309	8	12	20	6	7	6	7	6	6
	Intersection level of service (LOS) for typical Friday PM peak hour conditions	US 183 / SH 80	B	B	E	B	C	B	C	B	C
		US 183 / SH 80 / US 90	F	F	F	C	D	C	D	C	C
		Hackberry / SH 80	A	B	F	B	C	A	D	A	E
		Hackberry / US 90	A	B	F	A	B	A	A	B	F
	Intersection average delay for typical Friday PM peak hour conditions (seconds)	US 183 / SH 80	13	19	78	11	26	11	23	12	22
		US 183 / SH 80 / US 90	109	257	554	25	50	25	50	20	31
		Hackberry / SH 80	4	12	995	16	26	6	31	6	43
		Hackberry / US 90	8	13	145	9	13	7	9	13	145
	Total railroad crossing delay for typical weekday and typical Friday PM peak hour conditions	Daily vehicle hours of delay at US 183 crossing	104	135	193	131	185	110	156	99	138
		Friday PM peak vehicle hours of delay at US 183 crossing	16	21	32	21	32	18	26	16	24



LULING TRANSPORTATION STUDY

RESULTS SUMMARY – APRIL 2019



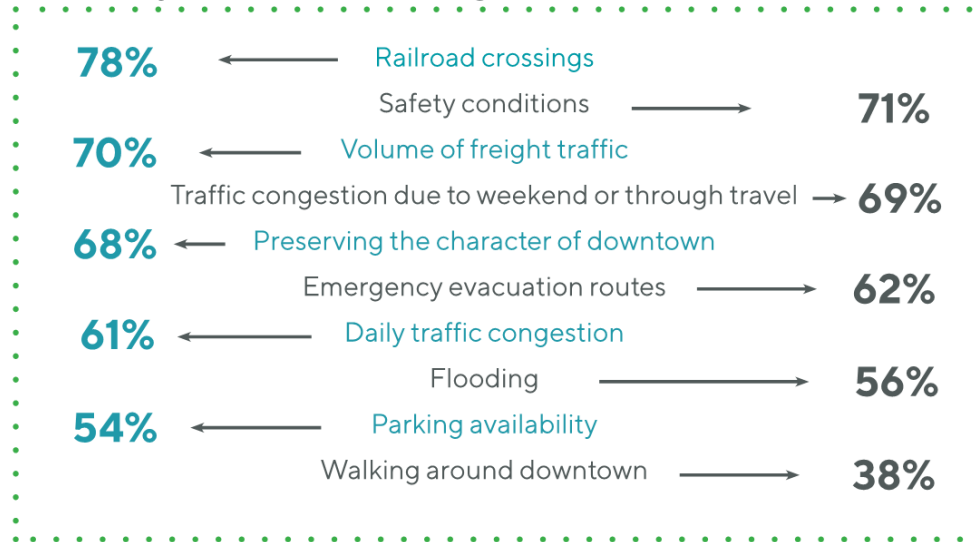
Goal	Measure	Unit	Existing	No Build		Near-Term Improvements		Option A		Option B/C	
				Low	High	Low	High	Low	High	Low	High
3	Estimated cost of each alternative including design, environmental compliance, right-of-way, and construction	Million \$	n/a	n/a	n/a	1.2	1.3	7	10	21	34
	Environmental impacts in terms of network fuel consumption and greenhouse gas emissions (Friday PM peak hour)	Gallons of fuel consumed	143	242	910	160	285	150	273	164	312
		kg CO emissions	9.97	16.92	63.6	11.19	19.92	10.47	19.06	11.47	21.82
	Overall environmental suitability of improvements (floodplains, land use, cultural resources, etc.)	1= low, many conflicts, 2=medium some conflicts, 3 = high, few conflicts	-	-	-	High	High	Med	Med	Low	Low
4	Increase or decrease in number of automobiles and trucks passing downtown through US 183 / SH 80 / US 90 intersection; distinguish trips that stop in downtown from pass-through trips	Total AADT	18500	23500	32100	23500	32100	23500	32100	18550	25300
		AADT Local to Luling	10900	14400	16400	14400	16400	14400	16400	14400	16400
		AADT Pass-through Luling	7600	9100	15700	9100	15700	9100	15700	4150	8900
		Total AADT compared to No Build	n/a	n/a	n/a	0	0	0	0	-4950	-6800
		Total Heavy Trucks	1600	2100	2850	2100	2850	2100	2850	900	1200
		Total Heavy Truck Local to Luling	150	350	450	350	450	350	450	350	450
		Total Heavy Truck Pass-through Luling	1450	1750	2400	1750	2400	1750	2400	550	750
		Heavy Truck volume compared to No Build	n/a	n/a	n/a	0	0	0	0	-1200	-1650
	Improvement to pedestrian connectivity between US 183 / Davis Street and US 183 / US 90 intersections	Number of protected crossings added	n/a	0		2		0		0	
		Miles of sidewalk/walking paths added	n/a	0		0.1		0		0	



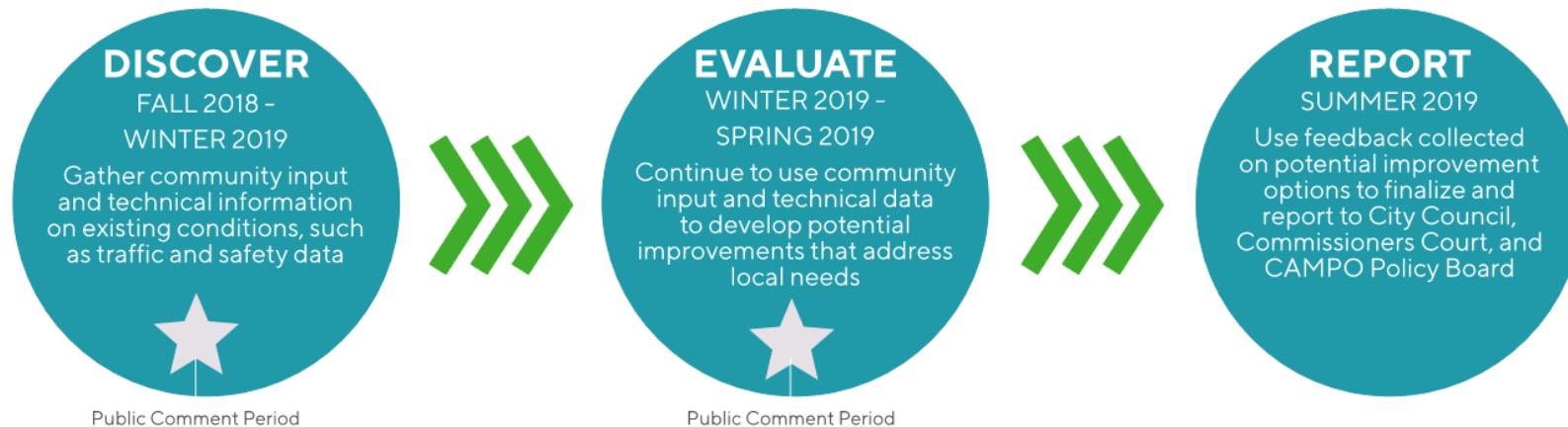
Public Survey – Results Summary

A community survey was developed in both English and Spanish and was administered between January 13, 2019 and February 24, 2019. The purpose of this survey was to determine people's perception of transportation conditions and issues within Luling and gauge opinions of the Luling Transportation Study Goals. In total, 252 responses were completed. Detailed results are contained within the Community Summary Survey Document. Overall, more than 70% of respondent agreed with the goals of the study. Other major findings and a sampling of written comments from the survey are provided below.

Community Concerns as Percentages



Schedule and Next Steps



The project team is currently evaluating community input on the short- and long-term options. The public comment period is open now and will be closed on May 15, 2019. Those comments and the materials contained within this document will be used to determine the recommended short- and long-term solutions and to finalize the report in summer 2019.

Other steps remaining in the study process include:

- Present recommendations to Luling City Council, Caldwell County Commissioners Court, and the CAMPO Transportation Policy Board
- Include recommended projects in CAMPO plans
- Secure funding for near-term improvements
- Complete the environmental study, design, and engineering for near-term improvements
- Evaluate travel and consider when long-term improvements are needed





Date: April 22, 2019
Continued From: N/A
Action Requested: Information

To: Technical Advisory Committee
From: Mr. Joe Clemens, Capital Metro
Agenda Item: 7
Subject: Status Update on Project Connect

RECOMMENDATION

None. This item is for information purposes only.

PURPOSE AND EXECUTIVE SUMMARY

Over the last three years, Capital Metro created the Project Connect Long Term Vision Plan. The system plan involved a three phase process to evaluate over 30 corridors, determine corridors for high-capacity transit, and create a network for bus rapid transit (BRT), light rail transit (LRT), and/or autonomous rapid transit (ART). The Long-Term Vision Plan was adopted by the Capital Metro Board on December 17, 2018.

Now, Capital Metro has moved priority corridors to early project development (Alternatives Analysis/Preliminary Engineering) to define the appropriate mode and alignment, move into the formal NEPA process, and prepare for a November 2020 vote. Capital Metro is using the FHWA/FTA Planning and Environmental Linkages (PEL) process, so the results of the AA/PE process may be considered during the NEPA process.

The first priority is the Orange Line Corridor, a 21-mile MetroRapid corridor that was previously funded through the FTA Very Small Starts program. The second priority corridor is the Blue Line Corridor, a 15.5-mile corridor along Trinity Street and East Riverside Drive to connect Central Austin to ABIA. There are seven BRT Light corridors that are also being considered for project development. Capital Metro is also investigating options for the MetroRail Red Line and is conducting the Green Line TOD Study. Lastly, Capital Metro is investigating options for expanding the MetroExpress commuter bus network.

At the end of the AA/PE process, Capital Metro anticipates identifying the locally preferred alternatives (LPAs) for further evaluation during the formal NEPA process. The LPAs will be considered as part of the November 2020 vote.

FINANCIAL IMPACT

Financial scenarios and impacts will be evaluated during the development of the LPA.

SUPPORTING DOCUMENTS

None.