



Capital-Alamo Connection Study: Joint MPO Transportation Policy Board (TPB) Regional Workshop

Meeting Summary

Date: December 5, 2018

Facilitator: Roger Beall (TxDOT)

Time: 10:00 am – 12:00 pm

Location: *New Braunfels Civic Center – 375 S Castell Ave, New Braunfels, Texas*

Purpose: Capital-Alamo Joint MPO TPB Regional Workshop – Prioritization of Strategies

Attendees: **Alamo Area Metropolitan Planning Organization (AAMPO) Transportation Policy Board**

Keith Horn (Jeff Arndt Alternate)
Vic Boyer
Kevin Hadas
Mario Jorge
Kyle Kutscher
Ismael Segovia (Betty Ann Matthies Alternate)
Wayne Peters
Chris Riley
Patricia Rodriguez
Ana E. Sandoval
Clay Smith
Kevin Webb
Illegible (Bridgett White Alternate)
Kevin A. Wolff
Clint Eliason (City of San Antonio Planning Coordinator, Alternate)

Capital Area Metropolitan Planning Organization (CAMPO) Transportation Policy Board

John Michael Cortez (Steve Adler Alternate)
Clara Beckett
Will Conley
Mark Jones
Cynthia Long
Melissa Velasquez (Office of Travis County Comm. Brigid Shea, Alternate)

AAMPO
Isidro (Sid) Martinez
Jeanne Geiger

CAMPO
Ashby Johnson
Doise Miers
Kim Petty
Nirav Ved
Greg Lancaster

Texas Department of Transportation
Roger Beall
Susan Chavez
Melissa Neeley
Peter Smith
Darcie Schipull
Mark Werner
Jonathan Bean
Kevin Dickey
Carlos Swonke

Attendees: Study Team

(Cont.)

Michael Sexton (JACOBS)
Jeff Webster (JACOBS)
Nair Barrios (JACOBS)
Travis Norton (JACOBS)
Adriana Torcat (JACOBS)
Carine Choubassi (JACOBS)
Hillary Calavitta (HNTB)
Scott Haywood (HNTB)
Janelle Carey (HNTB)
Jason Rodriguez (HNTB)
Randall Dillard (NLA, Inc.)
Lauren Canales (NLA, Inc.)
Rachel Lunceford (Hg Consult)
Steve Wells (Hg Consult)

Other attendees

Joel W. Hicks (City of Cibolo/ AAMPO TAC)
Tom Hornseth (Comal Co./AAMPO TAC)
Garry Ford (City of New Braunfels/AAMPO TAC)
Lauren Mandel (Office of Kevin Wolff)
Jeff Thompson (City of Boerne, Deputy City
Manager)
Michael Meek (Greater New Braunfels Chamber of
Commerce)
James Lovett (SH 130)
Darren Ratajsly (ZACHRY)
Troy Gjerde (ZACHRY)
Adam Ellis (Lamb-Star)
John Thomaidis (Former City of San Marcos Mayor)
Mario Bravo (Environmental Defense Fund) Bregger
Garrison (Freese & Nichols)
Linda Huff (Freese & Nichols)
Juan Sierra (Freese & Nichols)
Jim Powers (SH 130)
Windy Johnson (Texas Conference of Urban
Counties)
Tim Tuggey (CAMPO Legal Counsel)

- Attachments**
- A – Meeting Summary**
 - B – Meeting Agenda & Brochure**
 - C – Presentation**
 - D – Sign-In Sheets**
 - E – Workshop Work Sheets**

Attachment A – Meeting Summary

1. Welcome Remarks & Introductions

Roger Beall, TxDOT Transportation Planning & Programming Division Deputy Director, initiated the workshop with a brief introduction, followed by a moment of silence to commemorate the National Day of Mourning in honor of former President George H. W. Bush. He then proceeded to explain to the audience the safety features and procedures for the building. Mr. Beall continued by welcoming all Transportation Policy Board (TPB) members from AAMPO and CAMPO, and other attendees, to the second joint MPO TPB workshop for the Capital-Alamo Connections Study. He emphasized the significance of cooperative efforts like this and encouraged the continued participation of both organizations in regional transportation planning efforts (*refer to Attachment D for a complete attendee list*). Mr. Beall proceeded to introduce the TPB Chairmen from AAMPO and CAMPO, Bexar County Commissioner Kevin Wolff and Will Conley.

Commissioner Kevin Wolff and Will Conley also welcomed attendees and reminded members of both committees of the purpose of the workshop. Commissioner Wolff emphasized the importance of looking at the “I-35 Corridor” not as the Interstate itself but as the entirety of its immediate area of influence, from US 281 in the west to SH 130 in the east. Will Conley, echoed Commissioner Wolff’s remarks by stating these two regions have been recognized as the beginning of a larger mega region, one of the fastest growing ones. He reiterated that the advancement of overall quality of life in Central Texas depends on our ability to continue to coordinate work across these two regions. Both Mr. Conley and Commissioner Wolff are glad their TBPs have been moving in that direction and welcome this study as the touchstone for future efforts. Mr. Conley concluded by thanking the members of the study team for their efforts.

2. Stakeholder Update

Roger Beall followed both MPO Chairmen with a brief recap of the study. As a reminder, Mr. Beall went over the study definition and rationale, making emphasis on the dimension of the expected regional growth and its potential impacts to the regional transportation network. He also provided a brief overview of the study schedule and its progress. In relation to completed study activities, he presented the findings from the regional movement analysis. (*refer to Attachment B for more details*). Findings were as follows:

- A significant amount of the weekday trips originating in the Austin and San Antonio metro areas remain within their areas of origin.
- Weekday trips originating in other communities (i.e. San Marcos, New Braunfels) tend to travel to nearby communities.
- The number of weekday and weekend trips originating in the Austin and San Antonio metro areas with destinations outside the metro areas are similar.
- **I-35:** The analysis shows a high number of localized, short-distance movements on I-35, especially in Austin and San Antonio, with a significant number of trips using I-35 to travel only from one interchange to the next. These results suggest that some of I-35’s congestion could be related to the limited number of arterial connections.
- **US 281:** Travel on US 281, outside of San Antonio, appears to serve long-distance travel.
- **SH 130:** The analysis shows travel focused on the north end of the SH 130 corridor.

- Findings from the analysis of freight related through-traffic show that 8 out of 10 truck deliveries within the study area use I-35 today. If movements in both directions are accounted for, up to 82% of truck traffic makes at least one stop while travelling the entire I-35 Corridor. Only a small percentage of long-distance truck trips on I-35 do not have at least an intermediate stop within the study area.

An update on coordination efforts followed with the introduction of the MPO Directors, Sid Martinez (AAMPO) and Ashby Johnson (CAMPO). Mr. Martinez thanked all the attendees for their presence and offered remarks on the work developed by the MPOs Technical Advisory Committees' (TACs) throughout this study. He stated the TACs were tasked with ensuring the feasibility and appropriateness of the proposed strategies. Mr. Martinez told the audience this is not the end of the regional partnership but the beginning since this effort has created a good synergy between the staff and technical entities.

He was followed by Mr. Johnson, who took the opportunity to brief the audience on current bi-regional coordination efforts including the coordinated development of Regional Arterial Plans and Regional Bicycle/Pedestrians Plans. Additionally, the MPOs have coordinated with TxDOT Districts in the development of their Regional Incident Management Plans and upcoming 2040 Transportation Improvement Plans.

CAMPO, for its part, has approved a feasibility study to identify connections between SH 130 and I-35 in Caldwell County. On the freight side, CAMPO will begin work for a rail siding extension in Hays County in 2019, which will increase Union Pacific's (UP) capacity in the region while increasing safety and reducing blockage of local streets. Both MPOs will endeavor to continue providing improved safety and mobility around rail operations by working with UP.

Finally, Mr. Johnson expressed the need to consider the neighbors to the north, the Killen - Temple MPO, in the regions' long-range planning. Employment and population forecasts indicate an increased importance of those urban areas travel demands, especially related to Williamson and Burnet Counties.

Roger Beall continued the agenda with a summary of the Joint MPO TAC Workshop held in October of this year. He explained the general structure, objective and outcomes of the workshop. Mr. Beall highlighted the high attendance from both MPOs and the TACs' enthusiasm in working and reviewing the wording and implications of each of the proposed strategies and corresponding tactics. He summarized the main topics brought up by the TACs, which were incorporated into the proposed strategies presented during this workshop (*refer to Attachment C for more details*).

Mr. Beall opened the floor for questions on the information presented. No comments or concerns were expressed.

3. Strategies Workshop

Mr. Beall introduced the workshop facilitator, Jeff Webster, who explained the framework for the strategies prioritization workshop and presented an example of the upcoming exercise. Mr. Webster also introduced the facilitators assigned to each table. Each table group proceeded to review, prioritize and comment on the proposed strategies for each strategy group over the next 50 minutes. (*refer to Attachment E for more details*). Each strategy page included incorporates numbers representing the

total participants that expressed their preference for the selected year as the starting date for each strategy.

Modal Options Strategies

MODAL OPTIONS STRATEGIES



STRATEGY	FINANCIAL NEED	Essential Right Now					Can Wait
		2019	2020	2021	2022	2023	
SHORT TERM		2019	2020	2021	2022	2023	
Consider coordination schemes to enhance freight movements throughout the region	\$\$\$	4	7				
Implement Regional Intercity transit services	\$\$\$	12	3				
Further regular interregional transit cooperation	\$\$\$	9		1	1		
Discuss how public sectors could assist private companies to move freight more safely and efficiently	\$\$\$	5	7				
MID TERM		2025	2027	2029	2031	2033	
Establish a Transit Coordination Task Force focusing on service borders	\$\$\$	6	1	1			
Expand regional commuter transit options	\$\$\$	8	6	1			
Identify potential interregional joint transit service routes	\$\$\$	7	2	2			
Promote potential interregional bicycle routes and new long-distance bikeways	\$\$\$	1	4	1	2	1	
Consider possible rail and trucking enhancements	\$\$\$	2	5	1			
LONG TERM		2035	2037	2039	2041	2043	
Establish an interregional Transit Coalition	\$\$\$	8					
Participate in interregional coordination for rail freight relief efforts	\$\$\$	6	7				

COMMENTS
Include any further comments related to the strategy on a Post-it note to the right.

Concern about wanting to have interregional Transit coordination efforts implemented in the short term

ICM & ITS Strategies

ICM & ITS STRATEGIES



STRATEGY	FINANCIAL NEED	Essential Right Now	Timeline				Can Wait
		2019	2020	2021	2022	2023	
SHORT TERM							
Coordinate Emergency Roadside Assistance Programs Throughout Region	5	5	3	1			
Define regional priorities for corridor management	6	6	3	1			
Map existing and planned ITS systems, owners, and interagency agreements	6	6	2				
Coordinate Austin and San Antonio District TSMO activities	2	2	4				
Identify data sources for operations performance measures dealing with mobility between the regions	5	5	1				
Implement an Interregional, Integrated Corridor Management System for I-35	2	2	7				
Coordinate regional travel information systems across jurisdictional boundaries	2	2	3				
MID TERM							
Support the pursuit of opportunities to fund or pilot innovative technology deployments for interregional mobility	7	7					
Improve use of ICM during early coordination of construction activities and major planned disruptions across region	6	6	3				
Develop Regional Incident Management Plan and process for regular updates	3	3	4	1			
Support data gathering for early deployment of connected vehicles systems along major travel corridors	3	3	5	3	1		
Refine local ITS systems and coordinate operations with Traffic Management Centers	3	3	4				
Create framework and opportunity to share operations data and coordinate monitoring & performance management targets	5	5	3				
LONG TERM							
Establish redundancy in Regional Traffic Management Centers	4	4	2	1			
Deploy technologies to support connected vehicle systems along major travel corridors	6	6	3	2			
Use emerging technology to move people and goods within the regions	8	8	2				

COMMENTS

Include any further comments related to the strategy on a Post-it note to the right.

Long Term Consideration - Emerging Technology in High Speed Rail*

*Non TPB comment

The San Antonio TxDOT Emergency Roadside Assistance Program will start in the Spring of 2019

The development of Austin and San Antonio District TSMOs are underway as is the inventory of ITS efforts and efforts across regions

There is need for more coordination in the development of regional priorities for corridor management

REGIONAL COORDINATION STRATEGIES



STRATEGY	FINANCIAL NEED	Essential Right Now	→				Can Wait
		2019	2020	2021	2022	2023	
SHORT TERM		2019	2020	2021	2022	2023	
Formalize interagency coordination efforts	\$\$\$\$\$	10	6				
Create a joint website to document coordination efforts	\$\$\$\$\$	9	3	2			
Formalize an agreement to share planning data and shared performance measures among the two MPOs, local governments and transit agencies	●\$\$\$\$\$	6	7				
Develop a bi-regional travel demand model	●\$\$\$\$\$	13	3				
Define bi-regional objectives for improvement of mobility and connectivity	\$\$\$\$\$	16	1				
Define performance measures dealing with mobility between the regions	\$\$\$\$\$	13	1		1		
MID TERM		2025	2027	2029	2031	2033	
Create a policy-level cooperative body between both regions including representatives from all members of the Capital-Alamo Connections Study partnership.	\$\$\$\$\$	14					
Implement bi-regional solutions to improve mobility and connectivity	●\$\$\$\$\$	12					
Create a bi-regional technical committee focused on topics of shared concern	\$\$\$\$\$	12	1				
LONG TERM		2035	2037	2039	2041	2043	
Develop Combined Planning Documents	●\$\$\$\$\$	11	1	2			

COMMENTS
Include any further comments related to the strategy on a Post-it note to the right.

The development of a bi-regional travel demand model will be a 5-year ongoing effort that could get fast tracked by the designation of new Non-attainment areas

Concern over the need for " Formalization of interagency coordination efforts" and "Definition of performance measures...between regions" to be in place right now

Consider moving the creation of a policy-level cooperative body between both regions in the near term

Some members are concerned about wanting to have most of these strategies implemented in the short term

Priority Transportation Corridors

PRIORITY TRANSPORTATION CORRIDOR STRATEGIES



STRATEGY	FINANCIAL NEED	Essential Right Now	→				Can Wait
		2019	2020	2021	2022	2023	
SHORT TERM							
Enable future technology enhancements	\$\$\$	6	2	1	2	1	
Support improvements that address local deficiencies along I-35	\$\$\$	12	3	1			
Complete requirements for expansion of I-35	\$\$\$	7	4	4	2		
Reduce safety concerns at local intersections with high crash concentrations along US 281	\$\$\$	11	1	1			
MID TERM							
Maximize I-35 frontage road efficiency	\$\$\$	7	1	3	1	1	
Further the US 281 roadway structure update program	\$\$\$	7	1	1	1	1	
Increase capacity on US 281	\$\$\$	6		3	3	2	
Increase safety on US 281	\$\$\$	4		2	1		
Improve regional mobility west of Austin and San Antonio	\$\$\$	3	4		1	2	
LONG TERM							
Increase I-35's person and freight throughput	\$\$\$	8	3	2	1		
Increase capacity on US 281	\$\$\$	6	1	1	2	1	
Reorganize long-range traffic through City of Blanco	\$\$\$	1	3	3	1		

COMMENTS Include any further comments related to the strategy on a Post-it note to the right.	Include a connection between I-35 and SH 130	"Big Money - Where?" How will these be financed*	Include SH 46 & SH 130 as part of the arterials discussion	Southern connection to SH 130		
		*Non TPB comment				

Arterial Improvements

ARTERIAL IMPROVEMENT STRATEGIES



STRATEGY	FINANCIAL NEED	Essential Right Now	→				Can Wait
		2019	2020	2021	2022	2023	
SHORT TERM		2019	2020	2021	2022	2023	
Designation of a interregional relief arterial network	ⓈⓈⓈⓈⓈ	7	2	1	1		
Develop an improvement plan for designated relief arterials	ⓈⓈⓈⓈⓈ	4	4	3	1		
Develop a prioritization framework to aid local officials in prioritizing future investments	ⓈⓈⓈⓈⓈ	7	1	3	1		
Coordinate connection of planned arterial improvements in regional, local, and county thoroughfare plans	ⓈⓈⓈⓈⓈ	7	2		1		
MID TERM		2025	2027	2029	2031	2033	
Coordinate the connection of local arterial ITS systems with regional ITS master plans	ⓈⓈⓈⓈⓈ	3	2	3			
Develop interregional relief arterial network	ⓈⓈⓈⓈⓈ	7	2	2			
Prioritize corridor preservation and access management efforts	ⓈⓈⓈⓈⓈ	7	2				
Integrate management and operations of designated arterials into I-35 corridor management strategies	ⓈⓈⓈⓈⓈ	2	5	1			
LONG TERM		2035	2037	2039	2041	2043	
Equip arterials with connectivity and autonomous capabilities to accommodate emerging technologies	ⓈⓈⓈⓈⓈ	5	3	2	2	2	
Continue to promote use of local arterials to facilitate interregional multimodal connectivity	ⓈⓈⓈⓈⓈ	4	4				
Nurture the extension of the local and relief arterial networks to enhance mobility and connectivity between growing regions	ⓈⓈⓈⓈⓈ	3	2	2			

COMMENTS Include any further comments related to the strategy on a Post-it note to the right.	Pair "Coordination of planned arterial improvements" and "Continued promotion of local arterial use for interregional multimodal	Some members are concerned about wanting to have most of these strategies implemented in the short term	More (non-toll) connections between SH 130 and I-35 -Jim Beck	Electric Car Charging capabilities needed		
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Throughout the workshop activity, TPB members offered the following general comments:

- There was a general desire to advance strategies related to Regional Coordination, ICM & ITS soon as possible.
- Group members mentioned the need for an increased emphasis on electric vehicle charging stations as part of the multimodal efforts.
- Regarding the improvement of priority corridors, members recognized that environmental challenges might not allow progress in their preferred timeframe.

At the closing of the activity, several TPB members inquired about the following:

- Comal County Commissioner Webb commented that southern connectors from SH 130 to I-35 appear not to be included in the current recommendations and requested a strategy addressing the omission given the importance of such access point to Comal County and the City of New Braunfels. Mr. Beall responded that these improvements have been discussed in the past and considerations in the matter will be added to the implementation strategy.
- Cynthia Long, Williamson County Commissioner, commented on the addition of strategic economic development support. Improvements triggering development in the wrong locations will only contribute to congestion problems. She gave the example of the North Texas MPO as one that proactively incorporates their business community in the transportation planning process and has seen successful outcomes as a result.
- Wayne Peters, Mayor Pro Term of the City of New Braunfels, seconded Commissioner Webb's SH 130 - I-35 connector comments. He believes that the single southern access point to SH 130 via I-10 is detrimental to the use of SH 130 as an alternative when travelling to Austin. A southern connector from I-35 to SH 130 for northbound traffic would be beneficial to the entire San Antonio area.
- Kurt Kutscher, Guadalupe County Judge, highlighted the reasons behind recent local opposition to new southern connectors between SH 130 and I-35 as the result of "a lot of promises made and not kept". The current traffic demand model showed I-35 improvements as justified, however it also depicted a southern connector diverting traffic from SH 45 which was deemed not beneficial and unjustifiable. He reiterated that while Guadalupe County is open to the construction of a new connector, it remains concerned for the potential traffic impacts detrimental to the City of Seguin and the center of Guadalupe County. Judge Kutscher also asked attendees to consider the possibility of building tie-ins for a potential connector at a location not within a municipality. He recognized that this would negate the localized economic development benefits but could help deliver a better transportation network. Mr. Beall responded by assuring Judge Kutscher this issue requires in-depth analysis and as such it will be considered in this strategy.

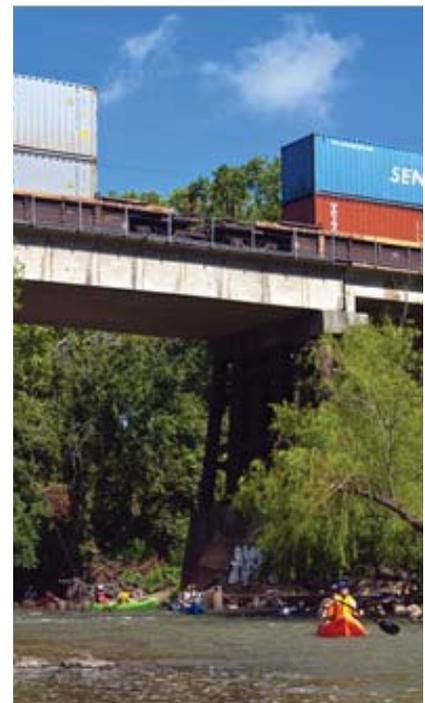
3. Next Steps

Roger Beall closed the workshop by providing a brief schedule of upcoming activities, which include the expected review of the finalized strategy by both MPO boards in January 2019, followed by actions items on the final product later in the year. Mr. Beall reiterated how the continued coordination and unified vision of the two regions will be the most important outcome of this effort. Going forward the goal is the implementation of the strategies developed and increased exposure for the important collaborative work

being done in Central Texas. He thanked everyone for their attendance and encouraged them to review the results of the workshop exercise posted at the front of the room.

The meeting was adjourned at 11:45 am.

Attachment B – Agenda & Brochure



CAPITAL - ALAMO CONNECTIONS STUDY

New Braunfels Civic Center
375 S Castell Ave
New Braunfels
TX 78130

December 5th, 2018
10:00 am - 12:00 pm



DRAFT

AGENDA



REGISTRATION

09:45 - 10:00 am

Registration



WELCOMING REMARKS AND CALL TO ORDER

10:00 - 10:05 am

Will Conley
Chairman, Capital Area MPO

Kevin Wolff
Bexar County Commissioner
Chair, Alamo Area MPO



CONNECTIONS WORKSHOP PART I - Stakeholder Update

10:05 - 10:25 am

Isidro Martinez
Director, Alamo Area MPO

Ashby Johnson
Executive Director, Capital Area MPO

Roger Beall
Deputy Director, TxDOT TP&P

Summary of Stakeholder Outreach to Date and Joint TAC Workshop

Presentation of Findings, Overarching Topics and Focus Areas Identified



CONNECTIONS WORKSHOP PART II - Strategies Workshop

10:25 - 11:55 am

Strategy Prioritization Workshop

Interactive Exercise to Prioritize Strategies

Report Out Opportunity



NEXT STEPS - Regional Framework

11:55 - 12:00 pm

Roger Beall
Deputy Director, TxDOT TP&P

Discussion on Next Steps and Framework Going Forward

ADJOURN

12:00 pm

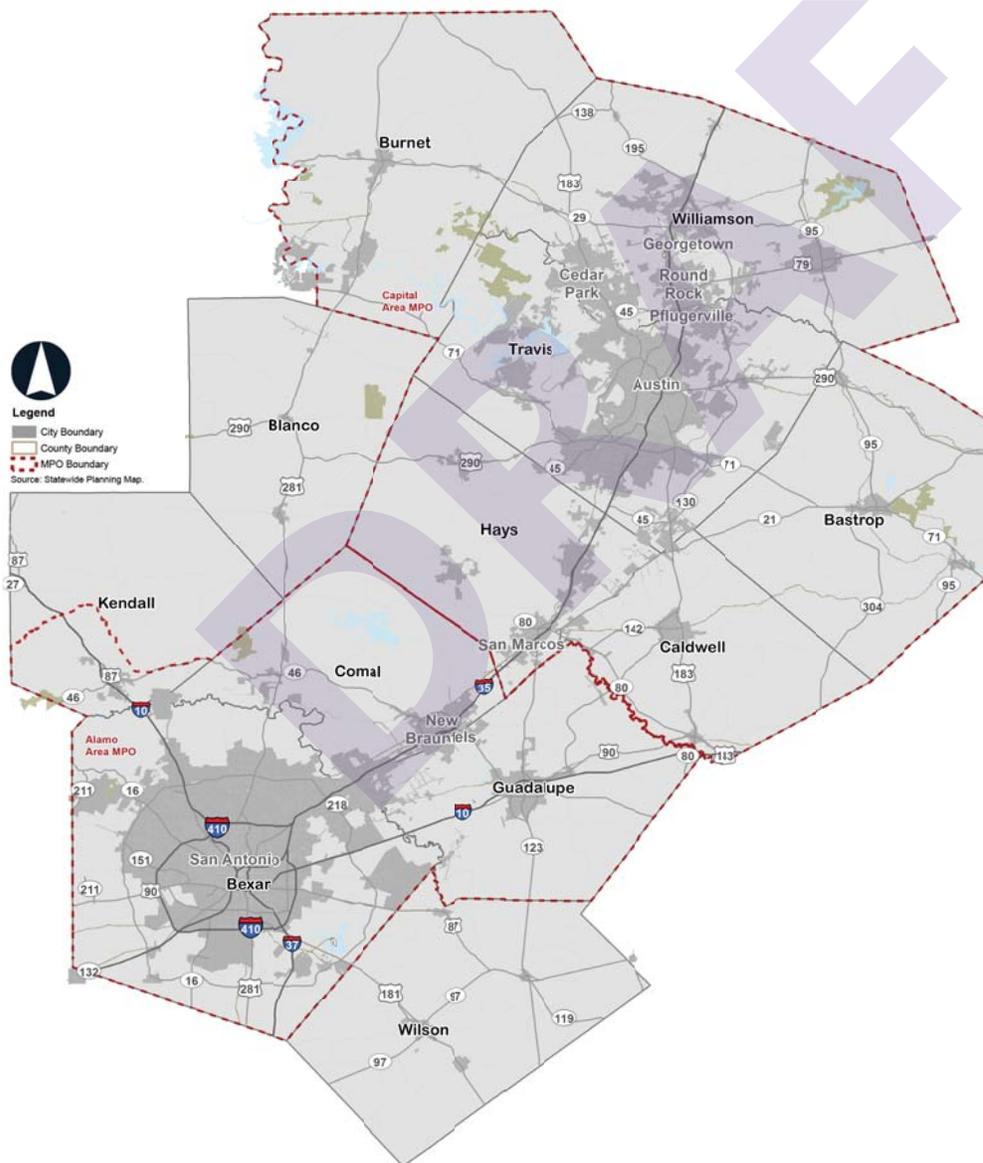
The Capital-Alamo Connections Study

The Capital Area and Alamo Area MPOs, in partnership with TxDOT, initiated a study to identify needs and develop strategies to enhance connectivity between the Greater Austin and San Antonio regions. Study efforts have included a review of data from the previous Lone Star Rail District study, current and future conditions analysis, stakeholder involvement, a scan of emerging technologies that might be considered and coordination with planned and programmed initiatives for both regions.

PURPOSE OF THE CAPITAL- ALAMO CONNECTIONS STUDY

Growth in Central Texas explains the need for both freight and passenger transportation improvements that better link the Austin and San Antonio regions. This study identifies inter-regional travel patterns, assesses current market conditions and defines future transportation needs.

CAPITAL- ALAMO CONNECTIONS STUDY AREA



The study area centers on the I-35 corridor but includes major parallel facilities, as well as portions of the 12 counties surrounding them

GOAL OF THE STUDY

Develop a regional strategy to enhance mobility and identify



infrastructure, policy and technology solutions

OUTCOME OF THE STUDY:

An implementation plan organized into short-, mid-, and long-term strategies and staged out to 2045

Study Rationale

Accelerated
Growth



San Antonio and Austin's combined population in 2045 is forecasted to be comparable to that of the DFW Metroplex today.

Do we currently have a mobility network that could address such population growth?

Emerging
Megaregion



The growth of Austin, San Antonio and the communities in between enhance the notion of a single Austin-San Antonio corridor of development.

How can this growth be leveraged for better economic and funding opportunities?

Urgent
Demands



With the 3rd most congested corridor in the state, I-35 in Downtown Austin, and with 25 other Top 100 Congested segments, there is a need to address current mobility concerns.

How do we address congestion along our major roadways?

What we heard...

Study partners identified stakeholders to define regional challenges and needs that could shape study recommendations. The team conducted a series of one-on-one interviews and workshops to get input on what might be politically and economically feasible among potential solutions. The following is a summary of their input:

CHALLENGES

NEEDS



Making mobility options convenient
Political will and capital
Physical constraints
Hurdles to cooperation
Existing system connectivity

Multimodal options
Optimization of existing facilities
Improved regional connectivity
Creative funding solutions
Flexible infrastructure



Better coordination with freight industry
New funding strategies
Cultural shift in mobility preferences
Project delivery processes
Inconsistent policies

Land use and transportation alignment
State investment and Federal funding
Embrace growth
Corridor preservation
Consistency in priorities



Uncertainty about the future
Need definition of infrastructure requisites
Public- Private Partnerships
Accelerated technology progression
Public perception

More understanding of new technologies
Implementation of new technologies
More coordination with industry
Consideration of potential implications in existing infrastructure

The most common issues & opportunities expressed by stakeholders were: 1. Use of technology, 2. Increase in local transit services and 3. Highway Improvements

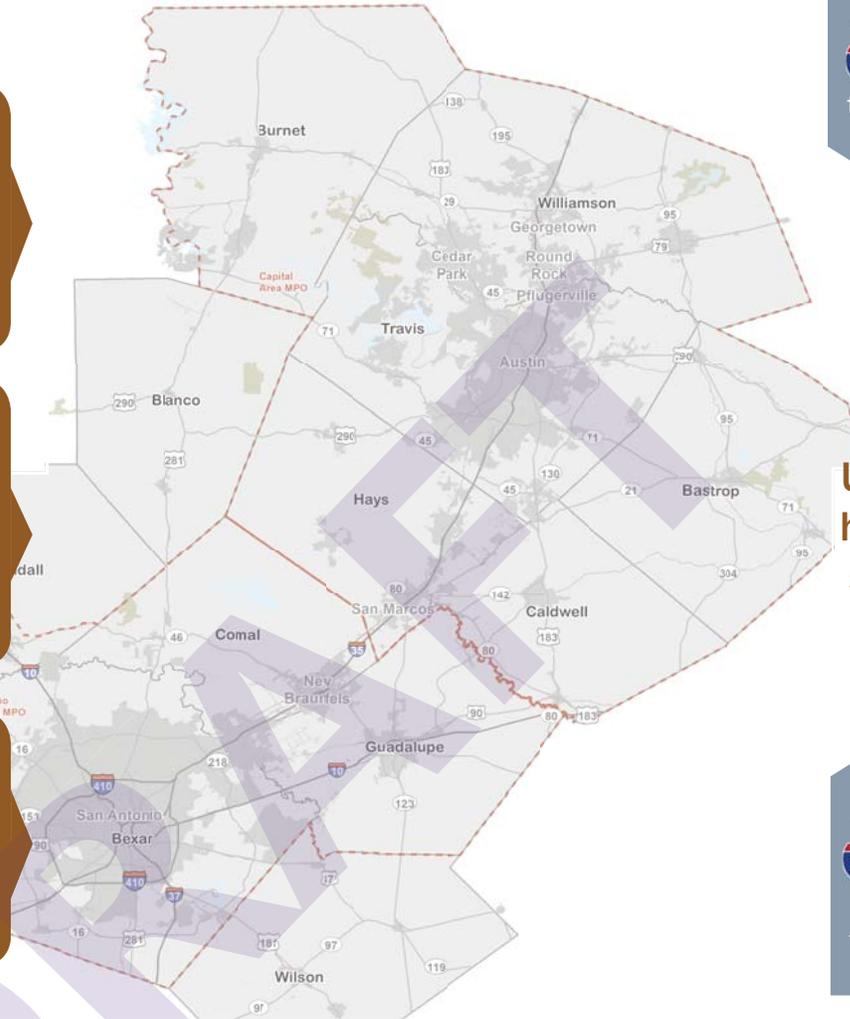
Regional Movements

The study team used state-of-the-art data collection technologies to identify travel patterns throughout the region.

A significant number of **week-day trips** that start **within** the Austin and San Antonio metro areas **remain local** to those areas.

Weekday trips originating in communities like **San Marcos and New Braunfels** tend to **travel** to nearby communities

The number of **trips headed outside** the Austin and San Antonio **metro areas** are **similar on weekdays and weekends**.



13%
of freight entering  North of Austin travels through the entire region.



Up to 82% is headed to or stops in the study area.

22%
of freight entering  South of San Antonio travels through the entire region.

MOVEMENTS ALONG MAIN CORRIDORS

US 281

Travel on US 281 outside of San Antonio appears to serve longer-distance travel.

I-35

Analysis of trips from ramp to ramp along I-35 identified a high number of local and short movements, especially in Austin and San Antonio.

A significant number of trips only use I-35 to travel one or two interchanges.

SH 130

Analysis of destinations for trips originating at each SH 130 interchange indicate heavy usage of the north end of the corridor.

Results suggest some of the congestion on these main corridors is a response to lack of arterial connections. Local improvements and alternatives could address regional demands

Where are people commuting?

To identify regional needs and potential connectivity opportunities, information on trips travelling along I-35 every weekday morning between the hours of 6 am and 10 am was analyzed. Corridor movements are shown in the following results:

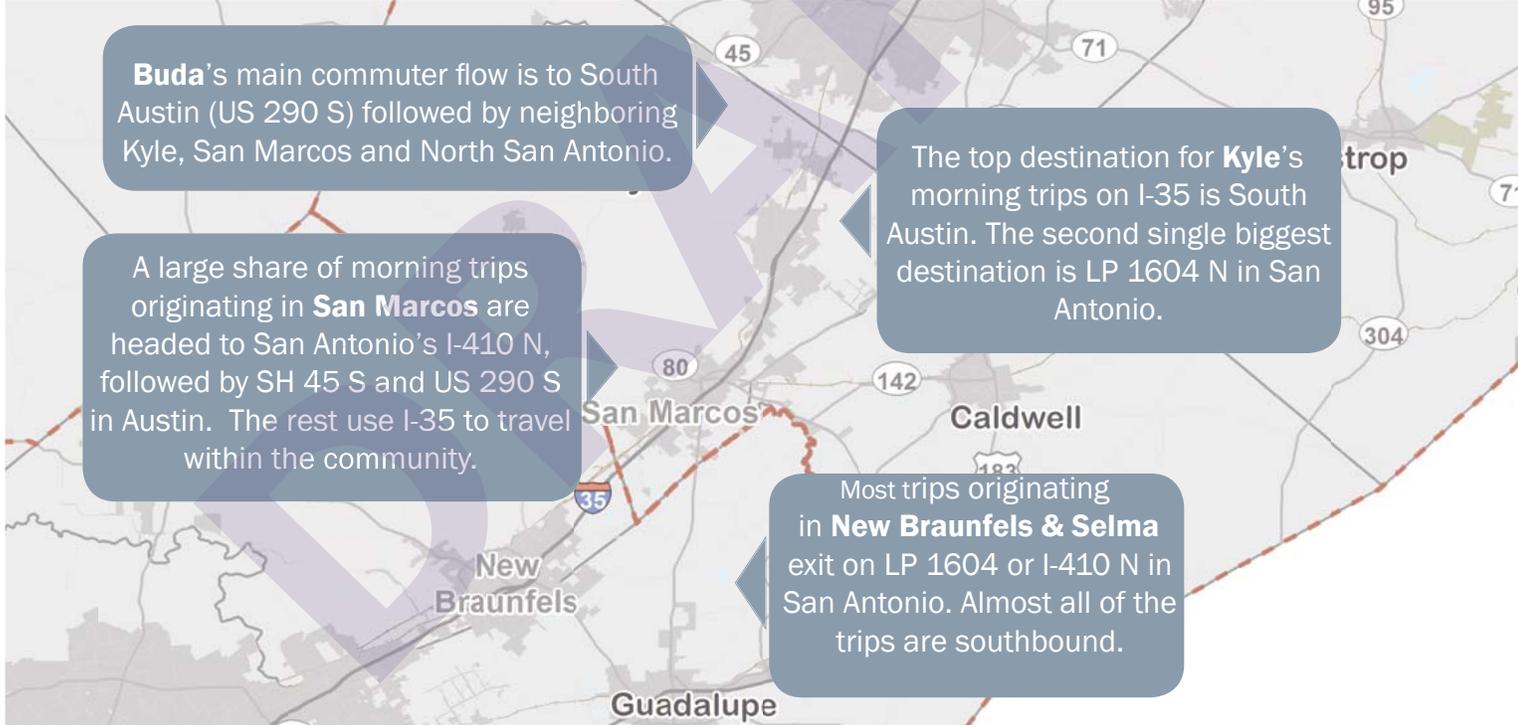


Round Rock sends a significant number of commuters as far as South Austin, however most of its trips stay local or close by in Georgetown.

Georgetown keeps most of its morning trips but sends commuters to Round Rock & Austin.

Most morning trips on I-35 are local, followed by commuters to Round Rock. However, a small share go as far as North San Antonio, mostly from South Austin.

Austin



Buda's main commuter flow is to South Austin (US 290 S) followed by neighboring Kyle, San Marcos and North San Antonio.

The top destination for **Kyle's** morning trips on I-35 is South Austin. The second single biggest destination is LP 1604 N in San Antonio.

A large share of morning trips originating in **San Marcos** are headed to San Antonio's I-410 N, followed by SH 45 S and US 290 S in Austin. The rest use I-35 to travel within the community.

Most trips originating in **New Braunfels & Selma** exit on LP 1604 or I-410 N in San Antonio. Almost all of the trips are southbound.

Most morning trips use I-35 for local travel, with a significant drop north of LP 1604. However, a small number of trips originating at LP 1604 go as far as North Austin.

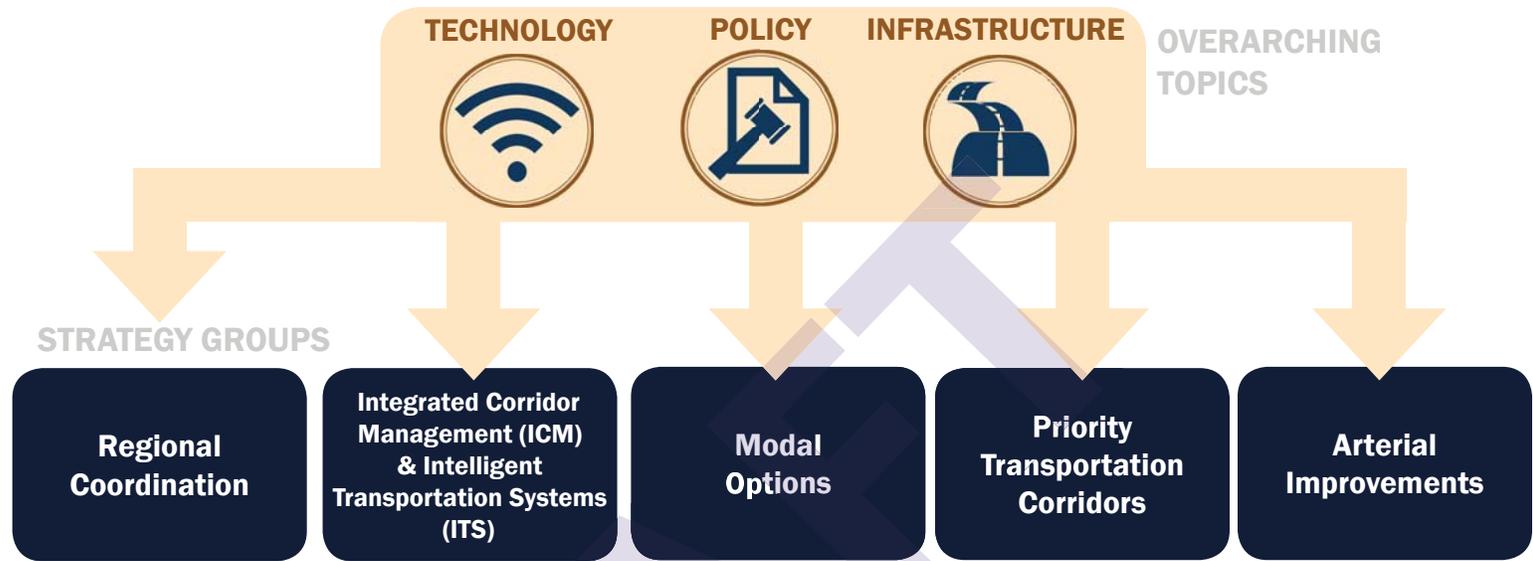
San Antonio

Results suggest most commuters on I-35 remain local or go to nearby communities. Strategies aimed at providing commuting solutions between neighboring communities could improve the travel experience for morning travelers.

Sources: 5. Streetlight GPS Data September 2017. JACOBS Graphics

Capital-Alamo Connections Strategy Structure

Feedback gathered in stakeholder engagement efforts from the Capital Alamo Connections Study was grouped into 3 main overarching themes: Technology, Policy and Infrastructure. Additionally, a technical analysis identified five main areas of focus for solutions to address current needs.



Strategy Development

Strategies were developed by reviewing current transportation plans and programs from each MPO and local jurisdiction within the study area, incorporating input from the MPO Transportation Policy Boards and Technical Advisory Committees, and gathering ideas from local Stakeholders. The resulting strategies are organized into short-, mid-, and long-term implementation timeframes.



This resulted in a preliminary group of 59 strategies to be evaluated and refined in a joint effort by the members of the Technical Advisory Committees of the Capital Area and Alamo Area Metropolitan Planning Organizations in preparation for a final review and assessment by their Transportation Policy Boards.

Joint MPO TAC Workshop

In order to ensure the relevancy and efficacy of the proposed strategies, a joint Technical Advisory Committee (TAC) workshop was held on October 2nd, 2018, allowing TAC members from both MPOs to review the universe of proposed strategies.

Purpose



Encouraging technical bodies to advance cooperation efforts and strive to accomplish a joint vision through complementary regional strategies

WHAT DID WE NEED TO DO?

1. Review main topics of stakeholder outreach
2. Review technical analysis work

WHAT DID WE WANT TO DO?

Refine strategies and tactics based on TAC members' technical and local knowledge



Ensure that strategies are relevant and feasible for both regions



GROUP DISCUSSION RESULTED IN

**60 Strategies
&
143 Tactics**



FOR PRIORITIZATION BY TPBs

Structure

AAMPO

+

CAMPO
CENTRAL AREA METROPOLITAN
PLANNING ORGANIZATION
CENTRAL TEXAS

+



28 TAC members in attendance

10 AAMPO + 18 CAMPO

32 additional attendees & representatives

5 Strategy-focused workshop groups

Regional
Coordination

ICM
& ITS

Modal
Options

Priority
Transportation
Corridors

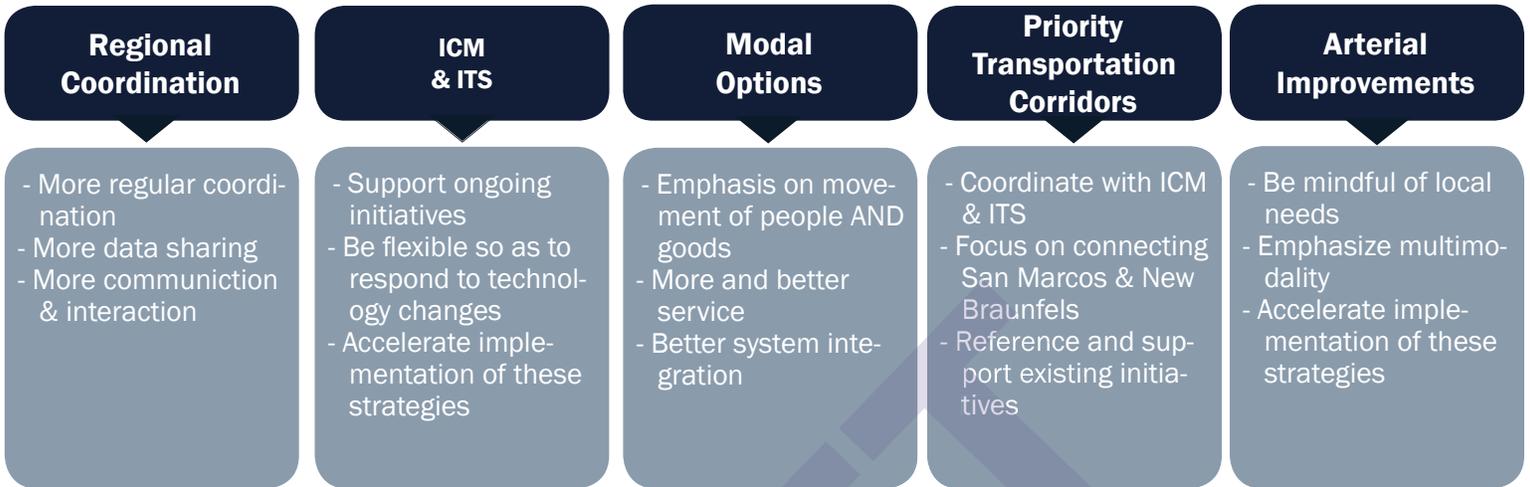
Arterial
Improvements

Tasked with review and refinement of proposed strategies and associated tactics by group.

WHAT DID WE ACCOMPLISH?

Joint MPO TAC Workshop Outcomes

Main outcomes from each group discussion are included below:



Capital-Alamo Connections Study Strategies

The summary tables below provide detailed descriptions of the Capital-Alamo Connections Study Strategies. The following describes the structure of the strategy tables:

Organization of Strategies

Timeframe

Three main planning horizons have been defined: Short- (0- 5 years), Mid- (6-15 years) and Long- (16-25 years) Term. Specific timeframes have been designated for each strategy in an effort to program needed improvements through coordinated actions.

Strategy

Defines the recommended improvement strategy.

Tactics

Provides initial guidance on how to implement the recommended strategies.

Overarching Topics (Topics)

Refers to the three main themes defined during the outreach efforts: Technology, Policy, and Infrastructure. These overarching topics provide an additional framework for the implementation of the recommended strategies.

Potential Local Partners (Partners)

Identifies the potential agencies and stakeholders that are expected to implement the recommended strategies.

Underway (↻)

Denotes tactics where progress is already being made through prior or current efforts.

Strategy Coordination (Coord.)

Denotes tactics which have been identified as requiring coordination with other strategy groups for optimal effectiveness.

Regional Coordination Strategies

Transportation agencies use a range of alternatives to improve coordination while retaining jurisdictional control. Some of the benefits of regional coordination between agencies include: promoting the efficient use of local resources, creating consistent transportation solutions, and maximizing the strengths of existing agencies, among others.

Strategy	Tactics	Topics	Partners		Coord.
SHORT TERM (2019-2024)					
Formalize interagency coordination efforts	Continue bi-regional cooperation on matters of common interest, particularly related to longer distance transport needs, by establishing a regular bi-regional update between MPOs		CAMPO, AAMPO, TxDOT, Cities, Counties, Transit Agencies		
	Draft a document to establish future shared goals				
	Identify potential “Early Win” projects that can encourage membership participation in additional efforts				
	Develop a coordinating body out of initial inter-agency coordination efforts				
Create a joint website to document coordination efforts	Share information about transportation efforts carried out by each agency		CAMPO, AAMPO, TxDOT		
	Publicize past coordination efforts and ongoing success				
Formalize an agreement to share planning data and shared performance measures among the two MPOs, local governments and transit agencies	Share current performance data and measurement approaches		CAMPO, AAMPO, TxDOT		ICM & ITS
	Share growth assumptions and regional travel demand model results				
	Define and track performance measures that are relevant to all communities, such as I-35 travel time reliability				
Develop a bi-regional travel demand model	Hold workshops on regional growth assumptions and travel impacts		CAMPO, AAMPO		
	Track demographic and travel trends, as well as emerging demands				
Define bi-regional objectives for improvement of mobility and connectivity	Share performance measures and objectives		CAMPO, AAMPO		ICM & ITS
Define performance measures dealing with mobility between the regions	Develop combined performance measures that focus attention on cross-jurisdictional travel issues based on current regional performance measures.		TxDOT, CAMPO & AAMPO TACs		
MID TERM (2025-2035)					
Create a policy-level cooperative body between both regions including representatives from all members of the Capital-Alamo Connections Study partnership.	Foster interlocal agreements between neighboring jurisdictions to develop shared transportation policies relevant to specific projects		CAMPO, AAMPO		
	Hold regular meetings of decision-makers from both regions to promote project level cooperation				

Regional Coordination Strategies, Cont.

Strategy	Tactics	Topics	Partners		Coord.
Implement bi-regional solutions to improve mobility and connectivity	Execute coordinated strategies for short- and long-range planning for projects of a bi-regional or bi-jurisdictional basis	 	CAMPO, AAMPO, Transit Agencies		
	Perform project prioritization process for bi-regional impacts				
Create a bi-regional technical committee focused on topics of shared concern	Focus on areas that affect both regions jointly, such as freight movement, rural transit, passenger rail, and emerging technologies	  	CAMPO, AAMPO, TxDOT	●	
	Facilitate conversations and agreements with public and private stakeholders to improve mobility in the region			●	
	Coordinate studies and shared planning documents related to specific transportation projects of mutual interest				
LONG TERM (2036-2045)					
Develop Combined Planning Documents	Collaborate on the development of a shared long-range transportation plan		CAMPO, AAMPO, Transit Agencies		
	Facilitate continued partnerships with transit agencies across existing service boundaries				Modal Options

ICM & ITS Strategies

Integrated Corridor Management (ICM) and Intelligent Transportation Systems (ITS) strategies provide guidance on how to make a more efficient use of current transportation infrastructure and make travel more reliable by relying on coordinated, multijurisdictional operations, which will be crucial to adapting to emerging technologies.

Strategy	Tactics	Topics	Partners		Coord.
SHORT TERM (2019-2024)					
Coordinate Emergency Roadside Assistance Programs Throughout Region	Achieve continuous roadside assistance on I-35 corridor between San Antonio and Georgetown	 	TxDOT, CAMPO & AAMPO TACs		
	Coordinate dispatching between operators in each TxDOT District and local jurisdictions				Regional Coord.
Define regional priorities for corridor management	Establish an ICM and ITS Task Force to coordinate local Traffic Management groups and define regional priorities for emergency response as well as incident and construction management	  	TxDOT, CAMPO & AAMPO TACs		Regional Coord.
	Coordinate and develop interregional efforts related to emergency response and incident management, construction management, and ITS systems				Regional Coord.
	Prioritize areas that would benefit from regional systems coordination				

ICM & ITS Strategies, Cont.

Strategy	Tactics	Topics	Partners		Coord.
Map existing and planned ITS systems, owners, and inter-agency agreements	Review ITS Master Plans for Austin and San Antonio Districts	 	TxDOT, CAMPO & AAMPO TACs		
	Review local systems maintained by major cities in the region				
	Identify gaps or incompatibilities between the systems				
Coordinate Austin and San Antonio District Transportation System Management & Operations (TSMO) activities	Find opportunities to coordinate plans between areas		TxDOT, CAMPO & AAMPO TACs		Regional Coord.
	Where TSMO coordination is required, establish procedures for engaging across jurisdictional boundaries			●	
	Share innovations and project successes between regions				
Identify data sources for operations performance measures dealing with mobility between the regions	Identify new or existing technologies that could enable mobility tracking between regions	 	TxDOT, CAMPO & AAMPO TACs		
	Identify existing road technologies and new technologies that support performance measure tracking				
Implement an Interregional, Integrated Corridor Management System for I-35	Develop corridor management strategies, such as active traffic management, traveler information systems, demand management, and incident management	 	TxDOT, CAMPO & AAMPO TACs		
	Engage stakeholders, including TxDOT Districts, local cities, emergency responders, and transit agencies in regular meetings and workshops			●	Regional Coord.
Coordinate regional travel information systems across jurisdictional boundaries	Provide relevant information for regional through-travel online, through device-based services (Waze, Google Maps, etc.), and on variable messaging signs	  	TxDOT, Working Groups		●
	Extend the reach of broadcasted travel time comparisons on major facilities, such as I-35, US 281, and SH 130, targeting freight and passenger traffic decision points				
MID TERM (2025-2035)					
Support the pursuit of opportunities to fund or pilot innovative technology deployments for interregional mobility	Identify federal & private grant funding opportunities		TxDOT, CAMPO & AAMPO TACs		
	Continue the development industry relationships to pursue public-private partnerships				
	Consider the impacts of emerging technologies, such as freight mobility, passenger information systems, and incident management, and create Working Groups for each.				Regional Coord.
	Support local initiatives to establish pilot technology deployment programs				

ICM & ITS Strategies, Cont.

Strategy	Tactics	Topics	Partners		Coord.
Improve use of ICM during early coordination of construction activities and major planned disruptions across region	Alert travelers to disruptions of travel through the regions		TxDOT, Working Groups	<input checked="" type="checkbox"/>	
	Identify alternative routes and alert passengers of incidents using V2X (Vehicle-to-Everything) technologies				
Develop Regional Incident Management Plan and process for regular updates	Integrate existing plans from Capital and Alamo Area regions		TxDOT, Working Groups		
	Define protocols for coordinated incident response between regions				
	Enable 'Closest to' dispatching across jurisdictional boundaries				
Refine local ITS systems and coordinate operations with Traffic Management Centers	Promote ITS integration in new local roadway construction	 	TxDOT, Working Groups	<input checked="" type="checkbox"/>	Regional Coord.
	Develop agreements between local system owners and TxDOT			<input checked="" type="checkbox"/>	
Support data gathering for early deployment of connected vehicles systems along major travel corridors	Gather information on roadway conditions, vehicle speed, and traveler type in central repositories	 	TxDOT, Working Groups	<input checked="" type="checkbox"/>	
Create framework and opportunity to share operations data and coordinate monitoring & performance management targets	Develop data sharing agreements for archived operations data	 	TxDOT, Working Groups		Regional Coord.
	Align performance metrics				
	Make operations data available for short- and long-range planning				
LONG TERM (2036-2045)					
Establish redundancy in Regional Traffic Management Centers	Manage and coordinate ITS systems, incident response, integrated corridor management	  	TxDOT, Working Groups	<input checked="" type="checkbox"/>	
	Develop system interoperability and shared management capabilities				
Deploy technologies to support connected vehicle systems along major travel corridors	Use ITS systems to facilitate vehicle-to-infrastructure (V2I) and vehicle-to-everything (V2E) communication technologies	 	TxDOT, Working Groups		
	Provide information to connected vehicle operators on system status, traffic, and disruptions				
Use emerging technology to move people and goods within the regions	Implement pilot programs leading to full deployment of emerging technologies	 	TxDOT, Working Groups		
	Focus on improving safety and efficiency of travel in the region with connected and autonomous vehicle technology				

Modal Options Strategies

During stakeholder coordination efforts by CAMPO and AAMPO in partnership with TxDOT, Transportation Policy Board (TPB) and Technical Advisory Committee (TAC) Members suggested improving modal options throughout the region. Stakeholders stressed the importance of advancing local, commuter, and region-wide options for multiple transportation modes.

Strategy	Tactics	Topics	Partners		Coord.
SHORT TERM (2019-2024)					
Consider coordination schemes to enhance freight movements throughout the region	Conduct regular re-evaluation of freight origins and destinations to adjust freight considerations in the mid-term		CAMPO, AAMPO, TxDOT and UP Rail		
	Participate in freight-centric studies on long range freight bypass needs and truck parking facilities				Regional Coord.
Implement Regional Intercity transit services	Broker new or additional intercity service, such as the Buda - Austin Commuter Route or CARTS - Interurban Coach Routes	 	CapMetro, VIA, ART, CARTS, Local Govts., TxDOT	●	
	Implement a New Braunfels - San Antonio Commuter Transit Route			●	
	Conduct summits among transit providers. Identify and eliminate obstacles between urban and rural transit systems				Regional Coord.
Further regular interregional transit cooperation	Annual coordination on intercity markets and service expansion plans		Cap-Metro, VIA, ART, CARTS		Regional Coord.
	Develop consistent policy goals and needs assessment methods to facilitate easier inter-agency bi-regional cooperation				Regional Coord.
	Technical knowledge transfer meeting for transit providers			●	Regional Coord.
	Maintain web links between all transit providers				
Discuss how the public sector could assist private companies to move freight more safely and efficiently	Discuss operational needs and opportunities		UP Rail, Trucking Companies, Shippers, TxDOT, CAMPO, AAMPO, Local Govts.	●	
	Identify further opportunities to grade separate arterials and rail freight operations				Arterials
MID TERM (2025-2035)					
Establish a Transit Coordination Task Force focusing on service borders	Create rules for the sharing of ridership info and service adjustments		Cap-Metro, VIA, ART, CARTS		
	Create web-based clearinghouse for long-term plans and services information				

Modal Options Strategies, Cont.

Strategy	Tactics	Topics	Partners		Coord.
Expand regional commuter transit options	Support the establishment of additional fixed-route flex-schedule regional routes by rural transit providers per Alamo Area and Capital Area Transit Human Service Transportation Plans	 	CAMPO, AAMPO, ART, CARTS	●	
	Develop a funding strategy for megaregion rural transit.				
	Hold a bi-annual interregional discussion on service updates				Regional Coord.
Identify potential interregional joint transit service routes	Study potential end-to-end interregional transit service	 	Cap-Metro, VIA, ART, CARTS		Priority Corridors & Arterials
	Study potential interregional Park-and-Ride locations			Priority Corridors & Arterials	
Promote potential interregional bicycle routes and new long-distance bikeways	Connect regional bicycle networks along highways	  	TxDOT, CAMPO, AAMPO, Local Govts.		
	Coordinate regional bicycle routes with transit agencies for connectivity				
	Use regional technical partnerships to promote, fund, and construct interregional bike-way connections				
	Incorporate permanent bicycle and pedestrian count equipment into new bikeways				
Consider possible rail and trucking enhancements	Create truck parking information systems and develop parking supplies if needed that aligned with statewide plans		UP, TxDOT Districts, National Truck Stop Association, Local Govts.		Priority Corridors
	Support network enhancement for all modes			Priority Corridors & Arterials	
	Develop a Regional Rail Strategy for the movement of people and goods			Regional Coord.	
	Foster preservation of right-of-way along corridors			Arterials	
LONG TERM (2036-2045)					
Establish an interregional Transit Coalition	Extend Rural Transit Coordination into an interregional Transit Coalition		Cap-Metro, VIA, ART, CARTS, TxDOT		
Participate in interregional coordination for rail freight relief efforts	Provide assistance as requested to private sector with implementation of their freight rail relief strategies	 	UP, Amtrak, TxDOT, AAMPO, CAMPO		
	If surplus rail freight capacity is created, discuss opportunities for alternative uses of increased rail capacity in the region				

Priority Transportation Corridors Strategies

Strategies were identified to help improve mobility along the three major north-south corridors in the region, I-35, US 281 and SH 130. No further strategies are recommended for SH 130 at the present time. The planned widening of SH 130 from SH 71 to SH 45 in Austin and existing capacity will accommodate anticipated future demands.

Strategy	Tactics	Topics	Partners		Coord.
SHORT TERM (2019-2024)					
Enable future technology enhancements	Define minimum ITS requirements for major Priority Transportation Corridors		TxDOT, CAMPO, AAMPO		ICM & ITS, Arterials
	Introduce installation requirements for technology integration in new expansion projects along Priority Transportation Corridors				
	Leverage technology to help travellers effectively plan trips				
Support improvements that address local deficiencies along I-35	Determine I-35 frontage road segments operating deficiently		TxDOT, CAMPO, AAMPO	●	
	Inventory and evaluate I-35 ramps for optimal configuration and move forward with the delivery of an access ramp conversion program				
Complete requirements for expansion of I-35	Develop environmental and Preliminary Engineering for expansion of I-35 between the Austin to San Antonio metro areas	 	TxDOT, CAMPO, AAMPO	●	
Reduce safety concerns at local intersections with high crash concentrations along US 281	Implement safety improvements at local intersections in Bexar County		TxDOT, CAMPO, AAMPO	●	
	Determine and implement safety improvements at local intersections in Comal, Burnet and Blanco Counties				
MID TERM (2025-2035)					
Maximize I-35 frontage road efficiency	Continue the implementation of a frontage road operation and upgrade program		TxDOT, CAMPO, AAMPO	●	
Further the US 281 roadway structure update program	Construct a new Guadalupe River Bridge (SB)		TxDOT, AAMPO	●	
Increase capacity on US 281	Construct a 4-lane divided highway from the Comal County Line to the Burnet County Line.		TxDOT, AAMPO, CAMPO, Local Govts.		
	Support the implementation of the US 281 Improvement Program by ensuring the existing ROW supports ultimate construction needs.				
	Construct a 4-lane freeway in Comal County				
	Study the feasibility of Park and Pool locations along US 281 in Bexar, Comal and Blanco Counties				
Improve regional mobility west of Austin and San Antonio	Reconstruct the US 281 /SH 71 intersection as a free-flowing interchange		TxDOT, CAMPO		
	Reconstruct the US 281 /US 290 S intersection as a free-flowing interchange		TxDOT		

Priority Transportation Corridors Strategies , Cont.

Strategy	Tactics	Topics	Partners		Coord.
Increase safety on US 281	Develop interchanges at Mustang Vista Rd, Casey Rd, FM 311, Jumbo Evans Blvd, Rebecca Creek Rd and FM 306 in Bexar County	 	TxDOT, AAMPO, CAMPO, Local Govts.		
	Conduct a regional crash hotspot analysis every 5 years to evaluate safety concerns				
	Improve intersections with high crash histories including RM 473 West, RM 473 East, John Price Road, and RM 32				
LONG TERM (2036-2045)					
Increase I-35's person and freight throughput	Improve I-35 to accommodate higher demands		TxDOT, CAMPO, AAMPO		
Increase capacity on US 281	Construct a 4-lane freeway from FM 306 (North of Comal County Line) to SH 71 in Burnet County		TxDOT, Local Govts.		
Reorganize long-range traffic through City of Blanco	Develop long term solutions for traffic on US 281 through the City of Blanco				

Arterial Improvement Strategies

In workshops held with the TACs from both MPOs, stakeholders identified the limited availability of alternatives to I-35 for movement within the corridor. The following Arterial Improvement Strategies work to provide options for local movement and routing alternatives, especially in the event of an incident on I-35.

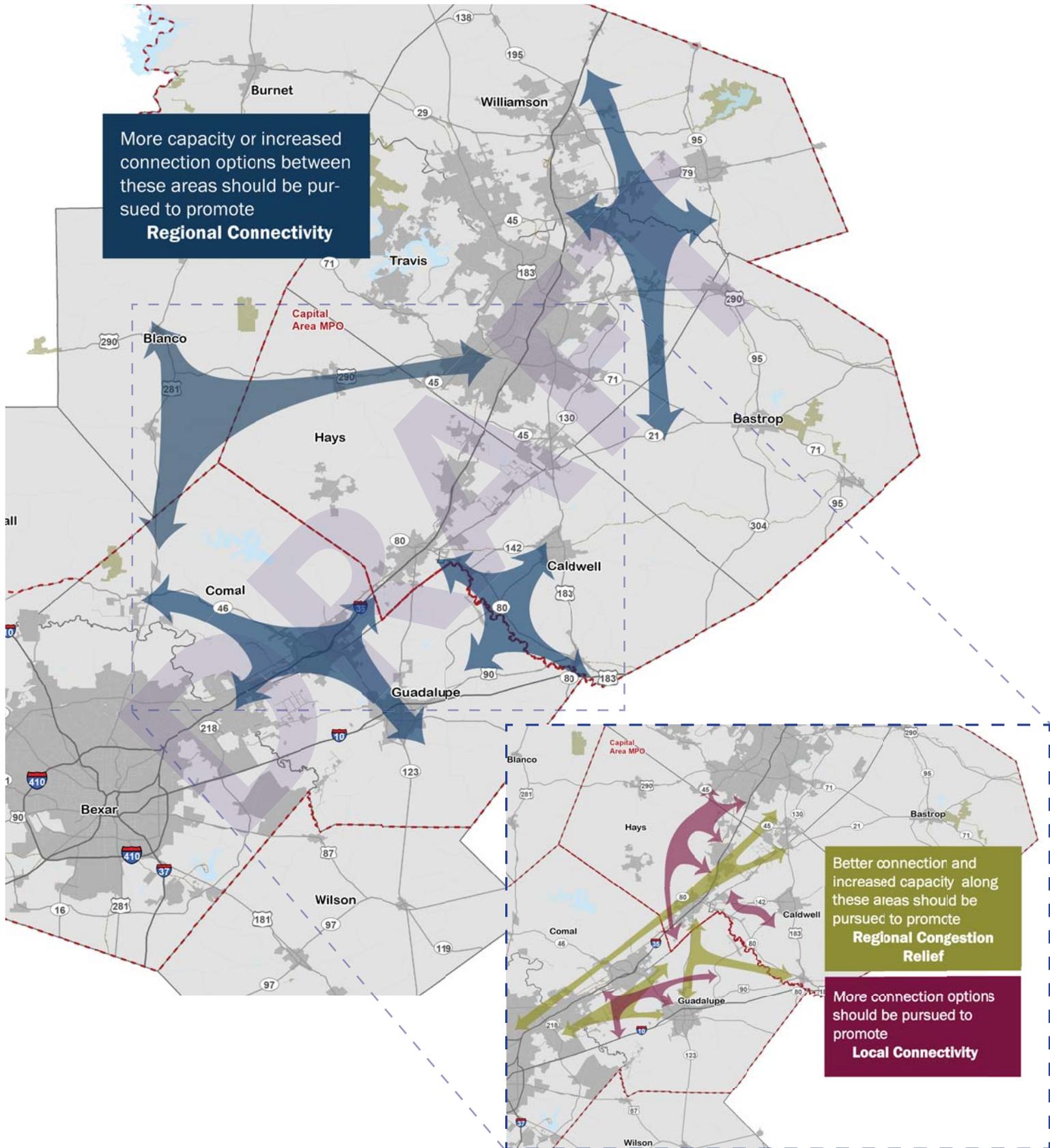
Strategy	Tactics	Topics	Partners		Coord.
SHORT TERM (2019-2024)					
Designate an interregional relief arterial network	ID network of arterials designated as relief routes for local movements and I-35 relief operations		TxDOT, CAMPO, AAMPO, Local Govts.	●	
	Begin feasibility studies to assess existing & future needs and conditions on each of the identified relief arterials				
Develop an improvement plan for designated relief arterials	Prioritize improvements on existing relief arterials		TxDOT, CAMPO, AAMPO, Local Govts.	●	
	Identify and prioritize potential new arterial connections				
Develop a prioritization framework to aid local officials in prioritizing future investments	Develop arterial performance measures and an information exchange protocol for sharing of the resulting measurements		TxDOT, CAMPO, AAMPO, Local Govts.		
	Develop an investment monitoring tool for arterial improvements				
Coordinate connection of planned arterial improvements in regional, local, and county thoroughfare plans	Initiate arterial improvement coordination between MPOs, cities and counties, focusing on cities whose ETJs cross county and MPO boundaries		CAMPO, AAMPO, Local Govts.	●	Regional Coord.
	Support local corridor preservation and corridor management activities for identified routes				

Arterial Improvement Strategies, Cont.

Strategy	Tactics	Topics	Partners		Coord.
MID TERM (2025-2035)					
Develop interregional relief arterial network	Construct improvements to existing relief arterials	 	TxDOT, Local Govts, CAMPO, AAMPO	●	
	Conduct planning and engineering for new arterial connections				
Coordinate the connection of local arterial ITS systems with regional ITS master plans	Support existing local ITS efforts and traffic management systems on arterials through knowledge and resource sharing	 	CAMPO, AAMPO, Local Govts, TxDOT	●	ITS & ICM
	Integrate local arterial ITS and TxDOT-managed systems				ITS & ICM
	Develop a regional strategy for smart multi-modal corridors, including installation of ITS technology and variable message road signs for motorists				ITS & ICM
	Create an interregional arterial rerouting plan for incidents along major regional connections and integrate recommendations into local incident management plans and ITS protocols				ITS & ICM
Prioritize corridor preservation and access management efforts	Integrate planned arterials with local growth plans	 	CAMPO, AAMPO, Local Govts, TxDOT	●	
	Identify and preserve right-of-way for new arterial connections				
	Perform access management along local arterials to ensure adequate mobility and safety				
Integrate management and operations of designated arterials into I-35 corridor management strategies	Identify areas of opportunity and overlap between local transportation Incident Management Plans	 	CAMPO, AAMPO, Local Govts, TxDOT	●	
LONG TERM (2036-2045)					
Equip arterials with connectivity capabilities to accommodate emerging technologies	Provide ITS connectivity along smart multi-modal corridors		TxDOT, CAMPO, AAMPO, Local Govts.	●	ITS & ICM / Modal Options
	Implement maintenance practices that support smart multimodal corridors				ITS & ICM / Modal Options
Continue to promote use of local arterials to facilitate interregional multimodal connectivity	Coordinate with regional bicycle networks and regional transit service routes to promote use of major arterials as regional multimodal corridors	 	CAMPO, AAMPO, Local Govts, TxDOT		Modal Options
Nurture the extension of the local and relief arterial networks to enhance mobility and connectivity between growing regions	Reassess the performance of the interregional arterial rerouting plans in a bi-annual basis based on established arterial performance measures		CAMPO, AAMPO, Local Govts, TxDOT		Regional Coord.

Arterial Improvement Strategies Map

The following maps identify the preferred areas and characteristics of the arterial improvement strategies to be implemented in the region according to stakeholder input and technical assessment of needs.



Next Steps

**MPO TRANSPORTATION POLICY BOARDS
JOINT STRATEGY WORKSHOP**

STRATEGY CONSENSUS



**CAPITAL - ALAMO
CONNECTIONS STRATEGY**

**SHORT-TERM
STRATEGIES
0 - 5 YEARS**

**MID-TERM
STRATEGIES
6 - 15 YEARS**

**LONG-TERM
STRATEGIES
16 - 25 YEARS**

**REVIEW OF STRATEGY PLAN
AND ACTION ITEMS BY
MPO TRANSPORTATION POLICY BOARDS**

CAPITAL - ALAMO CONNECTIONS STUDY



For more information, please contact:

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Attachment C – Presentation



CAPITAL - ALAMO CONNECTIONS STUDY

Joint Workshop – AAMPO & CAMPO
Transportation Policy Boards



1. Welcome
2. Stakeholder Update
3. Strategy Prioritization Workshop
4. Next Steps

Kevin Wolff

Bexar County Commissioner
Chairman, Alamo Area MPO



Will Conley

Chairman, Capital Area MPO



1. Welcome
2. Stakeholder Update
 - a) Technical Findings
 - b) Joint TAC Workshop
3. Strategy Prioritization Workshop
4. Next Steps

Study Timeline



Capital-Alamo Connections Study

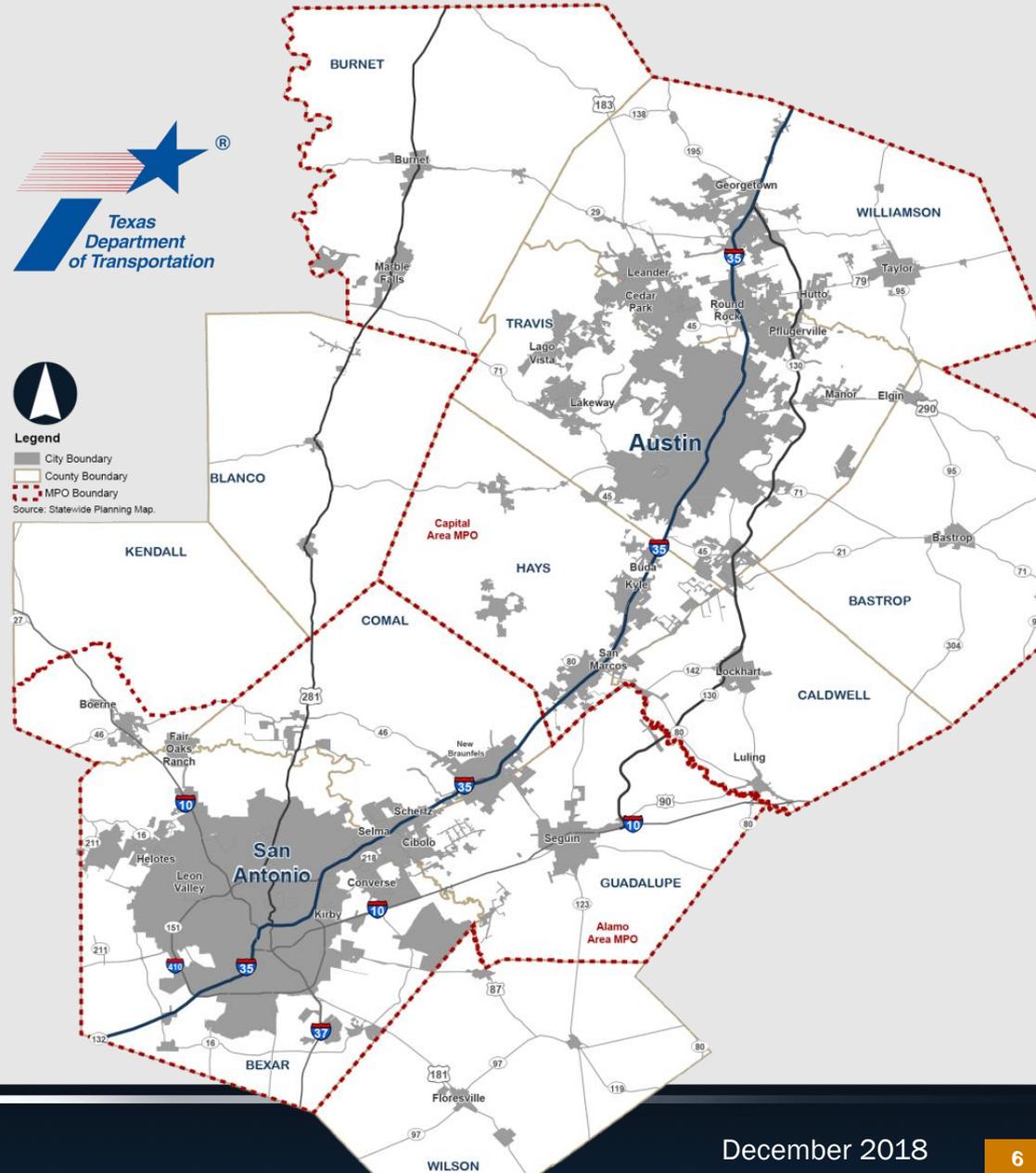
OUR JOINT EFFORT BY:



MULTI-REGIONAL LEVEL OF ANALYSIS

Twelve counties in the area of influence of the Metropolitan areas

This includes ALL member counties of both Metropolitan Planning Organizations



Why is this study necessary?



Accelerated Growth

Comal, Kendall and Hays counties are among the 10 fastest-growing counties in the US for 2017

Source: Census Bureau CB18-50



Emerging Megaregion

“An apparent merging of population density along I-35 corridor as the metro areas continue to grow”.

-Texas State Demographer

Source: TDC 2014



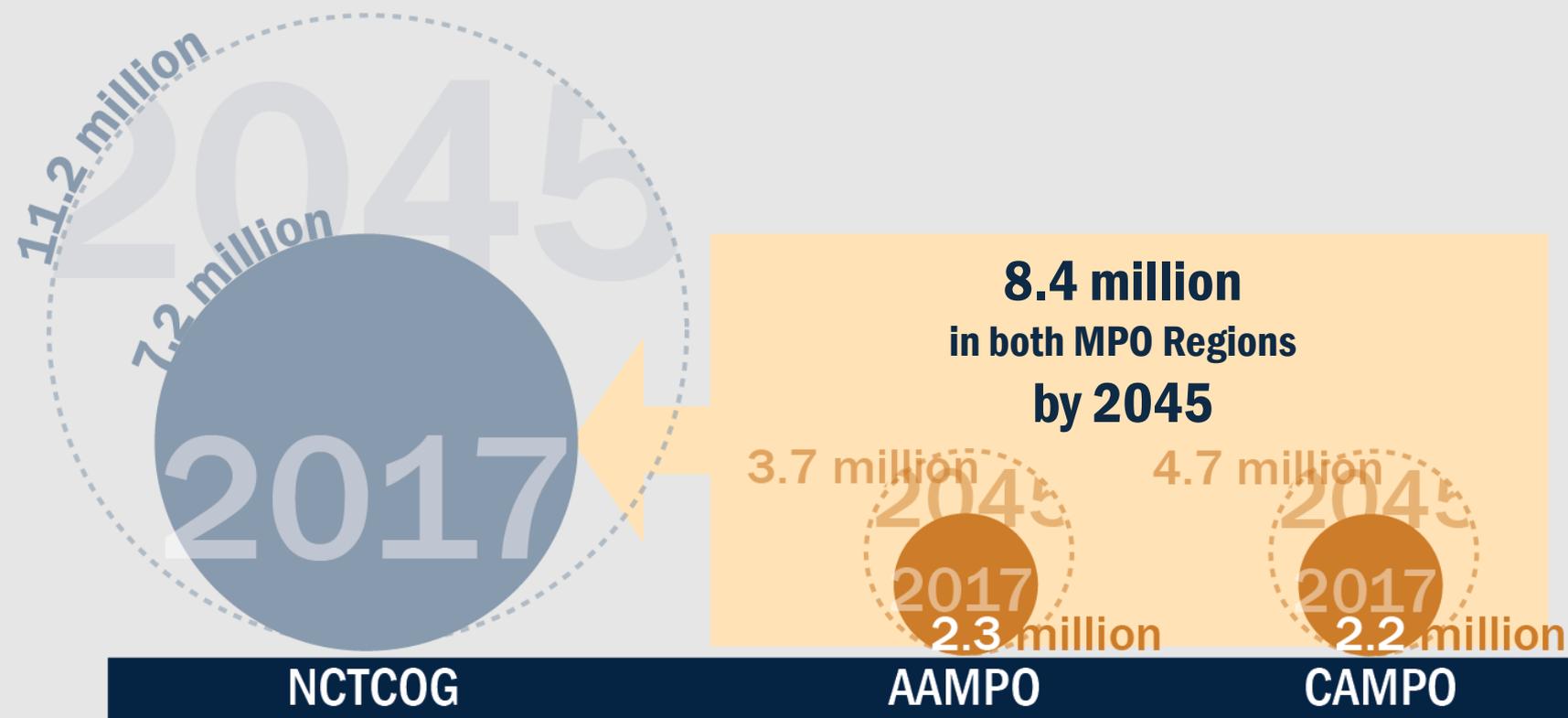
Urgent Demands

Seven segments on the North-South connections between Austin and San Antonio are in the Top 100 Most Congested Highway Segments

Source: TxDOT

RATIONALE

Accelerated Growth



GROWTH

Source: 2017 Census County Population Estimates;
NCTCOG, CAMPO, AAMPO 2045 Population Forecasts

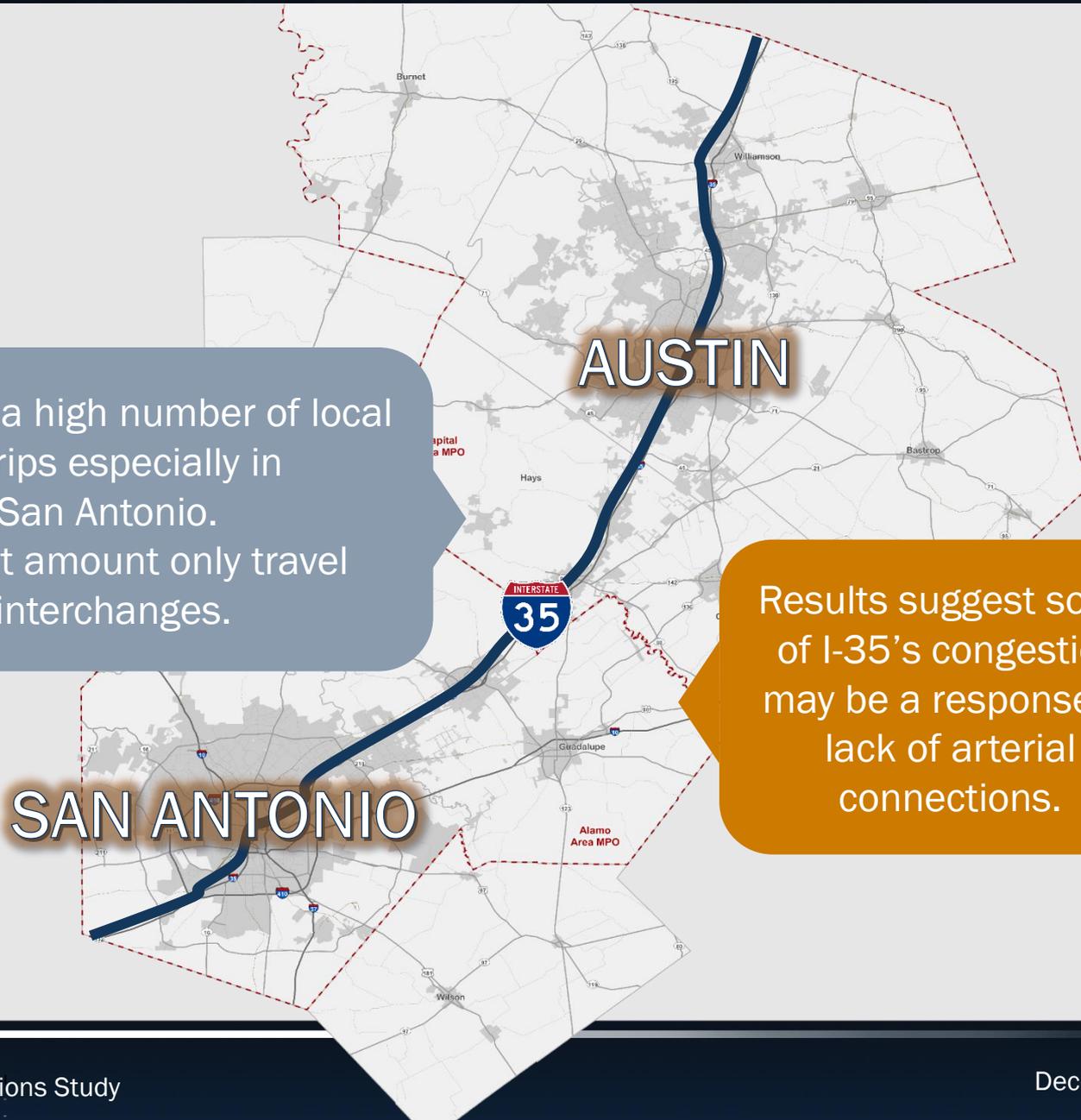
Study Goal

Develop a regional strategy to enhance mobility and identify infrastructure, policy and technology solutions



for the Greater Austin-San Antonio region.

I-35 Origin-Destinations: Findings



- I-35 shows a high number of local and short trips especially in Austin and San Antonio.
- A significant amount only travel one or two interchanges.

Results suggest some of I-35's congestion may be a response to lack of arterial connections.

Freight on I-35: Not through traffic

Up to 82% of truck traffic entering the region on I-35 stops in or is headed for either of these two regions.

Leave I-35

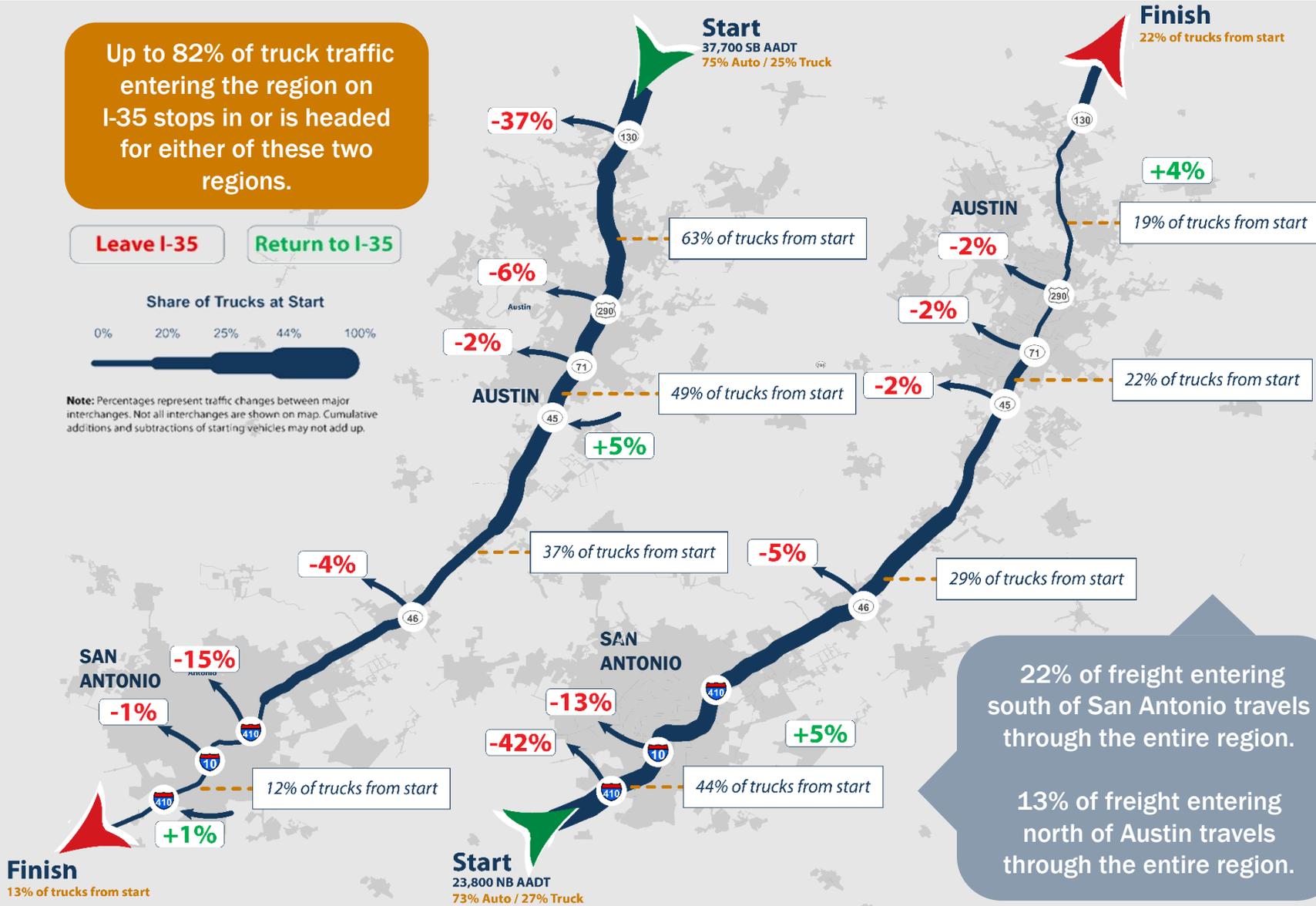
Return to I-35

Share of Trucks at Start

0% 20% 25% 44% 100%



Note: Percentages represent traffic changes between major interchanges. Not all interchanges are shown on map. Cumulative additions and subtractions of starting vehicles may not add up.



22% of freight entering south of San Antonio travels through the entire region.

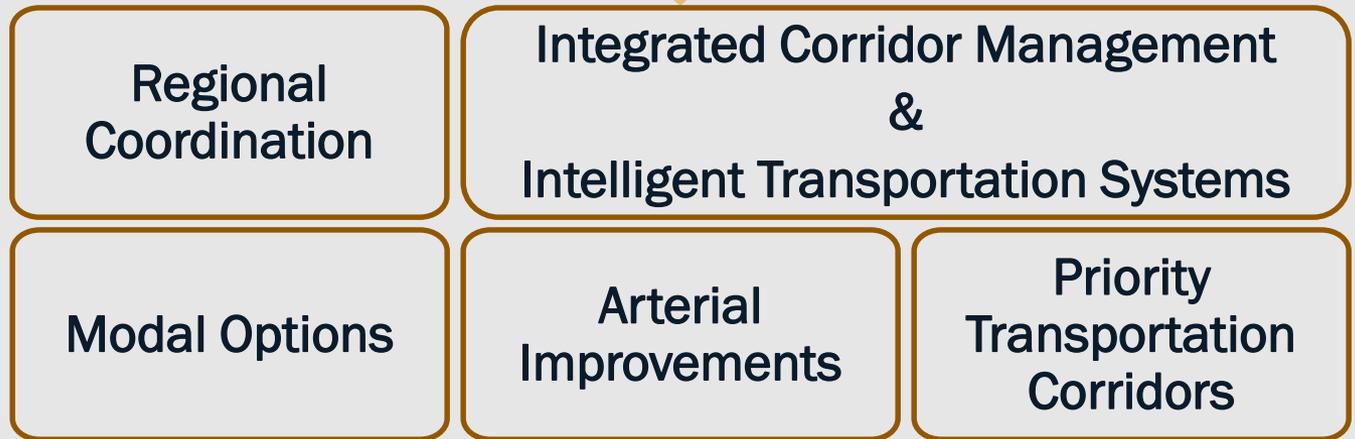
13% of freight entering north of Austin travels through the entire region.

Regional Strategy Development

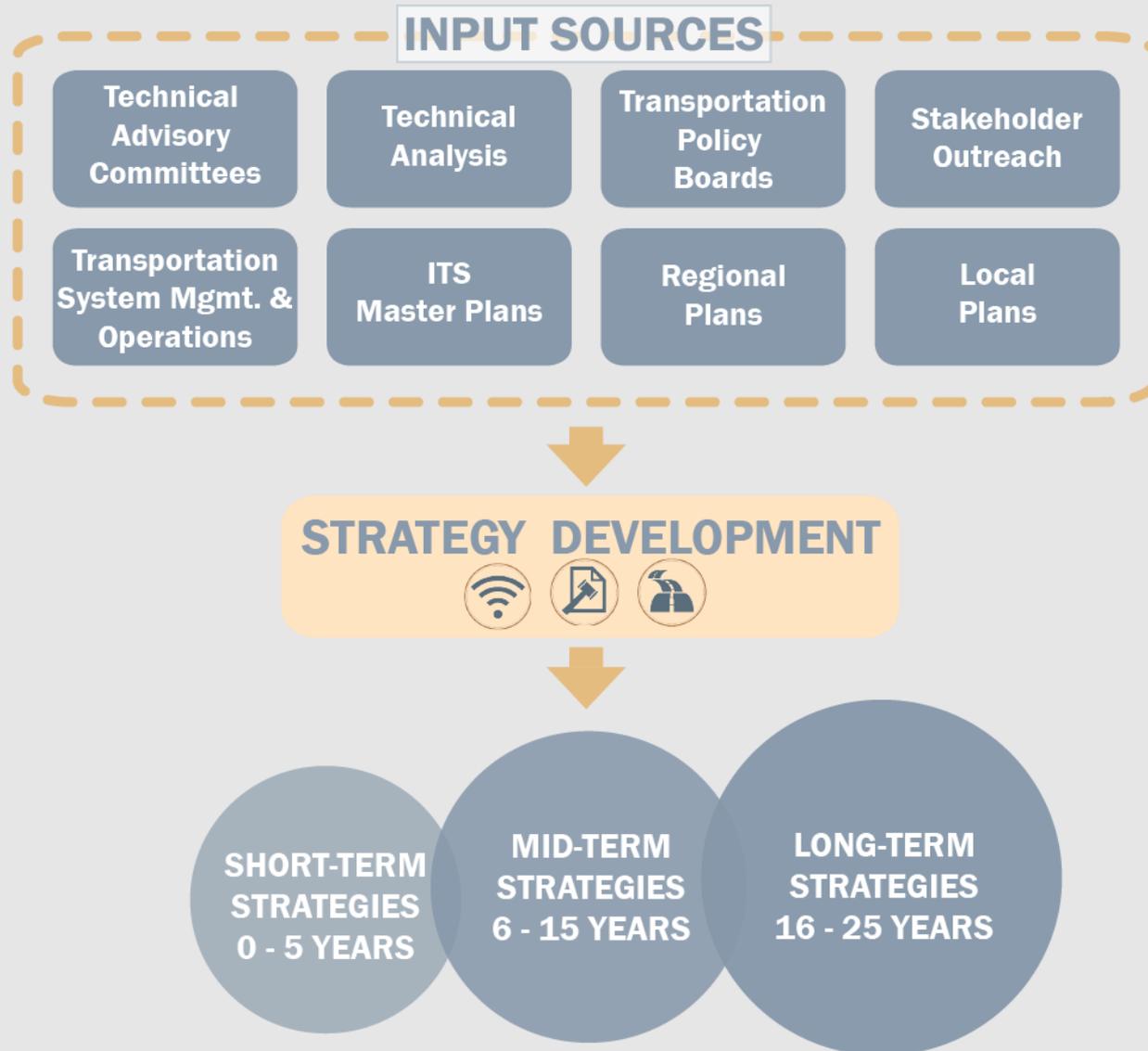
Overarching Topics



Strategy Groups



Strategy Development Process



1. Welcome
2. Stakeholder Update
 - a) Technical Findings
 - b) Joint TAC Workshop
3. Strategy Prioritization Workshop
4. Next Steps

Joint TAC Workshop - Structure

2 MPOs



In Partnership with



28 TAC members in attendance



10



18

32 additional attendees & representatives

5 Theme-focused workshop groups



REGIONAL COORDINATION



MODAL OPTIONS



ARTERIALS



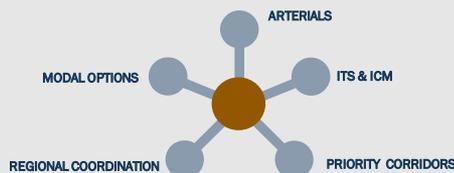
ITS & ICM



PRIORITY CORRIDORS

Review and alteration of strategies & tactics

Report Back and Group Discussion



Proposed Strategies for TPBs

Joint TAC Workshop

KEY MESSAGE

Encouraging our technical bodies to advance cooperation efforts and strive to accomplish a joint vision through complementary regional strategies



WHAT DID WE NEED TO DO?

Review main topics of stakeholder outreach

“What is at the forefront of the community’s mind?”

Review technical analysis work

“What are the implications of the analysis results?”

WHAT DID WE WANT TO DO?



Workshop strategies and tactics based on our technical and local knowledge



Ensure that strategies are relevant and feasible for both regions

WHAT DID WE ACCOMPLISH?



60 Strategies & 143 Tactics for prioritization by TPBs

Joint TAC Workshop – Main Outcomes

REGIONAL COORDINATION

- More regular coordination
- More data sharing
- More communication & interaction

ITS & ICM

- Support ongoing initiatives
- Be flexible so as to respond to technology changes
- Accelerate implementation of these strategies

MODAL OPTIONS

- Emphasis on movement of people AND goods
- More and better service
- Better system integration

PRIORITY CORRIDORS

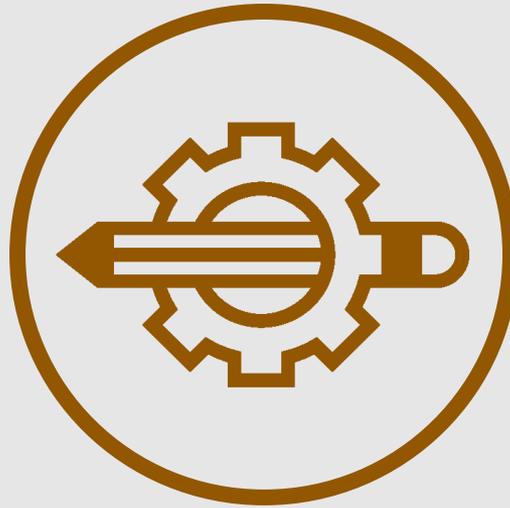
- Coordinate with ICM & ITS
- Focus on region between San Marcos and New Braunfels
- Reference and support existing initiatives

ARTERIALS

- Be mindful of local needs
- Emphasize multimodality
- Accelerate implementation of these strategies

Today's Meeting

1. Welcome
2. Stakeholder Update
3. Strategy Prioritization Workshop
4. Next Steps



Strategy Prioritization Workshop

Strategy Prioritization Workshop

Strategy Board Header

Strategy Group

Estimated financial need

REGIONAL COORDINATION STRATEGIES		  				
STRATEGY	FINANCIAL NEED	Essential Right Now	Can Wait			
SHORT TERM		2019	2020	2021	2022	2023

Strategy List

*Proposed
Timeframe*

Priority Scale





Strategy Prioritization Workshop

Strategy Prioritization Workshop

Results



1. Welcome
2. Stakeholder Update
3. Strategy Prioritization Workshop
4. Next Steps

What's next?



For more information:

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TP&P Corridor Planning Director

Phone: 512.486.5154 Roger.Beall@txdot.gov

Attachment D – Sign-In Sheets



Capital-Alamo Connection Study
 Joint Workshop of the AAMPO and CAMPO
 Transportation Policy Boards
 December 5, 2018



SIGN IN - Attendees (AAMPO TPB)

Initials	Name	Organization	Table Assignment
KAH	Jeff Arndt (Keith Horn via)	AAMPO TPB	2
VJ	Vic Boyer	AAMPO TPB	1
	Greg Brockhouse	AAMPO TPB	
	Tommy Calvert	AAMPO TPB	
	Rick Casteñeda	AAMPO TPB	
	Ron Cisneros	AAMPO TPB	
	Robert Comeaux	AAMPO TPB	
	Mary Dennis	AAMPO TPB	
	Michael S. Frisbie, P.E.	AAMPO TPB	
	Shirley Gonzales	AAMPO TPB	
	Renee Green, P.E.	AAMPO TPB	
	Scott Haag	AAMPO TPB	
	Kevin Hadas	AAMPO TPB	
	Mario Jorge, P.E.	AAMPO TPB	2
	Don Keil	AAMPO TPB	
KK	Kyle Kutscher	AAMPO TPB	3
	Cheryl Landman	AAMPO TPB	
	Michael J. Lynd, Jr.	AAMPO TPB	
	Jordana Matthews	AAMPO TPB	2
	Betty Ann Matthews ^{Ismael Segovia}	AAMPO TPB	2
	Justin Meadows	AAMPO TPB	
	Nick Page	AAMPO TPB	
WAS	Wayne Peters	AAMPO TPB	1
	Diane Rath	AAMPO TPB	
	Arthur Reinhardt, P.E., C.F.M.	AAMPO TPB	
CR	Chris Riley	AAMPO TPB	4
	Sergio "Chico" Rodriguez	AAMPO TPB	
RL	Patricia Rodriguez	AAMPO TPB	4
	Rey Saldaña	AAMPO TPB	
	Ana E. Sandoval	AAMPO TPB	3
ORS	Clay Smith, P.E.	AAMPO TPB	
KW	Kevin Webb	AAMPO TPB	1
BOCE	Bridgett White	AAMPO TPB	1
	Kevin A. Wolff	AAMPO TPB	4
	Jim Wolverton	AAMPO TPB	
	Greg P. Wood	AAMPO TPB	
	Clint Eliason - City of SAN ANTONIO		1
	Zach Green		





Capital-Alamo Connection Study
 Joint Workshop of the AAMPO and CAMPO
 Transportation Policy Boards
 December 5, 2018



SIGN IN - Attendees (CAMPO TPB)

Initials	Name	Organization	Table Assignment
PROXY	Steve Adler <i>John Michael Carter</i>	CAMPO TPB	
	Alison Alter	CAMPO TPB	
CB	Clara Beckett	CAMPO TPB	2
WC	Will Conley	CAMPO TPB	
	Gerald Daugherty	CAMPO TPB	
	Sarah Eckhardt	CAMPO TPB	
	Jimmy Flannigan	CAMPO TPB	
	Victor Gonzales	CAMPO TPB	
mf	Mark Jones	CAMPO TPB	1
	Ann Kitchen	CAMPO TPB	
CR	Cynthia Long	CAMPO TPB	
	Terry McCoy	CAMPO TPB	
	Terry Mitchell	CAMPO TPB	
	Craig Morgan	CAMPO TPB	
	James Oakley	CAMPO TPB	
	Dale Ross	CAMPO TPB	
	Brigid Shea	CAMPO TPB	
	Edward Theriot	CAMPO TPB	
	John Thomaidis	CAMPO TPB	
	Jeff Travillion	CAMPO TPB	
	Corbin Van Arsdale	CAMPO TPB	
	Jim Powers	SH 130	
	Greg Lancaster	CAMPO	
	XXXXXXXXXXXX		
	TOM HORNSETH	COMAL CO.	
	James Lovett	SH 130	
	Windy Johnson	Urban Counties	
	Cherry Ford	COMPS	
	JIM CARIZ	MAYOR ADLER	
	Melissa Velasquez	Comm Brigid Shea Travis County	
	Tim Tugger	CAMPO Council	





Capital-Alamo Connection Study
 Joint Workshop of the AAMPO and CAMPO
 Transportation Policy Boards
 December 5, 2018



SIGN IN - Staff

Initials	Name	Organization
RNB	Roger Beall	TxDOT
JB	Jonathan Bean	TxDOT
	Ricardo Casteñeda	TxDOT
SC	Susan Chavez	TxDOT
KW	Kevin Dickey	TxDOT
	Jefferson Grimes	TxDOT
MS	Melissa Neeley	TxDOT
DS	Darcie Schipull	TxDOT
	Peter Smith	TxDOT
CS	Carlos Swonke	TxDOT
MW	Mark Werner	TxDOT
	Linda Alvarado-Vela	AAMPO
	Allie Blazosky	AAMPO
	Alex Carroll	AAMPO
	Jeanne Geiger	AAMPO
JM	Sid Martinez	AAMPO
	Lori Steward	AAMPO
	Anthony Gonzales	CAMPO
	Ashby Johnson	CAMPO
DM	Doise Miers	CAMPO
KP	Kim Petty	CAMPO
NV	Nirav Ved	CAMPO
NB	Nair Barrios	Jacobs
CC	Carine Choubassi	Jacobs
TN	Travis Norton	Jacobs
MS	Michael Sexton	Jacobs
AT	Adriana Torcat	Jacobs
JW	Jeff Webster	Jacobs
	Jennifer Zankowski	Jacobs
HC	Hillary Calavitta	HNTB
JC	Janelle Carey	HNTB
SH	Scott Haywood	HNTB
	Summer Lawton	HNTB
JAR	Jason Rodriguez	HNTB
	David Kocour	Hg Consult
RL	Rachel Lunceford	Hg Consult
SW	Steve Wells	Hg Consult
LC	Lauren Canales	NLA
RD	Randall Dillard	NLA



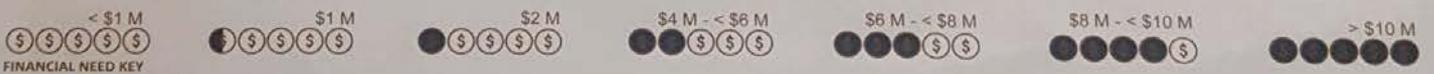
Attachment E – Workshop Work Sheets

PRIORITY TRANSPORTATION CORRIDOR STRATEGIES



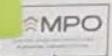
STRATEGY	FINANCIAL NEED	Timeline				
		Essential Right Now	2019	2020	2021	2022
SHORT TERM		2019	2020	2021	2022	2023
Enable future technology enhancements	●●●(●●●)	●●●●●	●		●	
Support improvements that address local deficiencies along I-35	●(●●●●)	●●●●●		●	●	
Complete requirements for expansion of I-35	●●●●●(●)		●●	●●	●●	●●
Reduce safety concerns at local intersections with high crash concentrations along US 281	●●●●●(●)	●●●●●				
MID TERM		2025	2027	2029	2031	2033
Maximize I-35 frontage road efficiency	●●●●●			●●	●	●
Further the US 281 roadway structure update program	●●●●●	●●	●			●
Increase capacity on US 281	●●●●●	●		●	●●	●●
Increase safety on US 281	●●●●●	●		●	●	
Improve regional mobility west of Austin and San Antonio	●●●●●		●			
LONG TERM		2035	2037	2039	2041	2043
Increase I-35's person and freight throughput	●●●●●	●●	●●	●	●	
Increase capacity on US 281	●●●●●		●	●	●	●
Reorganize long-range traffic through City of Blanco	●●●●●			●●		

COMMENTS
Include any further comments related to the strategy on a Post-it note to the right.



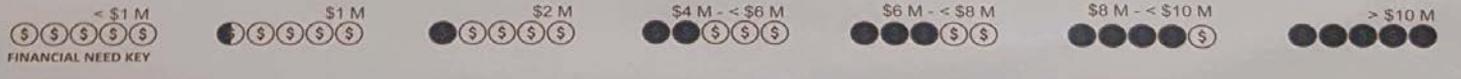
PRIORITY TRANSPORTATION CORRIDOR STRATEGIES

I-35 & SH 130
CONTRACTOR



STRATEGY	FINANCIAL NEED	Timeline					
		Essential Right Now	2019	2020	2021	2022	2023
SHORT TERM							
Enable future technology enhancements	●●●(\$(\$(\$		●				
Support improvements that address local deficiencies along I-35	●(\$(\$(\$(\$	●●●●●	●●●				
Complete requirements for expansion of I-35	●●●●●(\$	●●●●●	●●	●			
Reduce safety concerns at local intersections with high crash concentrations along US 281	●●●●●(\$		●				
MID TERM							
Maximize I-35 frontage road efficiency	●●●●●●	●●●●●	●●				
Further the US 281 roadway structure update program	●●●●●●	●●					
Increase capacity on US 281	●●●●●●	●●●●●	●●				
Increase safety on US 281	●●●●●●	●●					
Improve regional mobility west of Austin and San Antonio	●●●●●●		●				
LONG TERM							
Increase I-35's person and freight throughput	●●●●●●		●				
Increase capacity on US 281	●●●●●●	●●●●●	●●				
Reorganize long-range traffic through City of Blanco	●●●●●●		●●	●●			

COMMENTS
Include any further comments related to the strategy on a Post-it note to the right.



PRIORITY TRANSPORTATION CORRIDOR STRATEGIES

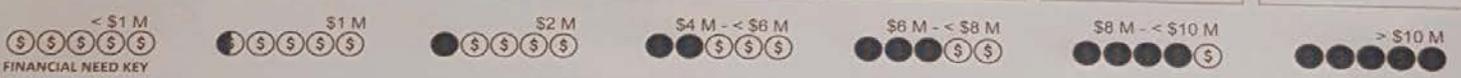


STRATEGY	FINANCIAL NEED	Essential Right Now					Can Wait
		2019	2020	2021	2022	2023	
SHORT TERM							
Enable future technology enhancements	●●●●\$	●●					
Support improvements that address local deficiencies along I-35	●\$		●				
Complete requirements for expansion of I-35	●●●●●\$	●●●●●					
Reduce safety concerns at local intersections with high crash concentrations along US 281	●●●●●\$	●					
MID TERM							
Maximize I-35 frontage road efficiency	●●●●●	●					
Further the US 281 roadway structure update program	●●●●●	●●●●	●				
Increase capacity on US 281	●●●●●	●●					
Increase safety on US 281	●●●●●						
Improve regional mobility west of Austin and San Antonio	●●●●●	●●	●				
LONG TERM							
Increase I-35's person and freight throughput	●●●●●	●●●●					
Increase capacity on US 281	●●●●●	●					
Reorganize long-range traffic through City of Blanco	●●●●●	●					

COMMENTS
Include any further comments related to the strategy on a Post-it note in the right.

Was SH 46/SH 130 looked at? Part of current discussion

Nothing addressing southern connection to SH 130



PRIORITY TRANSPORTATION CORRIDOR STRATEGIES



STRATEGY	FINANCIAL NEED	Timeline					
		Essential Right Now	2019	2020	2021	2022	Can Wait
SHORT TERM							
Enable future technology enhancements	●●●●●	●				●●	●
Support improvements that address local deficiencies along I-35	●●●●●	●●●	●				
Complete requirements for expansion of I-35	●●●●●		●		●		
Reduce safety concerns at local intersections with high crash concentrations along US 281	●●●●●	●●			●		
MID TERM							
Maximize I-35 frontage road efficiency	●●●●●	●●	●		●		
Further the US 281 roadway structure update program	●●●●●	●			●	●	
Increase capacity on US 281	●●●●●	●			●	●	
Increase safety on US 281	●●●●●	●●			●		
Improve regional mobility west of Austin and San Antonio	●●●●●		●			●	●●
LONG TERM							
Increase I-35's person and freight throughput	●●●●●	●	●	●			
Increase capacity on US 281	●●●●●	●				●	
Reorganize long-range traffic through City of Blanco	●●●●●		●	●	●		

COMMENTS

Include any further comments related to the strategy on a Post-it note to the right.

●●●●● < \$1 M
FINANCIAL NEED KEY

●●●●● \$1 M

●●●●● \$2 M

●●●●● \$4 M - < \$6 M

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●●●●● \$8 M - < \$10 M

●●●●● > \$10 M

ICM & ITS STRATEGIES

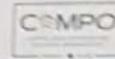


STRATEGY	FINANCIAL NEED	Essential Right Now	→					Can Wait			
		2019	2020	2021	2022	2023	2025	2027	2029	2031	2033
SHORT TERM											
Coordinate Emergency Roadside Assistance Programs Throughout Region <i>SA TxDOT Starting Spring FY 2019</i>	● (\$ \$ \$ \$ \$)	●									
Define regional priorities for corridor management <i>underway now, greater coord. needed</i>	● (\$ \$ \$ \$ \$)		●								
Map existing and planned ITS systems, owners, and interagency agreements <i>Regional Incident Mgmt. System</i>	● (\$ \$ \$ \$ \$)		●								
Coordinate Austin and San Antonio District TSMO activities <i>underway</i>	● (\$ \$ \$ \$ \$)		●								
Identify data sources for operations performance measures dealing with mobility between regions <i>Plan</i>	● (\$ \$ \$ \$ \$)	●									
Implement an Interregional, Integrated Corridor Management System for I-35 <i>Dumbine</i>	● ● ● (\$ \$)			●							
Coordinate regional travel information systems across jurisdictional boundaries	● (\$ \$ \$ \$ \$)		●								
MID TERM											
Support the pursuit of opportunities to fund or pilot innovative technology deployments for interregional mobility	● (\$ \$ \$ \$ \$)										
Improve use of ICM during early coordination of construction activities and major planned disruptions across region	● ● (\$ \$ \$)	● ●									
Develop Regional Incident Management Plan and process for regular updates	● ● ● (\$ \$)	● ●									
Support data gathering for early deployment of connected vehicles systems along major travel corridors	● (\$ \$ \$ \$)				●		● ●				
Refine local ITS systems and coordinate operations with Traffic Management Centers	● (\$ \$ \$ \$)	● ●									
Create framework and opportunity to share operations data and coordinate monitoring & performance management targets	● (\$ \$ \$ \$)				● ●						
LONG TERM											
Establish redundancy in Regional Traffic Management Centers	● (\$ \$ \$ \$)	● ●									
Deploy technologies to support connected vehicle systems along major travel corridors	● ● (\$ \$ \$)	● ●									
Use emerging technology to move people and goods within the regions	● (\$ \$ \$ \$)	● ●									

COMMENTS
Include any further comments related to the strategy on a Post-it note to the right

● (\$ \$ \$ \$) < \$1 M
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● ● (\$ \$ \$ \$ \$) \$2 M
● ● ● (\$ \$ \$ \$ \$) \$4 M - < \$6 M
● ● ● ● (\$ \$ \$ \$) \$6 M - < \$8 M
● ● ● ● ● (\$ \$ \$ \$) \$8 M - < \$10 M
● ● ● ● ● ● (> \$10 M)

ICM & ITS STRATEGIES



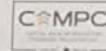
STRATEGY	FINANCIAL NEED	Timeline				
		Essential Right Now	2019	2020	2021	2022
SHORT TERM		2019	2020	2021	2022	2023
Coordinate Emergency Roadside Assistance Programs Throughout Region	● (\$ \$ \$ \$ \$)	●●●●●	●●●●●	●●●●●		
Define regional priorities for corridor management	● (\$ \$ \$ \$ \$)	●●●●●	●●●●●			
Map existing and planned ITS systems, owners, and interagency agreements	● (\$ \$ \$ \$ \$)	●●●●●	●●●●●			
Coordinate Austin and San Antonio District TSMO activities	● (\$ \$ \$ \$ \$)	●●●●●	●●●●●			
Identify data sources for operations performance measures dealing with mobility between regions	● (\$ \$ \$ \$ \$)	●●●●●	●●●●●			
Implement an Interregional, Integrated Corridor Management System for I-35	● (\$ \$ \$ \$ \$)		●●●●●	●●●●●		
Coordinate regional travel information systems across jurisdictional boundaries	● (\$ \$ \$ \$ \$)	●●●●●	●●●●●			
MID TERM		2025	2027	2029	2031	2033
Support the pursuit of opportunities to fund or pilot innovative technology deployments for interregional mobility	● (\$ \$ \$ \$ \$)	●●●●●	●●●●●			
Improve use of ICM during early coordination of construction activities and major planned disruptions across region	● (\$ \$ \$ \$ \$)	●●●●●	●●●●●			
Develop Regional Incident Management Plan and process for regular updates	● (\$ \$ \$ \$ \$)		●●●●●	●●●●●		
Support data gathering for early deployment of connected vehicles systems along major travel corridors	● (\$ \$ \$ \$ \$)		●●●●●	●●●●●	●●●●●	
Refine local ITS systems and coordinate operations with Traffic Management Centers	● (\$ \$ \$ \$ \$)		●●●●●	●●●●●		
Create framework and opportunity to share operations data and coordinate monitoring & performance management targets	● (\$ \$ \$ \$ \$)	●●●●●	●●●●●			
LONG TERM		2035	2037	2039	2041	2043
Establish redundancy in Regional Traffic Management Centers	● (\$ \$ \$ \$ \$)	●●●●●	●●●●●			
Deploy technologies to support connected vehicle systems along major travel corridors	● (\$ \$ \$ \$ \$)	●●●●●		●●●●●	●●●●●	
Use emerging technology to move people and goods within the regions	● (\$ \$ \$ \$ \$)	●●●●●	●●●●●			

COMMENTS						
Include any further comments related to the strategy on a Post-it note to the right						

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● (\$ \$ \$ \$ \$) \$4 M - < \$6 M
● (\$ \$ \$ \$ \$) \$6 M - < \$8 M
● (\$ \$ \$ \$ \$) \$8 M - < \$10 M
● (\$ \$ \$ \$ \$) > \$10 M

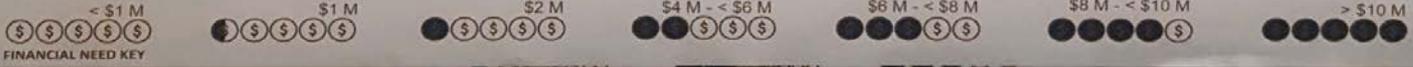
FINANCIAL NEED KEY

ICM & ITS STRATEGIES

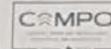


STRATEGY	FINANCIAL NEED	Timeline				
		Essential Right Now	2020	2021	2022	Can Wait 2023
SHORT TERM						
Coordinate Emergency Roadside Assistance Programs Throughout Region	● (\$ \$ \$ \$ \$)	●●				
Define regional priorities for corridor management	● (\$ \$ \$ \$ \$)					
Map existing and planned ITS systems, owners, and interagency agreements	● (\$ \$ \$ \$ \$)	●				
Coordinate Austin and San Antonio District TSMO activities	● (\$ \$ \$ \$ \$)					
Identify data sources for operations performance measures dealing with mobility between regions	(\$ \$ \$ \$ \$)		●			
Implement an Interregional, Integrated Corridor Management System for I-35	●●●● (\$ \$)		●			
Coordinate regional travel information systems across jurisdictional boundaries	(\$ \$ \$ \$ \$)					
MID TERM						
Support the pursuit of opportunities to fund or pilot innovative technology deployments for interregional mobility	● (\$ \$ \$ \$ \$)	●●				
Improve use of ICM during early coordination of construction activities and major planned disruptions across region	●●● (\$ \$ \$)	●				
Develop Regional Incident Management Plan and process for regular updates	●●●● (\$ \$)	●				
Support data gathering for early deployment of connected vehicles systems along major travel corridors	● (\$ \$ \$ \$ \$)			●●		
Refine local ITS systems and coordinate operations with Traffic Management Centers	● (\$ \$ \$ \$ \$)			●		
Create framework and opportunity to share operations data and coordinate monitoring & performance management targets	● (\$ \$ \$ \$ \$)					
LONG TERM						
Establish redundancy in Regional Traffic Management Centers	● (\$ \$ \$ \$ \$)		●			
Deploy technologies to support connected vehicle systems along major travel corridors	●● (\$ \$ \$ \$)		●			
Use emerging technology to move people and goods within the regions	● (\$ \$ \$ \$ \$)					

COMMENTS
Include any further comments related to the strategy on a Post-it note to the right

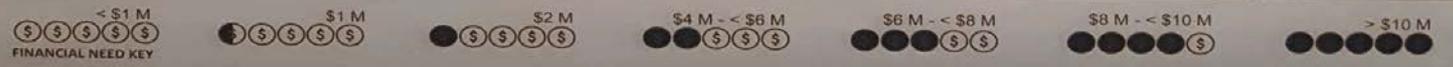


ARTERIAL IMPROVEMENT STRATEGIES

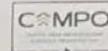


STRATEGY	FINANCIAL NEED	Timeline				
		Essential Right Now	2019	2020	2021	2022
SHORT TERM						
Designation of a interregional relief arterial network	(\$)((\$)((\$)((\$)((\$)	●	●	●	●	
Develop an improvement plan for designated relief arterials	●●●●●		●	●	●	●
Develop a prioritization framework to aid local officials in prioritizing future investments	(\$)((\$)((\$)((\$)	●●●●	●	●	●	
Coordinate connection of planned arterial improvements in regional, local, and county thoroughfare plans	●(\$)((\$)((\$)	●●	●●			
MID TERM						
Coordinate the connection of local arterial ITS systems with regional ITS master plans	●●●●(\$)((\$)	●●	●			
Develop interregional relief arterial network	●●●●●		●●	●		
Prioritize corridor preservation and access management efforts	●(\$)((\$)((\$)	●●	●			
Integrate management and operations of designated arterials into I-35 corridor management strategies	●(\$)((\$)((\$)		●	●		
LONG TERM						
Equip arterials with connectivity and autonomous capabilities to accommodate emerging technologies	●●●●(\$)((\$)	●●●●	●●	●	●	
Continue to promote use of local arterials to facilitate interregional multimodal connectivity	●●●●(\$)((\$)	●●●●	●●	●		
Nurture the extension of the local and relief arterial networks to enhance mobility and connectivity between growing regions	(\$)((\$)((\$)((\$)	●			●	

COMMENTS
Include any further comments related to the strategy on a Post-it note to the right

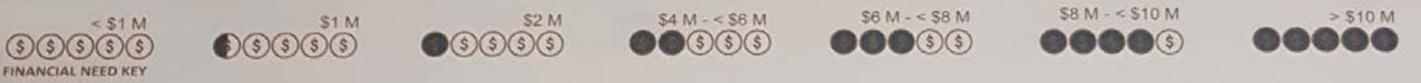


MODAL OPTIONS STRATEGIES



STRATEGY	FINANCIAL NEED	Timeline				
		Essential Right Now	2019	2020	2021	2022
SHORT TERM						
Consider coordination schemes to enhance freight movements throughout the region	● (\$ \$ \$ \$ \$)			●		
Implement Regional Intercity transit services	● ● ● ● (\$ \$)	● ● ● ● ● ● ● ●				
Further regular interregional transit cooperation	● (\$ \$ \$ \$ \$)	● ● ● ● ● ● ● ●				
Discuss how public sectors could assist private companies to move freight more safely and efficiently	(\$ \$ \$ \$ \$ \$)			●		
MID TERM						
Establish a Transit Coordination Task Force focusing on service borders	● (\$ \$ \$ \$ \$)	● ● ● ● ● ● ● ●				
Expand regional commuter transit options	● (\$ \$ \$ \$ \$)	● ● ● ● ● ● ● ●				
Identify potential interregional joint transit service routes	● (\$ \$ \$ \$ \$)	● ● ● ● ● ● ● ●				
Promote potential interregional bicycle routes and new long-distance bikeways	● (\$ \$ \$ \$ \$)			●		
Consider possible rail and trucking enhancements	● ● ● ● (\$ \$)				●	
LONG TERM						
Establish an interregional Transit Coalition	● (\$ \$ \$ \$ \$)	● ● ● ● ● ● ● ●				
Participate in interregional coordination for rail freight relief efforts	● (\$ \$ \$ \$ \$)	● ● ● ● ● ● ● ●		● ● ● ● ● ● ● ●		

COMMENTS	2019	2020	2021	2022	2023
Include any further comments related to the strategy on a Post-it note to the right					

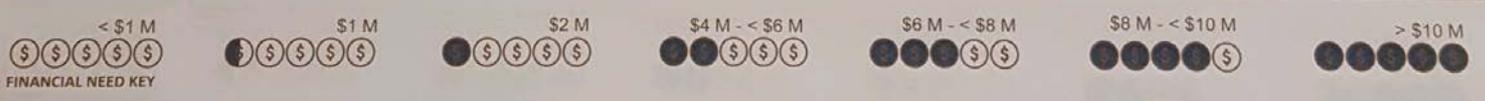


MODAL OPTIONS STRATEGIES



STRATEGY	FINANCIAL NEED	Timeline				
		Essential Right Now	2019	2020	2021	2022
SHORT TERM						
Consider coordination schemes to enhance freight movements throughout the region	● (\$ \$ \$ \$ \$)	● (Yellow) ● (Blue)	● (Blue) ● (Red)			
Implement Regional Intercity transit services	● ● ● ● (\$ \$)	● (Red) ● (Blue)		● (Yellow)	● (Blue)	
Further regular interregional transit cooperation	● (\$ \$ \$ \$ \$)	● (Blue)		● (Blue)	● (Red)	
Discuss how public sectors could assist private companies to move freight more safely and efficiently	(\$ \$ \$ \$ \$)	● (Blue)	● (Red) ● (Blue)			
MID TERM						
Establish a Transit Coordination Task Force focusing on service borders	● (\$ \$ \$ \$ \$)	● (Blue)	● (Blue)	● (Red)		
Expand regional commuter transit options	● (\$ \$ \$ \$ \$)	● (Blue)	● (Blue) ● (Red)			
Identify potential interregional joint transit service routes	(\$ \$ \$ \$ \$)	● (Blue)		● (Red) ● (Blue)		
Promote potential interregional bicycle routes and new long-distance bikeways	● (\$ \$ \$ \$ \$)		● (Red) ● (Blue)	● (Blue)	● (Blue) ● (Red)	● (Blue)
Consider possible rail and trucking enhancements	● ● ● ● (\$ \$)	● (Red) ● (Blue)	● (Blue) ● (Red)			
LONG TERM						
Establish an interregional Transit Coalition	(\$ \$ \$ \$ \$)	● (Blue) ● (Blue) ● (Red)				
Participate in interregional coordination for rail freight relief efforts	(\$ \$ \$ \$ \$)	● (Blue)	● (Blue) ● (Red)			

COMMENTS
Include any further comments related to the strategy on a Post-it note to the right.



* TPBS should be ordered by time, not the TAC

REGIONAL COORDINATION STRATEGIES



STRATEGY	FINANCIAL NEED	Essential Right Now					Can Wait
		2019	2020	2021	2022	2023	
SHORT TERM							
Formalize interagency coordination efforts	(\$(\$(\$(\$(\$(\$	●●	●●●●				
Create a joint website to document coordination efforts	(\$(\$(\$(\$(\$(\$		●●●●	●●			
Formalize an agreement to share planning data and shared performance measures among the two MPOs, local governments and transit agencies	●(\$(\$(\$(\$(\$		●●●●				
Develop a bi-regional travel demand model	●(\$(\$(\$(\$(\$	●●●●●	●●●●				
Define bi-regional objectives for improvement of mobility and connectivity	(\$(\$(\$(\$(\$(\$	●●●●●	●●●●				
Define performance measures dealing with mobility between the regions	(\$(\$(\$(\$(\$(\$	●●●●●	●●●●				
MID TERM							
Create a policy-level cooperative body between both regions including representatives from all members of the Capital-Alamo Connections Study partnership.	(\$(\$(\$(\$(\$(\$	●●●●					
Implement bi-regional solutions to improve mobility and connectivity	●(\$(\$(\$(\$(\$	●●●●					
Create a bi-regional technical committee focused on topics of shared concern	(\$(\$(\$(\$(\$(\$	●●●●					
LONG TERM							
Develop Combined Planning Documents	●(\$(\$(\$(\$(\$	●●●●					

Should be done now

→ ongoing - Syn effort

→ Non-attainment will A things

Done

COMMENTS
Includes any further comments related to the strategy on a Post-it note to the right

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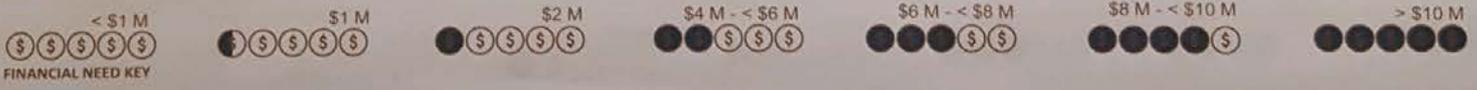
FINANCIAL NEED KEY

REGIONAL COORDINATION STRATEGIES

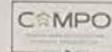


STRATEGY	FINANCIAL NEED	Timeline				
		Essential Right Now	2019	2020	2021	2022
SHORT TERM		2019	2020	2021	2022	2023
Formalize interagency coordination efforts	(\$(\$(\$(\$(\$(\$	●				
Create a joint website to document coordination efforts	(\$(\$(\$(\$(\$(\$	●				
Formalize an agreement to share planning data and shared performance measures among the two MPOs, local governments and transit agencies	●(\$(\$(\$(\$(\$			●		
Develop a bi-regional travel demand model	●(\$(\$(\$(\$(\$	●●●				
Define bi-regional objectives for improvement of mobility and connectivity	(\$(\$(\$(\$(\$(\$	●●●				
Define performance measures dealing with mobility between the regions	(\$(\$(\$(\$(\$(\$	●				
MID TERM		2025	2027	2029	2031	2033
Create a policy-level cooperative body between both regions including representatives from all members of the Capital-Alamo Connections Study partnership.	(\$(\$(\$(\$(\$(\$					
Implement bi-regional solutions to improve mobility and connectivity	●(\$(\$(\$(\$(\$	●				
Create a bi-regional technical committee focused on topics of shared concern	(\$(\$(\$(\$(\$(\$	●				
LONG TERM		2035	2037	2039	2041	2043
Develop Combined Planning Documents	●(\$(\$(\$(\$(\$					

COMMENTS
Include any further comments related to the strategy on a Post-it note to the right



PRIORITY TRANSPORTATION CORRIDOR STRATEGIES



STRATEGY	FINANCIAL NEED	Essential Right Now	→				Can Wait
		2019	2020	2021	2022	2023	
SHORT TERM							
Enable future technology enhancements	●●●(\$)(S)(S)						
Support improvements that address local deficiencies along I-35	●(\$)(S)(S)(S)(S)						
Complete requirements for expansion of I-35	●●●●●(S)						
Reduce safety concerns at local intersections with high crash concentrations along US 281	●●●●●(S)						
MID TERM							
		2025	2027	2029	2031	2033	
Maximize I-35 frontage road efficiency	●●●●●●●						
Further the US 281 roadway structure update program	●●●●●●●						
Increase capacity on US 281	●●●●●●●						
Increase safety on US 281	●●●●●●●						
Improve regional mobility west of Austin and San Antonio	●●●●●●●						
LONG TERM							
		2035	2037	2039	2041	2043	
Increase I-35's person and freight throughput	●●●●●●●						
Increase capacity on US 281	●●●●●●●						
Reorganize long-range traffic through City of Blanco	●●●●●●●						

COMMENTS

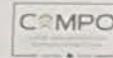
Include any further comments related to the strategy on a Post-it note to the right.

Big Money - Where?

FINANCIAL NEED KEY

< \$1 M (\$)(S)(S)(S)(S)	\$1 M (\$)(S)(S)(S)(S)(S)	\$2 M ●(\$)(S)(S)(S)(S)	\$4 M - < \$6 M ●●(\$)(S)(S)(S)	\$6 M - < \$8 M ●●●(\$)(S)(S)	\$8 M - < \$10 M ●●●●(\$)(S)	> \$10 M ●●●●●●●
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ICM & ITS STRATEGIES



STRATEGY	FINANCIAL NEED	Essential Right Now					Can Wait
		2019	2020	2021	2022	2023	
SHORT TERM							
Coordinate Emergency Roadside Assistance Programs Throughout Region	● (\$ \$ \$ \$ \$)						
Define regional priorities for corridor management	● (\$ \$ \$ \$ \$)						
Map existing and planned ITS systems, owners, and interagency agreements	● (\$ \$ \$ \$ \$)						
Coordinate Austin and San Antonio District TSMO activities	● (\$ \$ \$ \$ \$)						
Identify data sources for operations performance measures dealing with mobility between regions	(\$ \$ \$ \$ \$)						
Implement an Interregional, Integrated Corridor Management System for I-35	● ● ● (\$ \$)						
Coordinate regional travel information systems across jurisdictional boundaries	● (\$ \$ \$ \$ \$)						
MID TERM							
		2025	2027	2029	2031	2033	
Support the pursuit of opportunities to fund or pilot innovative technology deployments for interregional mobility	● (\$ \$ \$ \$ \$)						
Improve use of ICM during early coordination of construction activities and major planned disruptions across region	● ● ● (\$ \$ \$)						
Develop Regional Incident Management Plan and process for regular updates	● ● ● (\$ \$)						
Support data gathering for early deployment of connected vehicles systems along major travel corridors	● (\$ \$ \$ \$ \$)						
Refine local ITS systems and coordinate operations with Traffic Management Centers	● (\$ \$ \$ \$ \$)						
Create framework and opportunity to share operations data and coordinate monitoring & performance management targets	● (\$ \$ \$ \$ \$)						
LONG TERM							
		2035	2037	2039	2041	2043	
Establish redundancy in Regional Traffic Management Centers	● (\$ \$ \$ \$ \$)						
Deploy technologies to support connected vehicle systems along major travel corridors	● ● ● (\$ \$ \$)						
Use emerging technology to move people and goods within the regions	● (\$ \$ \$ \$ \$)						

COMMENTS
Include any further comments related to this strategy or a Post-it note to the right

Early Term
Planning and
spend out

FINANCIAL NEED KEY

- < \$1 M: (\$ \$ \$ \$ \$)
- \$1 M: ● (\$ \$ \$ \$ \$)
- \$2 M: ● ● (\$ \$ \$ \$ \$)
- \$4 M - < \$6 M: ● ● ● (\$ \$ \$ \$ \$)
- \$6 M - < \$8 M: ● ● ● ● (\$ \$ \$ \$ \$)
- \$8 M - < \$10 M: ● ● ● ● ● (\$ \$ \$ \$ \$)
- > \$10 M: ● ● ● ● ● ● (\$ \$ \$ \$ \$)