



Memorandum September 14, 2018

This agenda is subject to revision up to 72 hours prior to the meeting.

To: All Members, Transportation Policy Board
From: Kevin Wolff, Chair and Sid Martinez, Director
Subject: Transportation Policy Board Meeting Notice and Agenda

The next meeting of the **MPO Transportation Policy Board** is scheduled for
Monday, September 24, 2018 at 1:30 p.m.
at the VIA Metro Center Community Room located at 1021 San Pedro.
The following agenda items will be discussed and action will be taken as appropriate.
Items may be taken out of the order shown.

*Citizens to be Heard: Speakers will be allowed up to three (3) minutes each to address the Transportation Policy Board on any **one** specific agenda item. While speakers who have signed up may donate their time to another speaker, the maximum time allowed for any individual speaker will be nine (9) minutes. Speakers who wish to address the Board on multiple items or on items not listed on the agenda must do so under Citizens to be Heard. All speakers must sign the register and state their names and any organizations they represent.*

Agenda:

1. Roll Call
2. Director's Report – MPO (Martinez)
 - a. The next Síclavía will be held on Sunday, September 30, 2018 in the Broadway Corridor
 - b. A joint Bicycle Mobility Advisory Committee and Pedestrian Mobility Advisory Committee meeting is scheduled for Wednesday, October 24, 2018 from 6:00 p.m. to 8:00 p.m. at the VIA Metro Center located at 1021 San Pedro, San Antonio, TX 78212. Open House starts at 5:30 p.m.
 - c. MTP public meetings are scheduled for November 2018
3. Citizens to be Heard

Alamo Area MPO meetings are accessible to persons with disabilities. To arrange for special assistance or an interpreter, please call 210-227-8651 or TDD 1-800-735-2989 (Relay Texas) at least five working days in advance.

Las reuniones son accesibles a personas con discapacidad. Si usted necesita asistencia especial o un intérprete, llame al (210) 227-8651 o al TDD 1-800-662-4954 (Relay Texas) con cinco días hábiles de anticipación.

Please provide any written comments on any agenda items within three days prior to the meeting, to the MPO at:

825 South Saint Mary's Street • San Antonio, Texas 78205

(210) 227-8651 (210) 227-9321 TDD 1 (800) 735-2989

www.alamoareampo.org

Transportation Policy Board**September 24, 2018**

Consent Agenda: All items under the Consent Agenda are acted upon collectively unless opposition is presented, in which case, the contested item will be considered, discussed and appropriate action taken separately.

4. **Approval** of the August 27, 2018 Meeting Minutes
5. **Action** on Consultant Selection Committees – MPO (Geiger)
 - a. Subtask 3.2 New Braunfels Transit Study
 - b. Subtask 5.2 Alamo Area Commute Solutions Program Rideshare Matching Service
6. **Action** on the Congestion Management Process – MPO (Blazosky)

Items for Individual Discussion and Appropriate Action:

7. Discussion and Appropriate Action on the MPO's Environmental Justice Outreach Presentation – MPO (Perez)
8. Discussion and Appropriate Action on Air Quality Status and Metropolitan Transportation Plan Development – MPO (Blazosky)
9. Discussion and Appropriate Action on Amendments to the Metropolitan Transportation Plan and the FY 2019-2022 Transportation Improvement Program – MPO (Geiger)
10. Monthly Status Reports
 - a. Alamo Regional Mobility Authority (Renee Green)
 - b. Air Quality Issues (Diane Rath)
 - c. City of San Antonio (Mike Frisbie)
 - d. San Antonio Mobility Coalition (Vic Boyer)
 - e. Texas Department of Transportation (Mario Jorge)
 - f. VIA Metropolitan Transit (Jeff Arndt)
 - g. Others
11. Executive Session - Pursuant to Chapter 551, Subchapter D, Texas Government Code

At any time during the meeting of the MPO Transportation Policy Board, the Board reserves the right to adjourn into executive Session at any time to discuss any of the matters listed on the posted agenda, as authorized by Texas Government Code Section 551.071 (consultation with attorney), Section 551.072 (deliberations about real property), Section 551.074 (personnel matters), and Section 551.086 (economic development)

12. Adjourn

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Transportation Policy Board**September 24, 2018****1. Roll Call**

Commissioner Kevin A. Wolff (<i>Chair</i>)	Bexar County	210-335-2613
Councilman Rey Saldaña (<i>Vice Chair</i>)	City of San Antonio, District 4	210-207-7281
Ms. Jordana Matthews	Advanced Transportation District	210-362-2000
Mr. Michael J. Lynd, Jr.	Alamo Regional Mobility Authority	210-335-7065
Commissioner Tommy Calvert	Bexar County	210-335-2614
Commissioner Sergio "Chico" Rodriguez	Bexar County	210-335-2611
Ms. Renee Green, P.E.	Bexar County	210-335-6700
Mayor Pro Tem Wayne Peters	City of New Braunfels	830-221-4000
Councilman Greg Brockhouse	City of San Antonio, District 6	210-207-7065
Councilwoman Shirley Gonzales	City of San Antonio, District 5	210-207-7043
Councilwoman Ana Sandoval	City of San Antonio, District 7	210-207-7044
Mr. Michael S. Frisbie, P.E.	City of San Antonio	210-207-8140
Ms. Bridgett White	City of San Antonio	210-207-0147
Mayor Don Keil	City of Seguin	830-303-7333
Commissioner Kevin Webb	Comal County	830-221-1100
Mayor Chris Riley [Leon Valley]	Greater Bexar County Council of Cities	210-684-1391
Judge Kyle Kutscher	Guadalupe County	830-303-8857
Councilman Ron Cisneros	Kendall County Geographic Area	830-249-9511
Councilman Kevin Hadas [Selma]	Northeast Partnership	210-651-6661
Mr. Mario Jorge, P.E.	Texas Department of Transportation	210-615-5803
Ms. Patricia Rodriguez	VIA Metropolitan Transit	210-362-2000

Ex-Officio Members

Mr. Greg P. Wood	Federal Highway Administration
Mr. Nick Page	Texas Department of Transportation
Mr. Jeff Arndt	VIA Metropolitan Transit
Ms. Diane Rath	Alamo Area Council of Governments
Mr. Vic Boyer	San Antonio Mobility Coalition

2. Director's Report

- a. The next Síclovía will be held on Sunday, September 30, 2018 in the Broadway Corridor

- b. A joint Bicycle Mobility Advisory Committee and Pedestrian Mobility Advisory Committee meeting is scheduled for Wednesday, October 24, 2018 from 6:00 p.m. to 8:00 p.m. at the VIA Metro Center located at 1021 San Pedro, San Antonio, TX 78212. Open House starts at 5:30 p.m.

- c. MTP public meetings are scheduled for November 2018

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3. Citizens to Be Heard

4. Approval of the August 27, 2018 Meeting Minutes

Issue

The August 27, 2018 meeting minutes are attached for your review.

Action Requested

A motion to approve the August 27, 2018 meeting minutes.



Transportation Policy Board Meeting Minutes August 27, 2018

1. Roll Call

Members Present:

Ms. Jordana Matthews
Mr. Michael J. Lynd, Jr.
Commissioner Kevin Wolff (Chair)
Ms. Renee Green, P.E.
Mayor Pro Tem Wayne Peters
Councilman Greg Brockhouse
Councilwoman Shirley Gonzales
Mr. Art Reinhardt
Councilwoman Ana E. Sandoval
Ms. Bridgett White
Ms. Betty Ann Matthies
Commissioner Kevin Webb
Ms. Cheryl Landman
Judge Kyle Kutscher
Councilman Ron Cisneros
Councilman Kevin Hadas
Mr. Mario Jorge
Ms. Patricia Rodriguez

Advanced Transportation District
Alamo Regional Mobility Authority
Bexar County
Bexar County
City of New Braunfels
City of San Antonio
City of San Antonio
City of San Antonio
City of San Antonio
City of San Antonio
City of Seguin
Comal County
Greater Bexar County Council of Cities
Guadalupe County
Kendall County Geographic Area
Northeast Partnership
Texas Department of Transportation
VIA Metropolitan Transit

Members Absent:

Commissioner Tommy Calvert
Commissioner Sergio "Chico" Rodriguez
Councilman Rey Saldaña

Bexar County
Bexar County
City of San Antonio

Others Present:

Ms. Diane Rath
Mr. Jesse Lopez
Mr. Isidro "Sid" Martinez
Mr. Vic Boyer
Mr. Clay Smith

Alamo Area Council of Governments
Davidson Troilo Ream & Garza
Metropolitan Planning Organization
San Antonio Mobility Coalition
VIA Metropolitan Transit

Commissioner Wolff called the meeting to order at 1:30 p.m.

Transportation Policy Board**August 27, 2018****2. Director's Report**

- a. Transportation Alternatives (TA) Call for Projects will be postponed
- b. SAMCo State of the District Luncheon will be held on Wednesday, September 19, 2018
- c. San Antonio is the site of the Association of Metropolitan Planning Organizations (AMPO) annual conference which will be held September 24th-28th at the Westin Riverwalk
- d. The MPO Office will be closed on Monday, September 3rd for Labor Day

3. Citizens to be Heard

Mr. Emory Bluhm made the Board aware of the Scenic Loop-Helotes Creek Alliance and the purpose of the alliance.

Consent Agenda: All items under the Consent Agenda are acted upon collectively unless opposition is presented, in which case the contested item will be considered, discussed and appropriate action taken separately.

- 4. **Approval of the June 25, 2018 Meeting Minutes**
- 5. **Action on the MPO's FY 2019 Staff Operating Budget**
- 6. **Action on Amendments to the FY 2018-2019 Unified Planning Work Program**

Councilwoman Ana E. Sandoval moved and Mayor Chris Riley seconded to approve the Consent Agenda. The motion passed unanimously.

Items for Individual Discussion and Appropriate Action

- 7. **Discussion and Appropriate Action on *The Future of Autonomous and Connected Vehicles* Presentation**

For information and discussion only.

- 8. **Discussion and Appropriate Action on a Resolution of Support for Loop 1604 from SH 16 to IH 35 North as a Non-Toll Project**

Commissioner Kevin Webb moved and Councilman Kevin Hadas seconded to approve the resolution of support for Loop 1604 from SH

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16 to IH 35 North as a Non-Toll Project. Mr. Mario Jorge abstained. The motion passed.

9. Discussion and Appropriate Action on Air Quality Status and Metropolitan Transportation Plan Development

For information and discussion only.

10. Monthly Status Reports

- a. Alamo Regional Mobility Authority (Renee Green)
- b. Air Quality Issues (Diane Rath)
- c. City of San Antonio (Art Reinhardt)
- d. San Antonio Mobility Coalition (Vic Boyer)
- e. Texas Department of Transportation (Mario Jorge)
- f. VIA Metropolitan Transit (Clay Smith)
- g. Others

For information and discussion only.

11. Executive Session - Pursuant to Chapter 551, Subchapter D, Texas Government Code

This item was not considered.

12. Adjourn

There being no further business, the meeting was adjourned at 3:52 p.m.

**Councilman Kevin A. Wolff, Chair
Transportation Policy Board**

5. Action on Consultant Selection Committees**Purpose**

The purpose of this agenda item is to take action on the composition of two consultant selection committees.

Issue**a. Subtask 3.2 New Braunfels Transit Study**

The New Braunfels Transit Study was added to the FY 2018-2019 Unified Planning Work Program in August 2018. The purpose of the study is to identify potential fixed transit routes (including connectivity to San Antonio, Seguin, Schertz/Cibolo, and current and proposed park and carpool facilities); project ridership levels; identify potential street improvements, capital costs, operating costs, funding sources, and phasing of implementation. The study will also consider service to the disability community, discuss emerging technologies, and include a proactive public involvement component. This study is supported by both the City of New Braunfels' Comprehensive Plan and VIA Metropolitan Transit's 2040 Vision Plan.

The selection committee is proposed to be comprised of agency representatives as follows:

- AACOG – 1 representative
- City of New Braunfels – 2 representatives
- City of Seguin – 1 representative
- Comal County – 1 representative
- TxDOT – 1 representative
- VIA – 1 representative

b. Subtask 5.2 Alamo Area Commute Solutions Program Rideshare Matching Service

With the adoption of the FY 2019-2022 Transportation Improvement Program the Alamo Area Commute Solutions Program has moved from AACOG to the MPO. The contract between AACOG and Nuride (current rideshare matching service) expires in June 2019. The MPO plans to issue an RFP for the selection of a new service provider. The selection committee is proposed to be comprised of agency representatives as follows:

- AAMPO – 2 representatives
- Bexar County – 1 representative
- City of New Braunfels – 1 representative

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- City of San Antonio – 1 representative
- City of Seguin – 1 representative
- TxDOT San Antonio District – 1 representative
- VIA – 1 representative

Both committees will make a recommendation on their respective contract award and action will be taken by the Transportation Policy Board.

Action Requested

A motion to approve the composition of the consultant selection committees for Subtask 3.2 New Braunfels Transit Study and Subtask 5.2 Alamo Area Commute Solutions Program Rideshare Matching Service.

6. Action on the Congestion Management Process

Purpose

The purpose of this agenda item is to adopt the MPO's updated Congestion Management Process.

Issue

Congestion Management is the act of using a mix of strategies to reduce traffic. Metropolitan areas like ours with populations over 200,000 are known as transportation management areas (TMAs). TMAs are required by the federal government to have an ongoing congestion management process (CMP). The process includes eight actions:

1. Develop regional congestion management objectives
2. Define the CMP network
3. Develop multimodal performance measures
4. Collect data and monitors system performance
5. Analyze congestion problems and needs
6. Identify and assess strategies
7. Program and implement strategies
8. Evaluate strategy effectiveness

In TMAs that are not meeting federal requirements for air quality, federal funds cannot be used for projects that build new roads or expand the number of lanes for single-occupant vehicles (SOV) unless the area's CMP addresses the need for additional roadway space by other multimodal strategies first. Since the Environmental Protection Agency (EPA) designated Bexar County as a nonattainment area for ozone (effective September 24, 2018), the CMP is especially important for the future of transportation in our region.

In the past, our CMP has been more qualitative in nature and the proposed CMP brings a more quantitative approach to the process. The draft presentation is attached for your review as is the draft MTP chapter.

At their meeting on September 8, 2018, the Technical Advisory Committee unanimously recommended adoption of the CMP.

Action Requested

A motion to adopt the MPO's Congestion Management Process.

The logo for AAMPO, with the letters 'AA' in white on a red background and 'MPO' in white on a dark blue background.A red swoosh graphic that curves under the 'ACTION ITEM' text.

ACTION ITEM

Update to Congestion Management Process

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What we're covering

- Why an update?
- Project screening process
- Congestion management strategies
- Goals, objectives and measures
- Discussion and action



Why an update?

Why an update?

- **Federal Certification Review Letter (2016)**
 - Develop a quantitative process for assessing the effectiveness of TDM/TSM
- **Title 23 of the Code of Federal Regulations Section 450.322**
 - Federal funds may not be programmed for any project that will result in a significant increase in the carrying capacity for SOVs unless the project is addressed through a congestion management process

An online survey (February 2017) and TAC workshop (March 2017) identified important community concerns



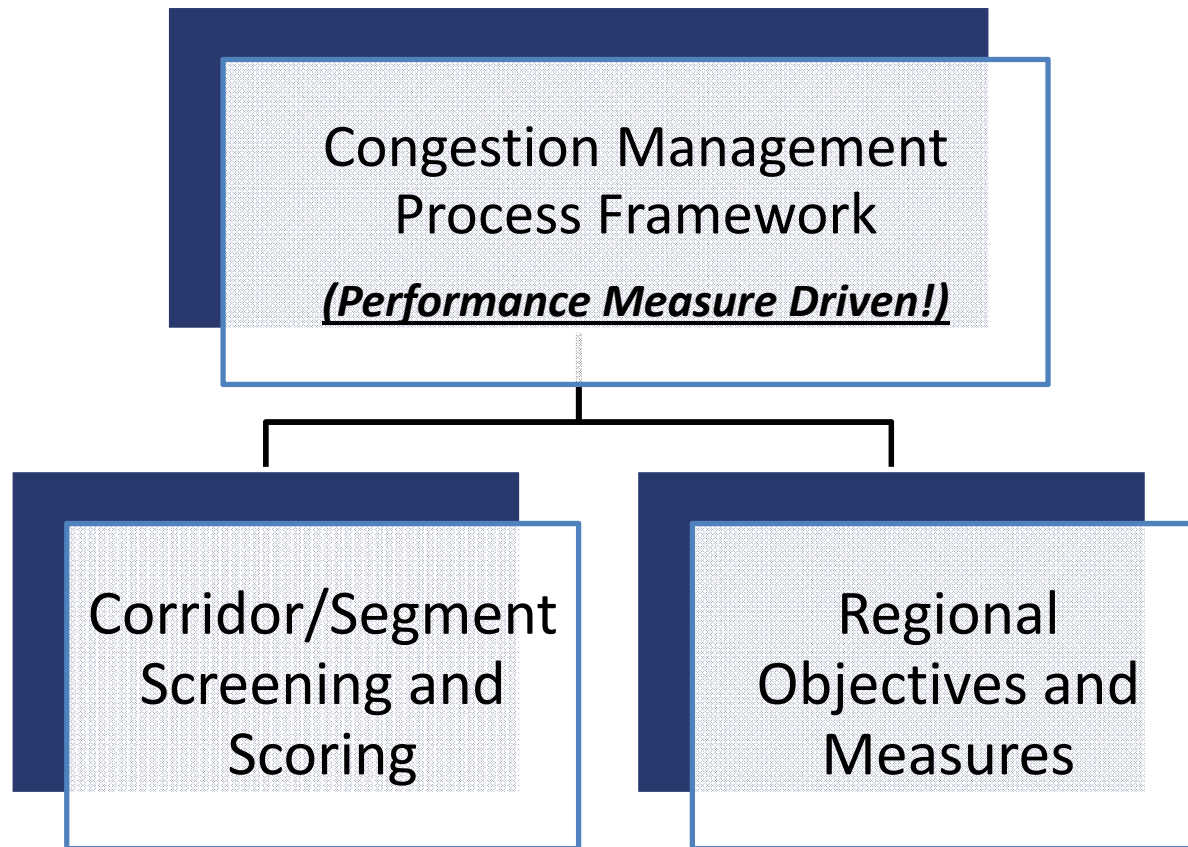
TAC WORKSHOP BUZZWORD: RELIABILITY



Survey Respondents' Top 5 Solutions for Congestion

- Constructing additional lanes
- Improving traffic signal coordination
- (Tie) Improving transit
- (Tie) Implementing dedicated turn lanes
- Land use policies

CMP Framework





Corridor Screening Process

Proposed Corridor Screening Process

- **Corridors are screened for** attributes organized under four categories, equally-weighted:
 - **Alternative Roadway Infrastructure**
 - **Modal Options**
 - **System Demand**
 - **System Reliability**
- **Highlights corridor deficiencies**
- **Connects to potential TDM and TSM&O strategies**

Alternative Roadway Infrastructure

- **Factors that influence access to/from the region, between regional activity centers, and to/from local land uses**

Does the corridor have sufficient...?

Category	Inventory	Measure	Points	Max Points
Alternative Roadway Infrastructure	Parallel Expressways (within 5 mi)	Yes	11	25
		None	0	
	Parallel Arterials (frontage roads, major and minor arterials within 1 mi)	Entire and partial limits	10	
		Entire limits	7	
		Partial limits	3	
		None	0	
	Direct Connections (Interchanges) to other highways	Yes	4	
		None	0	

Higher score = sufficient in this category.

Lower score = needs improvement in this category

If not, reasonable strategies include...

- Advanced traffic management
- Emergency management
- Capacity improvement
- Congestion relief corridors
- Bottleneck removal
- Incident management system
- Access management
- Signalization and traffic flow improvements
- Construction coordination

Modal Options

- **Factors that influence the viability of traveling by alternative modes on the corridor**

Does the corridor have sufficient...?

Category	Inventory	Measure	Points	Max Points
Modal Options	Public Transportation	Rapid Transit and Bus	10	25
		Rapid Transit	7	
		Bus	5	
		None	0	
	Rideshare (Park-and-Ride, Transit Center, Park-and-Pool)	Yes	7	
		None	0	
	Managed/HOV Lanes	Yes	6	
		None	0	
	Bike or Pedestrian Facility	Bike Lane and Sidewalk	2	
		Bike Lane	1	
		Sidewalk	1	
		None	0	

If not, reasonable strategies include...

- Advanced public transit systems
- Land use
- Green infrastructure
- Parking management
- Neighborhood preservation
- Transit-Oriented Development (TOD)
- Bicycle Facilities
- Pedestrian Facilities
- Premium transit
- Managed lanes
- Passenger rail service
- High speed rail
- Active parking management
- Rideshare program
- Flexible work hours
- Telecommuting
- Guaranteed ride home
- Walkable Community Program
- Transit service enhancements
- Transit facilities
- Transit ridership incentives

System Demand

- **Factors that influence the size of demand for roadway space on the corridor**

Is the corridor handling current demand?

Category	Inventory	Measure	Points	Max Points	
System Demand (Recurring)	Peak V/C	Below or Average	10	25	
		(Regional Average = 0.85)			
		Above	3		
	Truck Volume Percentage	Below or Average	7		
		(Regional Average = 11.54%)			
		Above	1		
	Area Type	Rural	8		
		Suburban	6		
		Urban	4		
		Urban Fringe	2		
		Urban Core (CBD)	1		

If not, reasonable strategies include...

All of those previously named except:

- Preservation of neighborhood aesthetic
- Preservation of green infrastructure
- Roadway rehabilitation
- Plus:
 - Freight management

System Reliability

- **Factors that influence occasional (non-recurring) traffic congestion on the corridor**

Does the corridor have sufficient...?

Category	Inventory	Measure	Points	Max Points
System Reliability (Non-Recurring)	2017 Crash Rate (total crashes per 100M VMT)	Below or Average	10	25
		(Regional Average Rate = 289)		
		Above	3	
	Shoulders (For emergency stopping or congestion bypass)	Full Outside <i>and</i> Inside	6	
		Full Outside <i>or</i> Inside	3	
		Partial Limits	1	
		None	0	
		Refuge areas (for surface streets)	3	
	Safety Service Patrol Coverage	Entire Limits	3	
		Partial Limits	1	
		None	0	
	Truck Lane Restrictions	Entire Limits	3	
		Partial Limits	1	
		None	0	
	ITS	Entire Limits	3	
		Partial Limits	1	
		None	0	

If not, reasonable strategies include...

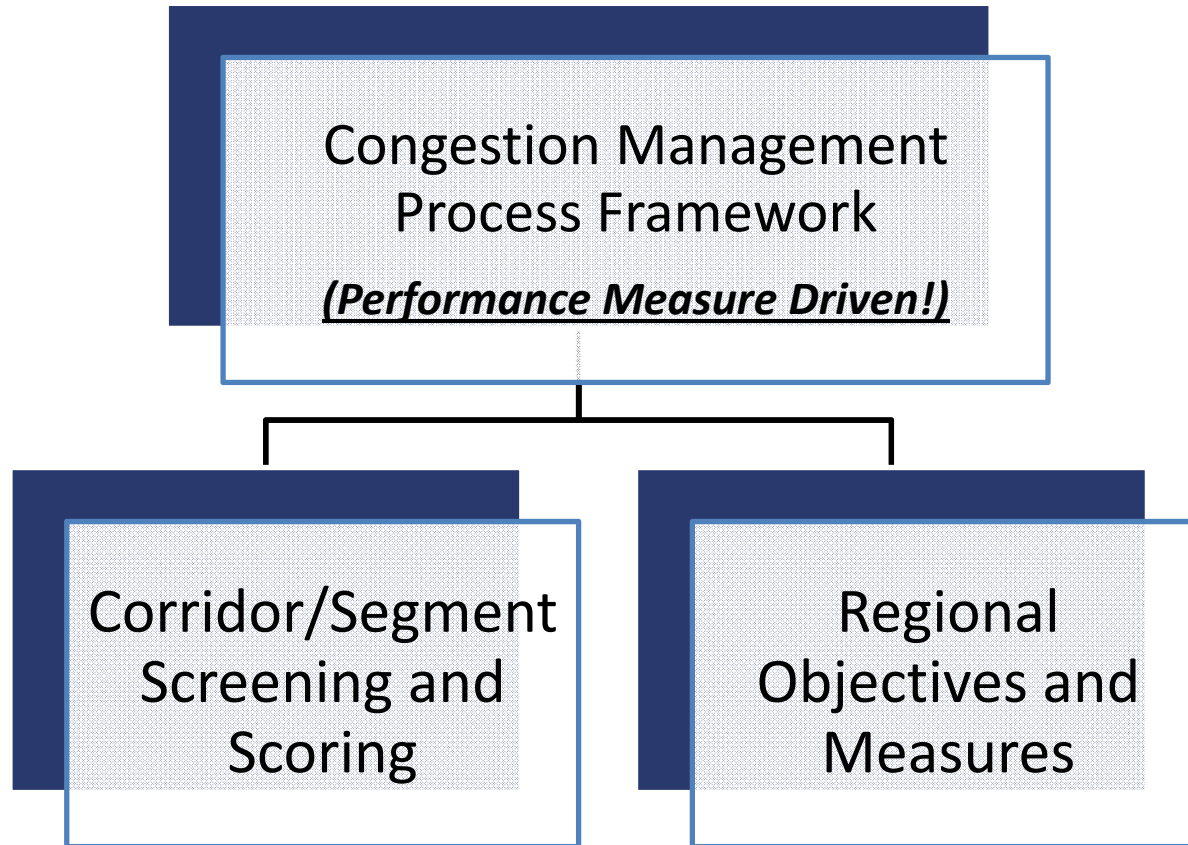
All of those previously named except:

- Land use
- Preservation of neighborhood aesthetic
- Preservation of green infrastructure
- Transit-Oriented Development
- Bike and pedestrian facilities



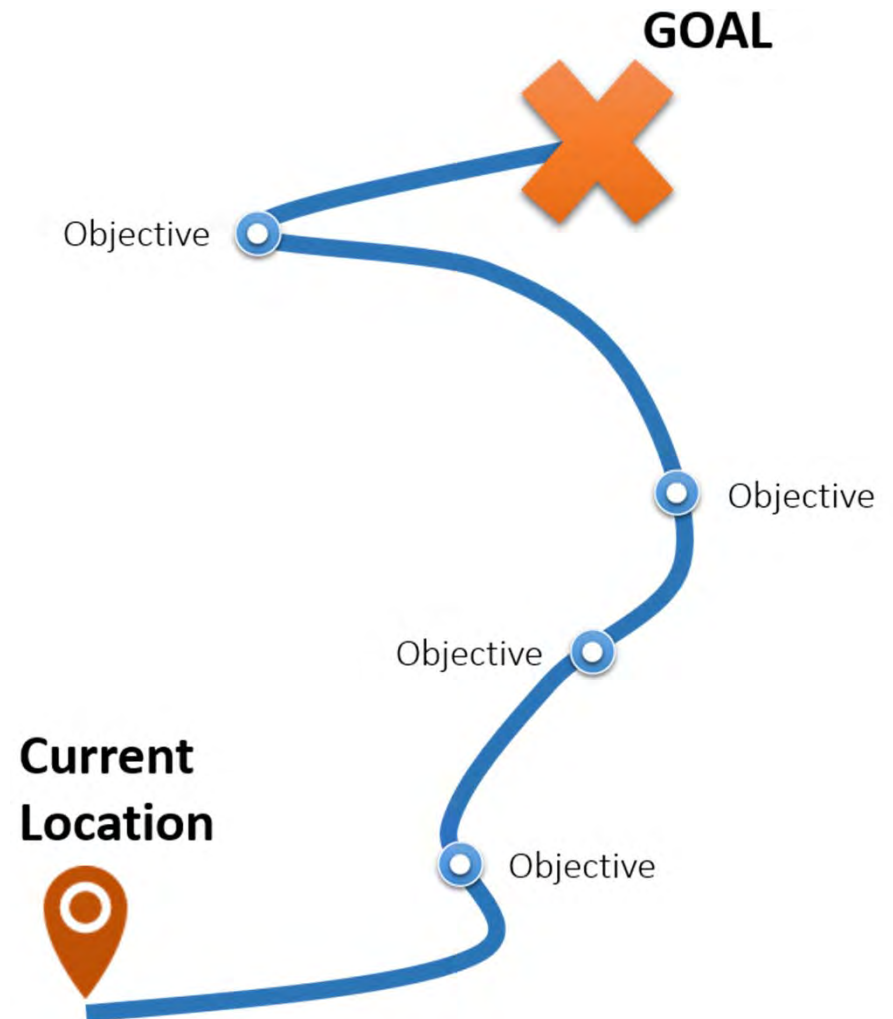
Goals, Objectives and Measures

CMP Framework



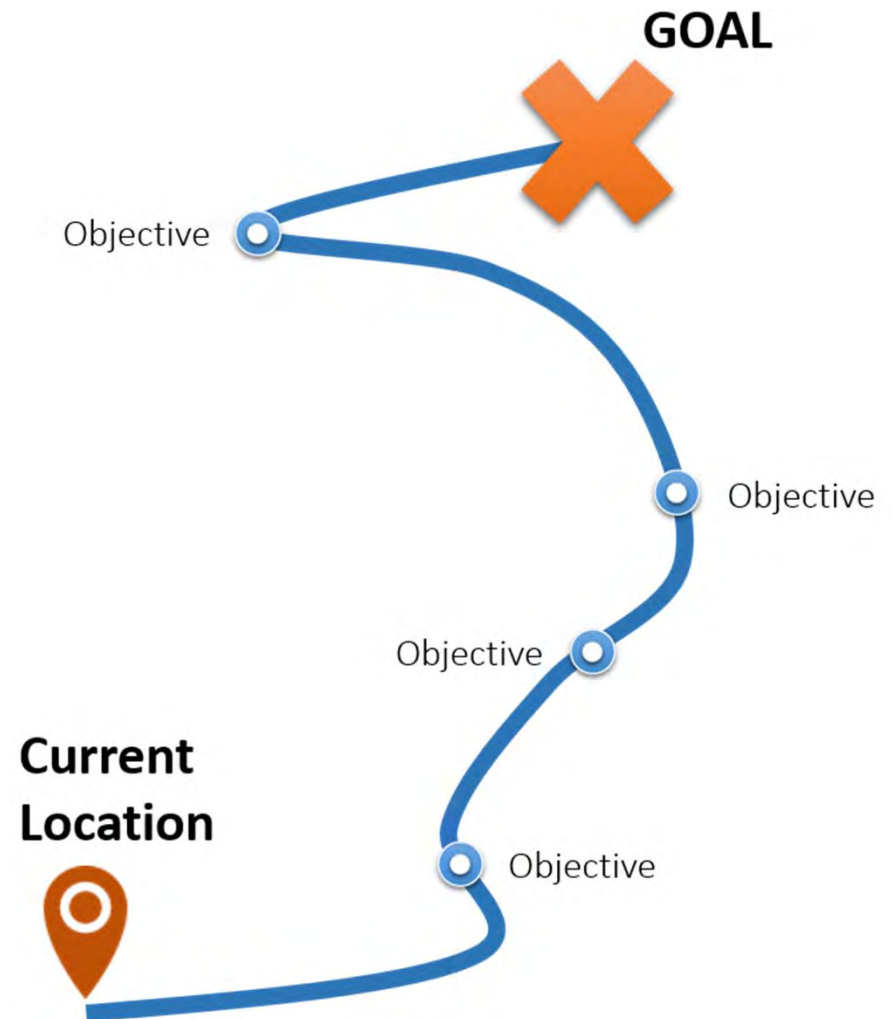
Goals vs. Objectives

- **Goals:**
 - Where you want to be
 - Broad, lofty and intangible
- **Objectives:**
 - The steps to get you there
 - **S**pecific
 - **M**easurable
 - **A**ttainable
 - **R**ealistic
 - **T**ime-bound



Goals vs. Objectives

- **Mobility 2045 Goal:**
Increase the efficiency of the transportation system and manage traffic congestion
- **Eight (8) objectives** to track progress *regionally* toward managing congestion



Eight Objectives

Maintain
congested VMT
per capita through
2022

Maintain current
level of congested
hours through
2022

At least 65% of the
Interstate should
be reliable by 2022

At least 45% of the
Non-Interstate
NHS should be
reliable by 2022

Average reliability
of the transit
system should be
85% by 2040

Double the population
and employment
within a quarter-mile
access of frequent
transit by 2040

Maintain 60 minutes
or less incident
clearance time on
expressways through
2022

Maintain travel time
for freight moved on
highways through
2022

Eight Objectives

Maintain
congested VMT
per capita through
2022

Maintain current
level of congested
hours through
2022

Measure	Data Source	Base Year	Collection Frequency	Responsible partner(s)
Number of road miles operating at $V/C < 1.0$ and ≥ 1.0	Travel Demand Model (TDM)	2015	At the time of TDM update	AAMPO
Percent of vehicle miles traveled at $V/C \geq 1.0$	TDM	2015	At the time of TDM update	AAMPO
Within a quarter-mile access of frequent transit by 2040	clearance time on expressways through 2022		highways through 2022	

Eight Objectives

Maintain
congested VMT
per capita through
2022

Maintain current
level of congested
hours through
2022

Measure	Data Source	Base Year	Collection Frequency	Responsible partner(s)
Congested hours	Urban Congestion Report	2017	Annually	TTI

Double the population
and employment
within a quarter-mile
access of frequent
transit by 2040

Maintain 60 minutes
or less incident
clearance time on
expressways through
2022

Maintain travel time
for freight moved on
highways through
2022

Eight Objectives

Maintain
congested VMT
per capita through
2022

Maintain current
level of congested
hours through
2022

At least 65% of the
Interstate should
be reliable by 2022

At least 45% of the
Non-Interstate
NHS should be
reliable by 2022

***National
performance
measures**

Measure	Data Source	Base Year	Collection Frequency	Responsible partner(s)
Percent of person-miles traveled on the Interstate and the Non-Interstate NHS that are reliable*	National Performance Measure Research Data Set (NMPRDS)	2017	Annually	AAMPO and TTI
Number of HOV lane miles	TDM	2015	Annually	AAMPO

Eight Objectives

Maintain
congested VMT
per capita through
2022

Maintain current
level of congested
hours through
2022

At least 65% of the
Interstate should
be reliable by 2022

At least 45% of the
Non-Interstate
NHS should be
reliable by 2022

Average reliability
of the transit
system should be
85% by 2040

Measure	Data Source	Base Year	Collection Frequency	Responsible partner(s)
Transit System Average Reliability	Automated Vehicle Locating System	2017	Annually	VIA
Percent of transit trips on dedicated lanes	Automated Passenger Counter	2017	Annually	VIA

Eight Objectives

Measure	Data Source	Base Year	Collection Frequency	Responsible partner(s)
Percent of population within quarter-mile distance of frequent transit service	VIA and Travel Demand Model (TDM)	2015	At the time of TDM update	AAMPO and VIA
Percent of employment within quarter-mile distance of frequent transit service	VIA and TDM	2015	At the time of TDM update	AAMPO and VIA
	reliable by 2022		85% by 2040	

Double the population and employment within a quarter-mile access of frequent transit by 2040

Maintain 60 minutes or less incident clearance time on expressways through 2022

Maintain travel time for freight moved on highways through 2022

Eight Objectives

	Maintain congested VMT per capita through		Maintain current level of congested hours through	
Measure	Data Source	Base Year	Collection Frequency	Responsible partner(s)
Incident clearance time*	TransGuide observations	2017	Annually	TxDOT
At least 85% of the Interstate should be reliable by 2022	Non-Interstate NHS should be reliable by 2022		of the transit system should be 85% by 2040	
Double the population and employment within a quarter-mile access of frequent transit by 2040	Maintain 60 minutes or less incident clearance time on expressways through 2022		*TxDOT statewide performance measure	

Eight Objectives

Measure	Data Source	Base Year	Collection Frequency	Responsible partner(s)
Number of Top 100 truck bottlenecks*	American Transportation Research Institute	2017	Annually	TxDOT
Truck Travel Time Reliability (TTTR) Index on the Interstate**	National Performance Measure Research Data Set (NMPRDS)	2017	Annually	AAMPO and TTI

*** State Freight Mobility Plan performance measure**

**** National performance measure**

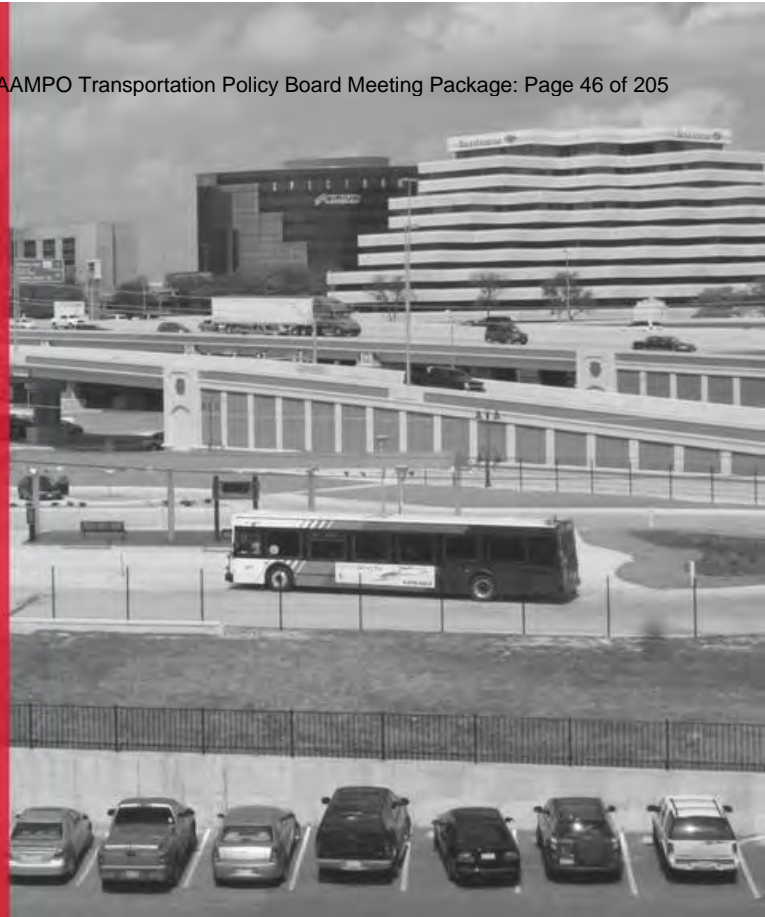
Maintain travel time for freight moved on highways through 2022

Next Steps

- TPB action on CMP framework in September
- Conduct corridor screening process
- Presentation and approval of CMP network corridors at a later date

CONGESTION MANAGEMENT PROCESS

MOVING PEOPLE
CONNECTING PLACES



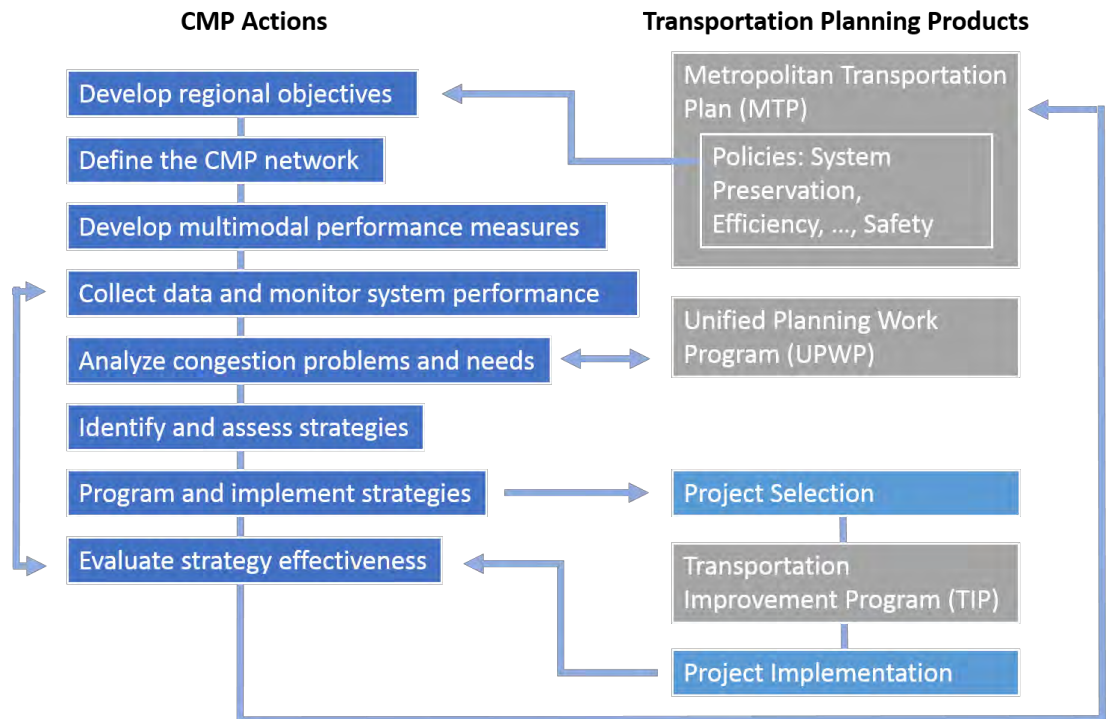
Traffic congestion impacts how easy - or not - it is to get around. While traffic will grow as more people and jobs move to the Alamo Area, we can and should try to manage the challenge ahead of us. One way is by reducing the demand for space on the *same* road at the *same* time. Another way is by improving the efficiency of the transportation system overall.

Congestion Management is the act of using a mix of strategies to reduce traffic. Metropolitan areas like ours with populations over 200,000 are known as transportation management areas (TMAs). TMAs are required by the federal government to have an ongoing congestion management process (CMP). The process includes eight actions:

1. Develop regional congestion management objectives
2. Define the CMP network
3. Develop multimodal performance measures
4. Collect data and monitors system performance
5. Analyze congestion problems and needs
6. Identify and assess strategies
7. Program and implement strategies
8. Evaluate strategy effectiveness

Figure XX shows the connections between the CMP and other elements of AAMPO's transportation planning process.

Figure 1. The Congestion management process informs and is informed by AAMPO's three transportation planning products: our Metropolitan Transportation Plan, Transportation Improvement Program and Unified Planning Work Program



In TMAs that are not meeting federal requirements for air quality, federal funds cannot be used for projects that build new roads or expand the number of lanes for single-occupant vehicles (SOV) unless the area's CMP addresses the need for additional roadway space by other multimodal strategies first. Since the Environmental Protection Agency (EPA) designated Bexar County as a nonattainment area for ozone (effective September 24, 2018), the CMP is especially important for the future of transportation in our region.

Additional information can be found in the Code of Federal Regulations for the CMP on pg. XX or online at [23 CFR 450.322](#).

Comparing the Alamo Area to other Regions

Traffic studies show that the Alamo Area is not yet one of the most congested regions in the country or state, but it has been identified as having one of the fastest growing congestion levels. The average commuter in San Antonio spends more than 44 hours in traffic each year, burning through \$1,000 in costs associated with congestion and an extra 20 gallons of fuel that expels ozone-forming pollutants into the air (Urban Mobility Report, Texas Transportation Institute (TTI), 2015).

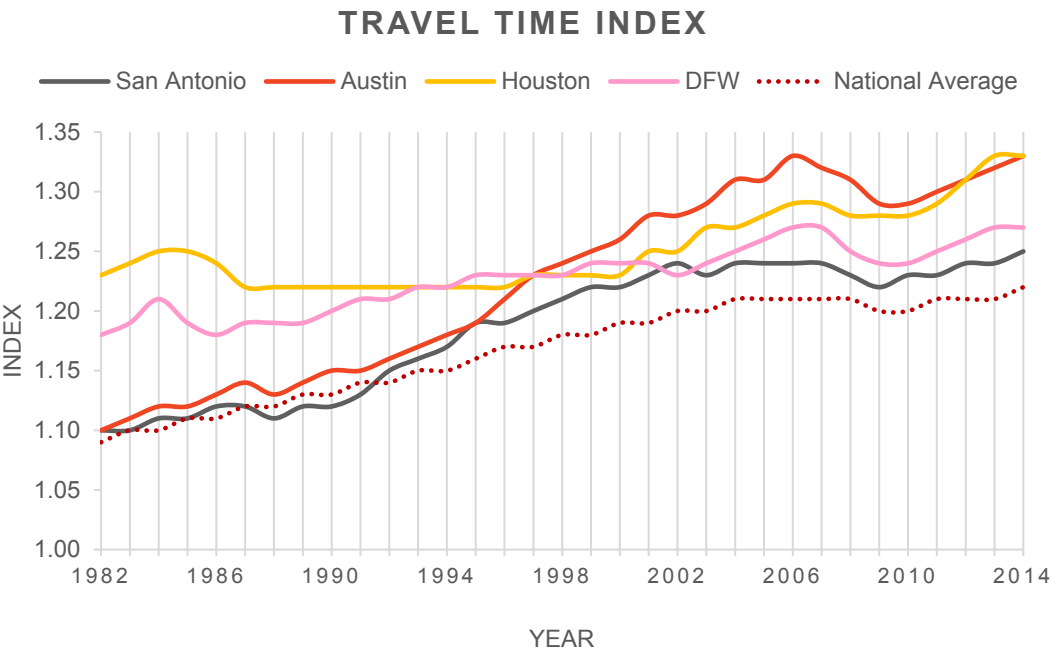
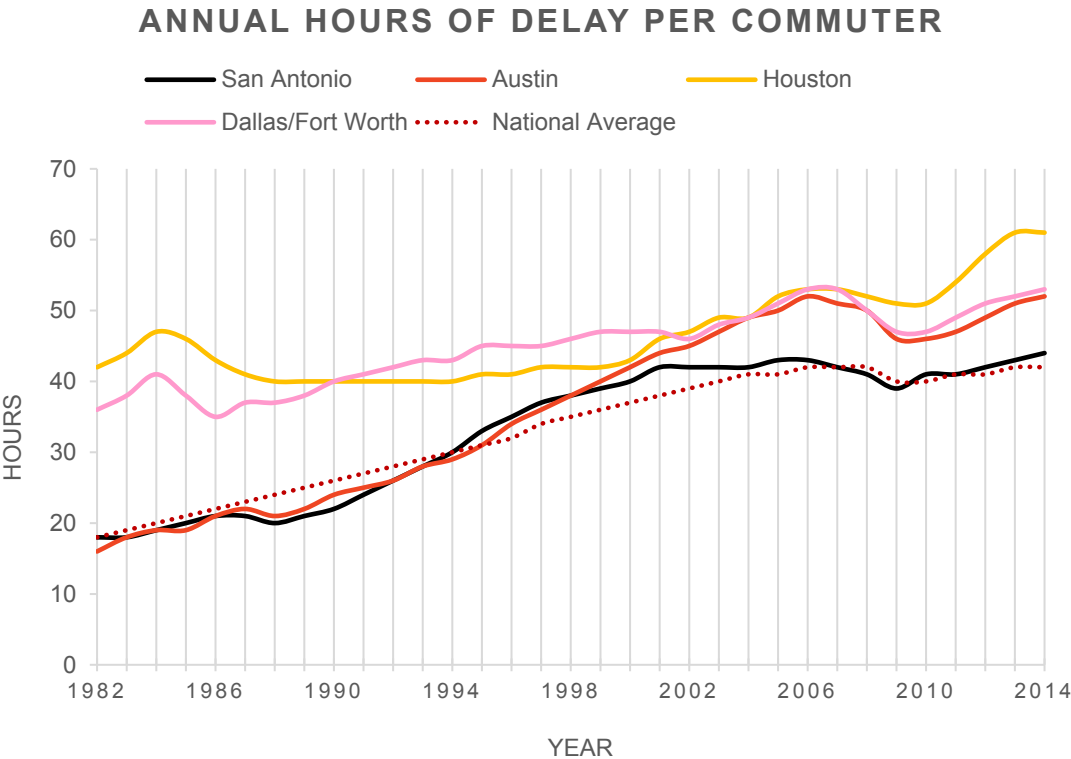
Figure XX compares San Antonio's congestion with other major Texas cities using two common measures: Annual Hours of Delay per Commuter and Travel Time Index.

Figure 2 shows how two common measures of congestion have changed over time in major Texas Cities.

Annual Hours of Delay per Commuter is the extra travel time during the year divided by the number of people who commute in private vehicles in the urban area.

Travel Time Index is the ratio of travel time in the peak period to the travel time at free-flow conditions. A value of 1.30 indicates a 20-minute free-flow trip takes 26 minutes in the peak period.

Source: Texas A&M Transportation Institute (TTI) 2015 Metro Mobility Scorecard



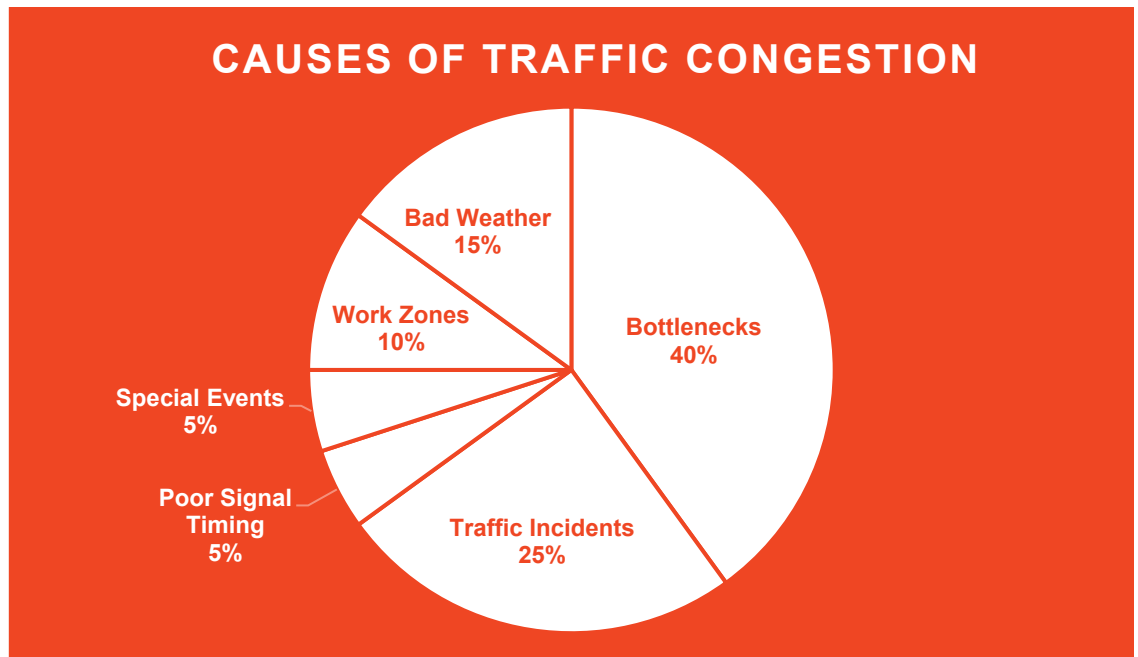
Causes of Traffic Congestion

Congestion occurs when travel demand is greater than the available roadway space, transit vehicle or other transportation facility. Typical causes of traffic congestion include:

- Bottlenecks that occur at intersections, interchanges, and other locations where traffic signals, traffic merging or special events cause a change in traffic flow
- Weather events, such as flash flooding
- Temporary capacity-reducing roadway conditions, such as work zones
- Crashes and other incidents that either partially block roadways or cause passing motorists to slow down

The national distribution of these causes is shown in Figure X.X. Nationally, 60% of all congestion is “non-recurring”. It is caused by occasional traffic incidents, bad weather, work zones, poor signal timing, and special events. The remaining 40% of congestion is “recurring” and is usually an effect of bottlenecks.

Figure 3: FHWA categorizes five causes of congestion. Source: <https://www.fhwa.dot.gov/policy/otps/bottlenecks/chap2.cfm>



Accomplishments

Over the past five years, the Alamo Area has paid significant attention to reducing demand and improving the flow of the transportation system. AAMPO took a major step forward with the overhaul of the region's CMP in early 2017. Our TMA each action required by the federal government for our congestion management process using a step-by-step approach.

AAMPO began by conducting an online public survey in February 2017 that focused on current commuting habits and community priorities. AAMPO led a workshop for partner agency staff in

March 2017. Feedback from both the self-selected public survey and agency staff workshop shaped our congestion management objectives. At the workshop, consensus was also reached on the CMP network, and discussion helped inform meaningful congestion indicators and a data and monitoring plan. Figure XX illustrates outcomes of the online survey and agency staff workshop.

In the fall of 2018, AAMPO staff presented a recommended path forward to the Technical Advisory Committee (TAC) and incorporated feedback from the TAC members into a final CMP. This chapter represents the region's congestion management process, which is also available at www.alamoareampo.org/CMP.

Since approving our region's previous long-range plan, AAMPO has enhanced the regional Travel Demand Model with four time-period traffic assignment and developed a micro-model capable of better small-area analysis and active transportation planning.

Additionally, all Texas MPOs gained access to the National Performance Measures Research Data Set and a suite of roadway speed analytics tools when TxDOT joined the Traffic Performance Metrics Pooled Fund Study.

The Regional Transportation Attitude Survey was completed in early 2018. It is the third of its type to be conducted for AAMPO in the past decade. A Regional Bike Share Master Plan was also completed in 2018, identifying potential future SWell Cycle bike share station locations in Bexar County and exploring the possibility of bike share in Comal, Guadalupe and Kendall Counties. AAMPO initiated a Regional Thoroughfare Plan Study in 2017 with the resulting product goal being a single classification system for the region's major thoroughfares. This study builds off of the Multimodal Transportation Plan, a City of San Antonio plan awarded AAMPO Surface Transportation Program – Metro Mobility funds in 2014.

In October 2018, AAMPO launched Alamo Commutes. Previously “Commute Solutions” under the Alamo Area Council of Governments, the program emphasizes travel demand management for employers and commuters.

The region's Intelligent Transportation System (ITS), TransGuide, celebrated its 20th anniversary in 2015. Since its start in 1995, the original 26 miles of freeway coverage by TransGuide has expanded to over 126 miles, outgrowing the TransGuide facility technology and layout. AAMPO STP-MM funding awarded in 2018 will support major upgrades and expansion of TransGuide as well as the creation of a Safety Service Patrol (SSP) which will begin operating on controlled access highways in Bexar, Comal and Kendall Counties in 2019. The SSP will assist stranded motorists with minor emergencies and provide light-duty traffic control.

The City of San Antonio implemented an innovative towing management contract in 2015 with the help of the multi-agency Traffic Incident Management group. This program has reduced the average arrival time of a tow truck when called by the San Antonio Police Department from 45 minutes to under 15 minutes, helping to achieve the ultimate goal of reducing clearance time for freeway crashes.

The TxDOT San Antonio District and City of San Antonio are increasingly piloting different technologies to optimize traffic cameras on arterials and highways and track signal performance metrics.

In 2015, VIA Metropolitan Transit opened Centro Plaza at VIA Villa, transportation hub servicing most downtown routes, improving traffic flow and transfers. VIA also opened a 400-vehicle capacity Park and Ride in the Stone Oak area in 2018 and worked with the City of San Antonio to secure funding that increased frequency of a dozen transit routes.

Figure 4: In the online survey, community members related the importance of eliminating congestion to other community priorities.



HOW DID WE DEVELOP OBJECTIVES?

1

An online survey and stakeholder workshop identified important congestion concerns

2

This feedback focused our efforts on the places and timing of congestion that most needs to be addressed

3

We determined what data is available to track what we wanted to measure

4

We looked at what was realistic based on regional growth trends, fiscal constraints and other Mobility 2045 goals

Regional Objectives for Congestion Management

The CMP outlines eight specific congestion management objectives that work toward the Mobility 2045 goal to increase the efficiency of the transportation system and manage traffic congestion. These include:

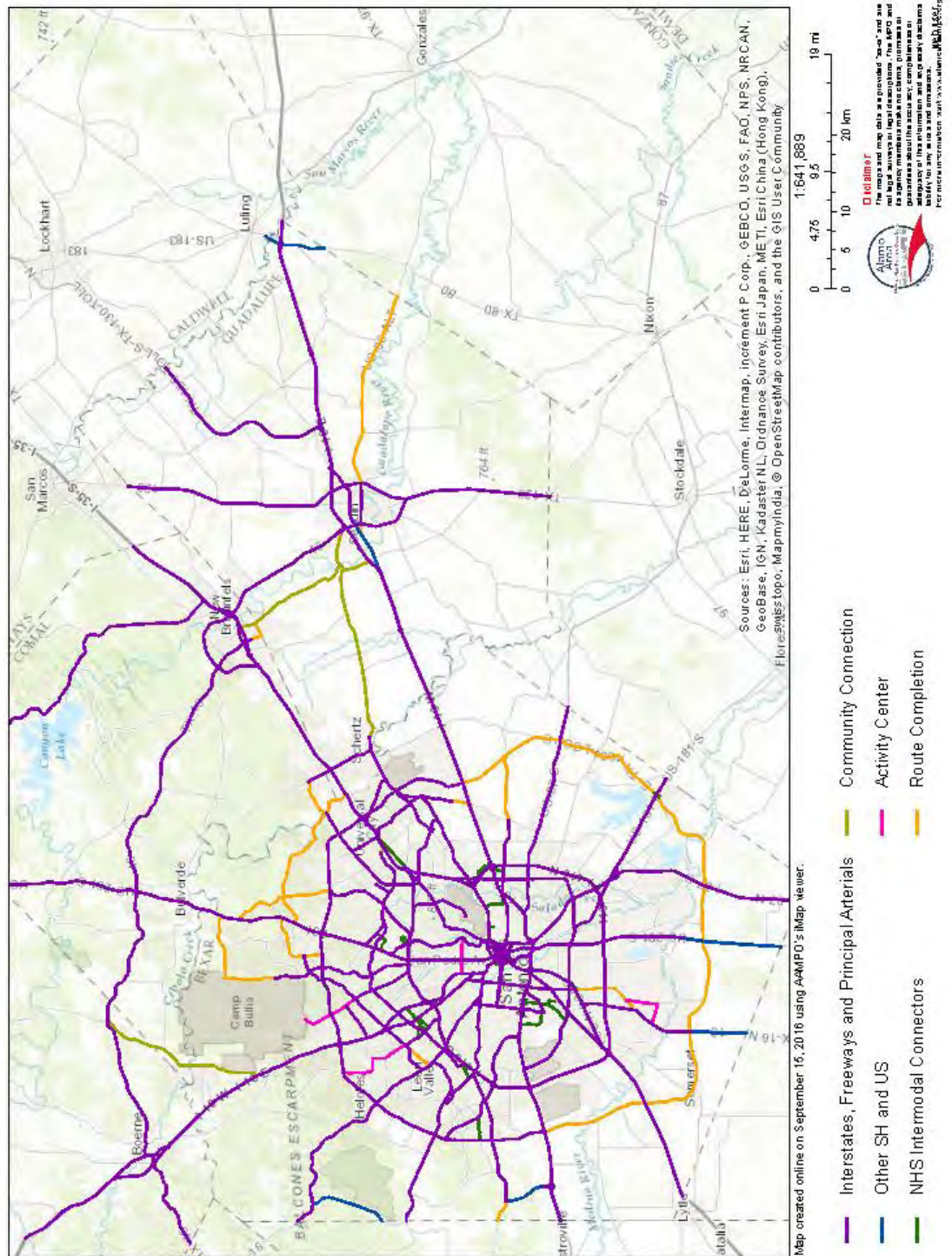
- Maintain congested VMT per capita through 2022
- Maintain current level of congested hours through 2022
- At least 65% of the Interstate should be reliable by 2022
- At least 45% of the Non-Interstate NHS should be reliable by 2022
- Average reliability of the transit system should be 85% by 2040
- Double the population and employment within a quarter-mile access of frequent transit by 2040
- Maintain 60 minutes or less incident clearance time on expressways through 2022
- Maintain travel time for freight moved on highways through 2022

CMP Network

AAMPO analyzes congestion on and defines its CMP network as all Regionally Significant roadways within our planning area. Over months of collaboration with state and local transportation planning partners in 2016, AAMPO defined Regionally Significant roadways as those that are:

- federally functionally classified as interstate freeways, other freeways or expressways
- federally functionally classified as principal arterials
- intermodal connectors included in the federally adopted National Highway System
- designated as SH or US routes
- community connections that provide direct, continuously signed connections between nearby or adjacent census defined urbanized areas, urban clusters and population centers with more than 5,000 people
- between activity centers that serve as primary regional connectors to an otherwise unserved regional activity center
- extensions of Regionally Significant Roadways to connect non-connecting termini

Figure 2: Map of Regionally Significant Roadways in the Alamo Area. Visit www.alamoareampo.org/imap to view these roadways online



Multimodal Performance Measures

In 2018, AAMPO staff developed baseline data for these eight performance measures tracking congestion at the regional level. (Note, performance measures are regional, not limited to the CMP network.) Updates are published on our online performance measure dashboard at www.alamoareampo.org/TPM and in the Performance Report chapter of the Metropolitan Transportation Plan.

*Table 3:
Performance
measures track
characteristics like
intensity and extent
of congestion*

Type of Measure	Performance Measures
Objective: Maintain congested VMT per capita through 2022	
Intensity: The relative severity of congestion that affects travel	Number of road miles operating at V/C < 1.0 and ≥ 1.0
Extent: The number of system users or components (e.g. vehicles, pedestrians, transit routes, lane miles) affected by congestion	Percent of vehicle miles traveled at V/C ≥ 1.0
Objective: Maintain current level of congested hours through 2022	
Duration: The amount of time the congested conditions persist before returning to an uncongested state	Congested hours
Objective: At least 65% of the Interstate should be reliable by 2022	
Objective: At least 45% of the Non-Interstate NHS should be reliable by 2022	
Objective: Average reliability of the transit system should be 85% by 2040	
Reliability: The changes in congestion that occur on different days or at different times of day.	Percent of person-miles traveled on the Interstate that are reliable
	Percent of person-miles traveled on the Non-Interstate NHS that are reliable
	Number of HOV lane miles
	Transit system average reliability

GOOD TO KNOW

Collecting data on system performance is a responsibility of facility owners and operators. The MPO's primary role is that of collator, coordinator, and analyzer of data collected by agencies across the region.

	Percent of transit trips on dedicated lanes
Objective: Double the population and employment within a quarter-mile access of frequent transit by 2040	
Land Use and Accessibility Measures	Population within quarter-mile access of frequent transit service Employment within quarter-mile access of frequent transit service
Objective: Maintain 60 minutes or less incident clearance time on expressways through 2022	
Safety	Incident clearance time
Objective: Maintain travel time for freight moved on highways through 2022	
Freight Measures	Truck Travel Time Reliability (TTTR) Index on the Interstate Number of Top 100 truck bottlenecks

Collecting Data and Monitoring the System

AAMPO brings together, organizes and analyzes data collected by our transportation partners in order to:

- Define the extent and duration of congestion
- Help determine causes of congestion
- Evaluate the efficiency and effectiveness of implemented actions.

Read more in [Ch. X - Performance Report](#) about data sources used by AAMPO.

As part of the congestion management process, AAMPO inventories our CMP network at the corridor level. A database is compiled relating attributes of the CMP network corridors that include several characteristics organized under four categories:

Alternative Roadway Infrastructure: Factors that influence access to/from the region, between regional activity centers, and to/from local land uses

- Parallel expressways (within 5 mi)
- Parallel arterials (frontage roads, major and minor arterials within 1 mi)
- Direct connections (interchanges) to other highways

Modal Options: Factors that influence the viability of traveling by alternative modes on the corridor

- Public Transportation
- Rideshare (Park-and-Ride, Transit Center, Park-and-Pool)
- Managed/HOV lanes
- Bike or pedestrian facility

System Demand: Factors that influence the size of demand for roadway space on the corridor

- Peak volume over capacity (V/C)
- Truck volume percentage
- Area Type

System Reliability: Factors that influence occasional (non-recurring) traffic congestion on the corridor

- Crash rate
- Shoulders
- Safety Service Patrol coverage
- Truck lane restrictions
- Intelligent Transportation System technology

A map of the CMP network and database are at www.alamoareampoint.org/CMP. AAMPO staff reviews the CMP network database for accuracy during updates to the long-range Metropolitan Transportation Plan. Agencies proposing a project for MPO funding that would add vehicle capacity to a corridor must confirm that the project is on AAMPO's CMP network or complete a Corridor Fact Sheet form with their project application, if it is not.

Performance Measure	Data Source	How Often it is Collected	Responsible Partner	Definition	Alignment with Other Plans
Number of road miles operating at V/C < 1.0 and ≥ 1.0	Travel Demand Model (TDM)	At the time of TDM update	AAMPO		
Percent of vehicle miles traveled at V/C ≥ 1.0	TDM	At the time of TDM update	AAMPO		
Congested hours	Urban Congestion Report	Quarterly	TTI	Average number of hours during specified time periods in which road sections are congested — speeds less than 90 percent of free-flow speed (e.g., 54 mph if free-flow speed is 60 mph). Reported for weekdays (6 am to 10 pm). Averages are weighted across road sections and urban areas by VMT using volume estimates derived from FHWA's HPMS.	
Percent of person-miles traveled on the Interstate that are reliable	National Performance Measure Research Data Set (NPMRDS)	Monthly	AAMPO & TTI		National performance measure

Performance Measure	Data Source	How Often it is Collected	Responsible Partner	Definition	Alignment with Other Plans
Percent of person-miles traveled on the Non-Interstate NHS that are reliable	NPMRDS	Monthly	AAMPO & TTI		National performance measure
Number of HOV lane miles	TDM	Annually	AAMPO		
Transit system average reliability	Automated Vehicle Locating System	Monthly	VIA		
Percent of transit trips on dedicated lanes	Automated Passenger Counter	Annually	VIA		
Percent of population within quarter-mile distance of frequent transit service	VIA and TDM	At the time of TDM update	AAMPO & VIA		
Percent of employment within quarter-mile distance of frequent transit service	VIA and TDM	At the time of TDM update	AAMPO & VIA		
Incident clearance time	TransGuide observations	Annually	TxDOT	Average time in minutes from incident detection to clearance of collisions and disabled vehicles	TxDOT statewide performance measure
Truck Travel Time Reliability (TTTR) Index on the Interstate	NPMRDS	Monthly	AAMPO & TTI		National performance measure

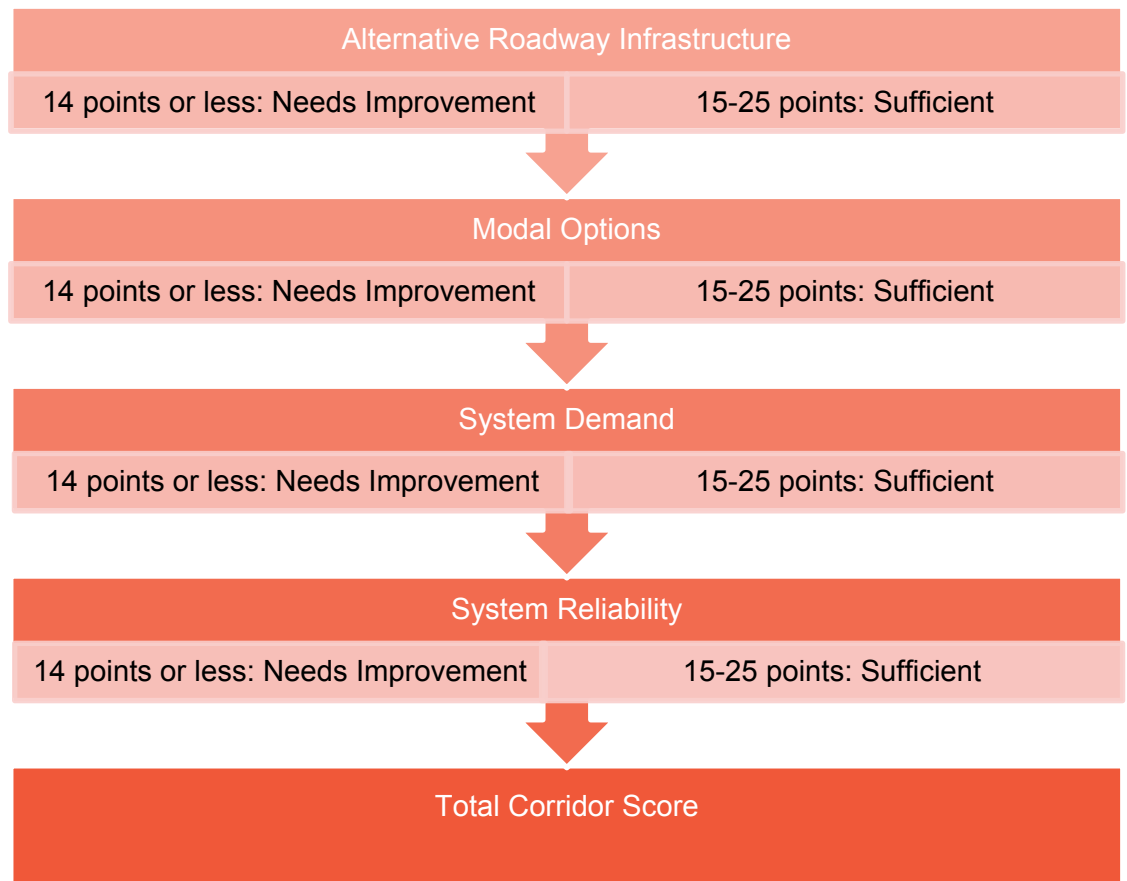
Performance Measure	Data Source	How Often it is Collected	Responsible Partner	Definition	Alignment with Other Plans
Number of Top 100 truck bottlenecks	American Transportation Research Institute	Annually	TxDOT		Texas Freight Mobility Plan performance measure

Analysis of Congestion Problems and Needs

The information collected through the corridor inventory described previously is used to score each corridor based on its capacity to handle congestion.

The maximum score a corridor can receive is 100 points (25 points per category). Corridors with higher scores are equipped with more travel options to alleviate congestion from the main roadway facility. Corridors with lower scores should be considered for improvements based on the sufficiency score of each category.

Figure X.X illustrates how the total corridor score is summed from the four categories used to understand the corridor's capacity to handle congestion. Detailed CMP Corridor Scoring Criteria is outlined in Figure X.X



Category	Inventory	Measure	Points	Max Number of Points	
Alternative Roadway Infrastructure	Parallel Expressways ¹ (within 5 mi)	Yes	11	25	
		None	0		
	Parallel Arterials ¹ (frontage roads, major and minor arterials within 1 mi)	Entire and Partial Limits	10		
		Entire Limits	7		
		Partial Limits	3		
		None	0		
	Direct Connections (Interchanges) to other highways ¹	Yes	4		
		None	0		
Modal Options	Public Transportation ²	Rapid Transit and Bus	10	25	
		Rapid Transit	7		
		Bus	5		
		None	0		
	Rideshare ² (Park-and-Ride, Transit Center, Park-and-Pool)	Yes	7		
		None	0		
	Managed/HOV Lanes ³	Yes	6		
		None	0		
	Bike or Pedestrian Facility ¹ (entire corridor)	Bike Lane and Sidewalk	2		
		Bike Lane	1		
		Sidewalk	1		
		None	0		
System Demand (Recurring)	2015 Peak V/C ³	Below	10	25	
		Regional Average = 0.85			
		Above	3		

Category	Inventory	Measure	Points	Max Number of Points
System Demand (Recurring) <i>Continued</i>	2015 Truck Volume Percentage	Below	10	25
		Regional Average = 11.54%		
		Above	3	
	Area Type	Rural	8	
		Suburban	6	
		Urban	4	
		Urban Intense	2	
		Urban Core	1	
System Reliability (Non-Recurring)	2017 Crash Rate ⁴	Below or Average	10	25
		(Regional Average Rate = 289)		
		Above	3	
	Shoulders ¹ (For emergency stopping or congestion bypass)	Full Outside <i>and</i> Inside	6	
		Full Outside <i>or</i> Inside	3	
		Partial Limits	1	
		None	0	
		Refuge areas (for surface streets)	3	
	Safety Service Patrol Coverage ⁵	Entire Limits	3	
		Partial Limits	1	
		None	0	
	Truck Lane Restrictions	Entire Limits	3	
		Partial Limits	1	
		None	0	
	Intelligent Transportation Systems	Entire Limits	3	
		Partial Limits	1	
		None	0	

Table 4: CMP
Corridor Scoring
Criteria

Source:

¹Google Maps Imagery

²VIA Metropolitan
Transit

³AAMPO Data;

⁴AAMPO interpretation
of TxDOT CRIS Data

⁵TxDOT

Strategy Identification

There are many ways ("strategies") to manage congestion. This section defines those strategy types that fit the character of our region and can help achieve our congestion management objectives

Intelligent Transportation Systems (ITS): TransGuide, an Intelligent Transportation System, was designed by the San Antonio District of the Texas Department of Transportation (TxDOT). This "smart highway" project provides information to motorists about traffic conditions, such as accidents, congestion and construction. With the use of cameras, message signs and fiber optics, TransGuide can detect travel times and provide that information to motorists not only with the message signs on the highways, but also with the use of the Internet and a Low-Power Television Station. TransGuide helps emergency responders rapidly respond to crashes and emergencies. Partners in the TransGuide project include TxDOT, the City of San Antonio (police/fire/EMS/traffic), and VIA Metropolitan Transit. ITS focuses on communication and real time information of traffic conditions. Components of ITS include:

- **Advanced Traffic Management:** dynamically managing roadway conditions based on prevailing and predicted traffic conditions. Examples include lane assignment, dynamic speed limits, adaptive ramp metering and real-time travel information. "TransGuide" is the traffic management system in the Alamo Area
- **Advanced Public Transit Systems:** on-board vehicle locating system to ensure travel time reliability and communications between buses and headquarters
- **Emergency Management:** related to disaster threats and marshalling resources

Policy Management includes existing and new ordinances and regulations that impact the transportation system. Policy management includes:

- **Land Use:** land use decisions to discourage urban sprawl and promote higher density levels and mixed use development to encourage travel by walking, bicycling and transit
- **Preservation of Green Space:** preserve undeveloped land and open spaces to provide for continuation of landscape character, scenic beauty and recreational opportunities so as not to worsen congestion, air and water quality
- **Parking Management:** includes policies that encourage more efficient use of existing public and private parking facilities (shared parking and improved parking facility design)
- **Vehicle Use Limitations:** refers to geographic areas where travel by car is restricted; can also include implementing no-drive days

- **Preserve Neighborhood Aesthetic:** refers to congestion mitigation with improvements complementing and protecting the cultural and historical nature of a corridor, neighborhood or geographic area
- **Transit-Oriented Development (TOD)** clusters housing and commercial uses to encourage public transit ridership

Corridor Improvements are strategies for corridors that are at least one mile in length. These improvements include:

- **Capacity Improvements:** add more travel lanes to roads for vehicles in both directions; if there is high rush travel flow in one direction consider adding reversible lanes that will change direction depending on the peak travel
- **Congestion Relief Corridors:** new roadways on new alignments that will relieve congestion on parallel roadways
- **Bottleneck Removal:** This includes improvements such as roadway widening to provide shoulders and improved sight lines or auxiliary lanes to improve merging and diverging. This also includes interchange modifications to decrease weaving sections on a freeway and intersection modifications such as adding dedicated turn lanes and realigning intersection streets,
- **Roadway Rehabilitation:** includes improving the roadway surface through filling potholes, resurfacing, or stabilizing the roadway structure
- **Bicycle Facilities:** addition of bicycle lanes, protected or buffered bicycle lanes, multi-use paths, and bicycle racks and lockers
- **Pedestrian Facilities:** includes improving sidewalks, adding countdown and/or audible signals and crosswalks

Advanced Transportation Systems are new strategies and technologies for the region including:

- **Premium Transit:** such as enhanced bus (Primo), Bus Rapid Transit (BRT), and Light Rail Transit (LRT)
- **Managed Lanes:** includes High Occupancy Vehicle lanes, express lanes or other special lanes
- **Passenger Rail Service:** between regional hubs such as San Antonio and Austin
- **High Speed Rail:** TxDOT completed the first phase of a Texas-Oklahoma Passenger Rail Study in 2017 and found high speed passenger rail between San Antonio and Dallas-Fort Worth feasible. The next step would be a project-level environmental study.

Operational Management includes techniques to optimize capacity and improve safety and reliability of the roadway system. Operational Management includes the following:

- Connected and Automated Vehicle (CAV) technology
- Incident Management: clearing incidents, crashes and major events to allow traffic flow to resume
- Access Management: limiting the number and placement of access points such as driveways on major roads; also includes the use of roadway medians and turning restrictions to improve safety and traffic flow
- Signalization & Traffic Flow Improvements: optimizing traffic signals, adding turn lanes or making lanes reversible to improve efficiency (to include the Superstreet concept)
- Railroad Crossing Improvements: installing gates and warning signals at railroad crossings or closing some at-grade (surface street) crossings to improve safety
- Construction Coordination: coordinating construction with other known projects in an area and scheduling the work during non-rush hour periods; inform the public and improve signage for safer travel
- Freight Management: monitoring freight travel patterns and identifying preferred truck routes or truck lanes.

The aim of **Travel Demand Management Campaigns** is to reduce automobile use and congestion. The MPO's "Alamo Commutes" and Walkable Community Programs educate employers and community members about these efforts:

- Rideshare Program: includes informal and employer sponsored carpool and vanpool programs
- Flexible Work Hours: includes staggered schedules, flexible hours and compressed work weeks that allow employees to arrive and leave work outside the traditional rush hour
- Guaranteed Ride Home Program: assures commuters who take alternative transportation a ride home in the event of a medical or family emergency
- Telecommuting: working full or part time at home, at a satellite or branch facility
- Walkable Community Program: the MPO hosts Walkable Community Workshops to help identify challenges and barriers to walking and identify potential improvements to help make walking a safer, more attractive option for people.

Public Transportation Improvements include the following activities:

- Transit Service Enhancements: includes expanding service areas, adding new transit routes, improving service frequency on existing routes, extending routes to serve more areas, expanding hours of service, and better timing to allow for faster transfers
- Transit Facilities: improving amenities such as adding benches, passenger shelters, and real time bus arrival information; also includes enhancing and constructing passenger facilities such as transfer centers, park & rides, or multi-modal terminals
- Ridership Incentives: includes programs to encourage transit use such as reduced fares, monthly passes and employer subsidies for the passes

Table X.X matches up strategies to the relevant corridor scoring categories introduced on p. XX. For example, “advanced traffic management” is one of the identified Intelligent Transportation Systems strategies to reduce congestion through:

- Sharing real-time travel information of alternative paralleling routes (Alternative Route Infrastructure);
- Managing access to a highway through ramp metering (System Demand); and
- Notifying the public about a crash ahead in time to take an alternative route (System Reliability)

to name a few ways. But, “advanced traffic management” will not be the strategy that improves congestion by expanding Modal Options along a corridor. “Advanced public transit systems”, though, can mitigate congestion by making public transportation more attractive to roadway users (Modal Options), decreasing the demand of roadway space by SOV drivers (System Demand).

Table 5: Strategies for Managing Congestion

Strategy type	Strategy	CMP Corridor Scoring Category			
		Alternative Route Infrastructure	Modal Options	System Demand	System Reliability
Intelligent Transportation Systems	Advanced traffic management				
	Advanced public transit systems				
	Emergency management				
Policy Management	Land use				
	Preservation of green infrastructure				
	Parking management				
	Preserve neighborhood aesthetic				
	Transit-Oriented Development (TOD)				
Corridor Improvements	Capacity improvements				
	Congestion relief corridors				
	Bottleneck removal				
	Roadway rehabilitation				
	Bicycle and pedestrian facilities				
	Pedestrian facilities				
Advanced Transportation Systems	Premium transit				
	Managed lanes				

Strategy type	Strategy	CMP Corridor Scoring Category			
		Alternative Route Infrastructure	Modal Options	System Demand	System Reliability
Advanced Transportation Systems (cont...)	Passenger rail service				
	High speed rail				
	Active parking management				
Operational Management	Connected and Automated Vehicle (CAV) technology				
	Incident management system				
	Access management				
	Signalization and traffic flow improvements				
	Railroad crossing improvements				
	Construction coordination				
	Freight management				
Travel Demand Management Campaigns	Rideshare program				
	Flexible work hours				
	Telecommuting				
	Guaranteed ride home				
	Walkable Community Program				
Public Transportation	Transit service enhancements				

Strategy type	Strategy	CMP Corridor Scoring Category			
		Alternative Route Infrastructure	Modal Options	System Demand	System Reliability
Improvements	Transit facilities				
	Transit ridership incentives				

Strategy Implementation

As the Transportation Improvement Program (TIP) and Metropolitan Transportation Plan are updated, CMP objectives and performance measures become part of the technical scoring process used to prioritize and select projects in those short- and long-range plans. CMP corridor scoring criteria does not replace the existing TIP and MTP project selection process used by AAMPO. It offers an additional tool for decision-making by the Technical Advisory Committee and Transportation Policy Board.

To enact these strategies, AAMPO relies on the actions of our transportation partners such as the Alamo Area Council of Governments, Alamo Regional Mobility Authority, cities and counties throughout the region, TxDOT and VIA Metropolitan Transit/Advanced Transportation District. During project planning and design, project sponsors can select appropriate strategies for addressing local congestion issues on the CMP network.

Evaluating Strategy Effectiveness

Strategies are generally evaluated for their potential and actual success through staff-level technical analysis. New mobility data from the National Performance Management Research Data Set (NPMRDS) allows AAMPO to study current and historic speeds on hundreds of roadway segments within the study area using user-generated travel data. For operational and infrastructure projects on roadways included in the NPMRDS, AAMPO can now prepare before-and-after effects of the investment.

Because projects are built or coordinated by agencies other than the MPO, it is critical that AAMPO make robust use of our own committees and those of our partner agencies to relay the effectiveness of strategies and to maintain consistency between planned/programmed projects and the CMP.

Over time, AAMPO's online dashboard at www.alamoareampo.org/TPM and Performance Report chapter of the Metropolitan Transportation Plan will be a valuable tool for tracking performance toward reaching CMP goals.

Federal Requirements

§ 450.322 Congestion management process in transportation management areas.

(a) The transportation planning process in a TMA shall address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities eligible for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53 through the use of travel demand reduction (including intercity bus operators, employer-based commuting programs such as a carpool program, vanpool program, transit benefit program, parking cash-out program, shuttle program, or telework program), job access projects, and operational management strategies.

(b) The development of a congestion management process should result in multimodal system performance measures and strategies that can be reflected in the metropolitan transportation plan and the TIP.

(c) The level of system performance deemed acceptable by State and local transportation officials may vary by type of transportation facility, geographic location (metropolitan area or subarea), and/or time of day. In addition, consideration should be given to strategies that manage demand, reduce single occupant vehicle (SOV) travel, improve transportation system management and operations, and improve efficient service integration within and across modes, including highway, transit, passenger and freight rail operations, and non-motorized transport. Where the addition of general purpose lanes is determined to be an appropriate congestion management strategy, explicit consideration is to be given to the incorporation of appropriate features into the SOV project to facilitate future demand management strategies and operational improvements that will maintain the functional integrity and safety of those lanes.

(d) The congestion management process shall be developed, established, and implemented as part of the metropolitan transportation planning process that includes coordination with transportation system management and operations activities. The congestion management process shall include:

(1) Methods to monitor and evaluate the performance of the multimodal transportation system, identify the underlying causes of recurring and non-recurring congestion, identify and evaluate alternative strategies, provide information supporting the implementation of actions, and evaluate the effectiveness of implemented actions;

(2) Definition of congestion management objectives and appropriate performance measures to assess the extent of congestion and support the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the

movement of people and goods. Since levels of acceptable system performance may vary among local communities, performance measures should be tailored to the specific needs of the area and established cooperatively by the State(s), affected MPO(s), and local officials in consultation with the operators of major modes of transportation in the coverage area, including providers of public transportation;

(3) Establishment of a coordinated program for data collection and system performance monitoring to define the extent and duration of congestion, to contribute in determining the causes of congestion, and evaluate the efficiency and effectiveness of implemented actions. To the extent possible, this data collection program should be coordinated with existing data sources (including archived operational/ITS data) and coordinated with operations managers in the metropolitan area;

(4) Identification and evaluation of the anticipated performance and expected benefits of appropriate congestion management strategies that will contribute to the more effective use and improved safety of existing and future transportation systems based on the established performance measures. The following categories of strategies, or combinations of strategies, are some examples of what should be appropriately considered for each area:

- (i) Demand management measures, including growth management, and congestion pricing;
- (ii) Traffic operational improvements;
- (iii) Public transportation improvements;
- (iv) ITS technologies as related to the regional ITS architecture; and
- (v) Where necessary, additional system capacity.

(5) Identification of an implementation schedule, implementation responsibilities, and possible funding sources for each strategy (or combination of strategies) proposed for implementation; and

(6) Implementation of a process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures. The results of this evaluation shall be provided to decision makers and the public to provide guidance on selection of effective strategies for future implementation.

(e) In a TMA designated as nonattainment area for ozone or carbon monoxide pursuant to the Clean Air Act, Federal funds may not be programmed for any project that will result in a significant increase in the carrying capacity for SOVs (i.e., a new general purpose highway on a

new location or adding general purpose lanes, with the exception of safety improvements or the elimination of bottlenecks), unless the project is addressed through a congestion management process meeting the requirements of this section.

(f) In TMAs designated as nonattainment for ozone or carbon monoxide, the congestion management process shall provide an appropriate analysis of reasonable (including multimodal) travel demand reduction and operational management strategies for the corridor in which a project that will result in a significant increase in capacity for SOVs (as described in paragraph (d) of this section) is proposed to be advanced with Federal funds. If the analysis demonstrates that travel demand reduction and operational management strategies cannot fully satisfy the need for additional capacity in the corridor and additional SOV capacity is warranted, then the congestion management process shall identify all reasonable strategies to manage the SOV facility safely and effectively (or to facilitate its management in the future). Other travel demand reduction and operational management strategies appropriate for the corridor, but not appropriate for incorporation into the SOV facility itself, shall also be identified through the congestion management process. All identified reasonable travel demand reduction and operational management strategies shall be incorporated into the SOV project or committed to by the State and MPO for implementation.

(g) State laws, rules, or regulations pertaining to congestion management systems or programs may constitute the congestion management process, if the FHWA and the FTA find that the State laws, rules, or regulations are consistent with, and fulfill the intent of, the purposes of 23 U.S.C. 134 and 49 U.S.C. 5303.

(h) **Congestion management plan.** A MPO serving a TMA may develop a plan that includes projects and strategies that will be considered in the TIP of such MPO.

(1) Such plan shall:

- (i) Develop regional goals to reduce vehicle miles traveled during peak commuting hours and improve transportation connections between areas with high job concentration and areas with high concentrations of low-income households;
- (ii) Identify existing public transportation services, employer based commuter programs, and other existing transportation services that support access to jobs in the region; and
- (iii) Identify proposed projects and programs to reduce congestion and increase job access opportunities.

(2) In developing the congestion management plan, an MPO shall consult with employers, private and nonprofit providers of public transportation, transportation

management organizations, and organizations that provide job access reverse commute projects or job-related services to low-income individuals.

7. Discussion and Appropriate Action on the MPO's Environmental Justice Outreach Presentation

Purpose

The purpose of this agenda item is to receive a presentation on the MPO's Environmental Justice (EJ) Outreach program.

Issue

This item is to present a summary of the public outreach activities conducted during FY 2018 and how they help the Alamo Area MPO fulfill obligations under Title VI of the 1964 Civil Rights Act, the President's Executive Order on Environmental Justice (1994) and subsequent orders and enforcement regulations. Generally referred to as Title VI and Environmental Justice, the provisions are intended to prevent federally funded actions from having disproportionate impacts on specific populations and ensure that members of the public have equal access to the decision making process.

The presentation is attached.

Action Requested

For information only. No formal action is requested.



Environmental Justice Presentation

Ambar Perez | Bilingual Public Involvement Specialist

What is Title VI of the Civil Rights Act of 1964

No person in the United States shall, on the ground of race, color, or national origin, be:

- excluded from participation in,
- denied the benefits of, or
- subjected to discrimination

under any program or activity receiving Federal financial assistance.



Executive Order 12898 on Environmental Justice

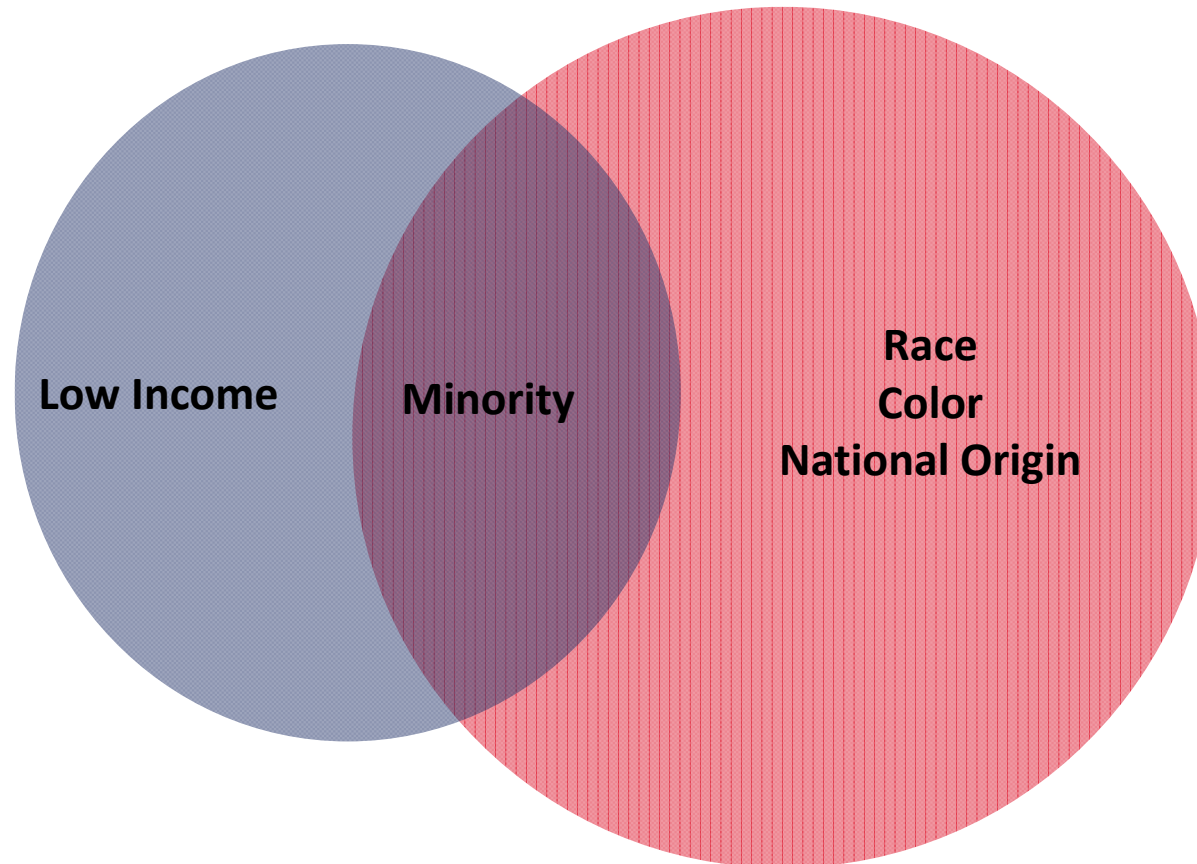
- Signed by President Bill Clinton in 1994
- Reaffirms that each Federal agency must make environmental justice part of its mission

Identifying and addressing **disproportionately high and adverse** human health or environmental effects on minority and low-income populations.

Understanding EJ and Title VI

EJ EXECUTIVE ORDER

TITLE VI STATUE



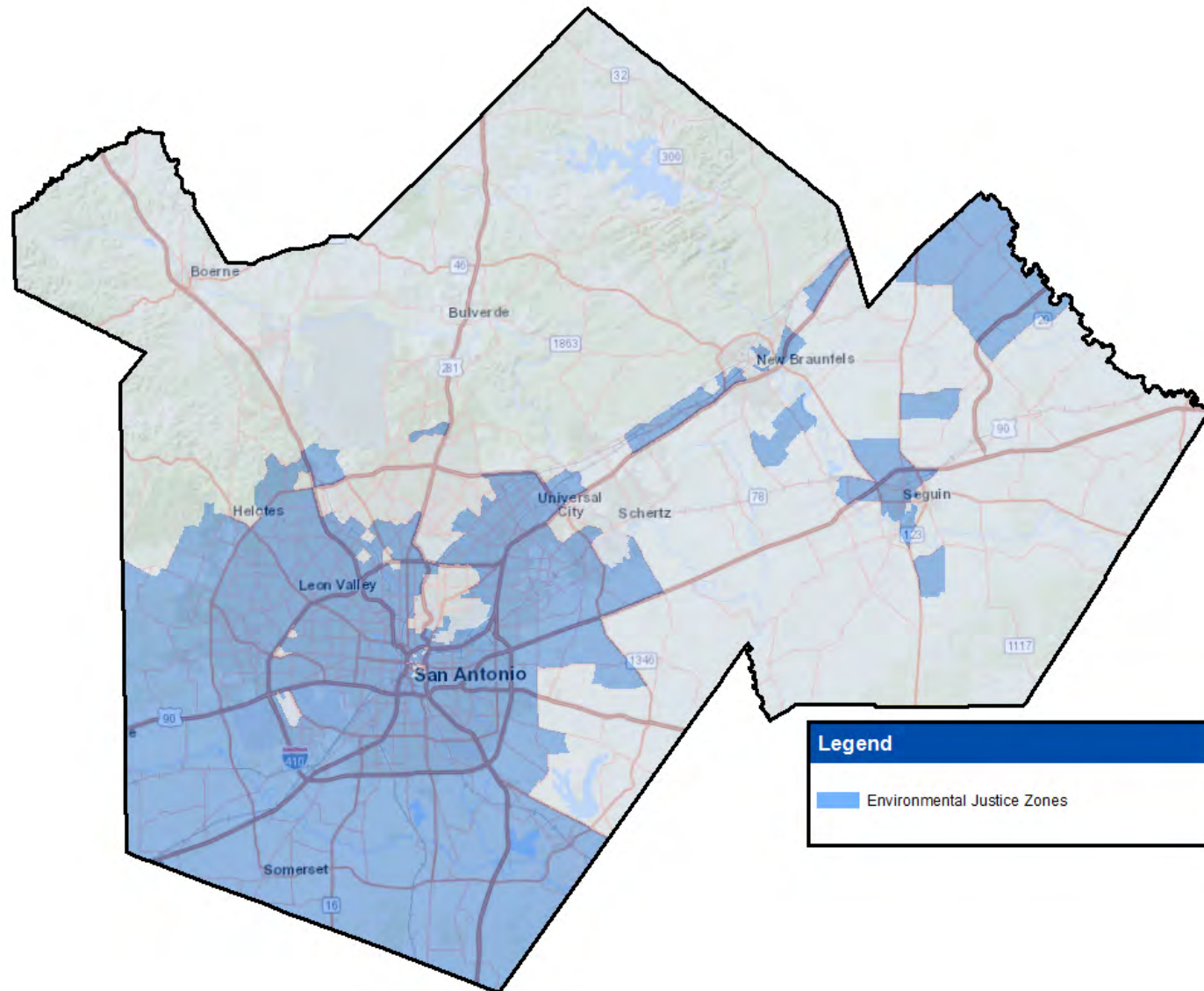
Source: EJ CoP Webinar: Guidance and Consistency of Analysis
Carolyn Nelson, P.E. Project Development/Environmental Specialist US-DOT, FHWA

What are the MPOs responsibilities?

- **Identify** minority and low-income populations
- **Engage** traditionally underserved populations in the transportation planning process
- **Solicit** meaningful input on transportation projects considered for federal funding



Environmental Justice Areas



EJ Community Engagement for FY 2018



Relationship Building with Key Groups

Focused on building strong, long-lasting relationships

- Avenida Guadalupe
- NAACP San Antonio Chapter



Avenida Guadalupe

30



years serving the
near-west side

Less than

2



miles from
downtown

The AAMPO
attended and
participated in

10 meetings

2



Community
Events



National Association for the Advancement of Colored People (NAACP)

Participated in

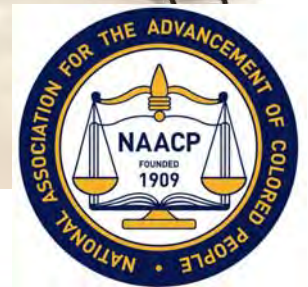
7

Member meetings and
provided MPO updates
and materials

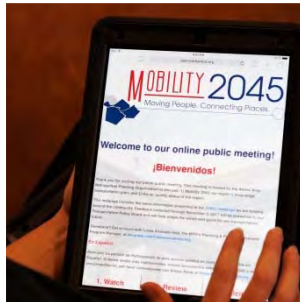


NAACP
referred us to
Willow/Coliseum Park
Neighborhood Association

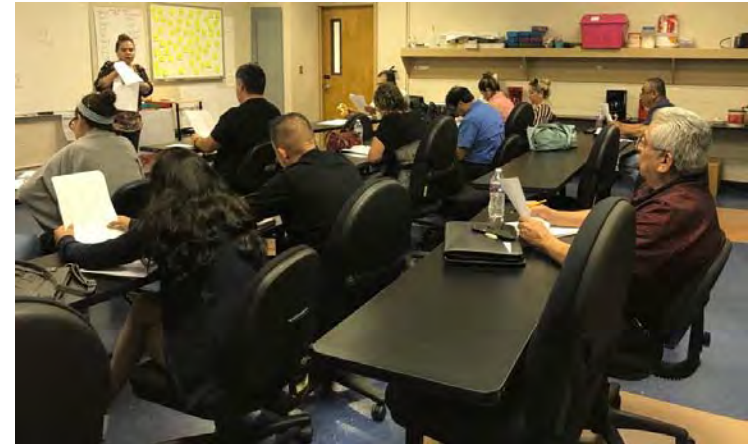
8/8/18



ESL Outreach for STP-MM Project Selection and TIP



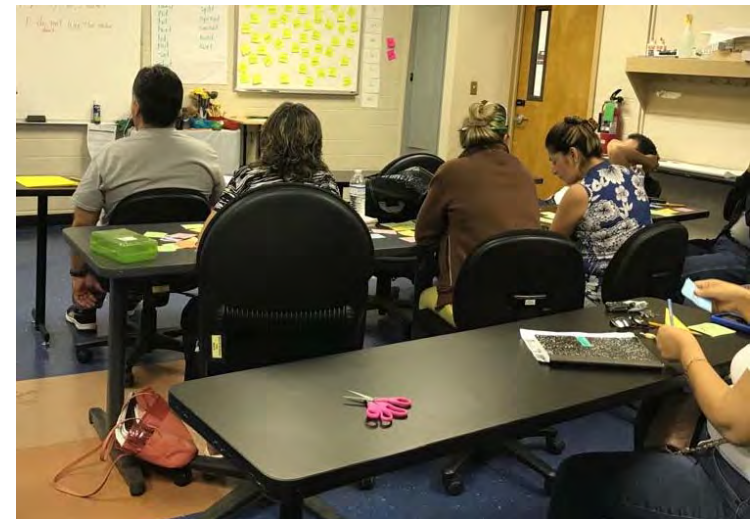
Presented to **two**
Education Service
Center, Region 20 (ESL)
classes



Received **22** project
comment forms in
Spanish



Provided MPO Spanish
language material to
the training center



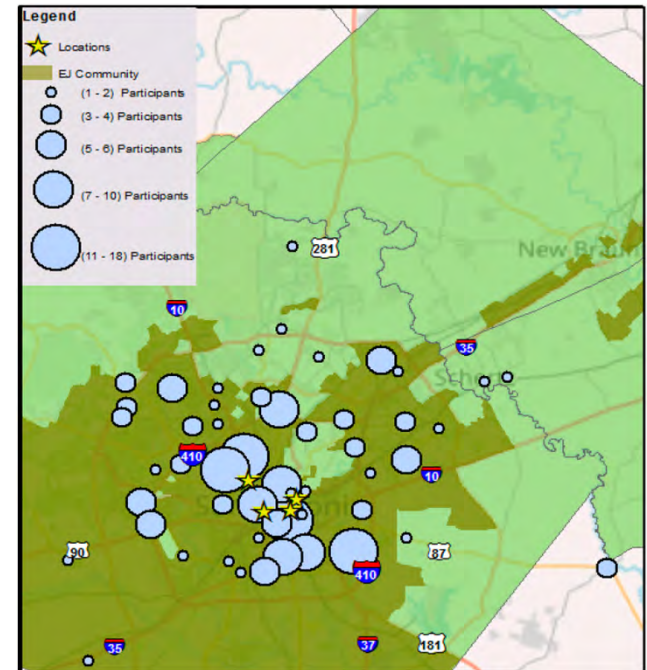
Outreach efforts



Fiesta Medal Outreach



Talked to 500 people



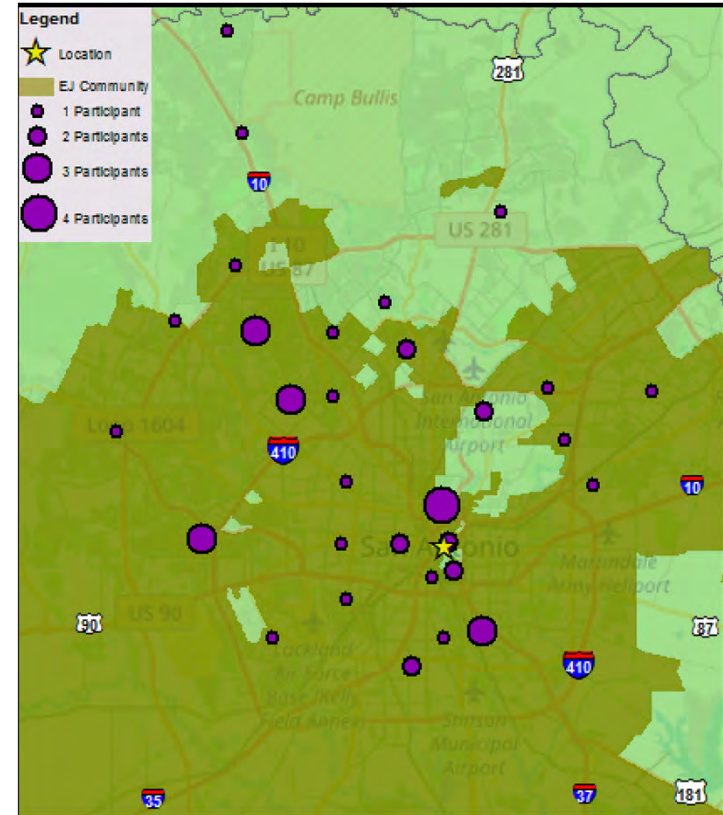
5-minute presentation on the issue of distracted driving



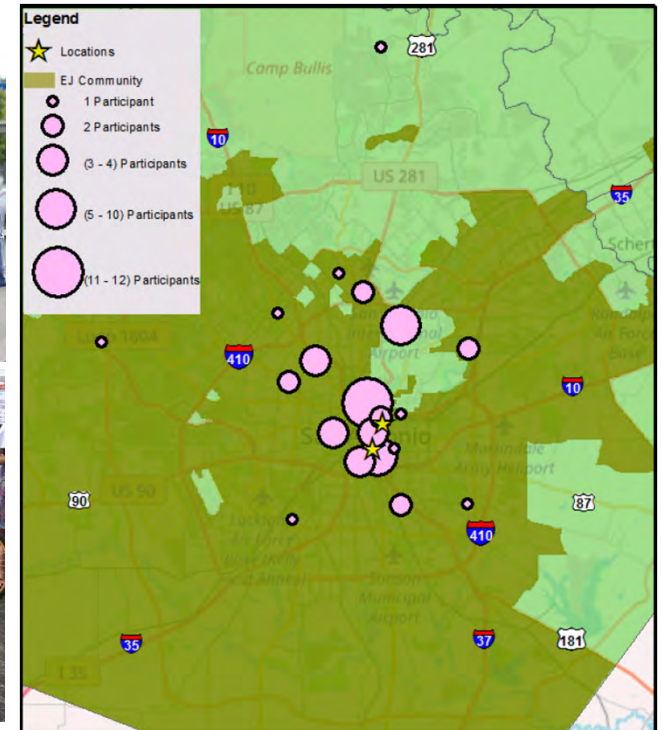
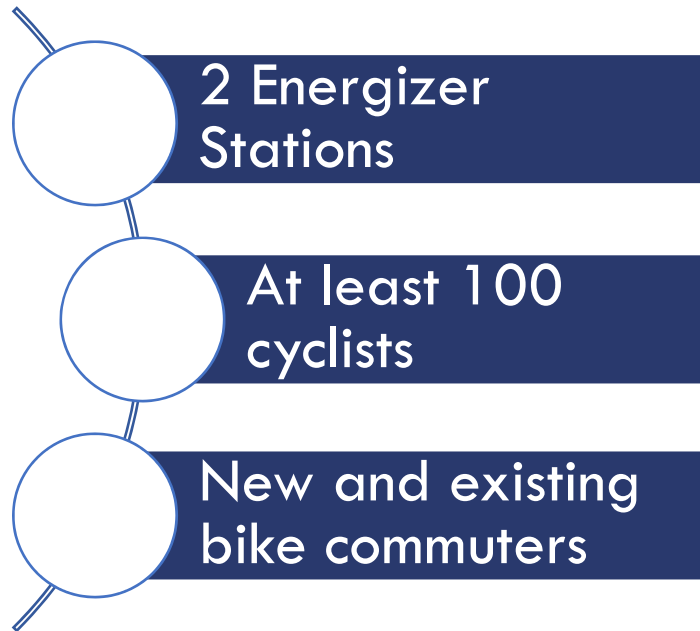
30 presentations in Spanish



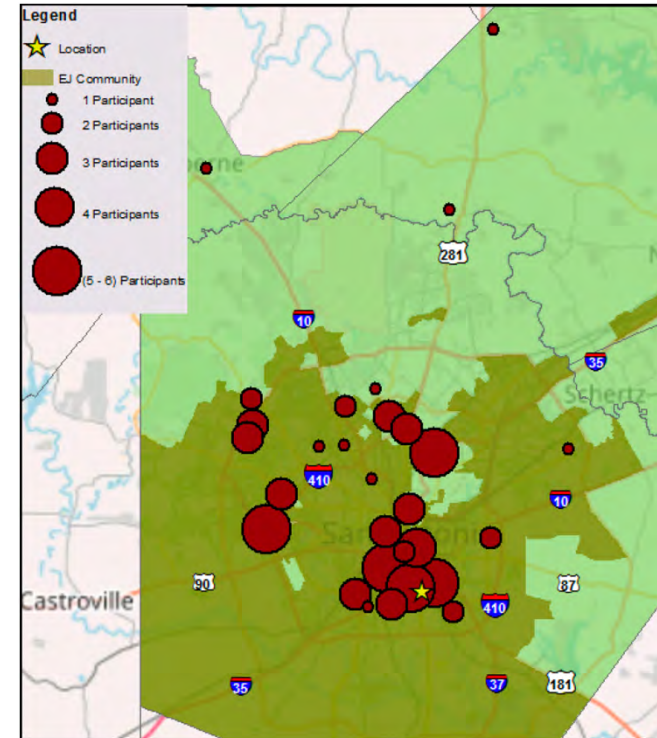
Walk & Roll Rally



Energizer Stations for Bike to Work Day



Siclovía



What would it take for you to ride the bus to work?

What would it take for you to ride a bike to work?

More Routes
Light Rail
 More Stops
 Safer
 Cheaper Fare
 Buses Outside 1604
 New Logo
 Smoother Ride
 More Bike Racks
 Dedicated Lane Access to Bus Lanes
 More Buses
More Frequency
Shorter Ride Time

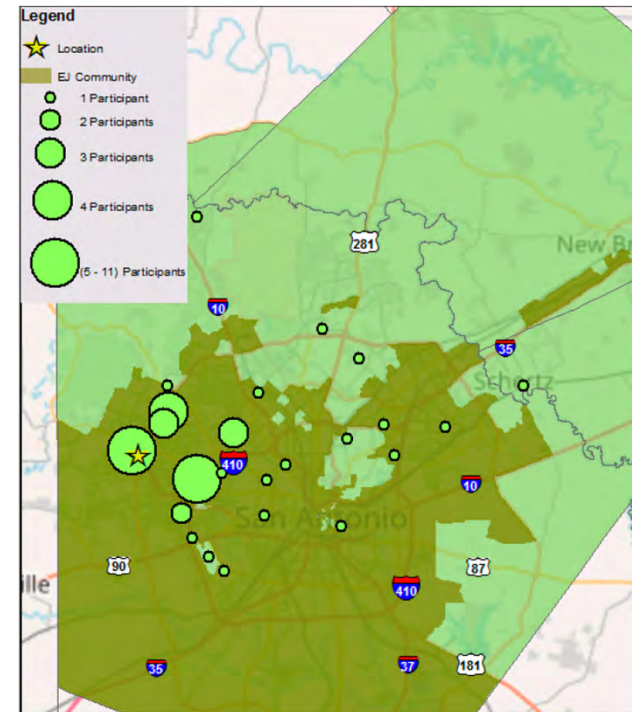
Street Safety
 Better Connectivity
Protected Bike Lanes
 More Bike Lanes
 Less Road Rage
 Better Weather
 More Water Stations
 More Shade
 Rider Education
 Animal Control
 Street Repair

Safe Kids Day

Total event attendees:
1,060

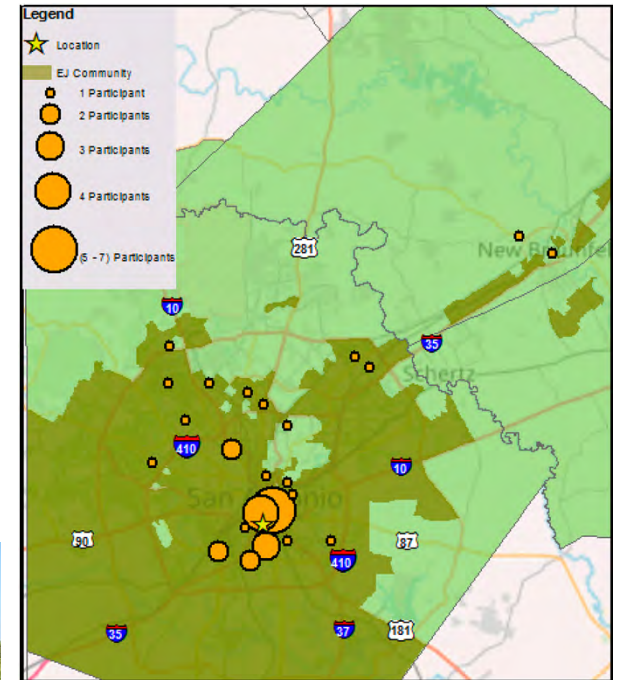
Increase bicycle and
pedestrian awareness

Promoted bicycle safety &
proper helmet usage



Walk & Bike Night

- Held at Confluence Park in the evening
- Supplied information on:
 - Sarah King Elementary Walking School Bus pilot program
 - Rivard Report's Open Ciclismo map
 - Regional Attitudes Survey
 - New Braunfels ISD Bike Club
 - And more



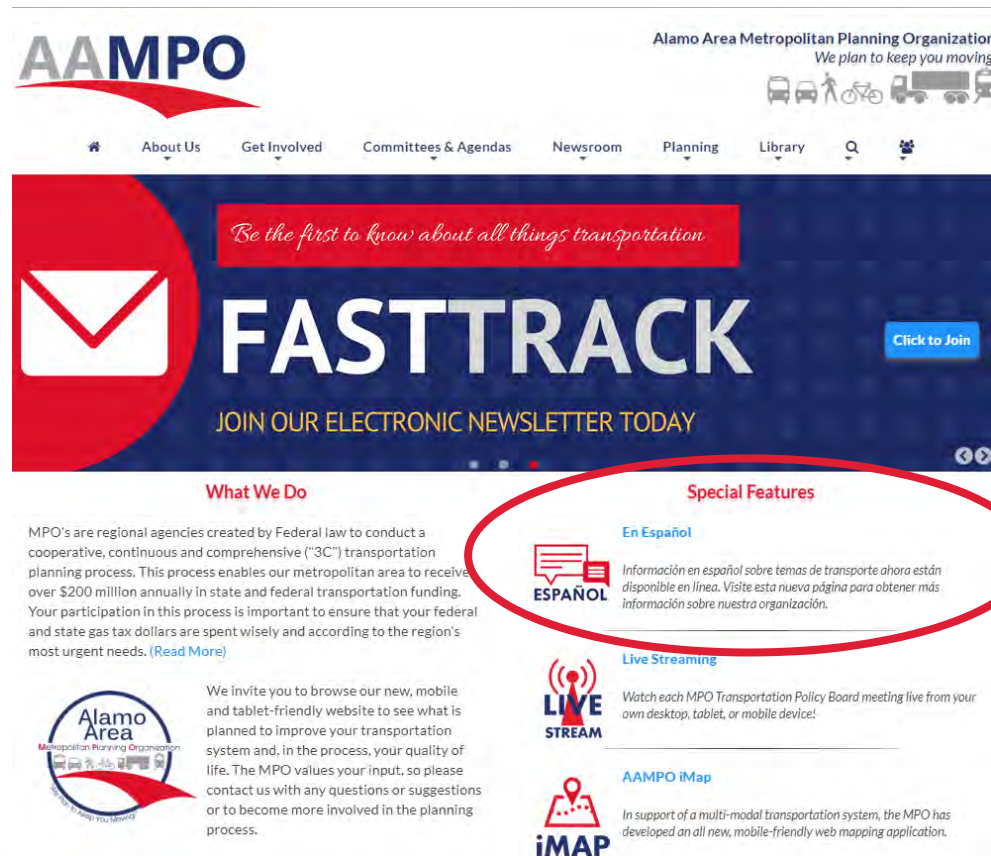
Walkable Community Workshops

- Eastwood Village Neighborhood Association
- Hot Wells & East Pyron/Symphony Lane Neighborhood Association



Spanish Landing Page

- <http://www.alamoareampo.org/Espanol>
- Spanish language videos, monthly infographics, brochures, policies & plans are available in one centralized location



Information available in Spanish



AIRE LIMPIO

A partir de julio de 2010, el condado de Bexar oficialmente excede las estándares nacionales de la calidad del aire. Aquí hay algunas maneras sencillas de ayudar a reducir la contaminación de vehículos:

- REVISE SUS LLANTAS:** Revise la presión de aire de sus neumáticos mensualmente. La salud de las llantas le ahorra hasta un 5% en combustible y reduce la contaminación del vehículo.
- DELE UN DESCANSO A SU VEHÍCULO:** Trate otras formas de llegar al trabajo como caminar, viajes compartidos, transporte público, bicicleta, a trabajar desde la casa, al menos un día al mes, o la semana o más.
- EVITE EL DRIVE-THRU Y CAMINE:** Apague el automóvil y volver a encenderlo consume menos gasolina que el tiempo de ralentí, hasta solo 30 segundos.
- LENE DESPUES DEL ATARDECER:** La luz solar y los contaminantes emitidos por los automóviles forman una reacción química, resultando en ozono a nivel del suelo. Ponga gasolina después de las 6 p.m.

www.alamoareampo.org/airquality
f /alamoareaampo

CICLISMO SEGURO

El ciclismo es una forma de transporte divertida, saludable, y ecológica. Manténgase seguro al andar en bicicleta siguiendo estos consejos:

- ESTE PREPARADO:** Antes de cada viaje, revise el aire en sus llantas, sus frenos y la cadena. ¡Use su casco para cada viaje!
- SEA PREDECIBLE:** Viaje en línea recta. Señale sus vueltas, y deténgase en señales de alto.
- SEA VISIBLE:** Use una luz delantera y trasera en su bicicleta. Use ropa brillante y reflectante. Viaje con el tráfico y fuera de las aceras.
- SEA CONSCIENTE:** Evite distracciones de teléfonos, audífonos y sistemas de navegación. Examine el camino por si hay obstrucciones.

En el primer año de viajar en bicicleta al trabajo, los ciclistas reducen su riesgo de enfermedad cardíaca al **13 libras** **50%**

www.alamoareampo.org/Bike-Ped
f /alamoareaampo

CAMINAR SEGURO

Caminar es una forma de transporte divertida, saludable y ecológica. Manténgase seguro mientras camina siguiendo estos consejos:

- ESTE PREPARADO:** Al cruzar la calle, mire a la izquierda, a la derecha y de nuevo a la izquierda.
- SEA PREDECIBLE:** Siempre use la acera y el paso de peatones. Si no están disponibles, camine de frente al tráfico y cruce la calle en un lugar bien iluminado.
- SEA VISIBLE:** Haga contacto visual con los conductores antes de cruzar la calle. Use ropa brillante y reflectante.
- SEA CONSCIENTE:** No camine mientras está en su teléfono o si tiene problemas de alcohol u otras sustancias. Siempre esté al pendiente de los vehículos que van a voltear.

Caminar regularmente puede reducir su riesgo de enfermedad cardíaca al **30%** **33%**

www.alamoareampo.org/Bike-Ped
f /alamoareaampo

El fin de semana de Memorial Day marca el inicio de la temporada de vacaciones de verano.

El año pasado, hubo 19 choques severos en el área del Álamo Area durante el fin de semana festivo. (25-29 de mayo de 2017)

Sea un ejemplo: maneje sobrio, abroche su cinturón de seguridad, y controle su velocidad

1/3 involucró alcohol

7% de las personas no estaban abrochadas

Mitad involucró velocidades inseguras

www.alamoareampo.org

El 1 de marzo inicia la TEMPORADA DE OZONO

SEÑORAS Y SEÑORES DETENGAN SUS MOTORES!

Estar al ralentí por solo 10 segundos desperdicia más gasolina que reiniciar el motor. La próxima vez que espere en alguna fila, apague su motor.

www.alamoareampo.org/airquality

2018 AÑO NUEVO, ¡NUEVAS RESOLUCIONES!

El lugar del transporte en la promoción de la actividad física

11% de las personas que usan transporte público también caminan o usan bicicleta.

47% de las personas que usan transporte público también caminan o usan bicicleta.

65% de las personas que usan transporte público también caminan o usan bicicleta.

30% de las personas que usan transporte público también caminan o usan bicicleta.

www.alamoareampo.org

VISION CERO

Una estrategia para eliminar todas las muertes y lesiones graves de tráfico.

154 CHOQUES En 2017 algunos conduciendo

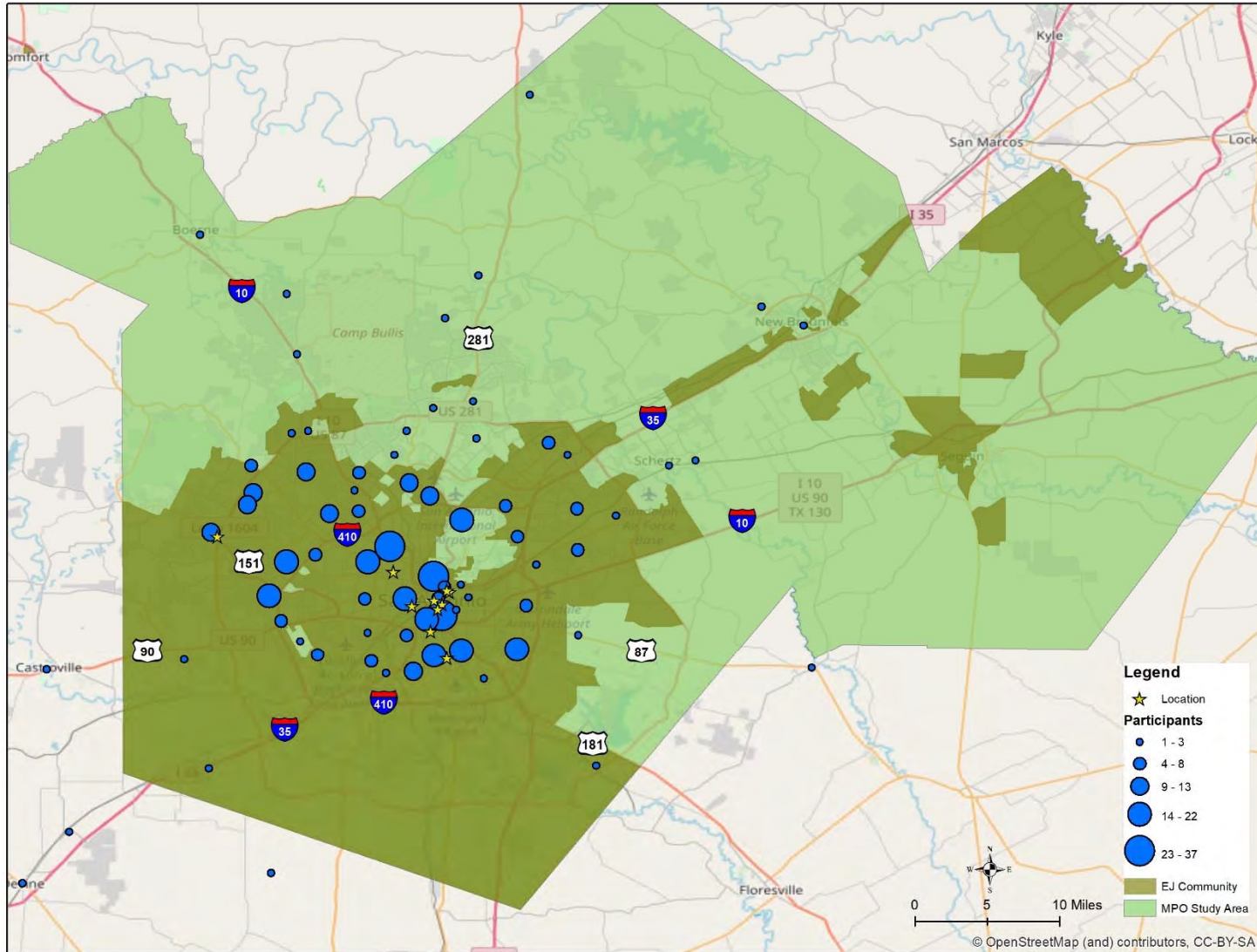
2017 DATOS DE CHOQUES

	TOTAL	SEVEROS	LEVES
VEHICULOS	56,149	263	55,886
PEATONES	744	59	685
BICICLETAS	335	4	331

59 PERSONAS MURIERON MIENTRAS CAMINABAN EN NUESTRA REGION. Esto es un promedio por 2 personas por hora.

www.alamoareampo.org

Environmental Justice Outreach





Questions?

Ambar Perez | Bilingual Public Involvement Specialist

8. Discussion and Appropriate Action on Air Quality Status and Metropolitan Transportation Plan Development**Purpose**

The purpose of this agenda item is to receive an update from the MPO staff on the region's air quality status and its effect on the update of the Metropolitan Transportation Plan.

Issue

On July 17, 2018, the U.S. Environmental Protection Agency (EPA) officially designated Bexar County as nonattainment for the 2015 ozone standard. On the same day, seven other counties in the San Antonio area received an attainment/unclassifiable designation including Atascosa, Bandera, Comal, Guadalupe, Kendall, Medina, and Wilson.

The nonattainment designation will take effect 60 days after a notice summarizing the action is published in the Federal Register (September 24, 2018). At that point, the MPO will have one year to submit an approved Transportation Conformity Document along with the region's short and long range plans.

The MPO is in the process of updating its Metropolitan Transportation Plan (MTP). Draft MTP chapters:

- Demographics
- Public Involvement
- Active Transportation
- Roadway System
- Environmental
- Financial Information

are attached for your review.

The Congestion Management chapter was provided under agenda item #6

The presentation is attached.

Action Requested

None. For information and discussion only.



Discussion and Appropriate Action on Air Quality Status and Metropolitan Transportation Plan Development



Nonattainment designation on July 17, 2018

Effective date: **September 24, 2018**

- Bexar County was designated marginal nonattainment
- Atascosa, Bandera, Comal, Guadalupe, Kendall, Medina, and Wilson were designated attainment/unclassifiable

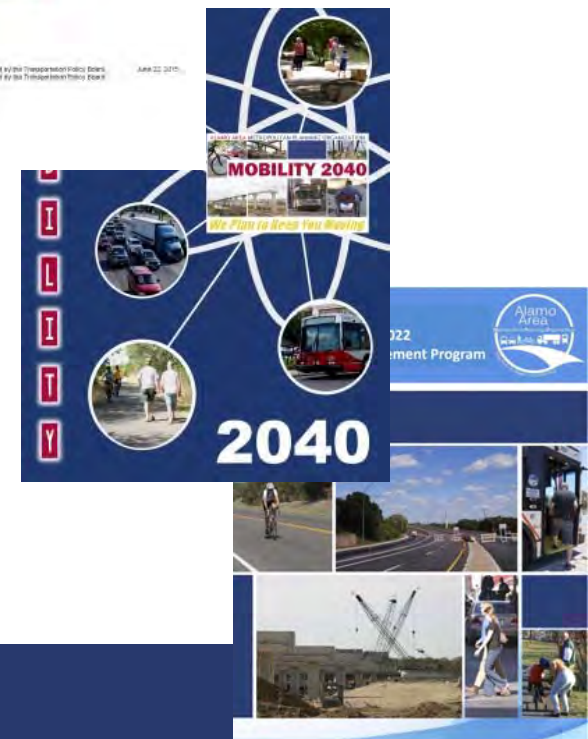




Impact on AAMPO's transportation planning: Transportation Conformity

As the regional, multi-modal transportation planning agency, the Alamo Area MPO is responsible for:

- Guiding the region's transportation planning process
- Allocating federal transportation funding to projects and programs
- **Determining transportation conformity on TIP and MTP (short- and long-range plans)**





MTP Update is Underway

MTP draft chapters provided in September:

- Demographics
- Public Involvement
- Active Transportation
- Roadway System
- Environmental
- Financial Information

MTP draft chapters expected in October:

- Executive Summary
- Introduction
- Transit
- Technology
- Performance Measures
- Project Lists

Complete draft MTP document in December



Interagency Consultation Partners Meeting

September 5, 2018

Transportation conformity process requires “interagency consultation”

- Between **federal, state and local partners**
- Process begins **approximately one year before** TIP/MTP updates/amendments occur



U.S. Department
of Transportation

**Federal Highway
Administration**



U.S. Department
of Transportation

**Federal Transit
Administration**



**TEXAS COMMISSION
ON ENVIRONMENTAL QUALITY**





Interagency Consultation Partners Meeting

September 5, 2018

- Network Milestone Years
 - 2017 (baseline), 2024, 2025, 2035 and 2045
- FHWA/EPA is reviewing a potential requirement for conducting transportation conformity of Regionally Significant Projects outside the NA area that may affect travel inside the NA area
- October 4th (9:00 a.m. – noon): TxDOT San Antonio is holding a project-level conformity training



Upcoming Schedule



2018

July 17

EPA designates Bexar County nonattainment for ozone. All other counties in the San Antonio-New Braunfels MSA designated Attainment / Unclassifiable

August

Presentations to TAC / TPB on MTP and Air Quality

September

Effective date of designation – clock starts for AAMPO to prove Transportation Conformity

Presentations to TAC / TPB, as needed

October

Presentations to TAC / TPB, as needed

November

All model runs are complete

Hold MTP public meetings in all four counties

December

Presentations to TAC / TPB on MTP (public meeting outcomes) and Air Quality

2019

January

Presentations to TAC / TPB on MTP and Conformity ("Presentation")

Begin 60-day public comment period on Conformity document

February

Hold AQ public meeting (Bexar County only)

Hold or cancel February TAC / TPB?

March

Presentation to TAC / TPB, as needed

April

Action by TAC / TPB on TIP, MTP and Transportation Conformity

AAMPO staff sends Conformity document to Interagency Consultation Partners

...

Interagency Consultation Partner comment and response period

September

Transportation Conformity deadline

Interagency Consultation Partners provide concurrence letter (FHWA's letter is final approval)



MTP Public Meetings

- Thursday, November 1: New Braunfels Civic/Convention Center, 375 S Castell Ave, New Braunfels, TX 78130
 - Thursday, November 8: Kronkosky Place, 17 Old San Antonio Road, Boerne, TX 78006
 - Tuesday, November 13: Seguin Public Library, 313 W. Nolte Street, Seguin, TX 78155
 - Thursday, November 15: VMC Community Room, 1021 San Pedro, San Antonio, TX 78212
-
- ❖ All meetings will be similar in content and format
 - ❖ Presentation begins at 6:00 p.m.
 - ❖ Online public input component will be available



Questions?

DEMOGRAPHICS

MOVING PEOPLE
CONNECTING PLACES



Forecasting population and employment growth for the region helps transportation planners understand what the potential impact of that growth will be on the regional transportation network. By getting a sense of future travel demand, planners can help policy makes make decisions about which projects may be needed to meet future demand. This chapter outlines the process used to develop demographic projections for this update of the MPO's Metropolitan Transportation Plan, including basic assumptions.

Accomplishments Over the Past Five Years

Since the last MTP update, several partner agencies have been working to enact policies and initiatives that support the growth scenario adopted under Mobility 2040. The City of San Antonio embarked on a long range planning effort based on this scenario to develop SA Tomorrow, a three-pronged planning effort to guide the city toward smart, sustainable growth. SA Tomorrow was adopted on August 11, 2016, and consists of a Comprehensive Plan, Sustainability Plan, and a Multimodal Transportation Plan. Similarly, VIA Metropolitan Transit also developed their long-range plan using the growth scenario adopted in Mobility 2040. Their plan was adopted by the VIA Board on August 23, 2016. The City of New Braunfels is on track

to adopt Envision New Braunfels which is a city-wide effort to develop a vision and roadway for New Braunfels through 2030.

Background

The basis of any effective planning effort rests primarily on a determination of the area's demographics (population, household size, employment, household income, and land use) and future projections of these demographics.

The process for forecasting future growth in population and employment is not an exact science. What is needed for the transportation planning process is a "comfort level" with the demographic control totals used to predict future travel. The tendency is to be more comfortable with the recent trends. If the economy is doing well and jobs and housing are expanding, the tendency is to select an optimistic forecast. The tendency to select a conservative forecast usually occurs if the current or most recent trend is decreasing or if a flat economy exists. Upturns and downturns in the economy occur in cycles that, over a 20 or 30-year time span, tend to counteract each other.

If a conservative approach is taken and selected control totals are too low then the risk is to be behind in planning for needed infrastructure. If the control totals are too optimistic, this could result in a false or premature justification for roadway and/or transit infrastructure improvements.

Given 1) the amount of time and resources expended to develop the growth scenario adopted by the Transportation Policy Board under Mobility 2040, 2) the extent of other planning efforts conducted using this data, 3) the knowledge that forecasting future growth in population and employment is not an exact science, and 4) the MPO expected to be designated nonattainment for ozone in October 2017 and there was a need to expedite the planning process, the MPO opted to interpolate and extrapolate future milestone years from the adopted growth scenario and check for reasonableness rather instead of going through another scenario planning process.

Mobility 2040 used 2010 as the base year to include 2010 census data and workforce development data. The source of future year population control totals at the county level was the Texas State Data Center. The scenario was based on a five-year population trend that indicated a greater amount of infill development and growth in the Center City. Employment projections were calculated using a locally developed formula that more realistically linked population with employment data for both the urban, suburban and rural counties. Population and employment projections were made at ten year intervals: 2020, 2030 and 2040.

For Mobility 2045, population and employment data was interpolated from the previously adopted data points. The 2015 demographics were interpolated from the 2010 and 2020 data.

Similarly, the 2025 demographics were interpolated from the 2020 and 2030 data. The 2045 demographics were extrapolated beyond the 2040 data. These demographics were checked for their reasonableness given the extreme growth of the region.

Table 1 - Population Control Totals by County

Population	2015	2045	Growth	% Change
Bexar County	1,898,173	3,004,011	1,105,838	58%
Comal County	134,019	287,655	153,636	115%
Guadalupe County	165,183	365,048	199,865	121%
Kendall County	38,314	67,539	29,225	76%
Total Region	2,235,689	3,724,253	1,488,564	67%

Table 2 - Employment Control Totals by County

Employment	2015	2045	Growth	% Change
Bexar County	893,782	1,571,410	677,628	76%
Comal County	52,683	119,352	66,669	127%
Guadalupe County	41,862	102,824	60,962	146%
Kendall County	13,707	24,728	11,021	80%
Total Region	1,002,034	1,818,314	816,280	81%

Figure 1Figure 2 show the 2045 population and employment density while Figure 3 through Figure 6 show the 2015 population, 2045 population, 2015 employment and 2045 employment distribution used for this update of the Plan.

Figure 1 – 2045 Population Density Map

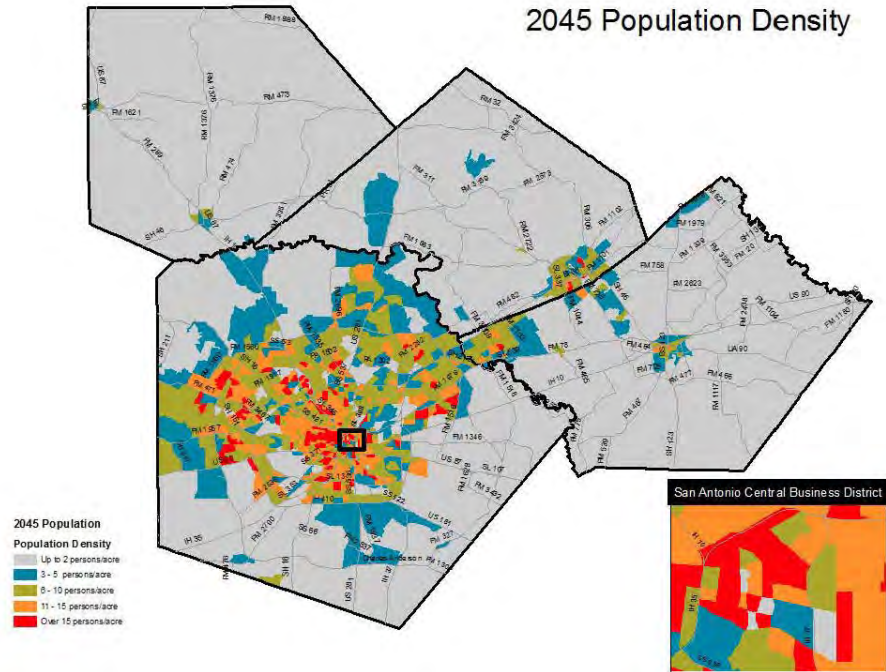


Figure 2 – 2045 Employment Density Map

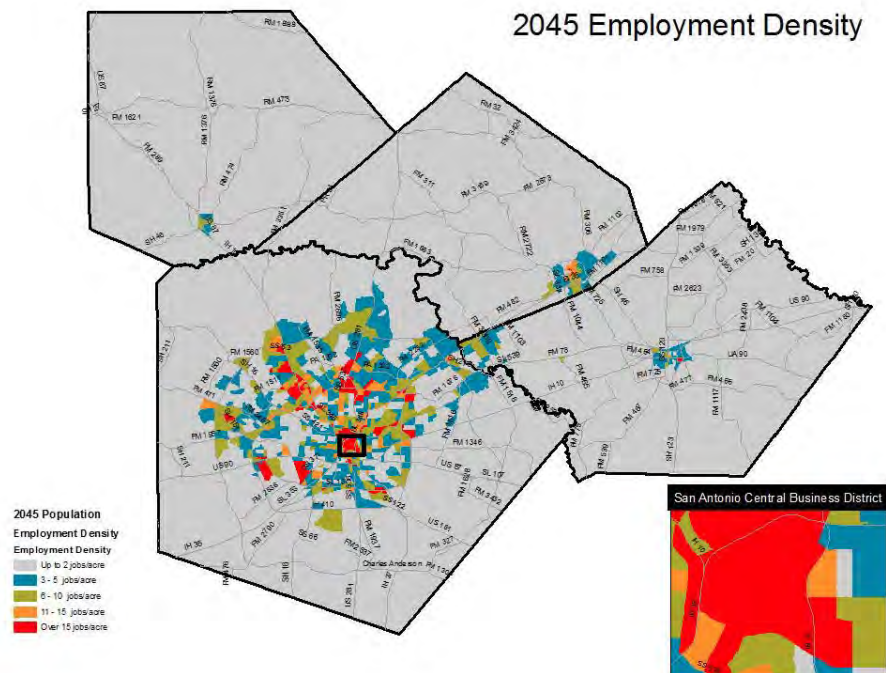


Figure 3 – 2015 Population Dot Map

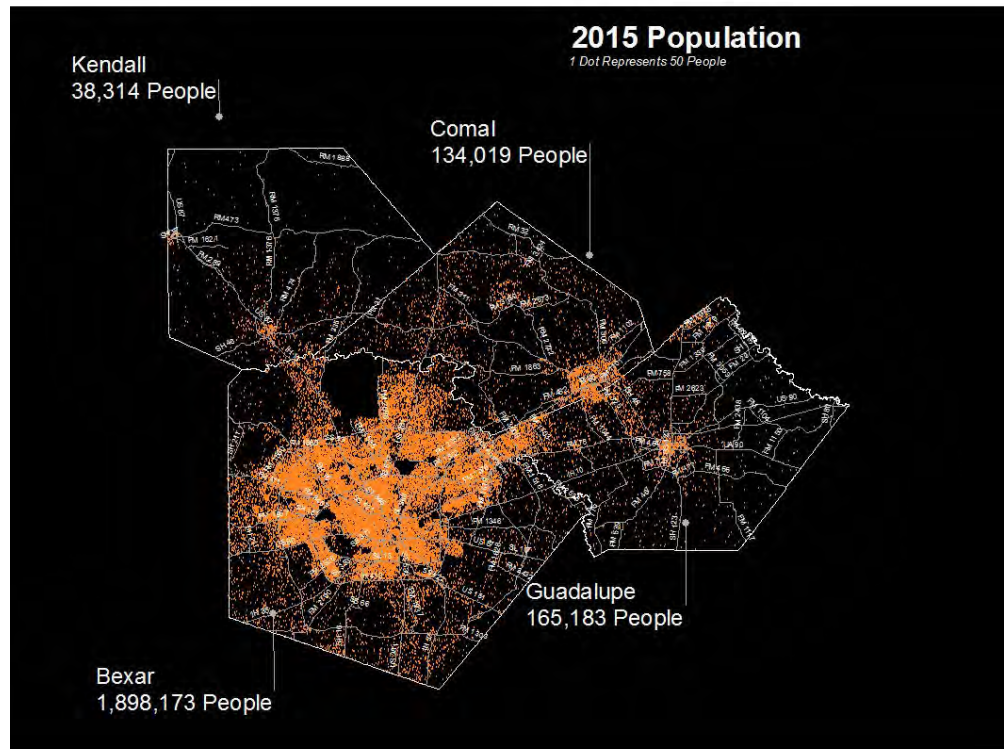


Figure 4 – 2045 Population Forecast Dot Map

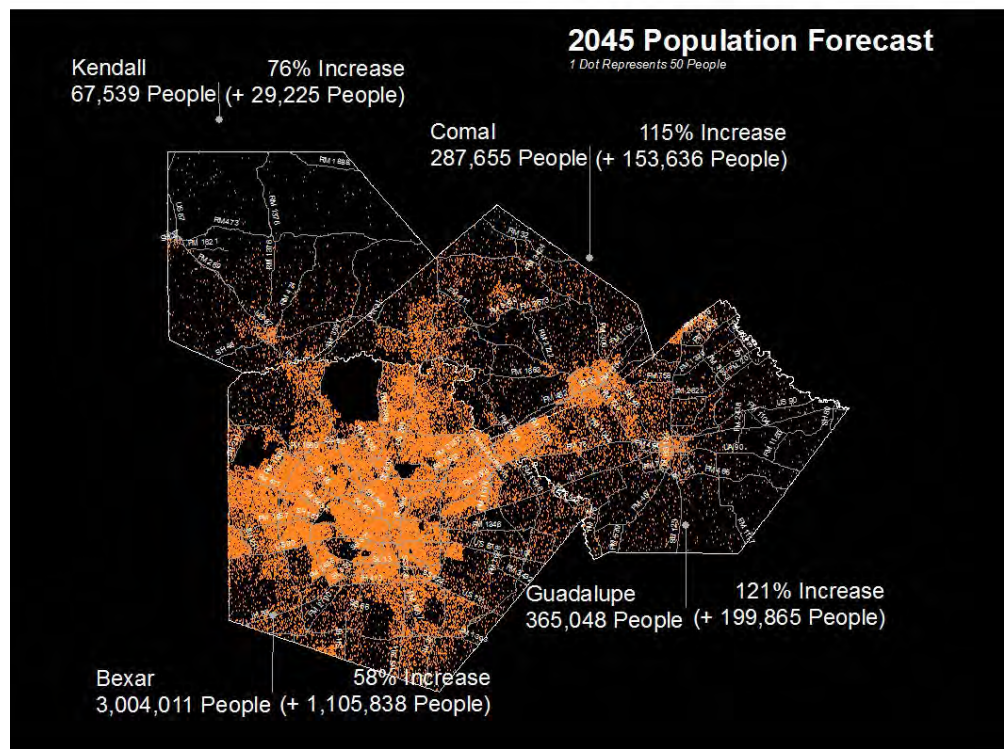


Figure 5 – 2015 Employment Dot Map

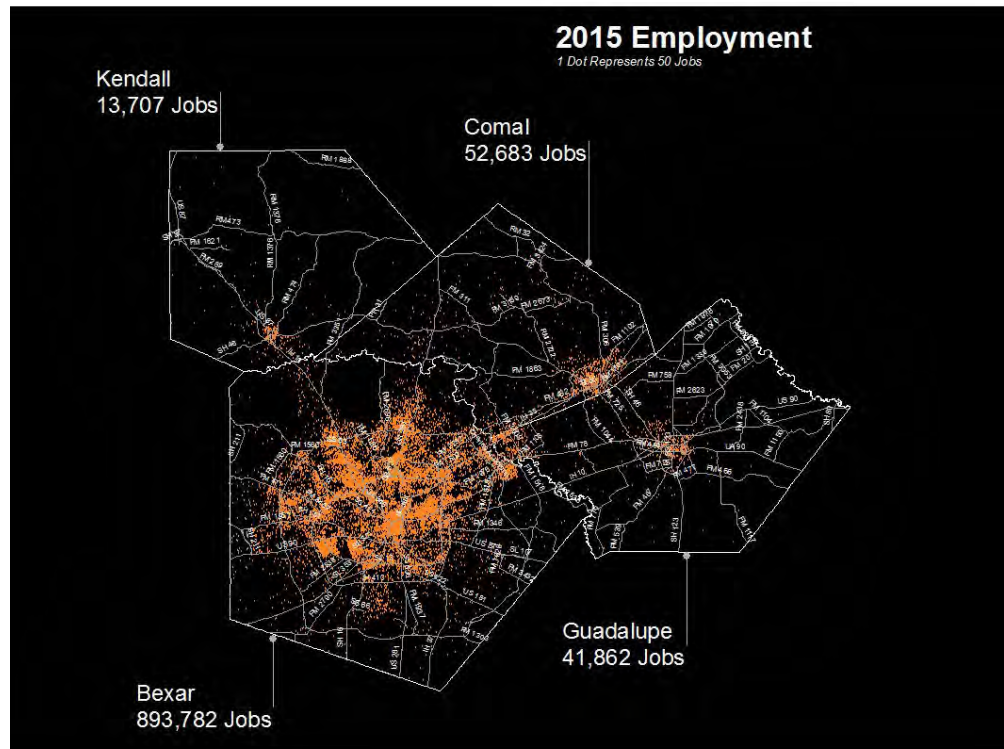
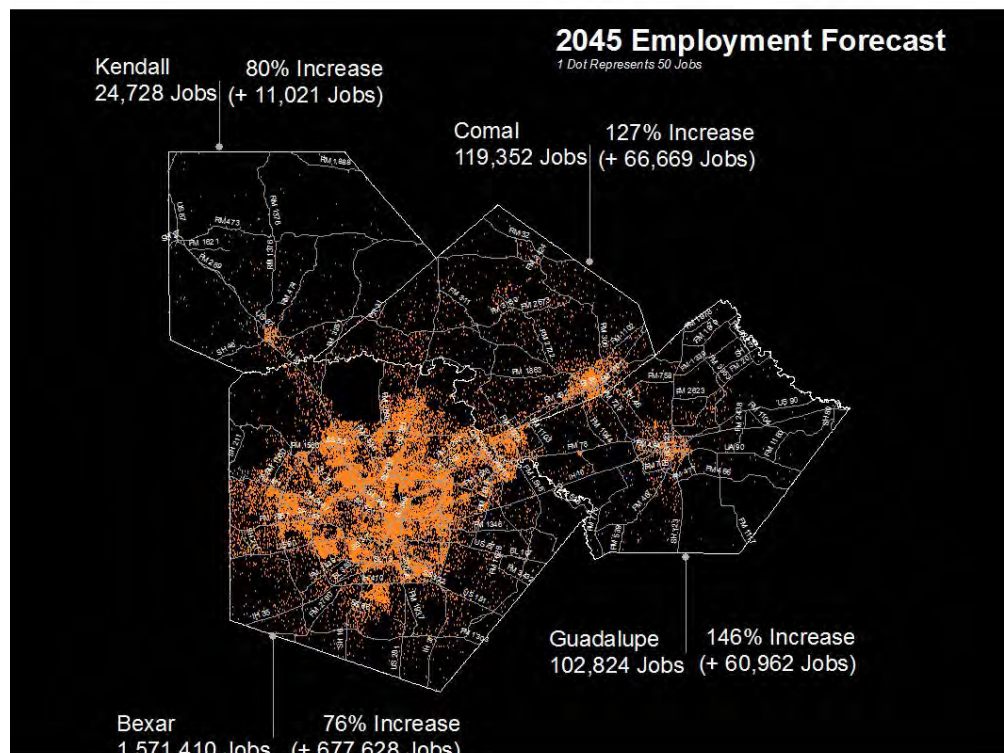


Figure 6 – 2045 Employment Forecast Dot Map



PUBLIC INVOLVEMENT

MOVING PEOPLE
CONNECTING PLACES



Public involvement is one of the cornerstones of transportation planning. Engaging the people who are most affected or who stand to benefit from transportation projects is a big part of an MPO's role in the community. At AAMPO, our goal is to inform, involve, and engage with people in a two-way conversation about transportation needs, challenges, and most importantly – solutions. This chapter focuses on the outreach conducted as part of the long range planning process but it only captures a snapshot of all the MPO's public involvement efforts in the region.

Accomplishments over the Past Five Years

The Alamo Area Metropolitan Planning Organization (MPO) continues to have a strong public participation program by taking advantage of new technologies and opportunities. The MPO continues its Walkable Community Program with workshops, Street Skills classes, bike rodeos and bicycle helmet and light distribution; in-house development of English and Spanish language videos and public service announcements as well as English and Spanish language brochures; the MPO continues to publish its bi-weekly e-newsletter "Fast Track" and also continues to translate its quarterly newsletter to Spanish. The MPO is also active on Facebook, Instagram, Twitter and YouTube and continually enhances its website format and content (mobile friendly). All committee (Transportation Policy Board, Technical Advisory Committee,

Bicycle Mobility Advisory Committee and Pedestrian Mobility Advisory Committee) meeting materials are posted on the website one week prior to the meetings. Transportation Policy Board meetings are livestreamed in accordance with state law.

In December 2017, the MPO adopted an updated Public Participation Plan that aligns with the Fixing America's Surface Transportation (FAST) Act requirements. The MPO also has adopted a Limited English Proficiency Plan. The MPO continues to host the monthly regional Public Information Officers meeting where information is shared and events are cross-promoted. The MPO also participates several times a month with other organizations' activities such as health fairs, Earth Day, Fresh Air Friday, Solar Fest and other events. The MPO also conducts outreach to school age children through the annual GIS Day event and bicycle and pedestrian safety classes. The MPO continues to produce its own videos in house highlighting upcoming events and activities throughout the month.

The MPO completed successful public outreach efforts in the development of the FY 2017-2020 and FY 2019-2022 Transportation Improvement Programs, two Transportation Alternative project calls, this update of the Metropolitan Transportation Plan and the Transportation Conformity documentation, each with an active online public input component. In FY 2018, the MPO was highlighted by the Federal Highway Administration's On Ramp to Innovation: Every Day Counts 5 as an innovative practitioner in the area of Virtual Public Involvement for online public meetings, production of videos for social media, and incorporating Story Maps and online mapping tools as part of the public involvement process.

Background

The MPO's mission is to provide a continuous, comprehensive and coordinated ("3-C") regional transportation planning process for the safe and efficient movement of people and goods consistent with the community's overall economic, social and environmental goals.

The MPO believes in the proactive involvement of citizens, affected public agencies, representatives of transportation agency employees, private providers of transportation, and other interested parties in the development and updates of the MTP. Effective public involvement is integrated throughout the entire process. A proactive approach to an effective public involvement process requires several elements:

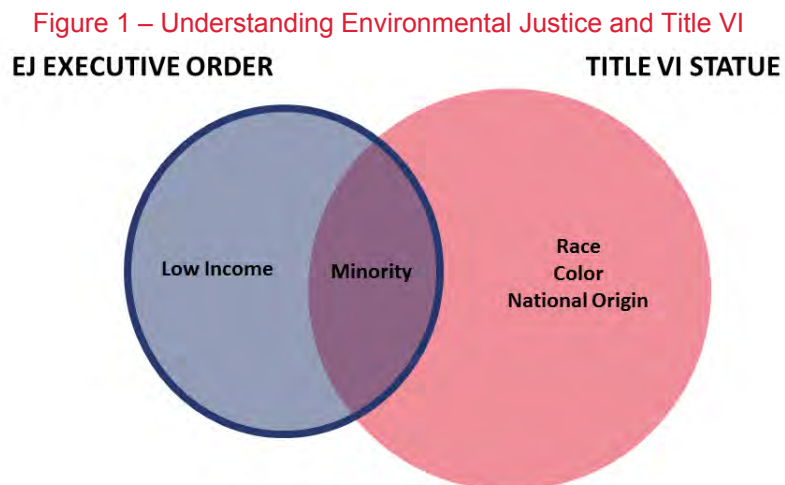
- Early, continuous, and meaningful public involvement;
- Reasonable public access to technical planning information;
- Collaborative input on transportation alternatives, evaluation criteria and mitigation needs;
- Transportation planning meetings that are open to the public; and
- Access to the planning and decision-making process prior to closure.

Title VI and Environmental Justice

Section 601 of the Civil Rights Act of 1964 prohibits discrimination “on the basis of race, color, or national origin” in any “program of activity receiving federal financial assistance.” The U.S. DOT’s Title VI regulations prohibit, among other things, actions that would have the “purpose or effect” of discriminating against individuals on the basis of race, color, or national origin. Thus, rather than only prohibiting intentional discrimination, the U.S. DOT Title VI regulations also prohibit actions that have a *disparate effect* on minorities. The U.S. DOT’s disparate-impact regulations were upheld by the Supreme Court in the early 1980s. Title VI applies to all programs and activities of Federal-aid recipients, subrecipients and contractors whether those programs and activities are federally funded or not.

In 1994 President Bill Clinton signed Executive Order No. 12898: Federal Action to Address Environmental Justice (EJ) in Minority Populations and Low-Income Populations. Executive Order 12898 expands on the Title VI Civil Rights Legislation and promotes nondiscrimination in federal programs that substantially affect human health and the environment. In addition, the order provides minority **and low-income** communities access to public information and opportunity for public participation in related matters. All programs that receive funding from federal agencies require Environmental Justice consideration in accordance with federal law.

While Title VI and Environmental Justice overlap, they are not one in the same as shown in Figure 1 below.



The MPO's public involvement activities work to meet and exceed both Title VI and Environmental Justice requirements which seek to:

- Avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority and low-income populations.
- Ensure the full and fair participation by all potentially affected communities in the transportation decision-making process.
- Prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations.
- Avoid discrimination of any kind against individuals on the basis of race, color, or national origin.

In addition to the definition above, the United States Department of Transportation (DOT) issued specific guidelines to MPOs regarding Environmental Justice. MPOs are to:

- Explore needs within minority communities.
- Involve minority communities and disabled persons in the transportation planning process.
- Include minorities/disabled persons on boards and committees in leadership roles.
- Document Title VI efforts.
- Advertise public meetings in places where minorities/disabled persons go.
- Hold meetings at times and places convenient for the minority community.
- Communicate in languages other than English.
- Consider special needs in public accommodations.
- Follow up with the minority community after public meetings, when decisions are made and after project implementation.

The MPO adheres to the Department of Transportation guidelines by conducting specific outreach in underserved communities by hosting public meetings in strategic locations, using the 'go to them' meeting approach, taking into account available transit service in determining meeting locations, translating information into Spanish, having Spanish speaking staff members available at all meetings, including minorities/disabled persons on committees, advertising public meetings and information in a variety of print media and documenting efforts.

Most recently, the MPO has worked to strengthen relationships with two low-income and minority communities by attending their monthly meetings and participating in community events. These include the Avenida Guadalupe Association on the near-westside of San Antonio and the National Association for the Advancement of Colored People on the near-eastside. Figure 2 illustrates the results of some of that ongoing engagement.

Figure 2 – Relationship Building with Avenida Guadalupe Association



MTP Public Meetings

For the development of the long-range transportation plan, in order to thoroughly engage the public and gather input the MPO hosted two formal rounds of public meetings throughout the region and completed the third Regional Transportation Attitude Survey. Opportunities to participate online were also available through the MPO website at www.alamoareampo.org. The purpose of the meetings was

- Phase 1:** Provide input on the regional vision statement and goals and review the population and employment forecasts for the region
- Phase 2:** Regional Transportation Attitude Survey III
- Phase 3:** Final review of the Plan document



The AAMPO used iPads and paper polls to allow people to participate how they felt most comfortable.

Phase I: Review of Vision, Goals and Demographic Forecasts

Public meetings were held to kick-off the MTP development process, obtain feedback on the draft vision and goals for the region, to review the population and employment projections, and provide opportunities for the public to get involved in the process. From October 25, 2013 through November 2, 2017, four public workshops were held – one in each of the counties on the MPO study area. The meeting held in Bexar County was also live streamed and an online public input opportunity, in both English and Spanish, was also provided.

Meeting times and locations were selected to allow meaningful coverage of the study area. The study team was also careful to identify locations that were ADA accessible with good access to transit, where available. Following is a list of the meeting locations, dates, and times.

Kendall County Public Meeting

- Wednesday, October 25, 2017, 6:00 p.m. – 8:00 p.m.
- Boerne Middle School South, 10 Cascade Caverns, Boerne

Bexar County Public Meeting (also live streamed)

- Thursday, October 26, 2017, 6:00 p.m. – 8:00 p.m.
- VIA Metro Center, 1021 San Pedro Ave., San Antonio

Comal County Public Meeting

- Monday, October 30, 2017, 6:00 p.m. – 8:00 p.m.
- New Braunfels Civic Center, 375 S. Castell Ave., New Braunfels



Guadalupe County Public Meeting

- Thursday, November 2, 2017, 6:00 p.m. – 8:00 p.m.
- Seguin - Guadalupe County Coliseum, 950 S. Austin St., Seguin

The four public meetings were similar in format and content and included a high level of audience participation. The input exercises were qualitative in nature and input was received using a smart phone or an iPad which were made available to the public for their use. Participants were asked to respond to the following.

- Give one word that describes:
 - Today's transportation system
 - The transportation system you hope we'll have in 2045
 - The walking environment you would like to see in 2045
 - The bicycling environment you would like to see in 2045
 - Transit you would like to see in 2045
 - The highways you would like to see in 2045
 - The major corridors, non-highway roadways you would like to see in 2045



From the responses, word clouds were developed. Some regional results and results by county are shown in Figure 3 through Figure 6.

Figure 3 – Overall Responses to *Today's Transportation System*



Figure 4 – Responses to *Today's Transportation System* by County

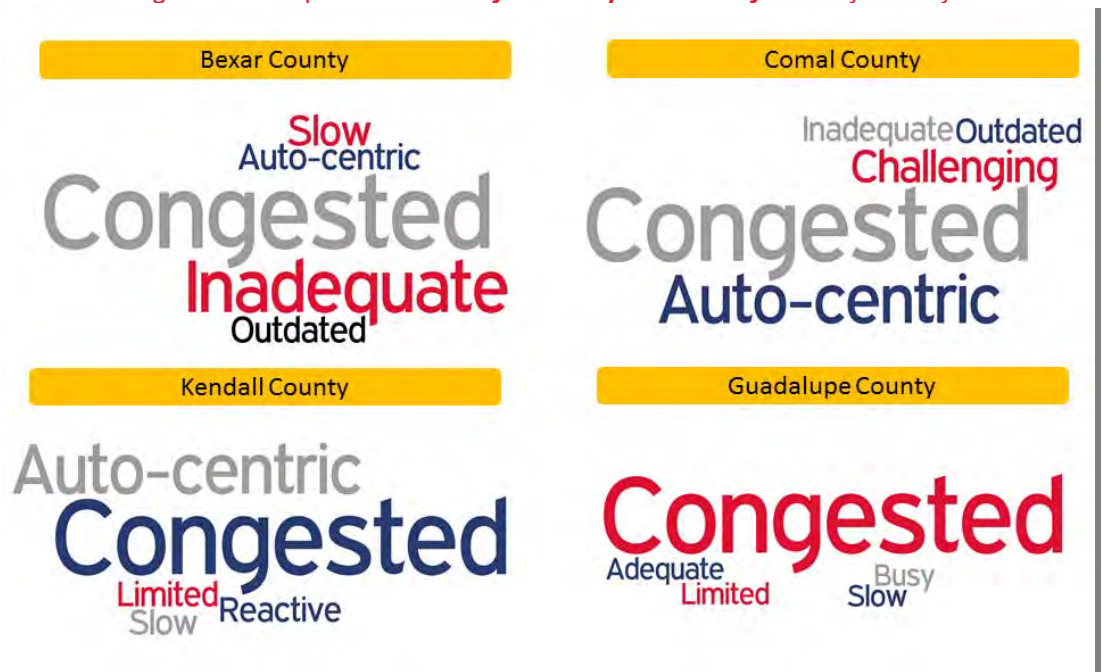


Figure 5 – Overall Responses to Hopes for Future Transportation System



Figure 6 – Responses to Hopes for Future Transportation System by County



Level of Importance Exercise

Next, participants were asked to respond to the following.

- On a scale of 1 to 5 where 1 means "highest level of importance" and 5 means "lowest level of importance", please indicate what level of importance should be placed on:
 - Building a network of bicycle lanes to make commuting by bicycle a better option.
 - building or widening sidewalks.
 - Relieving congestion by adding lanes.
 - relieving congestion by encouraging shared trips.
 - expanding bus service hours.
 - providing more frequent bus service.

Responses by county, all counties combined, and for online responses are shown in Table 1 – Level of Importance ExerciseTable 1.

Table 1 – Level of Importance Exercise

	Bexar	Comal	Guadalupe	Kendall	All Meetings	Online
Building a network of bicycle lanes to make commuting by bicycle a better option	2.00	2.63	3.62	3.38	2.91	3.15
Building or widening sidewalks	2.00	2.08	2.85	2.77	2.42	2.51
Relieving congestion by adding lanes	3.23	1.93	2.31	1.54	2.25	2.04
Relieving congestion by encouraging shared trips	2.46	2.68	3.15	2.77	2.77	2.89
Expanding bus service hours	2.42	2.58	4.00	2.90	2.97	2.91
Providing more frequent bus service.	2.00	2.05	3.92	2.90	2.72	2.72

Highlighting indicates highest priorities for that meeting or grouping.

Emoji Exercise

Similarly, the next series of questions asked about safety in different travel situations. People were asked to indicate how safe they felt by clicking on or circling an emoji that went from a dark green happy emoji to a bright red unhappy emoji. The various scenarios are described below and the results are shown in Figure 7 through

Figure 17.

- How safe do you feel walking in your neighborhood?
- How safe do you feel walking in your downtown?
- How safe do you feel riding a bicycle in your neighborhood?
- How safe do you feel riding a bicycle on major corridors?
- How safe do you feel riding a bicycle on a greenway or hike & bike trails?
- How safe do you feel crossing your neighborhood streets?
- How safe do you feel crossing major corridors?
- How safe do you feel driving on highways in rush hour?
- How safe do you feel driving on highways during normal traffic?
- How safe do you feel driving on major corridors during rush hour?
- How safe do you feel driving on major corridors during normal traffic?
- How would you rate our transportation system TODAY?

Figure 7 - How safe do you feel walking in your neighborhood?

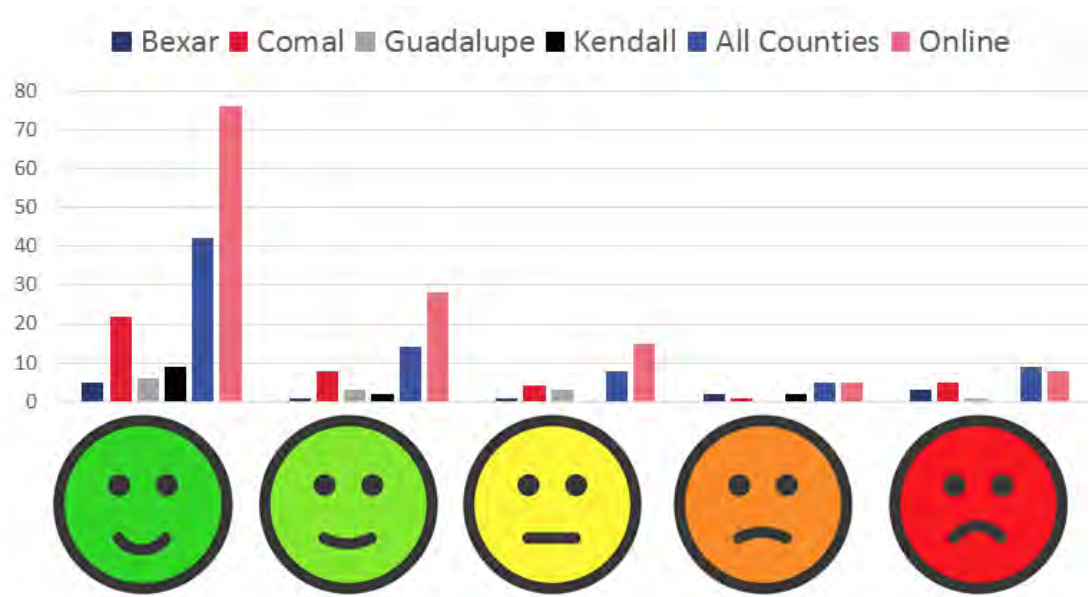


Figure 8 - How safe do you feel walking in your downtown?

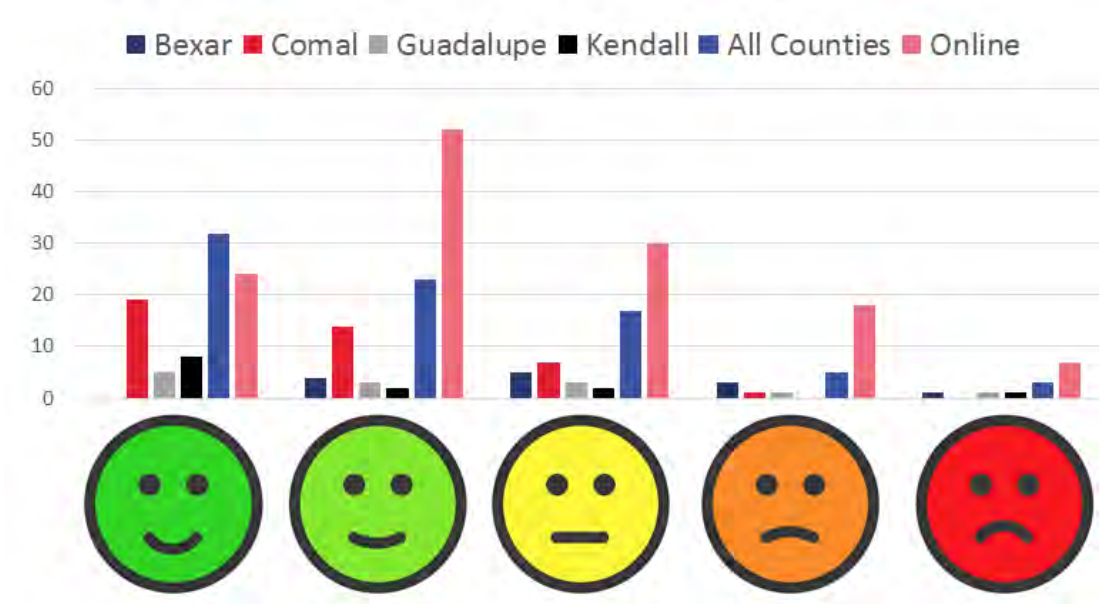


Figure 9 - How safe do you feel riding a bicycle in your neighborhood?

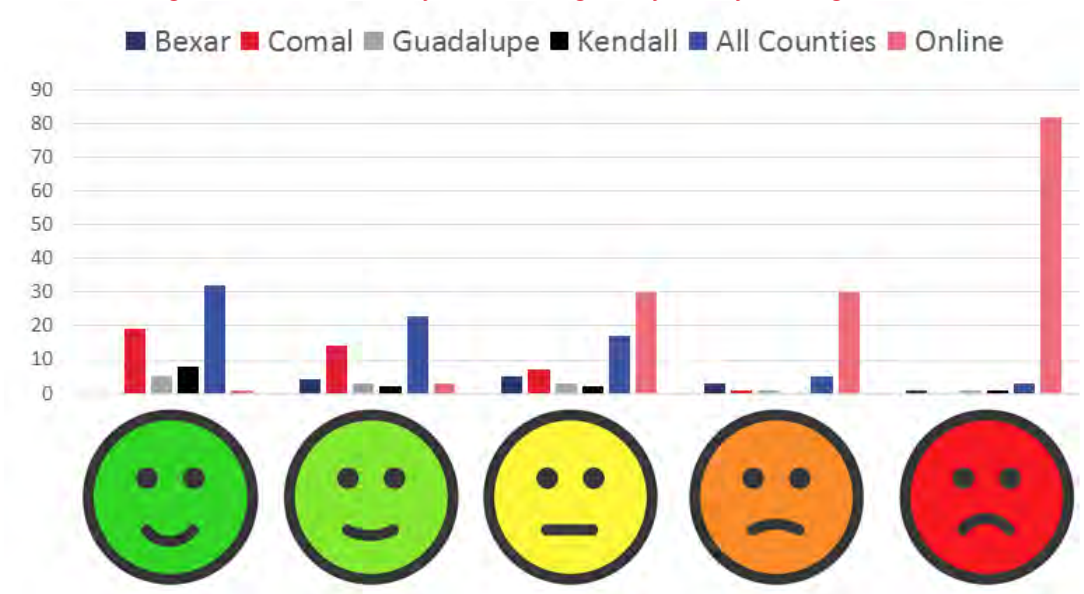


Figure 10 - How safe do you feel riding a bicycle on major corridors?

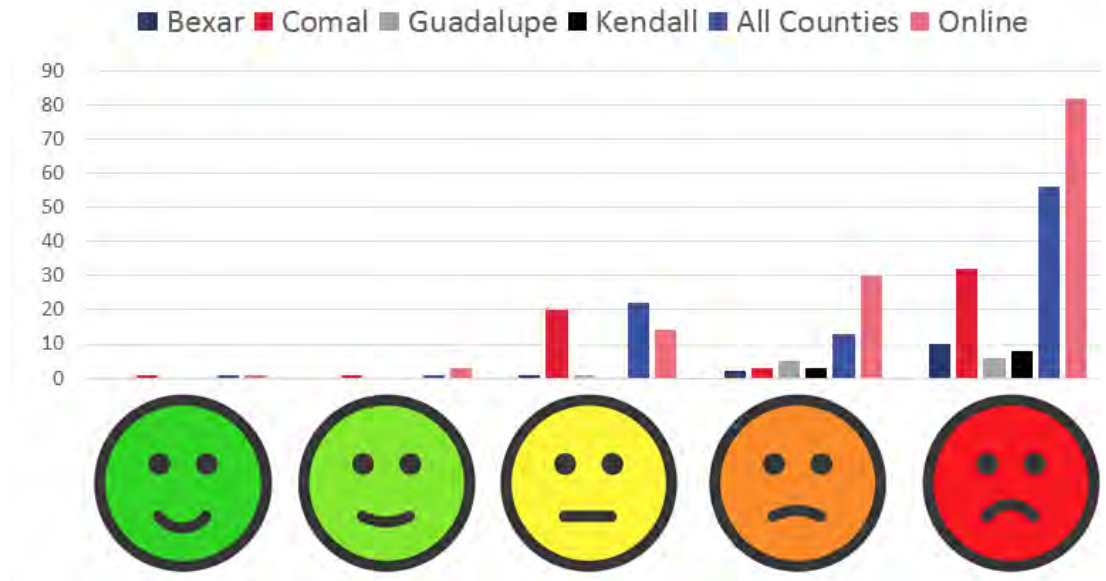


Figure 11 - How safe do you feel riding a bicycle on a greenway or hike & bike trails?

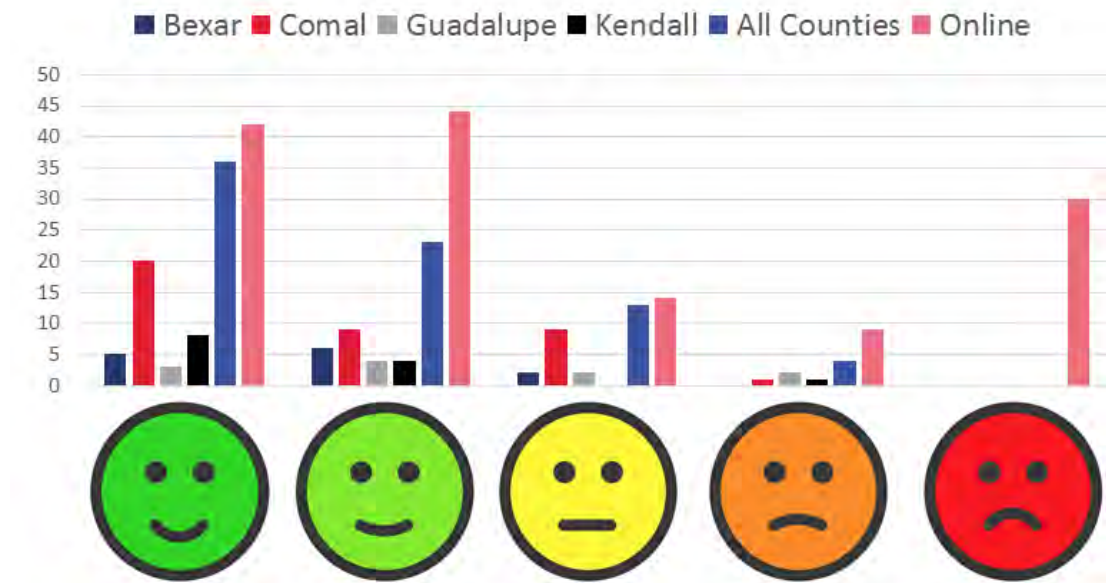


Figure 12 - How safe do you feel crossing your neighborhood streets?

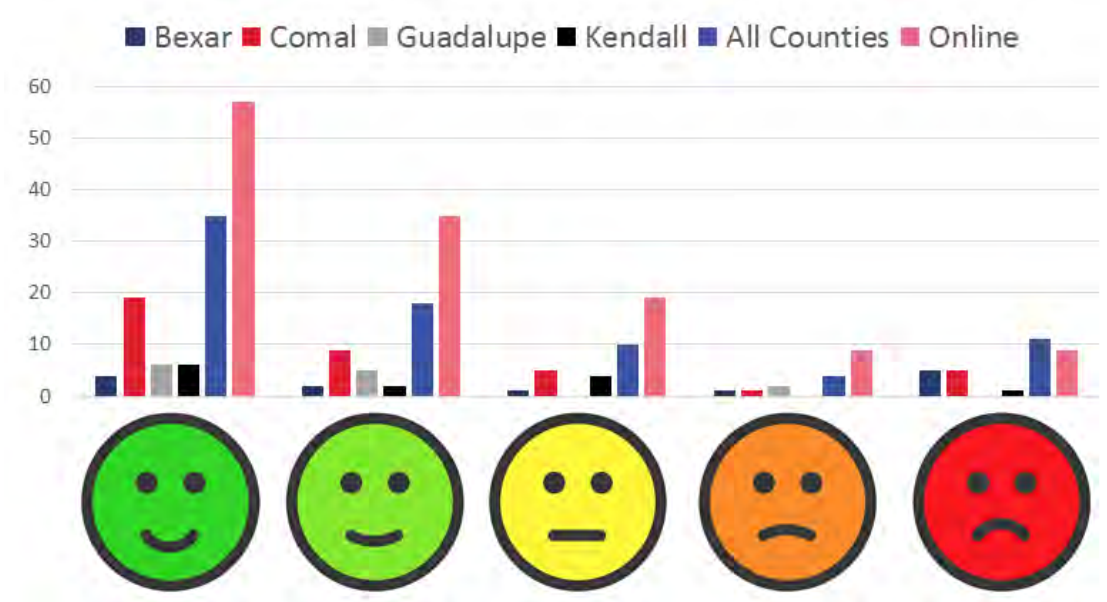


Figure 13 - How safe do you feel crossing major corridors?

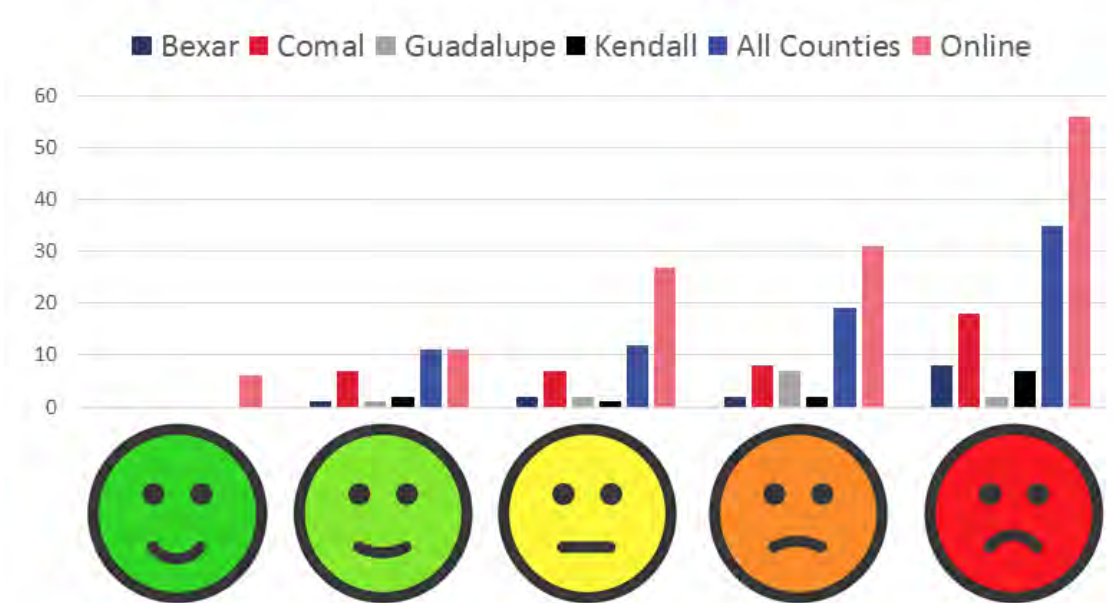


Figure 14 - How safe do you feel driving on highways in rush hour?

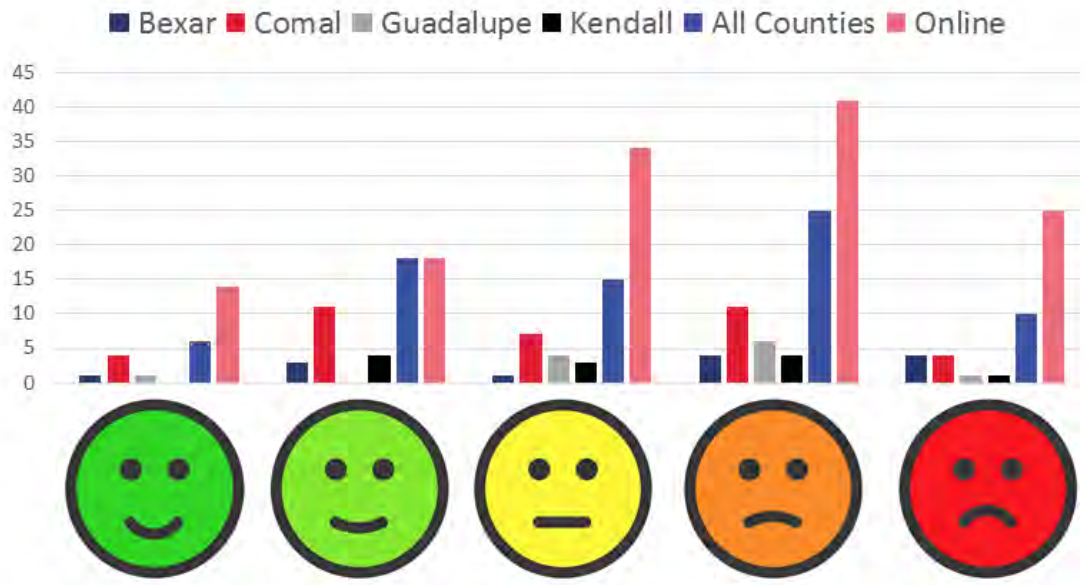


Figure 15 - How safe do you feel driving on highways during normal traffic?

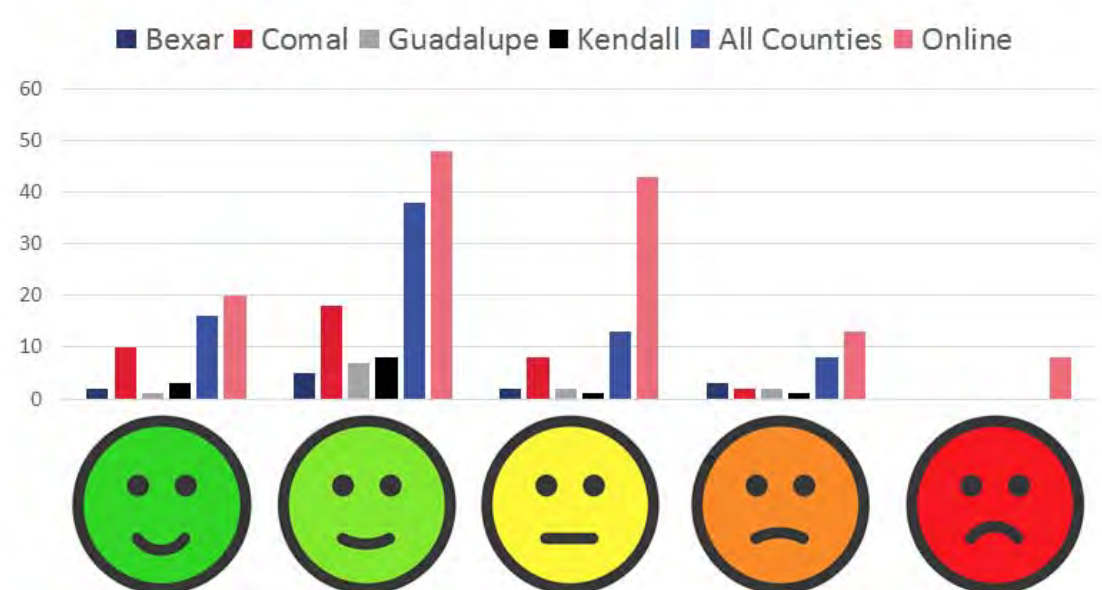


Figure 16 - How safe do you feel driving on major corridors during rush hour?

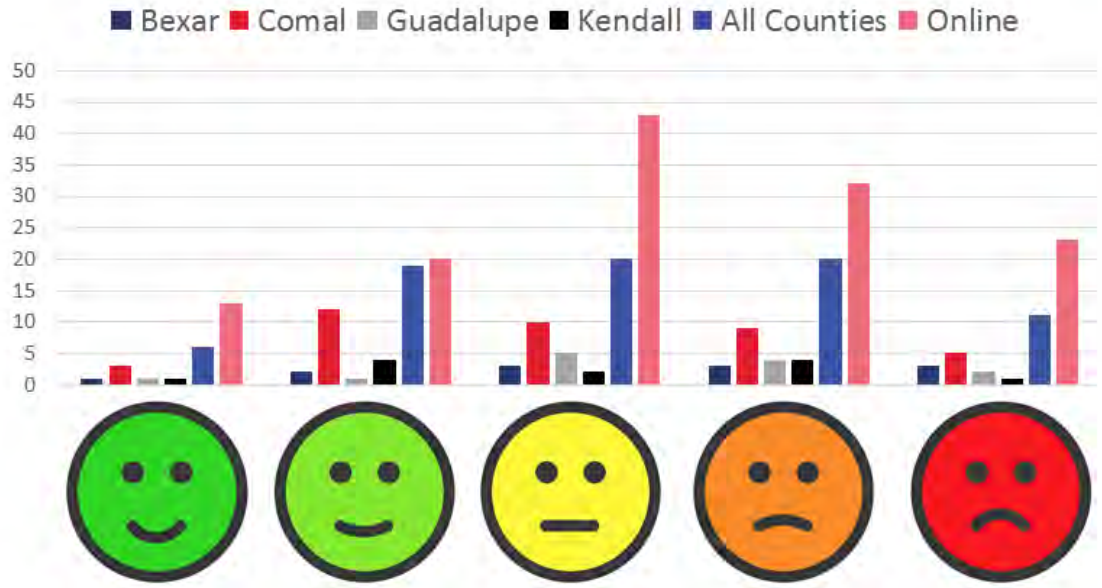
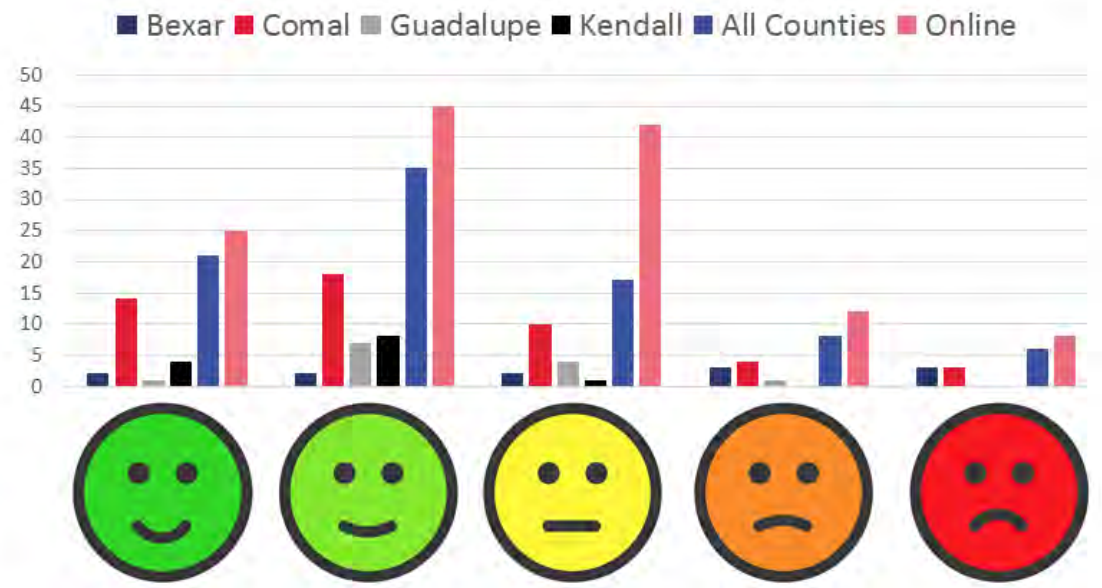
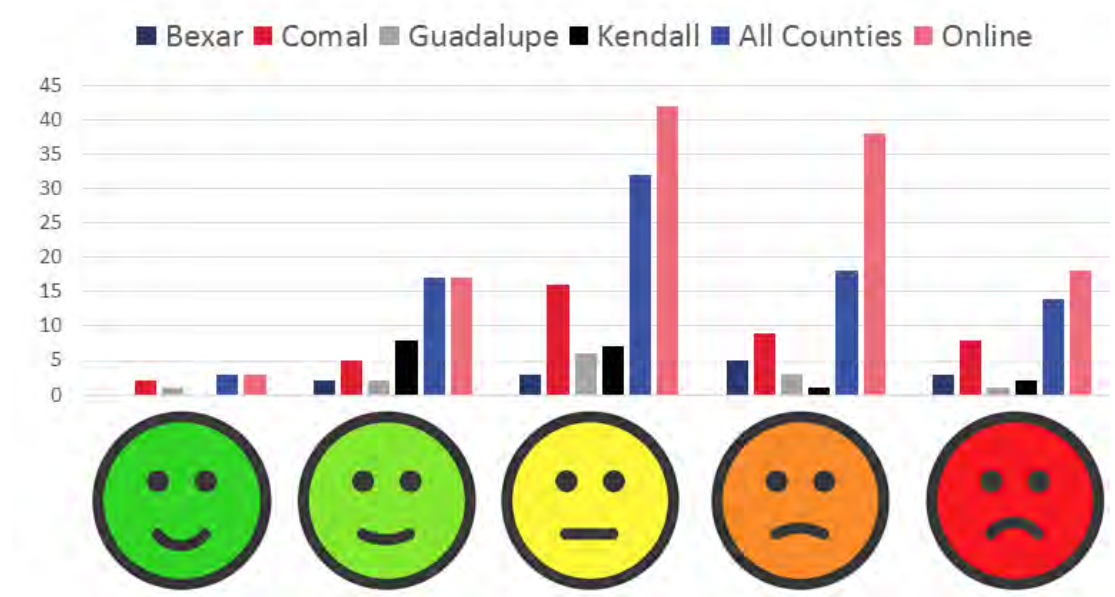


Figure 17 - How safe do you feel driving on major corridors during normal traffic?



Finally, participants were asked to indicate their current level of satisfaction with the transportation system currently in place. While some people indicated they were somewhat satisfied, the majority felt less than satisfied as shown in Figure 18 below.

Figure 18 – Satisfaction with Today's Transportation System by County



Station Exercises

Following the exercises and a brief presentation, participants were also asked to visit four stations and provide additional feedback on the Metropolitan Transportation Plan goals, readiness for different types of commuting options, and regional transportation challenges. The results for each of these exercises can be found on the following pages.

Station 1: Vision Statement

At this station, participants were asked to tell us what was missing from our vision statement, what was most important from the vision statement, and what, if anything, might need to be changed or come out. No one at any of the meetings held felt something should come out of the long-range plan vision statement.

Table 2 – Vision Statement Feedback

	Boerne October 25, 2017	San Antonio October 27, 2017	New Braunfels October 30, 2017	Seguin November 2, 2017
What's Missing	<ul style="list-style-type: none"> • Develop long-term integrated transportation plans and acquire right of ways • Long-term maintenance • Thinking about how our 25-year plan fits into longer term (maybe out 100 years?) 	<ul style="list-style-type: none"> • Keep transit affordable • Private/Public Ridesharing commuting solutions • Private Companies need more involvement 	<ul style="list-style-type: none"> • Efficiency • Get people where they need to go more quickly • Bike lanes (bike owners own cars too and should be able to travel safely) • Better funding for road improvements • Equity • Financing & sidewalks • Multiple routes in/out of areas (dead ends) • Financing • Connected within the city and to other cities 	<ul style="list-style-type: none"> • You do not mention retain individual rights (esp. land owners) • Rural property protection

	Boerne October 25, 2017	San Antonio October 27, 2017	New Braunfels October 30, 2017	Seguin November 2, 2017
<i>What's Really Important</i>	<ul style="list-style-type: none"> • Land use patterns • Enhancing safety of the public • Safety of the traveling public • Advancing sustainable modes of transportation • Advancing sustainable modes • Land use and sustainable modes of transportation • Foster appropriate land use 	<ul style="list-style-type: none"> • Affordable transportation • Safety • Environmental Quality: Air (federal penalties and cost for infrastructure) and Water (aquifer) • Vision Zero emphasis • County Land Use Patterns • Bike/Ped Safety 	<ul style="list-style-type: none"> • Ensuring environmental quality - using low impact development; avoiding new roads on Edwards recharge • Advancing sustainable modes of transportation • Emphasis should remain on mode 95-97% of commuters use, which is roads. Bikes and pedestrians shouldn't be getting highway dollars. Those modes should be addressed at city level • One size doesn't fit all. AAMPO is a diverse area • Bike lanes are not used. Stop implementing them • Integration of govt agencies (TCEQ, TxDOT, EPA, city and county officials) • We as young people don't prefer bikes and walking. I love the independence of my vehicle! • Quarries killing Comal County. Institute impact tax • Put the money under the road pavements - do not waste it on toll roads (?) • Safe ways to walk or bike from neighborhoods to parks, destinations and work/school 	<ul style="list-style-type: none"> • All goals are admirable but difficult to achieve • Don't confuse rural & urban areas
<i>What Needs to Come out?</i>	<ul style="list-style-type: none"> • Nothing listed 	<ul style="list-style-type: none"> • Nothing listed 	<ul style="list-style-type: none"> • Nothing listed 	<ul style="list-style-type: none"> • Nothing listed

Station 2: Goals

At this station participants were given three dots and asked to put the dots next to the goals that were most important to them. What we hoped to learn: Do these goals still reflect the community's priorities?

Table 3 – Goal Feedback Station

Location Total Respondents	System Preservation		System Efficiency		Transit		Environment		Economic Development		Public Involvement		Land use		Safety		Sustainable Funding		Other: None	
Boerne 43	5	11%	11	26%	0	0%	3	7%	3	7%	4	9%	12	28%	2	5%	3	7%	0	0%
San Antonio 19	1	5%	1	5%	3	16%	2	11%	2	11%	2	11%	1	5%	4	21%	2	11%	1	5%
New Braunfels 81	7	9%	22	27%	10	12%	10	12%	2	3%	12	15%	7	9%	6	7%	3	4%	1	1%
Seguin 30	5	17%	5	17%	1	3%	2	7%	1	3%	2	7%	3	10%	4	13%	2	7%	5	17%
Siclovía 400	33	8%	65	16%	40	10%	26	7%	38	10%	23	6%	27	7%	73	18%	29	7%	46	12%
Total 573	51	9%	104	18%	54	9%	43	8%	46	8%	43	8%	50	9%	89	16%	39	7%	53	9%

Highlights denote highest ranked goal for that meeting, event, or total.

Boerne Other

- None

San Antonio Other

- Multimodal (1 / 5%)

New Braunfels Other

- Get more funds to fund better roads (1 / 1%)

Seguin

- Preserve the rights of land owners above all else (1 / 3%)

Siclovía

- Expand greenways for bikes (31/ 8%)
- Address animal control cyclists and pedestrian safety (4/ 1%)
- Maintain roads for safe biking (11/ 3%)

Station 3: Reducing Vehicle Miles of Travel

Next, we asked participants to tell us which, if any, of the following commuting options they would be willing to consider as an alternative to being in a single occupancy vehicle on their commute to work. What we hoped to learn: What options other than driving alone are most palatable to people today? \

Table 4 – Commute Options Readiness Feedback

Location Total	Flexible work schedule		Work from home		Carpool with friends		Carpool with strangers		Walking		Biking		Transit		None	
Boerne 30	5	17%	6	20%	4	13%	1	3%	2	7%	1	3%	1	3%	10	33%
San Antonio 26	2	7%	4	15%	3	12%	3	12%	4	15%	3	12%	6	23%	1	4%
New Braunfels 49	4	8%	5	10%	5	10%	1	2%	6	12%	6	12%	6	12%	16	33%
Seguin 30	5	17%	5	17%	0	0%	1	3%	1	3%	3	10%	0	0%	5	17%
Total 135	16	13%	20	15%	12	9%	6	4%	13	10%	13	10%	13	10%	32	24%

Highlights denote highest ranked alternative for that meeting, event, or total.

Station 4: Transportation Challenges

The final station asked participants to identify transportation challenges they experience on a daily basis and to categorize them by the goal they felt covered the challenge. What we hoped to learn: Are there projects suggested that should be included as “unfunded” or that we should think about including in future?

TABLE LEGEND

	Boerne		San Antonio		New Braunfels		Sequin
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Table 5 – Transportation Challenges Input

System Preservation	System Efficiency	Transit	Environment	Economic Development	Public Involvement	Land Use	Safety	Sustainable Funding	None Apply
Complete sidewalks are needed.	Congestion on roads to/from town	Need transit from Boerne to San Antonio	LID & other storm water quality measures	Public transport so people can get to work	Residents complain about reckless motorists on online neighborhood forums but don't attend public informational meetings.	Long term planning for future roadway dedication	Lack of safe bike corridors into and out of major employment areas and employers	No measurement with added land value with transportation investment	ITS on IH 10 between San Antonio and Boerne to warn of accidents and less barricades so that traffic can be diverted quicker
Build more lanes	Light synchronization	Commuter rail	Am seeing increasing exhaust fumes on the road and fuel inefficient vehicles	Park, ride, and do - park and ride that is more than a lot - coffee, dry cleaner, day care	Need more or different outreach to non-English speakers.	Preservation of routes	Crossing main streets in small towns, especially Boerne	Increase gas tax	
Do not spend road funds on bike lanes and sidewalks	Traffic on IH 10	Lack of light rail	No new roads over Edwards Aquifer Recharge zone	Public transportation so people can keep their jobs!	More folk need to update their knowledge of vehicle safety (bikes, cars)	Secure roadway land for the future	Son getting to school safely on his bike	Put all road funds on non-toll roads - non-HOV roads	
Preventative Maintenance	Congestion	Bus system	Bioswails	Public transportation to stores, jobs, library, food	Stakeholders from low-income areas need to be involved from the	Secure land for future roadways	Bike lanes and sidewalks for kids to get to school safely	sometimes you have to spend money to save	

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Public Involvement

System Preservation	System Efficiency	Transit	Environment	Economic Development	Public Involvement	Land Use	Safety	Sustainable Funding	None Apply
	Congestion on roads 2 lane roads can no longer support the growth in the area	Public transportation in Boerne	Low priority	banks for all.	beginning The public has repeatedly rejected tolling and the tax burden and restrictions on travel it creates, so it needs to be off the table. Listen!	Coordination with land use planning to ensure safe and realistic transportation needs are met - Quarry industry killing Comal County	A car has more rights than you or I walking or biking	money later Funding prioritized on non-toll highways expansion as road/ our gas taxes are intended to do!	
	Incentives for faster project completion especially on IH 10	Light-rail	Protect the environment and rural areas		Use all possible outreach methods. (social media)	Direct route bike lanes from north to south to east to west	Not enough protected bike lanes	Funding that you can forecast	
	Roundabouts work! Less frontage roads!	Signing up for less expensive senior transit				Not my land	Too many cyclists and pedestrians injured and killed	Funding	
	FM 306/2673 at Horseshoe	Hours need to be extended it is hard to catch "line up" when you're 64				Preserve private property rights (no to eminent domain)	Too many pot holes and uneven pavement for biking		
	725 coming and going traffic light	Transit transfers not explained any where				Transportation solutions that don't increase urban sprawl	FM 3009 - high traffic, no shoulders, no turning lanes, no bicycle lanes, no lights at intersections		
	SH 46 at I-35 intersection needs flyovers - all directions	Keeping frequency and late hour service				Preserve private residential property	Walkways on Hwy 306 are ridiculous		

System Preservation	System Efficiency	Transit	Environment	Economic Development	Public Involvement	Land Use	Safety	Sustainable Funding	None Apply
	Help FM 1863 be more flood - proof!	My neighborhood bus does not run late enough to get home from evening meetings.				Do not use eminent domain	Conrads/Kohlenberg exit and yields - elementary future 7 subdivisions DPS megacenter		
	SH 46 no lights - narrow freeway	Light rail in the I-35 corridor					No street light at Hwy 46/3009, no bike lanes, 2-way lanes need to expand		
	non-toll lanes carry more than restricted lanes and are more efficient - so restricted lanes need to be nixed!	Park, ride, do - park and rides that have more than a parking lot					Monitor speeds on highway and streets		
	Lanes need to be wider for cars	Rapid transit from New Braunfels to Austin					Natural Bridge Caverns - heavy congestion at peak vacation season, weekends, holidays		
	Getting thru intersection of IH 35 and SH 46	Transit to-from Austin to NB					Crosswalks		
	ITS	Bus within NB					Safe ways to bike and walk to work, school, and parks.		
	Upgrades of traffic signals	Full connection from Austin to San Antonio					Safer transportation		
	Widen IH-10 (much too congested)	Stand alone bike/walk lane to connect the city							

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Public Involvement

System Preservation	System Efficiency	Transit	Environment	Economic Development	Public Involvement	Land Use	Safety	Sustainable Funding	None Apply
		parks, communities and extend around the city as well							
	Widen IH-10	Transit in New Braunfels to San Antonio, San Marcos and Austin							
	Planning for technologies such as self-driving cars	Bus transportation in New Braunfels							
		Need to use more of our rails for transportation from San Antonio to Houston							
		Need way to get from San Marcos to New Braunfels							
		Waste of money in Guadalupe County							
		As we grow and as we age, are there plans for public trans. To airports in SA and Austin?							
		Regional mass transit, light rail							

Phase II: Regional Transportation Attitude Survey III

Building a good plan requires a statistically valid benchmark or starting point regarding attitudes and perceptions concerning the region's current transportation system. Accordingly, a third Regional Transportation Attitude Survey (RTAS III) was conducted in the Winter of 2017. The purpose of the RTAS' are to gather statistically valid data on the public's opinions, attitudes, beliefs and values about existing transportation issues, changes in travel behavior, lifestyles, and perceptions about future multimodal transportation systems. The survey was previously conducted in 1997-1998 and in 2006-2007. This study was the first for the expanded MPO study area.

The survey is actually three surveys: residents, employers and underserved populations. The results of the survey will be used to help set long range transportation priorities for the MPO study area, which includes all of Bexar, Comal, and Guadalupe Counties as well as a portion of Kendall County. The survey will also help the MPO better understand the level of satisfaction with the region's transportation system and attitudes toward prioritizing transportation improvements. All three reports are posted on the MPO's website but selected findings of the resident survey are below.

Findings of the Resident Survey

How Residents Thought Traffic Congestion Has Changed Compared to Five Years Ago: Seventy-one percent (71%) of the residents surveyed indicated they thought traffic congestion has "increased a great deal" in the San Antonio/Alamo area compared to five years ago; another 17% indicated they thought it has "increased somewhat." In 2008, 73% of respondents thought traffic congestion has "increased a great deal" and another 15% indicated they thought traffic congestion has "increased somewhat." Overall, the results from 2008 to 2018 did not significantly change.

Satisfaction with Aspects of the Region's Transportation System: The aspects of the region's transportation system with the highest levels of satisfaction, based upon the combined percentage of "very satisfied" and "satisfied" responses among residents, who had an opinion, were: ease of travel from your home to work (40%), ease of travel between your home and Seguin (37%), and the ease of travel between your home and Downtown San Antonio (35%). Residents were least satisfied with the ease of travel by bicycle in the region (14%). When analyzing the trends in responses from 2018 and 2008 the most significant change is a 9% decrease in the number of respondents who gave either "very satisfied" or "satisfied" responses when indicating their overall satisfaction with the ease of travel between home and Downtown San Antonio. In 2018, 40% of respondents indicated they were "very satisfied" or

“satisfied” with the ease of travel between home and Downtown San Antonio compared to 49% in 2008.

Current and Emerging Problems in the Region: Based on the combined percentage of “current problem” and “emerging problem” responses from residents, who had an opinion, the following items are considered to be the largest problem areas in the region moving forward: the capacity of major roads not keeping up with new development (87%), congestion between home and Downtown San Antonio (81%), truck traffic (79%), and congestion between home and New Braunfels (70%). Residents were least concerned with traffic delays caused by trains (30%).

Satisfaction with Efforts to Address Long Range Transportation Planning Issues in the Region: The long range transportation issues with the highest levels of satisfaction, based upon the combined percentage of “very satisfied” and “satisfied” responses among residents, who had an opinion, were: preserving historical sites (51%), protecting sources of drinking water (43%), protecting trees and other features of the natural landscape (32%), and protecting and preserving air quality (31%). Residents were least satisfied with the relief of traffic congestion in the region (12%) and the reduction of urban sprawl (13%).

ACTIVE TRANSPORTATION IN THE ALAMO REGION

MOVING PEOPLE
CONNECTING PLACES



Bicycling and walking are vital components of a transportation system. Riding a bike and walking can improve physical and mental health, curb air and water pollution, reduce traffic congestion, preserve natural resources, promote equity, and create social bonds. These benefits warrant the development of a transportation system that enables people to travel safely and comfortably by bike or foot.

Accomplishments Over the Last Five Years

Ten years ago, it would have been a rare sight to see someone walking to work or riding a bicycle on a weekday in downtown San Antonio. Today, a casual glance at Main Street reveals an entirely different picture, punctuated by buffered bike lanes and wide, shaded sidewalks.

The Alamo Area Metropolitan Planning Organizations (MPO) and its partner agencies continue to educate, encourage, and engineer bicycle and pedestrian facilities to increase the number of people riding bicycles and walking a preferred mode of choice.

Since 2013, the MPO has conducted nine Walkable Community Workshops, assisting residents in identifying the barriers to a more walkable and bikeable community. The

Bicycling and Walking in the Alamo Region

workshops have increased awareness of the importance of pedestrian and cyclist mobility and access, and led to engineering improvements from applicants in San Antonio and New Braunfels. The workshops are supplemented by more frequent and informal walkability audits, conducted by request.

Since 2014, the MPO has reached 820 people through a partnership with the City of San Antonio to provide free Street Skills classes to teach adults and mature teens the rules of the road for cyclists and deliver helpful tips for riding safely.

In the fall of 2014, the City of San Antonio was declared a Bronze-level Bicycle Friendly Community by the League of American Bicyclists and the MPO was designated a Silver-level Bicycle Friendly Business in 2015.

In 2015, San Antonio became the first city in Texas to launch a Vision Zero initiative. Vision Zero is a traffic safety approach to eliminate traffic-related deaths and severe injuries. The MPO's Transportation Policy Board and the Cities of Kirby and Leon Valley have since approved resolutions in support of Vision Zero initiatives within the Alamo Area. In 2018, the MPO co-hosted the region's first Vision Zero Summit.

In 2016, the MPO made several strides towards a bicycle and pedestrian friendly region by completing its first Regional Bike/Pedestrian Planning Study which included recommendations for enhancing bicycle and pedestrian mobility and access in San Antonio, New Braunfels, Seguin, and Boerne. That same year, the MPO also published a 5th Edition Bicycle Map that categorized the streets in Bexar County according to the Level of Traffic Stress for people on bikes, and a correlating online map that covered the entire study area.

In 2017, the MPO initiated the Regional Bike Share Master Plan to help identify potential future SWell Cycle bike share station locations in Bexar County, as well as explore the possibility of bike share in Comal, Guadalupe, and Kendall Counties. In 2017, the MPO also convened a subcommittee of the Bicycle Mobility Advisory Committee (BMAC) for the purpose of encouraging businesses to participate in the League of American Bicyclists Bicycle Friendly Business Program.

As of 2018, the regional bicycle network includes over 230 miles of bike lanes in Bexar County and 68 miles (and counting) of shared use paths along the Leon Creek, Salado Creek, Medina River, and San Antonio River with another 10 miles of shared-use paths providing access through Boerne, New Braunfels and Seguin.

Current MPO Policies

Complete Streets Policy

Since its inception, the Alamo Area MPO's Transportation Policy Board (TPB) has strived to fund projects that included safe and convenient access for all roadway users, including people driving cars, walking, biking, and using transit. In 2009, the TPB formally adopted a Complete Streets Policy, aimed at ensuring that people of all ages and abilities are able to use roadways safely and comfortably.



Figure 1. Bike lane on Main Street, San Antonio.

MPO's Complete Streets policy also encourages the MPO's partner agencies to adopt similar policies. In 2011, the City of San Antonio adopted a Complete Streets policy and in 2017, the City of Seguin adopted a similar policy in its Master Thoroughfare Plan.

Vision Zero

In 2015, the City of San Antonio adopted a Vision Zero Initiative, which calls for eliminating traffic fatalities and serious injuries. That same year, the TPB passed a similar resolution in support of Vision Zero. Since then, the MPO has worked closely with the City of San Antonio and other partner agencies to enhance roadway safety through education, encouragement, and engineering initiatives. The MPO has also worked to incorporate safety considerations into its activities, most notably in scoring projects for potential MPO funding.

In 2016, the City of San Antonio began its study of Severe Pedestrian Injury Areas (SPIAs), identifying locations where two or more severe pedestrian injuries occurred in close proximity. The study will help the City of San Antonio to identify and prioritize pedestrian improvements for high-need areas. Similar studies are expected for bicycle and vehicular crashes in the future. The MPO is currently conducting a similar

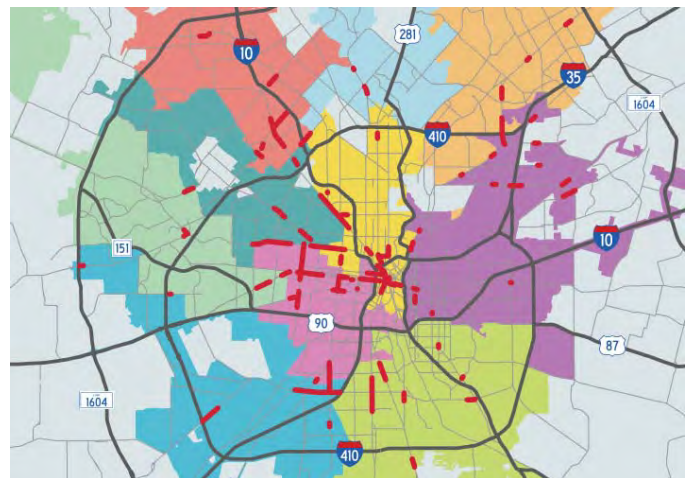


Figure 2. City of San Antonio Severe Pedestrian Injury Areas, 2011-2015.

Bicycling and Walking in the Alamo Region

analysis for Guadalupe, Comal, and Kendall Counties to guide safety projects in those areas as well.

In July 2018, the MPO co-hosted San Antonio's inaugural Vision Zero Summit, alongside our transportation partners in the region. The sold-out event featured regional and national speakers, including Leah Shahum, founder of the Vision Zero Network; Gabe Klein, founder of CityFi; and Lilly O'Brien, with the Los Angeles Department of Transportation. Regional leaders, including Councilwoman Shirley Gonzalez and TCI Director, Mike Frisbie, provided local insight.



Figure 3: Vision Zero Summit Leadership Panel

MPO Active Transportation Programs

Walkable Community Workshop Technical Assistance Program

The Walkable Community Workshop is a regional technical assistance program that works with community groups to identify barriers to walkability and bikeability within their district.

Since 2013, the MPO has conducted nine Walkable Community Workshops. The workshops educate participants about the benefits of active transportation, assist communities in identifying infrastructure improvements, and



Figure 4. Residents from the Seele Elementary School area in New Braunfels come together to discuss barriers to walking in their neighborhood.

provide the community with an opportunity for two-way communication with local transportation agency staff. After the workshop, MPO staff compile the findings into a report, which includes recommended strategies for enhancing neighborhood mobility. Projects that stem from these

Bicycling and Walking in the Alamo Region

reports are then given additional consideration if submitted for MPO funding. The workshop reports are available at the MPO's website at www.alamoareampoint.org/wcp.

Community Education and Encouragement

Street Skills

The Street Skills program is a partnership between the MPO and the City of San Antonio.

Street Skills classes are classroom-style sessions where adults and mature teens can learn the rules of the road for people on bikes, including bicycle safety tips and best practices for handling potentially dangerous situations. Attendees are given a free helmet and set of bike lights to help them stay safe while riding.



Figure 5. Street Skills participants at a Bexar County Lunch & Learn

SINCE 2016, OVER
700 AREA
RESIDENTS HAVE
ATTENDED
STREET SKILLS
CLASSES AND
RECEIVED NEW
BICYCLE HELMETS
AND LIGHTS.

Bicycle & Pedestrian Mobility Advisory Committees

The AAMPO Bicycle Mobility Advisory Committee (BMAC) and the Pedestrian Mobility Advisory Committee (PMAC) advise the MPO's Technical Advisory Committee (TAC) and Transportation Policy Board (TPB) on technical and policy issues related to active transportation. Each committee meets monthly, and is comprised of a variety of agency representatives, bicycle organizations, and citizens who are interested in and knowledgeable about active transportation. The committees provide a centralized forum for discussion, interagency coordination, and citizen input on bicycle- and pedestrian-related matters.

Bicycle Friendly Business Program

The League of American Bicyclists' Bicycle Friendly Business Program is a nationwide recognition program for employers that support traveling by bicycle. In 2017, there were only six bicycle friendly businesses designated in San Antonio, including the Alamo Area MPO. That's why in 2016, the MPO launched an effort to make more businesses aware of the program and encourage them to apply for designation. SWell Cycle was one of the businesses to apply and in 2018 they were declared a Bronze Level Bicycle Friendly Business.

Defensive Driving

The MPO partners with the City of San Antonio's Risk Management Division to educate city-employed drivers about sharing the road with people biking and walking. This information is shared at approximately 45 classes annually, reaching more than 1,000 people each year.

Bicycling and Walking in the Alamo Region

Community Events

It is the MPO's goal to actively participate in and promote various community events that educate and encourage residents about healthy transportation and environmental sustainability. MPO staff attend events and distribute educational materials related to bicycling, walking, and air quality. In 2016, MPO staff attended over 20 community events, reaching thousands of residents within the MPO study area.

Youth Outreach

Bicycle Rodeos & Safety Talks

The MPO provides support for bicycle rodeos by helping children fit their helmets properly, distributing helmets to children who do not own one, and sharing important safety information with parents, teachers, and students. MPO staff also provide bicycle and pedestrian safety talks to schools and other youth groups.

Safe Routes to School Program

In 2017, the MPO joined its partner agencies in establishing a Walking School Bus program at Sarah King Elementary School. The MPO provided crash data that aided in the selection of the school and conducted a walkability audit. The MPO will increase collaboration with local and regional partners to promote International Walk to School Day each October and foster the development of more Walking School Bus programs around the region.



Figure 8: Walking School Bus at Sarah King (Picture Credit: KSAT12 News)

Bicycling and Walking in the Alamo Region

Walk & Roll Program

The Walk & Roll Program encourages residents to use active, healthy forms of transportation. Walk & Roll efforts typically take place during National Bike Month in May, with the annual Walk & Roll Rally kicking off the festivities.

Averaging 300 attendees

annually, the Walk & Roll

Rally educates the public on the benefits of active transportation, shares information on active transportation programs and resources, and encourages people to walk, bike, and ride transit more often. In 2018, the MPO also debuted “Energizer Stations”, which celebrate National Bike to Work Day by providing free snacks, giveaways, and educational materials to cyclists on their way to work.



Figure 9. The MPO's 21st annual Walk & Roll Rally in 2016.

Funding and Implementing Active Transportation Projects

Bicycle networks are funded and developed by a variety of agencies responsible for the transportation system. Leveraging various sources of funding is often necessary to complete bicycle projects.

Table shows some of the common sources of funding for bicycle projects and programs in the Alamo region.

Bicycling and Walking in the Alamo Region

Table 1. Primary Funding Sources for Bicycle Infrastructure in the Alamo Area.

Agency	Funding Program
Alamo Area MPO (AAMPO)	<p>The MPO awards federal funds through a competitive project selection process. The MPO has two federal funding programs that fund bicycle projects.</p> <p>Surface Transportation Program-Metropolitan Mobility (STP-MM):</p> <p>Over \$100 million in federal funding is available approximately every two years. Approximately \$170 million dollars were awarded during the 2017 call for projects. Standalone bicycle and pedestrian facilities are eligible for funding.</p> <p>Transportation Alternatives Program (TAP):</p> <p>Transportation Alternatives is a set-aside program intended specifically for bicycle and pedestrian projects. Approximately \$15 million was available during the 2016 call for projects. Calls for projects are issued about every two years as funding becomes available.</p>
Texas Department of Transportation (TxDOT)	<p>TxDOT's Statewide Transportation Alternatives Program is intended specifically for bicycle and pedestrian projects. Calls for projects are issued approximately every two years and are open to projects outside urbanized areas.</p>
City of San Antonio	<p>The City of San Antonio has two major programs for funding bicycle and pedestrian infrastructure projects:</p> <p>Infrastructure Management Program (IMP): The Infrastructure Management Program (IMP) is a five-year rolling program which focuses on the maintenance of the City's infrastructure.</p> <p>City of San Antonio Bond Program: Since 2007, the City of San Antonio has initiated five-year bond programs to finance large capital improvements throughout the City. The 2017-2022 bond program allocated over \$445 million towards Street, Bridge, & Sidewalks Improvements.</p>
City of Seguin	<p>City of Seguin Bond Program: The City of Seguin typically puts aside \$50,000 annually to fund sidewalk construction and maintenance. The city also aggressively pursues grants to fund bicycle and pedestrian infrastructure.</p>

San Antonio ranks 42nd in the U.S. for bicycle commuting, with 0.3% of San Antonio residents commuting to work by bike.

2016 Benchmarking Report, Alliance for Biking and Walking

The use of Strava Metro data will enable the MPO and its partner agencies to better understand bicycle and pedestrian travel patterns and behavior, from the most-highly used roadways to wait times at intersections.

Active Transportation Trends in the Alamo Area

Bicycle Ridership & Walking Trends

People living in the Alamo region ride bicycles and walk for a variety of reasons.

In 2010, an estimated 93 percent of adult residents in Bexar County who rode a bicycle in the last 30 days did so for recreational purposes. Meanwhile, 17 percent bicycled to run errands, 7 percent bicycled to go to work, and 4 percent bicycled to go to school (San Antonio Regional Bicycling Travel Patterns Survey, 2010).

Commuting by bicycle is also on the rise. Between 2007 and 2013, the percentage of San Antonians who commuted to work by bike increased from 0.1 percent to 0.3 percent. While these are gains to be celebrated, there is much room for improvement. As of 2016, an estimated 1.9 percent of San Antonio commuters walk to work – a 0.4 percent decrease since 2007. Of the fifty most populous cities in the US, San Antonio ranked 40th and 42nd in terms of share of people who commute by foot and bike, respectively (2016 Benchmarking Report, Alliance for Biking and Walking).

The Alamo Area has the potential to increase overall ridership and foot traffic. In a 2015 survey, over 86 percent of respondents indicated they would like to ride a bicycle more (Regional Bicycle and Pedestrian Planning Study, 2015). Similarly, in the MPO's 2018 Regional Transportation Attitudes Survey, 37% were satisfied with the availability of sidewalks and pedestrian facilities.

Strava

In 2017, the Texas Department of Transportation purchased Strava Metro data share with MPOs and other public agencies.

The MPO plans to use this information to better inform its planning process, including in project selection and community outreach.

For example, in 2018, the MPO used Strava data to identify the most popular locations for National Bike to Work Day “Energizer Stations”. The MPO's partner agencies can also use this



data to prioritize bicycle and pedestrian projects, build support for more infrastructure, and evaluate usage before and after project implementation.

Safety

According to the Alliance for Biking & Walking 2016 Benchmarking Report, the rate of bicyclist and pedestrian fatalities in San Antonio is higher than the national average.¹ Since 2013, 33 cyclists and 307 pedestrians were killed in the MPO study area, and another 778 were seriously injured (CRIS, 2018). Many more crashes are less severe or do not get reported. Safety concerns remain a major barrier to many people who currently ride a bicycle or are considering riding.

The Bicycle and Pedestrian Network

Existing Conditions

The existing bicycle network in Bexar County contains diverse bicycle and pedestrian facilities. In 2000, there were approximately 34 miles of on-street bicycle facilities in Bexar County. By 2017, the number had increased to over 280, not including wide shoulders.

There are also over 115 miles of off-street multi-use trails, serving people who bike for both transportation as well as recreation. In terms of total number of miles of bicycle facilities, San Antonio outpaces the national average. However, it falls below the national average in terms of bike facilities per square mile.

Currently, there are no on-street bicycle facilities in the City of Boerne in Kendall County. There are, however, 11.5 miles of multi-use trails and side paths. Over 64 percent of survey respondents from Boerne said that the lack of bicycle lanes, trails, or paths prevents them from riding more often than they currently do, and 21 percent of respondents used the word “dangerous” to describe bicycling in Boerne. Boerne’s Parks, Recreation, and Open Space Master Plan includes goals to develop more pedestrian and bicycle facilities throughout the city, and over 85 miles of bicycle facilities were proposed in the MPO’s Regional Bicycle & Pedestrian Planning Study for Boerne.

The City of New Braunfels in Comal County has over 10 miles of bicycle lanes and nearly 24 miles of wide shoulders. The City’s off-street bicycle network consists of 5.7 miles of multi-use trails and 6 miles of side paths. Over 80 percent of survey respondents in New Braunfels said that the lack of bicycle facilities prevented them from riding a bicycle more often. The 2017 Strategic Parks and Recreation Master Plan calls for a network of off-street trails throughout

¹ While the MPO boundary includes Bexar, Comal, Guadalupe, and Kendall Counties, data from this report was only available for the City of San Antonio.

Bicycling and Walking in the Alamo Region

the City as well as on-street facilities. Over 123 miles of bicycle facilities are also proposed in the MPO Regional Bicycle and Pedestrian Planning Study for the City of New Braunfels.

The City of Seguin in Guadalupe County has 0.9 miles of bicycle lanes and 31.1 miles of wide shoulders. The City's off-street bicycle network is comprised of 1.4 miles of multi-use trails. Over 78 percent of survey respondents in Seguin said that the lack of bicycle facilities prevents them from riding a bicycle more often. Over 117 miles of bicycle facilities are proposed in the MPO Regional Bicycle and Pedestrian Planning Study for the City.

5th Edition Bike Map

The MPO, in partnership with the City of San Antonio Office of Sustainability, created the 5th Edition Bike Map to help the public and other transportation agencies better understand people's experiences when cycling in the region by including the level of traffic stress on different roadways.

The 5th Edition Bike Map shows the Level of Traffic Stress (LTS) for people on bikes on various roadways in the MPO study area. The LTS score was calculated based on several factors:

- Number of travel lanes,
- Posted speed limit
- Traffic volumes
- Type of bicycle facility present

LTS maps help bike riders consider the full roadway context when choosing their route and enables them to select routes that are appropriate for their skill and comfort level. The map is available online at www.alamoareampoint.org/bikemap.

Planned Network

Regional Bicycle and Pedestrian Planning Study

The MPO completed the Regional Bicycle and Pedestrian Planning Study in 2016. With input from the community, transportation agency partners, and the MPO Bicycle and Pedestrian Mobility Advisory Committees, the study included a review of existing conditions and needs as well as bicycle and pedestrian infrastructure recommendations for five areas:

- City of San Antonio (pedestrian recommendations)
- San Antonio Missions National Historic Park
- City of Boerne
- City of New Braunfels
- City of Seguin

Bicycling and Walking in the Alamo Region

The final report documents the growing interest in bicycling in the region and provides guidance for implementing a safe, accessible, and comprehensive bicycle and pedestrian network for the MPO study area.

2011 Bike Plan

In 2011, the City of San Antonio adopted the San Antonio Bike Plan & Implementation Strategy. The plan mapped the existing network of on- and off-street bicycle facilities in Bexar County, included recommendations for types and locations of new bicycle facilities, and prioritized network recommendations. The plan also listed opportunities for education and encouragement, as well as potential funding sources for expanding the existing bicycle network.

In total, the plan proposed 1,718 miles of new bicycle facilities. Some of these projects have already been implemented in the six years since the plan was adopted, but continued interagency collaboration, funding, and public engagement will be necessary to further realize the vision network outlined in the plan.

2016 SA Tomorrow Multimodal Transportation Plan

In 2016, the City of San Antonio published the SA Tomorrow Multimodal Transportation Plan. The Transportation Plan outlines goals and guidelines for building a regional transportation system that is “sustainable, safe, convenient, and efficient”. The plan focuses on a balanced distribution of transportation modes by investing in a well-connected network of vehicle, transit, bicycle, and pedestrian facilities. The plan also evaluates different scenarios for growth, concluding that a diverse network of transportation options (including bicycle and pedestrian facilities) most cost-effectively reduces congestion.

Off-Street Trail Network

The City of San Antonio and the San Antonio River Authority collectively have implemented and manage over 100 miles of paved multi-use trails throughout Bexar County. The City of San Antonio is currently planning to expand the Howard Peak Greenways Trail System.

Off-street trails are planned for other parts of the region as well. The City of New Braunfels is developing a Master Plan for the Dry Comal Creek Hike & Bike Trail, which, once complete, will span over five miles and connect parks, neighborhoods, and downtown. Also, the City of Seguin plans to extend the Walnut Springs Hike & Bike Trail within the next few years.

Bike Share

San Antonio became the first city in Texas to initiate a bike share system in 2011.

In 2017, the MPO initiated the Bike Share Master Plan to seek opportunities to expand the existing system within the City of San Antonio and potentially into the Cities of Boerne, New

Bicycling and Walking in the Alamo Region

Braunfels, and Seguin. Since the start of the plan, dockless electric scooters were introduced in downtown San Antonio. This prompted the City of San Antonio to begin work on a regulatory framework to manage dockless vehicles in anticipation of other dockless technologies. The impact on the docked bike share system is still unknown but the MPO will continue to work with all parties to promote safe forms of active transportation in the region.

Integration with Transit

Integrating bicycle infrastructure with public transit is an important step to increase mobility and accessibility for the region's residents. Eighty-five percent of transit riders access VIA bus service by walking or bicycling (VIA Origin and Destination Study, 2015). Therefore, increasing safe access to bus stops has the potential to increase ridership, which helps the region achieve community goals such as improved air quality and reduced traffic congestion.

Interagency coordination is key to making these crucial connections. Today, the majority of bike share stations are located within a ¼ mile of a bus stop. Additionally, all VIA buses are equipped with at least two bike racks. Whether a project makes multimodal connections is also a key part of the process for reviewing projects for potential funding through the MPO.

In 2015, VIA began the MyLink project to improve pedestrian connectivity by identifying high priority areas for sidewalk completion projects. Areas were identified using a variety of criteria including average daily boardings, proximity to bus stops, known accessibility issues, and number of routes at the stop.

Regional Connections

As our region continues to grow, the MPO and its partners will increasingly need to look for regional bicycle connections to improve interregional mobility. In 2017, the MPO sought public input on potential bicycle connections between San Antonio and Austin. These results were shared with the Capital Area Metropolitan Planning Organization (CAMPO) in Austin and incorporated into the future vision network of their Active Transportation Plan.

The Texas Department of Transportation also initiated a Bicycle Tourism Trails Study in 2017. The goal of the study is to identify a proposed statewide network of bikeways that connects cities in Texas, New Mexico, and Oklahoma. While these routes are only conceptual, they represent a good first step to expanding the reach of regional bicycle infrastructure.

Focus Areas for the Next Five Years

In such a large region, transportation needs undoubtedly exceed available funding. Therefore, it is necessary to prioritize key actions and projects that can have a strong positive impact on bicycle mobility, access, safety, comfort, and therefore, ridership.

Bicycling and Walking in the Alamo Region

Prioritize funding for improvements that enhance safety in areas with high concentrations of bicycle and pedestrian crashes.

In accordance with MPO's support for Vision Zero, MPO will prioritize bicycle and pedestrian projects that have the greatest potential to improve safety for users.

Increase connectivity within and between activity centers.

MPO will look to fund bicycle projects that create high quality connections within and between high activity areas to enhance access between key destinations.

Enhance regional connectivity.

Local governments throughout the region are seeking to expand the bicycle network within their own jurisdictions. MPO will work with its regional partners to pursue regional bicycle connections between these areas.

Collect more data on bicycle use and bicycle facilities.

The MPO will work with its partners to expand opportunities to collect and use data on bicycle activity, including by measuring the impacts of new bike facilities on ridership and route choice.

Expand educational programs on bicycle safety.

MPO will work with its partners to expand opportunities for people to learn what the rights and responsibilities are for people who bike through in-person engagement, media coverage, and social media outreach.

ROADWAY SYSTEM

MOVING PEOPLE
CONNECTING PLACES



The region's roadway system transports people and goods locally and to other parts of the state. Located on two major freight corridors, IH 10 and IH 35, our region is fortunate to have relatively good mobility as compared to other Metropolitan Statistical Areas with comparable populations. However, with another 1.5 million new residents expected by 2045, resiliency and reliability of the roadway system will increase in priority as we work to maintain current levels of congestion and the region's quality of life.

Accomplishments Over the Past Five Years

Since the update of the Metropolitan Transportation Plan (MTP) in December 2014, several roadway-related developments have occurred. With the passage of Proposition 1 and Proposition 7 funding proposals by the State of Texas, more projects have been able to expand the roadway system in this rapidly growing region. Additionally, the 84th Session of the Texas Legislature HB 1 ended diversions from the state's gas tax which resulted in an additional \$620 million/year statewide. Locally, Bexar County was successful in seeking authority from the State to increase the vehicle registration fees by \$10 which has helped them fund multiple projects in Bexar County. The additional local and state funding has resulted in



The TxDOT San Antonio District has constructed and/or started construction of 179 projects in the MPO study area over the past five years.

Source: TxDOT Online Project Tracker

the conversion of most toll lane projects that were previously adopted in the MPO's Plan to non-toll and high occupancy vehicle lanes.

According to TxDOT's Project Tracker, In the past five years, the TxDOT San Antonio District had 179 projects under construction or beginning construction within the MPO study area for a total estimated cost of \$1,544,756,427. Another 140 projects will begin with the next four years for a total estimated cost of \$1,206,590,988.

The San Antonio Mobility Coalition (SAMCo) continues to help with the education and funding processes at the federal, state and local levels.

Roadway System Policies

The pace of population and employment growth in the Alamo Area will continue to put pressure on the capacity of the roadway network. While it is recognized that building the region out of current and future congestion is not possible, adding new lanes and making operational improvements will be part of the comprehensive strategy to improve the transportation system.

Roadway system improvements proposed in the MTP are constrained to the amount of funding available, or those revenues that can be reasonably expected over the 25-year horizon of the MTP. The anticipated revenues fall short of covering all desired roadway projects, so the funded roadway projects included in the MTP address the region's most congested areas. The policies proposed below will assist in developing the best transportation system for the area.

- Support the design, planning, maintenance and operation of a roadway system that is compatible with the needs of other modes such as bicycles, pedestrians, public transportation, and truck and rail freight
- Using performance measures, monitor the functionality of the roadways in the region
- Analyze and display crash information for the roadway system and use this quantitative information and the goals of the State Highway Safety Plan as factors in the project selection process
- Leverage transportation asset management data and methods to make informed, cost-effective program decisions and optimize the use of existing transportation assets
- Use technology such as intelligent transportation systems and signal prioritization to optimize the roadway operations
- Require land developers to preserve the necessary rights-of-way in future travel corridors
- Require private developer contributions in roadway construction in undeveloped areas through the development process
- Ensure a process exists for maintaining roadways through their life cycle

- Support travel demand management techniques that reduce single occupancy vehicle trips and vehicle miles of travel throughout the system, including ride share/car share, parking pricing/policies, land use policies, and employer trip reduction programs
- Support the integrated development and implementation of transportation, land use and economic development plans by ensuring consistent collaboration between local, regional and statewide transportation partners

Roadway Functional Classification

The MTP is primarily concerned with those roadways that will be built or expanded using federal funding sources. These roadways are part of the “functionally classified roadway system.” A functionally classified roadway system allows for urban streets to be grouped by their purpose or function. There are three main functions for urban streets: 1) movement of traffic, 2) distribution or collection of traffic, and 3) provide access to terminal points. Freeways provide maximum movement of vehicles, but allow limited access to the adjacent land use. Arterial streets have lower vehicular capacity and speed, but allow for direct access to surrounding land use. Collector and residential streets primarily provide access to larger facilities, as each class of urban street serves as a collection device for the next lower class of street. The functional classification system is further defined in Table 1.

Functionally classified roadways describe the various levels of vehicular mobility. Using functional class in the transportation planning process ensures that general land use and local development are considered in evaluation of both existing and future transportation needs. Another purpose for using the functional classification system is to help determine which roadways should be included in a regional transportation system.

Table 1 – Functional Classification System Description

FUNCTIONAL CLASS	LEVEL OF MOBILITY	SYSTEM ACCESS	LEVEL OF ACCESSIBILITY
Freeway	Connects all urban subregions together; connects urban and rural service areas with metro major activity centers; connects to other cities.	To other freeways, principal arterials, and selected arterials; no direct land access.	Long trips at high speed within and through the metro area; express transit trips.
Principal Arterial	Connects two or more subregions; provides secondary connections outside cities; complements freeways in high volume corridors.	To freeways, other principal arterials, and high-volume collectors; no direct land access except major traffic generators.	Medium distance to long trips at high to moderate speeds within the urban area; express transit trips.
Arterial	Connects adjacent subregions and activity	To freeways, principal arterials, other	Medium to short trips at moderate to low

FUNCTIONAL CLASS	LEVEL OF MOBILITY	SYSTEM ACCESS	LEVEL OF ACCESSIBILITY
	centers within subregions.	arterials, and collectors; restricted direct land access.	speeds; local transit trips.
Collector	Connects neighborhoods within and between subregions.	To arterial, other collectors, and local streets; direct land access.	Primarily serves collection and distribution function for the arterial system at low speeds; local transit trips.
Local	Connects blocks within neighborhoods and specific activities within homogeneous land use areas.	To collectors and other local streets; direct land access.	Almost exclusively collection and distribution; short trips at low speeds.



Comal and Kendall Counties are two of the fastest growing counties in the country. Further, most of their growth is a result of domestic migration and as a result more impactful to their roadway networks that were built for rural traffic.

Major Thoroughfare Plans

The area's Major Thoroughfare Plans are composed primarily of principal and major arterial streets and provides the necessary transportation support and access to and from local land uses. Since many major expressway corridors are constrained from acquiring additional right-of-way, much of the additional out-year demand will likely have to be accommodated through a better connected and more efficient arterial street system. Many of the major and minor arterials are expected to be constructed by developers interested in expanding commercial and residential development outside of built portions of the cities within the MPO study area.

To help local partners plan for this and think about regional connections, the MPO commissioned the Regional Thoroughfare Plan Study. The purpose of the study was to review existing major thoroughfare plans to identify differences between plans in the MPO study area, determine constraints that impact the constructability of proposed thoroughfares, perform a needs study that used both capacity and connectivity criteria to identify areas in the region that should be the focus of further study, and develop a "bridge" to understand how individual jurisdictions' existing classification system align with the regional system.

Local jurisdictions were involved in this process and were given the tools they need to revise their major thoroughfare plans if deemed necessary.

Regionally Significant Roadway Network

In anticipation of a nonattainment designation for ozone, the MPO began work in January 2016 to develop a definition for “regionally significant projects.” Over a series of discussions and presentations to the region’s Technical Advisory Committee and was ultimately approved by the MPO Transportation Policy Board on _____. The MPO’s adopted, regionally significant roadway definition is as follows:

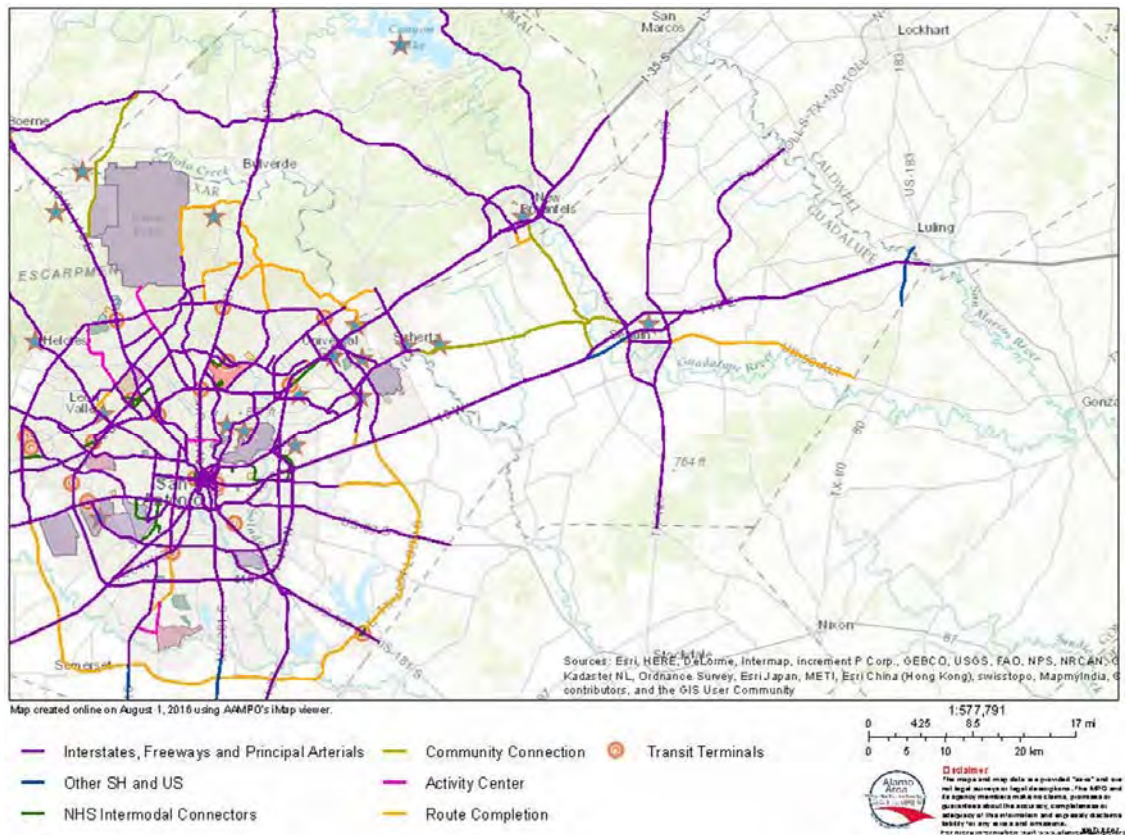
- Those facilities federally functionally classified as interstate freeways, other freeways or expressways
- Those facilities federally functionally classified as principal arterials
- Roadways and intermodal connectors included in the federally adopted National Highway System
- Roads designated as SH or US routes
- Community connections that provide direct, continuously signed connections between nearby or adjacent census defined urbanized areas, urban clusters and population centers with more than 5,000 people
- Roadways between activity centers that serve as primary regional connectors to an otherwise unserved regional activity center
- Extensions of Regionally Significant Roadways to connect non-connecting termini

While not mapped because none currently exist, the AAMPO’s regionally Significant Roadways definition also includes the following:

- Fixed guideway transit facilities that offer an alternative to regional highway travel
- Tollways
- Grade-separated interchange projects on Regionally Significant Roadways where no access existed previously

The regionally Significant Roadways system is shown in Figure 1. These roadways are serving the region’s transportation needs by providing access to major activity centers and employers that include military bases, Brooks, Port San Antonio, Toyota, major shopping malls, the South Texas Medical Center, colleges and universities and communities of 5,000 or more in population.

Figure 1 – Regionally Significant Roadway Network



Base Year and Future Year Roadway Systems

The future year (2045) roadway system was developed using an extensive technical and financial analysis and public input. Agencies' priorities and projected transportation usage were evaluated to develop a network of the future year highway and street system. The number of lane miles, vehicle miles of travel, vehicle hours of travel, and average speeds for facility types are summarized in Table 2Table 4.

Table 2 – Comparison of Vehicle Miles of Travel by Facility Type

FACILITY TYPE	2015	% OF TOTAL	2025	% OF TOTAL	2045	% OF TOTAL
Radial Interstate						
Loop Interstate						
Tolled Radial Interstate Main Lanes						
Tolled Interstate Loop Main Lanes						
Radial Freeway						
Loop Freeway						
Tolled Radial Main Lanes						
Tolled Loop Main Lanes						
Radial Expressway						
Loop Expressway						
Principal Arterial Divided						
Principal Arterial with Center Left Turn Lane						
Principal Arterial Undivided						
Minor Arterial Divided						
Minor Arterial with Center left Turn Lane						
Minor Arterial Undivided						
Collector Divided						
Collector with Center Left Turn Lane						
Collector Undivided						
Frontage Roads						
Ramps Main Lanes to Frontage Roads						
Ramps Main Lanes to Main Lanes						
Tolled Ramps						
Totals						

Table 3 – Comparison of Vehicle Hours by Facility Type

FACILITY TYPE	2015	% OF TOTAL	2025	% OF TOTAL	2045	% OF TOTAL
Radial Interstate						
Loop Interstate						
Tolled Radial Interstate Main Lanes						
Tolled Interstate Loop Main Lanes						
Radial Freeway						
Loop Freeway						
Tolled Radial Main Lanes						
Tolled Loop Main Lanes						
Radial Expressway						
Loop Expressway						
Principal Arterial Divided						
Principal Arterial with Center Left Turn Lane						
Principal Arterial Undivided						
Minor Arterial Divided						
Minor Arterial with Center left Turn Lane						
Minor Arterial Undivided						
Collector Divided						
Collector with Center Left Turn Lane						
Collector Undivided						
Frontage Roads						
Ramps Main Lanes to Frontage Roads						
Ramps Main Lanes to Main Lanes						
Tolled Ramps						
Totals						

Table 4 – Comparison of Average Daily & Congested Speed by Facility Type

FACILITY TYPE	2015	% OF TOTAL	2025	% OF TOTAL	2045	% OF TOTAL
Radial Interstate						
Loop Interstate						
Tolled Radial Interstate Main Lanes						
Tolled Interstate Loop Main Lanes						
Radial Freeway						
Loop Freeway						
Tolled Radial Main Lanes						
Tolled Loop Main Lanes						
Radial Expressway						
Loop Expressway						
Principal Arterial Divided						
Principal Arterial with Center Left Turn Lane						
Principal Arterial Undivided						
Minor Arterial Divided						
Minor Arterial with Center left Turn Lane						
Minor Arterial Undivided						
Collector Divided						
Collector with Center Left Turn Lane						
Collector Undivided						
Frontage Roads						
Ramps Main Lanes to Frontage Roads						
Ramps Main Lanes to Main Lanes						
Tolled Ramps						
Totals						

Regional Toll Analysis

Mobility 2040 outlined a robust toll lane system, requiring the MPO to conduct a Regional Toll Analysis to ensure the toll lane system did not cause an adverse impact to traditionally disadvantaged residents. With the availability of new funding sources, all previous toll lanes have been converted to managed (non-toll) lanes in Mobility 2045 with the exception of Cibolo Parkway (planned) and SH 130 (operating). Since these two facilities do not intersect, creating a system, the MPO is not required to conduct a new Regional Toll Analysis.

Conclusions

Despite the significant investment in roadway projects and policies over the past three years, congestion on the region's roadways is expected to increase in the future. The roadway projects outlined in the funded project list begin to mitigate the expected growth in congestion. However, to accommodate the higher burden that will be placed on the transportation system, not just expansion of the roadways, but operational improvements (such as signal re-timings and intersection modifications) and enhancements to the transit, bicycle and pedestrian systems must occur. This includes exploring new and emerging technologies for their potential to help the existing roadway system run more efficiently and reliably.

Other potential improvements to relieve congestion and improve quality of life are documented in Chapter 10 Congestion Management Process.

ENVIRONMENTAL

MOVING PEOPLE
CONNECTING PLACES



Public involvement is one of the cornerstones of transportation planning. Engaging the people who are most affected or who stand to benefit from transportation projects is a big part of an MPO's role in the community. At AAMPO, our goal is to inform, involve, and engage with people in a two-way conversation about transportation needs, challenges, and most importantly – solutions. This chapter focuses on the outreach conducted as part of the long range planning process but it only captures a snapshot of totality of the MPO's public involvement efforts in the region.

Accomplishments Over the Past Five Years

Until July 18, 2018, San Antonio had been the largest city in the United States that was in compliance with federal ozone standards. On that date, the Environmental Protection Agency (EPA) designated Bexar County as marginal nonattainment for ozone. The effective date of designation is September 24, 2018. Bexar County has until September 24, 2021 to meet the ozone standard. Comal, Guadalupe and Kendall counties were previously designated attainment/unclassifiable under the October 2015 standard.

Over the years, the region has been actively implementing measures to stay in attainment. Some examples include implementing vehicle idling restrictions, conducting educational and public outreach campaigns, improving transit services including coverage and frequency, purchasing newer, alternatively fueled fleets, expanding the scope of the Alamo Area

Commute Solutions Program, and increasing the coverage of bicycle and pedestrian facilities and amenities.

Beginning with the Safe, Accountable, Flexible, Efficient, Transportation Equity Act - A Legacy for Users (SAFETEA-LU) and subsequently advanced with the Moving Ahead for Progress in the 21st century (MAP-21) these acts better defined environmental goals that include more integration of metropolitan and statewide planning with the National Environmental Policy Act (NEPA) activities. From 2013-2015, the San Antonio TxDOT District worked with regional stakeholders on two Planning and Environmental Linkages (PEL) studies. In September 2015, the AAMPO adopted resolutions supporting the work completed on the two PEL studies completed for sections of IH 35.

Over the past five years, the AAMPO staff has developed and refined its online iMap tool. iMap is a user-friendly mapping application that is available to the public on the AAMPO website at <http://www.alamoareampo.org/imap/>. iMap contains a wide variety of transportation, geographic and environmental data layers. By using iMap, users can assess traffic volumes, vehicle crashes, floodplains, Edwards Aquifer impacts, transit service, environmental justice impacts, and other important data elements for geographic areas or transportation projects.

Environmental issues in transportation planning continue to be a priority. This chapter discusses local environmental issues: Linking NEPA and Planning, environmental analyses, air quality, water availability and sustainability.

Linking Planning and NEPA

Planning and Environment Linkages or PEL is an umbrella term for the many environmental issues that should be considered and used in the planning process to improve the environment. PEL addresses many of the concerns addressed under NEPA, such as environmental effects, endangered species, wetlands, and cultural preservation. It also includes Linking Planning and NEPA activities and concepts regarding how to conduct transportation planning-level choices and analyses so they may be adopted or incorporated into the process required by NEPA. PEL pertains to a wider array of issues and topics, including planning-level interagency consultation and coordination.

The AAMPO utilizes PEL as an approach to transportation decision-making that considers environmental, community, and economic goals early in the planning stage, and carries them through project development, design, and construction. The AAMPO strives for a seamless decision-making process that minimizes duplication of effort, promotes environmental stewardship, and reduces delays in project implementation. In September 2015, the AAMPO adopted resolutions supporting the work completed on the two PEL studies completed for sections of IH 35.

AAMPO Project Assessment Tool: iMap

When considering a transportation project for funding, the AAMPO, agency partners, public and stakeholders, can take into general account potential impacts to the environment and community and consider, where appropriate and necessary, environmental mitigation activities. The AAMPO does this through its iMap online mapping application. AAMPO has developed iMap through publicly available datasets and geocoded data elements specific to the AAMPO. iMap does not include an exhaustive listing of factors however, and each project sponsor is still responsible for the relevant environmental clearance documentation to comply with NEPA or appropriate state level environmental clearance, where applicable. Additionally, factors such as air quality may be a regional concern and not specifically limited to individual travel corridors.

The following are some of the environmental concerns that can be analyzed using iMap within the project development process:

- Environmental Justice
- Edwards Aquifer Impacts
- Floodplains
- Watershed areas
- Places of community interest
- Project locations and adjacent feature

As noted previously, it is still the responsibility of the sponsoring agency, in conducting the environmental analysis for proposed projects, to accurately and fully identify any impacts covering social, economic and environmental concerns, and proposed mitigation approaches, as applicable and warranted, to ensure compliance with relevant state and federal requirements.

Air Quality

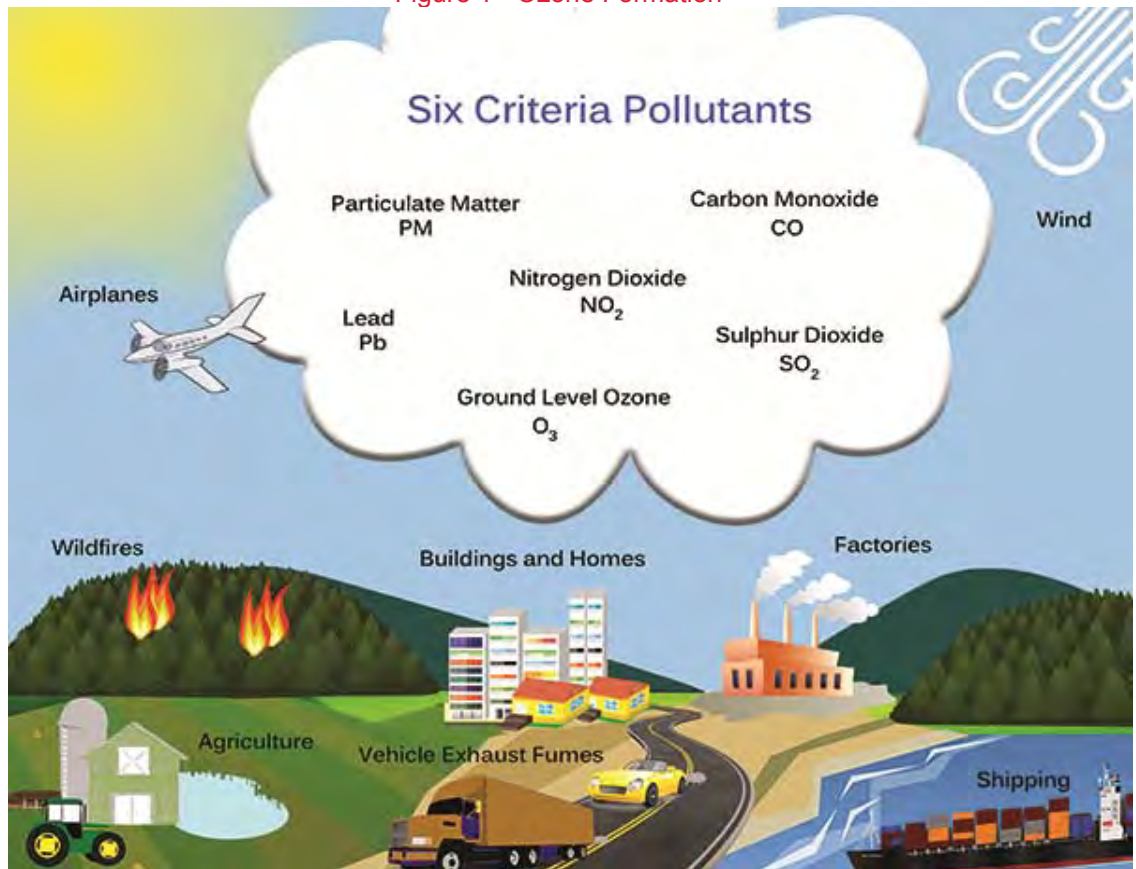
The ratification of the Clean Air Act of 1970 authorized the development of comprehensive federal and state regulations to limit emissions from both stationary (industrial) sources and mobile sources. Four major regulatory programs were initiated: the National Ambient Air Quality Standards (NAAQS) State Implementation Plans (SIPs), New Source Performance Standards (NSPS), and National Emission Standards for Hazardous Air Pollutants (NESHAPs). The EPA was created on May 2, 1971 in order to implement the various requirements included in the Clean Air Act.

The Clean Air Act required areas to create plans to meet the air quality standards and set deadlines for achieving those standards. Using this authority, the EPA has promulgated air quality standards for six air pollutants: sulfur dioxide (SO₂), particulate matter (PM_{2.5} and PM₁₀), nitrogen dioxide (NO₂), carbon monoxide (CO), ozone, and lead. The Act required the EPA to review the scientific data upon which the standards are based, and revise the standards, if necessary, every five years, if deemed necessary to protect public health with “an adequate margin of safety”.

The 1990 Clean Air Act Amendments group nonattainment areas into classifications based on the extent to which the air quality standard is exceeded, and establish specific pollution controls and attainment dates for each classification. The classifications are as follows: Marginal, Moderate, Serious, Severe, and Extreme. Areas with more severe air pollution problems have a longer time to meet the standards, but also have more stringent control requirements placed on them.

Currently, air pollutants are monitored on a daily basis. These pollutants include ozone, nitrogen dioxide, carbon monoxide, and particulate matter. A community may be in attainment for one of these pollutants and non-attainment for another. As stated earlier, the issue in Bexar County with regard to air quality is ground level ozone. However, unlike the other pollutants, ozone is not directly emitted, but is formed by the interaction of volatile organic compounds (VOCs) and nitrogen oxides (NO_x) in the presence of sunlight as shown in Figure 1. Therefore, the control of ozone is based on regulating emissions of VOCs and NO_x.

Figure 1 - Ozone Formation



The Ozone Standard

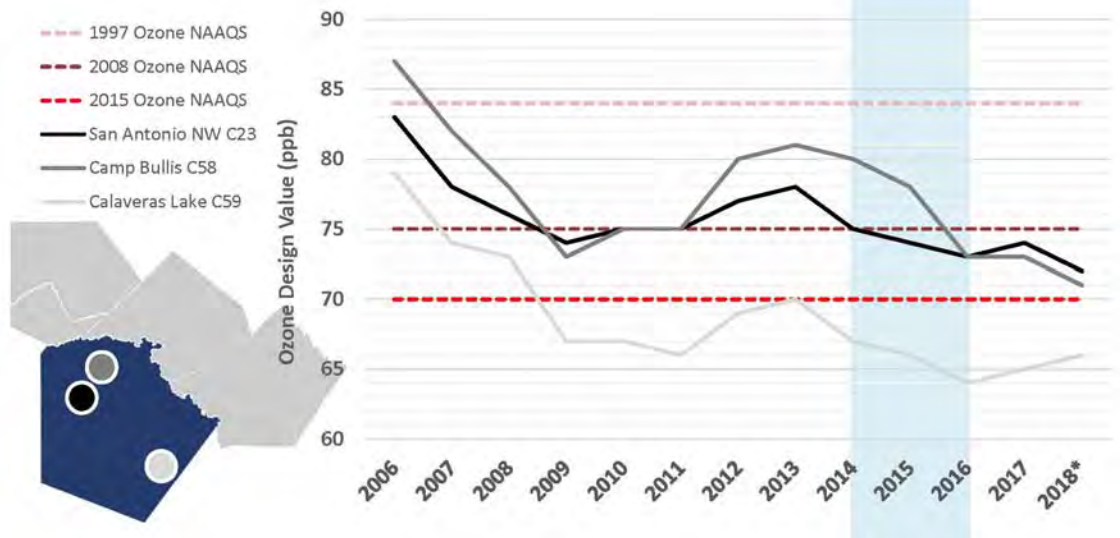
On October 1, 2015, the Environmental Protection Agency (EPA) strengthened the National Ambient Air Quality Standards (NAAQS) for ground-level ozone by lowering the standard from 75 parts per billion (ppb) to 70 ppb, based on scientific evidence about ozone's effects on public health and welfare. The updated standards will improve public health protection, particularly for at-risk groups including children, older adults, people of all ages who have lung diseases such as asthma, and people who are active outdoors. The San Antonio was not able to achieve the lower standard and was designated marginal nonattainment for ozone on July 18, 2018.

Air Quality Conditions

The MPO study area currently has several Continuous Air Quality Monitoring Systems (CAMS), which record ozone levels daily. As shown in Figure 9.2, the regulatory ozone CAMS include the San Antonio Northwest (C23), Camp Bullis (C58), Calaveras Lake (C59), Pecan Valley (C678) and the CPS Heritage Middle School (C622). In addition, the Alamo Area Council of Governments (AACOG) operates non-regulatory ozone monitoring sites across the region during the ozone season.

As shown in Figure 2 illustrates, monitor readings have been trending downward over time; however, it is not sufficient to meet the new 70 ppb standard.

Figure 2 -San Antonio Eight-Hour Design Value Trends by Monitor Site 2006 - 2018



(Source: April 2014 Air Tech AACOG presentation)

Transportation Conformity

Now that Bexar County has been designated nonattainment for ozone, the AAMPO is responsible for Transportation Conformity. Transportation Conformity addresses air pollution from on-road mobile sources. The Transportation Conformity requirements ensure that transportation projects do not cause new air quality violations, exacerbate existing ones, or delay attainment of the air quality standards.

In order to conform, the AAMPO's adopted MTP and Transportation Improvement Program (TIP) must include an analysis showing that projects do not negatively affect the air quality. To be in conformity, an area's MTP and TIP must be found to result in emissions that are less than the baseline emissions,

Final determinations of conformity for MTPs and TIPs are made by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). The transportation conformity process relies heavily on the interagency Consultation Procedures as outlined in the Code of Federal Regulations and the Texas Administrative Code. The AAMPO and TCEQ are responsible to meet legal public consultation requirements, and the AAMPO has principal responsibility for demonstrating transportation conformity. FHWA and FTA are responsible for issuing a final conformity determination.

If conformity is not demonstrated, federal funds for highway and transit improvements can be delayed. Only certain types of projects can move forward in a lapse. These include safety

projects, rehabilitation projects and those projects that do not have a negative impact on air quality.

The MPO has one year from the effective designation date (September 24, 2018) to complete the transportation conformity process. A conformity determination is required, at a minimum, every time a new or amended long range plan (MTP) or short range plan (TIP) is adopted (unless only adding exempted projects).

Air Quality Mitigation Efforts

In the Alamo Area, on-road vehicles are the largest single source of all ozone precursors. Fortunately, improvements in technology have had a considerable effect on the reduction of air pollution (emissions from new vehicles have declined over time as emission controls and fuel efficiency have improved). In order to reduce criteria pollutants, even though cleaner vehicles are in operation, vehicle miles of travel should be reduced. A downward trend in VMT is of the greatest benefits in reducing mobile source emissions. Reduction in the growth of vehicle miles of travel requires behavioral changes rather than solely relying on improvements in technology. The challenge is to reduce the length of most trips and to identify and implement strategies to encourage walking, bicycling and transit use.

Vehicles are not the only source however, according to the AACOG Emissions Trend Analysis for the San Antonio-New Braunfels Metropolitan Statistical Area (MSA) of ozone forming pollutants, there are 275.36 tons of VOCs and 240.26 tons of NOx emitted daily in from all man-made sources (power generation, vehicles, aircraft, etc.) in 2012. See Table 1 - 2012 Human-Made Emission Sources Ozone Season Weekday Anthropogenic VOC and NOx emissions for the San Antonio-New Braunfels MSA, 2012..

Table 1 - 2012 Human-Made Emission Sources Ozone Season Weekday Anthropogenic VOC and NOx emissions for the San Antonio-New Braunfels MSA, 2012. – NEED TO UPDATE

Source Type	VOC (tons/weekday)		NOx (tons/weekday)	
	Tons/Weekday	Percentage	Tons/Weekday	Percentage
Other	3.07	1.4%	3.85	2.0%
Non-Road	27.10	12.1%	19.59	10.3%
Off-Road	3.26	1.5%	8.13	4.3%
Area	151.25	67.6%	15.61	8.2%
Point	6.11	2.7%	66.35	34.9%
On-Road	32.93	14.7%	76.71	40.3%
Total	223.70	100.0%	190.24	100.0%

Source: AACOG, Oct. 2013. "Emissions Trend Analysis for the San Antonio-New Braunfels MSA: 1999, 2002, 2006, 2012, 2018, and 2023"

Water Availability

There is a continued interest in the protection of natural resources, especially water. Due to the development and expansion in the recharge zone of the Edwards Aquifer area and recent weather conditions including drought, concerns regarding the importance of looking after and

preserving the water resources in the Alamo Area region continues. The Edwards Aquifer is the primary source of drinking water for the area. It is important for governmental entities, private corporations and citizens to work together to address urban development that impacts the aquifer. Plans such as the Edwards Aquifer Sustainability Initiative specify preferred restrictions on impervious cover percentages that will sustain existing water quality, as well as other measures that will assist in protecting the aquifer.

The Edwards Aquifer is one of the major groundwater systems in Texas. It has been a source of water for people in south central Texas for more than 12,000 years. Today, it is the primary source of water for approximately 1.7 million people. Geographically, the Aquifer extends through parts of Kinney, Uvalde, Zavala, Medina, Frio, Atascosa, Bexar, Comal, Guadalupe, and Hays counties and covers an area approximately 180 miles long and five to 40 miles wide. The total surface area overlying the Aquifer is approximately 3,600 square miles. The Aquifer is the primary water source for much of this area, including the City of San Antonio and its surrounding communities.

Historically, the cities of Uvalde, San Antonio, New Braunfels, and San Marcos were founded around large springs that discharged from the Aquifer. As the region grew, wells were drilled into the Aquifer in order to supplement the water supplied by those springs. The Aquifer also serves as the principal source of water for the region's agricultural and industrial activities and provides necessary spring flow for endangered species habitat, as well as recreational purposes and downstream uses in the Guadalupe, Nueces, and San Antonio river basins. During the 1970s and 1980s, residential development in the San Antonio Metropolitan Area occurred predominantly in the northern part of the region. Because of the concern of continued development over the Recharge Zone, construction in the 1990s occurred in the western and northeastern areas of the County, slightly curbing the expansion to the north.

As the metropolitan area continues to grow, the needed transportation projects will impact surface water flow and infiltration, especially during storm or flood conditions. The Aquifer is divided into three main zones: the contributing zone, the recharge zone, and the artesian zone. The contributing zone is also called the drainage area or the catchment area. Here the land surface "catches" water from rainfall that averages about 30" per year, and water runs off into streams or infiltrates into the water table aquifer of the plateau. Runoff from the land surface and water table springs then both feed streams that flow over relatively impermeable limestone until they reach the recharge zone. Because transportation facilities generally cause an increase in the impermeable surface area, roadways can result in increasing local surface runoff and reducing water infiltration into the soil. Roadway construction projects can also cause the altering of drainage patterns at stream crossings, by changing the speed, direction and amount of storm water flow.

Aquifer Mitigation Efforts

There are several mitigation strategies that could be used to reduce storm water runoff and degradation of the Edwards Aquifer by minimizing the impact of transportation improvements. Most of these can be directly incorporated into the design of the transportation facility. Engineering on new projects, and redesign and retrofit of existing facilities could include:

- erosion control measures and runoff management techniques used to prevent pollution of adjacent waterways and the Edwards Aquifer
- adjustments to the alignments of transportation facilities used to avoid flood hazards
- greater use of permeable surfaces employed to reduce impacts on ground water recharge
- cost/pricing strategies to reduce demand for paved parking or increasing fines for intentional discharge

Other mitigation strategies could include compliance with federal, state and local policies, standards and land use strategies that address water resources.

Conclusion

With increased population and vehicle miles traveled projected, it is important the region be proactive on regulations concerning water quality and air quality. The area will need to be proactive in its protective measures and getting information out to the general public in order to help reduce potential negative impacts to both sensitivities and in order to stay in compliance with the NAAQS in the future.

FINANCIAL INFORMATION

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The Alamo Area has done an incredible job of working together to seek new, innovative funding mechanisms to help advance needed transportation projects as soon as possible. This includes pursuing and securing several local funding options to better leverage federal funding dollars. As a financially constrained plan, the Metropolitan Transportation Plan includes projects which our region believes to be able to fund with available funding over the next 25 years. Following are the expected funding sources and how they are allocated within the plan.

Accomplishments Over the Past Five Years

Since the adoption of the Metropolitan Transportation Plan (MTP) in December 2014, several financial mechanisms, such as the additional \$10 Bexar County vehicle registration fee, Proposition 1, Proposition 7 and ending of diversion in state funding have been used successfully to advance construction projects.

In 2013, a \$10 per vehicle increase in the Bexar County vehicle registration was approved and in August 2013, the 83rd Texas Legislature approved SJR 1, a proposed Constitutional Amendment expected to provide \$1.4 billion for non-toll transportation projects by dedicating a portion of oil and gas severance taxes to this purpose. SJR 1 was overwhelmingly approved

by voters on November 4, 2014. The enabling legislation (HB 1) calls for the new funding to be allocated “consistent with existing formulas” adopted by TxDOT.

Background

Fiscal constraint remains a key component of transportation plan and program development since enactment of the Intermodal Surface Transportation Efficiency Act (ISTEA) in 1991 followed by the Transportation Equity Act for the 21st Century (TEA-21) in 1998, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) on August 10, 2005, Moving Ahead for Progress in the 21st Century Act (MAP-21), and the Fixing America’s Surface Transportation (FAST) Act.

The MPO generally uses the Texas Department of Transportation’s Unified Transportation Program (UTP) as a funding guideline for the first ten years of the MTP. While the UTP is neither a budget nor a guarantee of project funding, it is a critical tool for project planning. Beyond ten years, funding levels are extrapolated out to the MTP horizon year. No new funding sources have been included in this funding analysis; the MPO makes no assumptions about new funding sources in the development of this Plan and so this plan is a rather conservative one.

Project Implementation Goals

The following project financing goals support the vision of a workable, cost beneficial transportation system that efficiently serves area mobility and accessibility needs:

- Deliver the best projects for the region
- Ensure efficient use of financial resources
- Promote safety
- Preserve infrastructure assets
- Ensure a seamless multimodal transportation system
- Optimize system performance
- Leverage all available funding sources

Selected Funding Sources***Proposition 1***

Proposition 1 (Prop 1), approved by voters on November 4, 2014, authorizes annual disbursements from the state's oil and gas production tax collections to the State Highway Fund if certain conditions are met. For Prop 1, the Joint Select Committee to Study the Balance of the Economic Stabilization Fund determines and adopts a sufficient balance of the Economic Stabilization Fund (also known as the Rainy Day Fund) in the month prior to the start of each legislative session. The first 25% of oil and gas severance tax deposits above the Rainy Day Fund sufficient balance are deposited into the state's General Revenue Fund. The remaining 75% of the severance tax is distributed evenly between the Rainy Day Fund and the State Highway Fund. The volatility of oil and gas production in the state creates difficulty in reliability projecting revenues. Prop 1 funding can only be used for construction, maintenance, rehabilitation, and acquiring right-of-way for non-toll, public roads.

Proposition 7

Proposition 7 (Prop 7) was approved by the voters on November 3, 2015. For FYs 2018 and 2019 Prop 7 allows for \$2.5B to be deposited into the State Highway Fund after an initial threshold of \$28B of sales and use tax is met. In future years the Prop 7 amount may increase. Also, beginning in FY 2020, 35% of the amount over \$5B of the Motor Vehicle Sales and Rental Tax will go into the State Highway Fund.

Transit Formula Funds (FTA Section 5307)

For transit projects, these revenues are provided directly to VIA Metropolitan Transi., through a funding formula. The program is also known as Section 5307 funds and come from federal gas taxes and the general fund. The funds are primarily for transit capital purchases such as buses and transit maintenance facilities and fund 80% of a total project's cost and require a 20% local match.

VIA Metropolitan Transit Sales Tax

A transit sales tax of ½ % is collected within VIA Metropolitan Transit's service area. The revenues from the sales tax are administered by VIA and support operation, maintenance and capital expenditures for transit.

Advanced Transportation District

Creation of an Advanced Transportation District and authorization of the imposition of a local sales and use tax for advanced transportation (Senate Bill 769) was enacted by the Texas Legislature during the 76th session in 1999. The Texas Legislature amended this legislation in 2003. Advanced transportation as defined in the legislation includes light rail, commuter rail, fixed guideways, traffic management systems, busways, bus lanes, technologically advanced

bus transit vehicles and systems, bus rapid transit vehicles and systems, passenger amenities, transit centers, stations, electronic transit-related information, fare, and operating systems, high occupancy vehicle lanes, traffic signal prioritization and coordination systems, monitoring systems, and other advanced transportation facilities, equipment, operations, systems, and services, including planning, feasibility studies, operations, and professional and other services in connection with such facilities, equipment, operations, systems, and services.

This legislation authorizes that the board of an authority in which the sales and use tax is imposed at a rate of one-half of one percent and in which the principal municipality has a population of more than 700,000 (VIA Metropolitan Transit) may order an election to create an advanced transportation district within the authority's boundaries and to impose a sales and use tax for advanced transportation under this subchapter. Locally, VIA ordered an election for November 2, 2004. Voters in Bexar County approved the sales tax increase at the rate of one-fourth of one percent. Half of the revenue generated from this sales tax is allocated to VIA Metropolitan Transit to fund transit projects, with the remainder equally divided between the City of San Antonio and the Texas Department of Transportation (Bexar County) to fund streets, roads and interstate projects.

Transit Discretionary Capital Funds (FTA Section 5309)

These funds are available for major new capital projects. The funding comes from federal gas taxes and the federal general fund. Transit service providers apply directly to the FTA for these funds to build a particular project.

Federal Transit Administration New Starts Program

The FTA's discretionary "New Starts" program is the Federal government's primary funding source for supporting locally planned, implemented, and operated transit guideway capital investments. Transit guideway capital investments include heavy rail, light rail, commuter rail, bus rapid transit systems and streetcars. The New Starts program has helped to make possible hundreds of new or extended transit fixed guideway systems across the country. These rail and bus investments, in turn, have improved the mobility of millions of Americans, have helped to reduce congestion and improve air quality in the areas they serve.

Surface Transportation Block Grant

Funds from the Surface Transportation Block Grant, formerly Surface Transportation Program – Metropolitan Mobility (STP-MM) program, are allocated by the MPO. The original source of these monies is primarily the federal gas tax and various truck taxes. Funds from this source are flexible and can be spent on various transportation projects.

Transportation Alternatives

The Transportation Alternatives (TA) is a funding program under the FAST Act that is an evolution of the previous Transportation Enhancement Program, Safe Routes to Schools and other programs. MPOs over 200,000 in population receive an allocation by formula. Projects undertaken with TA funds are eligible for reimbursement of up to 80% of allowable costs. The governmental entity nominating a project is responsible for the remaining cost share, including all cost overruns and project

Congestion Mitigation and Air Quality (CMAQ) Funding

The Congestion Mitigation and Air Quality Improvement program (CMAQ) was created in 1991 by the Federal Highway Administration and the Federal Transit Administration. The intent of the program is to help fund areas with poor air quality. Although not yet available to the MPO Study Area, CMAQ funding is a future potential revenue source. This funding is available to states for distribution to metropolitan areas in non-attainment of national ambient air quality standards.

Transportation Partners***San Antonio Mobility Coalition***

An important partner in transportation is the San Antonio Mobility Coalition, Inc., more commonly referred to as SAMCo. Organized in December 2001 as a non-profit corporation, SAMCo's purpose is "to identify and advocate transportation and mobility solutions for the San Antonio Metropolitan area." Funding for this endeavor is provided by public agencies (Bexar County, City of San Antonio, VIA Metropolitan Transit) and private interests (area chambers of commerce, major San Antonio corporations, transportation construction and supply companies, real estate developers, consulting engineers, and other interested organizations). Examples of SAMCo's efforts include expressing the funding and mobility needs of the region to the greater San Antonio Legislative delegation. More information on SAMCo can be found at www.samcoinc.org.

Alamo Regional Mobility Authority

Approval of Proposition 15 (which established the Texas Mobility Fund) and passage of Texas Senate Bill 342 in 2001 allowed for the creation of Regional Mobility Authorities (RMA). On August 12, 2003, Bexar County Commissioners Court adopted a resolution supporting the formation of a RMA and authorized the County Judge to execute a petition to the Texas Transportation Commission to form the RMA. Bexar County formed the RMA in January 2004. Today, the Alamo RMA (ARMA) is overseen by a seven member board of directors and is a local transportation authority that can build, operate and maintain transportation projects including toll and managed lane facilities. Information specific to the Alamo Regional Mobility Authority can be found at www.alamorma.org.

Bexar County

Transportation improvement projects and funding for these projects (including highway and transit projects involving County financing or property) within the jurisdiction of Bexar County must be approved by Commissioners Court. The Public Works Division of the Bexar County Infrastructure Services Department has primary responsibility for administering transportation improvements for the County. The County Engineer administers the road funds for County projects.

Bexar County roadway maintenance and improvement projects are primarily budgeted through four dedicated funds: (1) Special Road and Bridge Fund, (2) Farm-to-Market and Lateral Road Fund, (3) Economic Capital Projects Fund, and (4) November 2003 Bond Referendum Fund.

City of San Antonio

In May 2017, voters in the City of San Antonio approved a bond program in the amount of \$xxx million for streets, bridges and sidewalks as well as drainage and flood control.

The revenue sources that contribute to the city's general fund are: (1) sales tax, (2) property tax, (3) CPS Energy, and (4) other fees. The City of San Antonio also receives a share of the revenues generated by the sales tax increase for the Advanced Transportation District. VIA Metropolitan Transit also contributes to the maintenance of the street system. Street reconstruction augments the street maintenance program, extending the life expectancy of city streets. This is inclusive of seal coat, rehabilitation, crack seal, asphalt overlay and base failure.

Other Local Funding Programs

Suburban cities and surrounding cities and counties may use local general funds, as well as dedicated road-building funds to match or complete regional transportation improvements. These funds rely on revenues from various sources including local sales and property taxes, fees, fines, bond levies, and private sector contributions including right-of-way dedication.

Additional Financing

In addition, new, "but reasonably expected to be available" funding sources can be explored as alternatives. New revenue sources usually require some degree of official action, (enabling legislation, referendum, or jurisdictional decision). In order to be considered a strategy for funding sources must ensure the availability of the new revenue in the years when the funds are needed for project development and implementation. Structures to administer new revenue sources may also need to be established if not already in place. New initiatives will continue to be considered during the process of developing the Financial Plan of the MTP Update. Financial planning is a dynamic process, and should always be adaptable to new

innovations as they are identified. In a tight economy, the challenge is finding creative ways to optimize and/or augment existing financing strategies.

Funding Gap

Reducing future traffic congestion and improving quality of life in the region will require continuation of innovative financing techniques that increase the funding amount that the area currently receives from traditional funding sources. In order to implement this plan, leaders in this region must explore various funding and project implementation strategies, including:

- Phase projects – with limited funds, search for ways to build critical sections of roadway with logical termini and not necessarily construct the ultimate build-out of a roadway in the near term. Additionally, local funding options have been pursued in previous state legislative sessions:
 - Develop new local revenue sources, such as a local gas tax or local sales tax such as the Advanced Transportation District
 - Raise the state gas tax or impose a region wide gas tax
 - Increase vehicle registration fees
 - Mileage based road user fee
 - Assessing traffic impact fees/systems development charges for new development (based on expected trips that will be generated by the development)
- Capture a larger portion of State and Federal transportation funding:
 - Pursue additional federal discretionary funding including FTA 5309 funding
 - Work with the Texas Transportation Commission to receive a larger portion of funding allocated at their discretion

And finally, increasing the use of Local Improvement Districts, Business Improvement Districts, Tax Increment Financing Districts and other special taxing districts can also increase the transportation funding levels for the region.

Transportation Policy Board**September 24, 2018****9. Discussion and Appropriate Action on Amendments to the Metropolitan Transportation Plan and the FY 2019-2022 Transportation Improvement Program****Purpose**

The purpose of this agenda item is to review proposed roadway and transit amendments to the Metropolitan Transportation Plan and the FY 2019-2022 Transportation Improvement Program.

Issue

The Texas Department of Transportation (TxDOT) amends the Statewide Transportation Improvement Program (STIP) on a quarterly basis. To meet our local process for amending the Transportation Improvement Program (TIP), amendments will be reviewed in September with action scheduled for October. In order to keep the Metropolitan Transportation Plan (MTP) and TIP consistent, amendments to the TIP will also need to be made to the MTP.

Amendments this quarter include:

- amending STP-MM projects that 1) let in FY 2018 and therefore removing them from FY 2019 and 2) moving back two VIA projects to be able to move up VIA's Multimodal Corridor Project to FY 2019.
- amending the Loop 1604 and IH 35 added capacity projects to reflect the resolutions adopted by the Transportation Policy Board in June and August 2018.
- adding locally funded added or reduced capacity projects (City of San Antonio, Bexar County and Alamo Regional Mobility) that are expected to be open to the traveling public by 2025 to the TIP and MTP. These projects are being adding for air quality purposes and ensuring consistency with the travel demand model networks.
- adding five transit projects and revising the cost on one project (attached)

The draft presentation, amendment summary and STP-MM financial constraint spreadsheet are provided.

Action Requested

For information only and discussion only. Action is scheduled for October 2018.



Metropolitan Transportation Plan and Transportation Improvement program Amendments



Amendment Process

In accordance with MPO policy,
amendments to the
Long Range Transportation Plan (MTP)
and the
Short Range Transportation Plan (TIP)
occur in a two step process with
presentation one month and
action the following month



Amendment Process

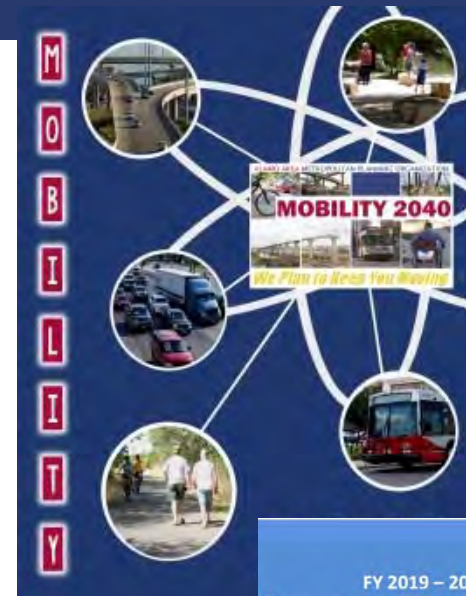
- Amendments are being presented in September 2018 with action scheduled for October 2018
- After approval, amendments to the short range plan are then forwarded to TxDOT for inclusion in the Statewide Transportation Improvement program (STIP)
- Amendments to the short range plan also need to be made to the long range plan so they stay consistent per federal requirements



Impact on AAMPO's transportation planning: Transportation Conformity

As the regional, multi-modal transportation planning agency, the Alamo Area MPO is responsible for:

- Guiding the region's transportation planning process
- Allocating federal transportation funding to projects and programs
- **Determining transportation conformity on TIP and MTP (short- and long-range plans)**





MTP/TIP Projects as related to Transportation Conformity

1. Finalize TIP and MTP project lists: focus on added capacity, reduced capacity, operational projects and high capacity transit

2. Develop 2024, 2025, 2035 and 2045 Travel Demand Model (TDM) networks

3. Run TDM for years 2024, 2025, 2035 and 2045

4. Send outputs to Texas A&M Transportation Institute for emissions modeling

5. Did we pass Transportation Conformity?



MTP/TIP Amendment Summary

TIP/MTP amendments can be categorized as follows

- **Amendments to Category 7 (STP-MM) projects**
 - Reconfigured projects based on Transportation Policy Board adopted IH 35 and Loop 1604 resolutions in June and August 2018
 - Projects that are spun off or created from an existing project
 - Funding revisions between projects (FM 2252) with no change to limits and description
 - Added projects for environmental clearance purposes; partial corridors are already in the TIP/MTP
 - Locally funded projects that will be included in the MPO's travel demand model

FY 2019 - 2022 Transportation Improvement Program

CSJ	Roadway	Const Cost	Cat 7 Total	Cat 10 STP&M Reconciliation	Other Funding	Limits From	To	Description
FY 2019								
0015-00-211	Smart Signal Upgrade	\$1,617,960	\$1,617,960			Various		Install advanced controllers, networking equipment, and control software for traffic signals
0015-00-212	Safety Service Patrol	\$2,500,000	\$2,500,000			Various		Implement SSP on an controlled access highways in Benar, Camal and Kendall counties
0015-12-009	Buvalte Road	\$9,097,480	\$9,097,480			Marshall Road	Information Oak	Reconstruct and widen to 4 lanes with shoulder, grade than ramps, curb, bridge construction, and drainage improvements
0015-12-514	Lehigh Valley Hwy & Bike Trail	\$100,000.00	\$100,000.00			SH-16, Benbar Road	Crystal Hill Park	Construction of a bike and pedestrian along Highway Creek
0015-12-520	Quintana Road	\$7,000,000	\$7,000,000			Herman Avenue	McHenna Avenue	Rehab and widen roadway, intersection and Road control improvements
0015-12-543	Alamo Area Commute Solutions	\$100,000	\$100,000			Guadalupe & partial Kendall County		Alamo Area MPO Commute Solutions Program (FY 2019)
0015-12-544	Gulm Road	\$7,223,351	\$7,223,351	\$4,100,000		FM 471 (Culebra Road)	Government Canyon State Park	Expand from 2 to 4 lanes, including drainage improvements, bike and pedestrian amenities
0015-12-546	Alamo Area Commute Solutions	\$100,000	\$100,000			Guadalupe & partial Kendall County		Alamo Area MPO Commute Solutions Program (FY 2019)
0015-12-561	Alamo Area Commute Solutions	\$100,000	\$100,000			Alamo Area MPO - In Benar, Camal	Guadalupe & partial Kendall County	Alamo Area MPO Commute Solutions Program (FY 2017)
0015-12-605	Austin Highway/Hwy Wurzbach	\$17,177,000	\$17,177,000			Hwy Wurzbach	at Austin Highway	Construct entrance and exit ramps between Hwy Wurzbach and Austin Highway
0015-12-562	Watson Road	\$4,886,116	\$4,886,116			FM 2780 - Somerset	0.8 MI East to Watson Road	Expand from 2 to 4 lanes, including drainage improvements, bike and pedestrian amenities
0015-00-172	Rapid Transit Corridor Study	\$10,000,000	\$10,000,000					Rapid Transit Corridor Study - FY 2020
0015-12-579	E. Aviation Blvd	\$8,832,561	\$7,444,174	\$1,188,387		SH 218 (Pat Booker Road)	Oliver Creek	Expand from 2 to 4 lanes, drainage, left turn lane, bike lanes and sidewalks
0015-12-579	Expand San Antonio Pedestrian and Bicycle Improvements	\$2,000,000	\$2,000,000					Construct bicycle pedestrian and bicycle improvements
0015-12-580	ITS - Enhancements	\$1,500,000	\$1,500,000					Reduce project cost from \$4M to \$1.5M
0015-12-585	Banero Road	\$14,681,225	\$14,681,225			West Oak Estates	Borghel Drive	Expand from 3 to 4 lanes divided roadway with dual median, bike lanes, sidewalks, curbs and drainage
0015-12-601	ITS - Enhancements	\$1,500,000	\$1,500,000					Upgrade traffic signal controllers, add project funding from CSJ (0015-12-580)
0015-12-602	Intelligent Transportation Systems Congestion Management	\$4,000,000	\$4,000,000					Transit/State Upgrade (add project with funding from CSJ (0015-12-577 and 0015-12-580))
0015-12-603	Judson Road	\$7,000,000	\$7,000,000			Independence	HI 39	Construct sidewalks on the west side of Judson Road
0015-12-609	CoSA Multimodal Corridor Study	\$1,000,000	\$1,000,000					Multimodal planning study on one arterial to accommodate travel modes including high capacity transit
0015-12-610	CoSA Bike/Ped Improvements	\$1,000,000	\$1,000,000			Various	San Pedro	
0015-12-608	Smart Signal Upgrade	\$400,000	\$400,000			Various		Purchase of control software for traffic signals
0015-12-609	Smart Signal Upgrade	\$400,000	\$400,000			Various		Install advanced controllers, networking equipment, and control software for traffic signals
2200-01-001	FM 1560	\$12,525,004	\$11,070,000	\$1,038,000	\$225,000	SH 16	Loop 1804	Expand from 2 to 4 lanes with raised median, bike lanes and sidewalks
		\$109,063,697	\$102,110,200	\$5,130,000	\$14,131,391			
		2019 UTP Allocation	\$43,420,900					
		Plus Carryover	\$80,771,864					
		Balance	\$22,681,558					
								Legend
								Move 0015-2020
								CSJ 0015-2020
								VIA Amendments - consolidate 5 CSJ's into 1 for FY 2019 and move MYLink projects
								CSJ 0015-2020
FY 2020								
0015-00-234	Loop 508 (Broadway)	\$14,000,000	\$9,000,000		\$5,000,000	US 261 interchange	Mulberry Street	Construct separated bicycle and pedestrian facilities between US 261 and Cunningham and intersection improvements between Cunningham and Mulberry
0219-01-057	SL 937 Overpass	\$10,400,000	\$10,400,000			at River Road		Construct grade separation
0521-05-148	TH 410	\$9,100,000	\$9,100,000			Old Pearlcard Road	Valley HI	Construct operational improvement to include ramp reversals and intersection improvements
0658-01-044	FM 1529 (NW Military Highway)	\$7,500,000	\$7,500,000			Shavens Ranch Road	Loop 1804	Expand from 2 to 4 lanes with raised median, center turn lane, bike lanes and sidewalks
0015-00-195	Alamo Area Commute Solutions	\$100,000	\$100,000			Various		Alamo Area MPO Commute Solutions Program (FY 2020)
0015-00-213	Safety Service Patrol	\$4,500,000	\$4,500,000			Various		Implement SSP on an controlled access highways in Benar, Camal and Kendall counties
0015-12-681	Talley Road	\$20,917,524	\$19,417,524	\$1,500,000		Wissman Blvd	Tamaron Park	Expand from 2 to 4 lanes with raised median, bike lanes and sidewalks
0015-00-304	Est. 0015-2020 Highway	\$1,000,000	\$1,000,000			Guadalu		Expand from 2 to 4 lanes with raised median, bike lanes and sidewalks
		\$74,517,824	\$67,017,824		\$7,500,000			
		2019 UTP Allocation	\$45,295,900					
		Plus Carryover	\$22,081,559					
		Balance	\$352,834					
FY 2021								
0253-00-207	SR 536 (Rosarvite)	\$2,000,000	\$2,000,000			at San Antonio River		Construct bicycle and pedestrian bridge
0859-01-045	FM 1595 (NW Military Highway)	\$9,500,000	\$9,500,000			Huembler Road	Loop 1804	Construct 2 way left turn lane, bike lanes and sidewalks
0015-00-189	Alamo Area Commute Solutions	\$100,000	\$100,000					Alamo Area MPO Commute Solutions Program (FY 2021)
0015-00-214	Safety Service Patrol	\$4,500,000	\$4,500,000			Various		Implement SSP on an controlled access highways in Benar, Camal and Kendall counties
0015-12-582	Rocket Lane	\$5,430,481	\$5,430,481			Bridge	Loop 1804	Expand from 2 to 4 lane roadway with contraflow center turn lane, sidewalks and bike lanes
0015-12-604	Presa Street	\$10,080,000	\$9,000,000	\$1,080,000		West Boyer Street	SE Military Drive	corridor enhancements (bike and ped) to create complete street environment to the extent that ROW allows
0015-12-611	CoSA Multimodal Corridor Study	\$3,000,000	\$3,000,000					Multimodal Planning Study on three corridors to accommodate travel modes including high capacity transit
0015-12-612	Rapid Transit Corridor Study	\$0,316,858	\$0,316,858			SH 48		Rapid Transit Corridor Study - FY 2021
0015-00-343	Russell Road	\$4,200,000	\$4,200,000			SH 48	Huber Road	Expand from 2 to 4 lanes with center turn lane and bicycle and pedestrian facilities
1433-01-028	FM 2262	\$4,200,000	\$4,200,000			at Evans Road		Construct operational improvements, including widening of Cibola Creek bridge
		\$42,047,139	\$41,047,139		\$1,000,000			
		2019 UTP Allocation	\$46,876,900					
		Plus Carryover	\$353,634					
		Balance	\$5,176,495					
FY 2022								
0215-00-029	FM 735	\$10,600,000	\$10,600,000			County Line Road	Zip Road	Expand from 2 to 4 lanes with median, sidewalks and bicycle lanes
0015-00-215	Safety Service Patrol	\$2,000,000	\$2,000,000			Various		Implement SSP on an controlled access highways in Benar, Camal and Kendall counties
0015-12-578	MYLink Pedestrian Corridor Safety	\$6,000,000	\$7,200,000		\$800,000	Various locations on the state parkway system		Construct curb ramps, landing pads, sidewalks and other pedestrian infrastructure, construct improvements to North State Transit Center intersection for improved transit access
0015-13-504	Crestway Road	\$7,781,571	\$7,781,571			Kitty Hawk Road	Gibbs Sprawl Road	Reverse operational aspects of roadway to add 6' sidewalks and 6' bike lanes in each direction
0015-13-610	Rapid Transit Corridor Study							Rapid Transit Corridor Study - FY 2022
2200-01-020	FM 1560	\$12,100,000	\$10,500,000	\$1,500,000		FM 471	Salm/Shenfields	Expand from 2 to 4 lanes with raised median, center turn lane, bike lanes and sidewalks
0015-00-197	Alamo Area Commute Solutions	\$100,000	\$100,000					Alamo Area MPO Commute Solutions Program (FY 2022)
		\$110,581,571	\$48,271,571		\$62,330,000			
		2019 UTP Allocation	\$46,490,900					
		Plus Carryover	\$5,176,495					
		Balance	\$3,394,824					



Amendments to Category 7 (STP-MM) projects

- FM 1560 (CSJ 2230-01-013) let in FY 2018 so is being removed from FY 2019
- Leon Valley Hike and Bike Trail (CSJ 0915-12-514) is proposed to move from FY 2019 to FY 2020
- VIA's Rapid Transit Corridor Project was split into five projects when it went into the TIP and MTP in April; VIA has requested to consolidate the five projects into one CSJ and move to FY 2019; VIA is proposing to move two of their MyLink projects out to make room for this revision
- Wurzbach Parkway project (CSJ 7774-01-001) has a proposed change to the description
- IH 410/Blanco Road/US 281 operational project (CSJ 0521-04-285) has a cost increase that TxDOT is using other funding sources to fill the gap



MTP/TIP Amendment Summary

Network Year	CSJ	MPO Number	Project Name	Limits From	To	Description	Const Cost	County	Let Date
FY 2019 TIP and MTP Amendments									
2025	0016-05-119	5548	IH 35	FM 2252	SCHWAB RD	RAMP REVISIONS, INTERSECTION AND FRONTAGE ROAD OPERATIONAL IMPROVEMENTS	\$25,000,000	COMAL	Feb-2019
2025	2452-04-016	5549	SL 1604	IH 10 E	MARTINEZ CREEK	EXPAND FROM 2 LANES TO 4 LANE DIVIDED	\$20,000,000	BEXAR	Feb-2019
2025	0016-04-116	5550	IH 35	1.2 MILES SOUTH OF FM 306	FM 306	RAMP REVISIONS, INTERSECTION AND FRONTAGE ROAD OPERATIONAL IMPROVEMENTS	\$12,000,000	COMAL	Apr-2019
2025	0072-06-074	5403	IH 10	CASCADE CAVERNS/SCENIC LOOP	KENDALL/BEXAR COUNTY LINE	RECONFIGURE RAMP AND WIDEN FRONTAGE ROAD TO CONVERT TO ONE WAY OPERATION	\$20,000,000	KENDALL	Apr-2019
2025	0016-04-117	5551	IH 35	FM 306	HAYS/COMAL COUNTY LINE	RAMP REVISIONS, INTERSECTION OPERATIONAL IMPROVEMENTS AND CONVERT FRONTAGE RD TO ONE WAY OPERATION	\$63,000,000	COMAL	Jun-2019
2025	0521-04-204	5372	IH 410	INGRAM RD	US 90	EXPAND FROM 6 & 8 TO 8 & 16 LANE EXPRESSWAY -ADD 2 ADDITIONAL LANES. RECONSTRUCT SH 151 INTERCHANGE - PHASE 1	\$100,000,000	BEXAR	Jul-2019
2025	0521-04-275	5373	IH 410	KT 50151	INTERCHANGE	RECONSTRUCT INTERCHANGE -PHASE 2		BEXAR	Jul-2019
2025	0521-04-279	5374	IH 410	SH 151	US 90	EXPAND FROM 6 LANE TO 8 LANE EXPRESSWAY		BEXAR	Jul-2019
FY 2020 TIP and MTP Amendments									
2025	0025-02-219	5552	IH 10	LOOP 1604	GRAYTOWN RD	EXPAND FROM 4 LANE TO 6 LANE EXPRESSWAY	\$55,000,000	BEXAR	Sep-2019
2025	0073-08-183	4969	IH 37	LP 13	IH 410	CONSTRUCTION OF A PARTIAL FRONTAGE ROAD, RAMP AND INTERSECTION IMPROVEMENTS	\$2,900,000	BEXAR	Sep-2019
2025	0016-06-047	4013	IH 35	BEXAR/GUADALUPE COUNTY LINE	FM 3009	EXPAND FROM 8 LN TO 14 LN EXPY-ADD 6 NEW EXPRESS LANES INCLUDING 2 HOV-SPECIAL USE LANES	\$75,000,000	GUADALUP	May-2020
2025	0016-07-413	3477	IH 35	IH 410 N	GUADALUPE/BEXAR COUNTY LINE	EXPAND FROM 8 LN TO 14 LN EXPY-ADD 6 NEW EXPRESS LANES INCLUDING 2 HOV-SPECIAL USE LNS & CONNS @ IH 410N & LP 1604	\$645,000,000	BEXAR	May-2020
2025	777-04-001	5315.3	PA 1502	LOCKHILL/SEIMA ROAD	FM 1535-NW MILITARY	EXPAND 4 TO 6 LANES AND INTERSECTION OPERATIONAL IMPROVEMENTS,	\$9,000,000	BEXAR	May-2020
FY 2021 TIP and MTP Amendments									
2025	1433-01-028	5329	FM 2252	EVANS ROAD	COMAL/BEXAR COUNTY LINE	EXPAND FROM 2 LANES TO 4 LANES WITH RAISED MEDIAN OR CONTINUOUS LEFT TURN LANE, BIKE LANES AND SIDEWALKS	\$500,000	BEXAR	Sep-2020
2025	1433-02-044	9115	FM 2252	BEXAR/COMAL COUNTY LINE	FM 3009	EXPAND FROM 2 LANES TO 4 LANES WITH RAISED MEDIAN OR CONTINUOUS LEFT TURN LANE, BIKE LANES AND SIDEWALKS	\$21,700,000	COMAL	Sep-2020
2025	1433-01-029	5324	FM 2252	AT EVANS ROAD		CONSTRUCT INTERSECTION OPERATIONAL IMPROVEMENTS, INCLUDING WIDENING OF CIBOLO CREEK BRIDGE	\$7,500,000	BEXAR	Sep-2020
2025	2452-02-083	3913	SL 1604	SH 16	US 281	EXPAND 4 TO 10 LANE EXPRESSWAY -INCLUDING 2 HOV-SPECIAL PURPOSE LANES & PHASE 1 DIRECT CONNECTORS AT IH 10 W	\$368,300,000	BEXAR	May-2021
2025	2452-03-113	3786	SL 1604	US 281	REDLAND ROAD	EXPAND 4 TO 10 LANE EXPRESSWAY -INCLUDING 2 HOV-SPECIAL PURPOSE LANES	\$30,000,000	BEXAR	May-2021
2025	2452-02-117	5332	SL 1604	AT FM 2696- BLANCO RD		INTERSECTION OPERATIONAL IMPROVEMENTS	\$43,000,000	BEXAR	May-2021
2025	0025-02-215	5396	IH 10	GRAYTOWN RD	GUADALUPE/BEXAR COUNTY LINE	EXPAND FROM 4 LANE TO 6 LANE EXPRESSWAY	\$154,000,000	BEXAR	Jun-2021
2025	3508-01-029	5382	SH 151	LP 1604	IH 410	EXPAND FROM 4 LANE TO 6 LANE EXPRESSWAY	\$80,000,000	BEXAR	May-2021
2025	0016-05-120	5553	IH 35	AT FM 725		INTERSECTION OPERATIONAL IMPROVEMENTS	\$6,000,000	COMAL	Jun-2021
FY 2022 TIP and MTP Amendments									
2025	0521-04-285	5376	IH 410	AT US 281/SAN PEDRO		INTERCHANGE IMPROVEMENTS:	\$70,000,000	BEXAR	Sep-2021
2025	2452-01-066	9110.2	SL 1604	MACDONA-LACOSTE RD.	US 90 W	EXPAND FROM 2 LANES TO 4 LANE DIVIDED	\$40,000,000	BEXAR	Sep-2021
2025	0535-01-074	5385	IH 10	US 90A	SH 130	EXPAND FROM 4 LANE TO 6 LANE EXPRESSWAY	\$200,000,000	GUADALUP	Apr-2021
FY 2023 MTP Amendments									
2025	2452-04-017	5554	SL 1604	MARTINEZ CREEK	FM 1346 - HOUSTON ST	EXPAND FROM 2 LANES TO 4 LANE DIVIDED	\$12,000,000	BEXAR	Sep-2022
FY 2025 MTP Amendments									
2035	0291-10-099	9112.2	SH 16	GUILBEAU RD	LOOP 1604	OPERATIONAL IMPROVEMENTS - EXPANSION	\$35,000,000	BEXAR	Sep-2024
2035	0291-10-100	9112.1	SH 16	GUILBEAU ROAD		OPERATIONAL IMPROVEMENTS - EXPANSION	\$65,000,000	BEXAR	Sep-2024
2035	2452-04-013	9108	SL 1604	IH 10 EAST	FM 1346 - HOUSTON ST	EXPAND FROM 2 LANES TO 4 LANE DIVIDED	\$32,000,000	BEXAR	Sep-2025
FY 2026-2045 MTP Amendments									
2035	0016-06-900	5555	IH 35	FM 3009	GUADALUPE/COMAL COUNTY LINE	EXPAND FROM 6 LN TO 10 LN EXPY- ADD 2 NEW EXPRESS LANES INCLUDING 2 HOV-SPECIAL USE LANES	\$140,000,000	GUADALUP	Sep-2029
2035	0016-05-111	4014	IH 35	GUADALUPE/COMAL COUNTY LINE	FM 1103	EXPAND FROM 6 LN TO 10 LN EXPY - ADD 2 NEW EXPRESS LANES INCLUDING 2 HOV-SPECIAL USE LANES	\$160,000,000	COMAL	Sep-2029
2035	0017-10-368	61.2	IH 35	IH 410 S	IH 410 N	EXPAND 8 TO 12 LN EXPY -ADD 2 NEW EXPRESS LANES INCLUDING 2 HOV-SPECIAL USE LNS & CONNS AT IH 410 S & IH 410N	\$568,530,500	BEXAR	Sep-2029
2035	2452-02-900	5556	SL 1604	AT IH 10 W		PHASE 2 DIRECT CONNECTORS	\$175,000,000	BEXAR	Sep-2029
2035	2452-03-087	3530	SL 1604	REDLAND RD.	IH 35 NORTH	EXPAND 4 TO 10 LANE EXPRESSWAY -INCLUDING 2 HOV-SPECIAL PURPOSE LANES	\$179,659,167	BEXAR	Sep-2029
2035	2452-01-053	3912	SL 1604	BRAUN RD.	SH 16	EXPAND 4 TO 8 LANE EXPRESSWAY-CONSTRUCT 4 NEW MANAGED LANES	\$47,417,043	BEXAR	Jun-2030
2035	2452-01-052	3911	SL 1604	WEST MILITARY DRIVE	BRAUN RD	EXPAND 4 TO 6 LANE EXPRESSWAY -CONSTRUCT 3 NEW MANAGED LANES, INCLUDING MANAGED-LANE DIRECT CONNECTORS AT SH 151	\$16,897,467	BEXAR	Jun-2030
2035	2452-01-029	2020	SL 1604	US 90	WEST MILITARY DR.	EXPAND 4 TO 6 LANE EXPRESSWAY -CONSTRUCT 3 NEW MANAGED LANES, INCLUDING MANAGED-LANE DIRECT CONNECTORS AT US 90	\$118,486,058	BEXAR	Jun-2030
2035	2020-02-031	9110.1	SL 1604	IH 35 S	0.7 MI NORTH OF FM 2536	EXPAND FROM 2 LANES TO 4 LANE DIVIDED	\$28,000,000	BEXAR	Sep-2030
2035	2452-01-000	5557	SL 1604	MACDONA-LACOSTE RD.	0.7 MI NORTH OF FM 2536	EXPAND FROM 2 LANES TO 4 LANE DIVIDED	\$4,000,000	BEXAR	Sep-2030
2035	3212-04-900	5558	FM 3351	SH 46	KENDALL/COMAL COUNTY LINE	EXPAND FROM 2 TO 4 OR 6 LANES WITH CENTER TURN LANE, BIKE LANES AND SIDEWALKS	\$24,000,000	KENDALL	
2035	3212-05-901	5559	FM 3351	KENDALL/COMAL COUNTY LINE	KEENELAND DR	EXPAND FROM 2 TO 4 OR 6 LANES WITH CENTER TURN LANE, BIKE LANES AND SIDEWALKS	\$23,200,000	COMAL	
2035	1268-02-900	5560	FM 1103	RODEO WAY	MAIN STREET	EXPAND TO 4 LANES WITH MEDIAN, TURN LANES, SIDEWALK AND BIKE LANES	\$13,400,000	GUADALUPE	
2045	0016-04-112	5375	IH 35	GUADALUPE RIVER	HAYS / COMAL COUNTY LINE	OPERATIONAL IMPROVEMENTS INCLUDING RAMP REVISIONS AND INTERSECTION IMPROVEMENTS-CONVERT FRONTAGE ROAD TO ONE WAY	\$60,000,000	COMAL	Sep-2034
2045	0016-05-114	5383	IH 35	GUADALUPE RIVER	FM 1103	OPERATIONAL IMPROVEMENTS INCLUDING RAMP REVISIONS INTERSECTION IMPROVEMENT	\$89,000,000	COMAL	Sep-2034

Project spun off of an existing project; ex: environmentally clear Corridor A-C; projects become A-B and B-C
Reconfigured projects based on TPB approved IH 35 and Loop 1604 resolutions in June and August 2018
Category 7 projects
Funding revisions between these projects
Projects added, partial corridor already in MTP/TIP; for environmental clearance purposes



MTP/TIP Amendment Summary

TIP/MTP amendments can be categorized as follows

- **Reconfigured projects based on Transportation Policy Board adopted IH 35 and Loop 1604 resolutions in June and August 2018**
- **Projects that are spun off or created from an existing project**
- **Funding revisions between projects (FM 2252) with no change to limits and description**
- **Added projects for environmental clearance purposes; partial corridors are already in the TIP/MTP**
- **Locally funded projects that will be included in the MPO's travel demand model**



Upcoming Schedule



2018

July 17

EPA designates Bexar County nonattainment for ozone. All other counties in the San Antonio-New Braunfels MSA designated Attainment / Unclassifiable

August

Presentations to TAC / TPB on MTP and Air Quality

September

Effective date of designation – clock starts for AAMPO to prove Transportation Conformity

Presentations to TAC / TPB, as needed

October

Presentations to TAC / TPB, as needed

Action on MTP/TIP Amendments on October 22

November

All model runs are complete

Hold MTP public meetings in all four counties

December

Presentations to TAC / TPB on MTP (public meeting outcomes) and Air Quality

2019

January

Presentations to TAC / TPB on MTP and Conformity ("Presentation")

Begin 60-day public comment period on Conformity document

February

Hold AQ public meeting (Bexar County only)

Hold or cancel February TAC / TPB?

March

Presentation to TAC / TPB, as needed

April

Action by TAC / TPB on TIP, MTP and Transportation Conformity

AAMPO staff sends Conformity document to Interagency Consultation Partners

...

Interagency Consultation Partner comment and response period

September

Transportation Conformity deadline

Interagency Consultation Partners provide concurrence letter (FHWA's letter is final approval)



Questions?

Network Year	CSJ	MPO Number	Project Name	Limits From	To	Description	September 24, 2018 AAMPO Transportation Policy Board Meeting Package: Page 197 of 205	Const Cost	County	Let Date
FY 2019 TIP and MTP Amendments										
2025	0016-05-119	5548	IH 35	FM 2252	SCHWAB RD	RAMP REVISIONS, INTERSECTION AND FRONTAGE ROAD OPERATIONAL IMPROVEMENTS		\$25,000,000	COMAL	Feb-2019
2025	2452-04-016	5549	SL 1604	IH 10 E	MARTINEZ CREEK	EXPAND FROM 2 LANES TO 4 LANE DIVIDED		\$20,000,000	BEXAR	Feb-2019
2025	0016-04-116	5550	IH 35	1.2 MILES SOUTH OF FM 306	FM 306	RAMP REVISIONS, INTERSECTION AND FRONTAGE ROAD OPERATIONAL IMPROVEMENTS		\$12,000,000	COMAL	Apr-2019
2025	0072-06-074	5403	IH 10	CASCADE CAVERNS/SCENIC LOOP	KENDALL/BEXAR COUNTY LINE	RECONFIGURE RAMPs AND WIDEN FRONTAGE ROAD TO CONVERT TO ONE WAY OPERATION		\$20,000,000	KENDALL	Apr-2019
2025	0016-04-117	5551	IH 35	FM 306	HAYS/COMAL COUNTY LINE	RAMP REVISIONS, INTERSECTION OPERATIONAL IMPROVEMENTS AND CONVERT FRONTAGE RD TO ONE WAY OPERATION		\$63,000,000	COMAL	Jun-2019
2025	0521-04-204	5372	IH 410	INGRAM RD.	US 90	EXPAND FROM 6 & 8 TO 8 & 10 LANE EXPRESSWAY -ADD 2 ADDITIONAL LANES; RECONSTRUCT SH 151 INTERCHANGE - PHASE 2		\$100,000,000	BEXAR	Jul-2019
2025	0521-04-275	5373	IH 410	AT SH 151	INTERCHANGE	RECONSTRUCT INTERCHANGE -PHASE 2			BEXAR	Jul-2019
2025	0521-04-279	5374	IH 410	SH 151	US 90	EXPAND FROM 6 LANE TO 8 LANE EXPRESSWAY			BEXAR	Jul-2019
FY 2020 TIP and MTP Amendments										
2025	0025-02-219	5552	IH 10	LOOP 1604	GRAYTOWN RD	EXPAND FROM 4 LANE TO 6 LANE EXPRESSWAY		\$55,000,000	BEXAR	Sep-2019
2025	0073-08-183	4969	IH 37	LP 13	IH 410	CONSTRUCTION OF A PARTIAL FRONTAGE ROAD, RAMPs AND INTERSECTION IMPROVEMENTS		\$2,900,000	BEXAR	Sep-2019
2025	0016-06-047	4013	IH 35	BEXAR/GUADALUPE COUNTY LINE	FM 3009	EXPAND FROM 8 LN TO 14 LN EXPY-ADD 6 NEW EXPRESS LANES INCLUDING 2 HOV-SPECIAL USE LANES		\$75,000,000	GUADALUP	May-2020
2025	0016-07-113	3477	IH 35	IH 410 N	GUADALUPE/BEXAR COUNTY LINE	EXPAND FROM 8 LN TO 14 LN EXPY-ADD 6 NEW EXPRESS LANES INCLUDING 2 HOV-SPECIAL USE LNS & CONNS @ IH 410N & LP 1604		\$645,000,000	BEXAR	May-2020
2025	7774-01-001	5315.3	PA 1502	LOCKHILL SELMA ROAD	FM 1535-NW MILITARY	EXPAND 4 TO 6 LANES AND INTERSECTION OPERATIONAL IMPROVEMENTS;		\$9,000,000	BEXAR	May-2020
FY 2021 TIP and MTP Amendments										
2025	1433-01-028	5329	FM 2252	EVANS ROAD	COMAL/BEXAR COUNTY LINE	EXPAND FROM 2 LANES TO 4 LANES WITH RAISED MEDIAN OR CONTINUOUS LEFT TURN LANE, BIKE LANES AND SIDEWALKS		\$500,000	BEXAR	Sep-2020
2025	1433-02-044	9115	FM 2252	BEXAR/COMAL COUNTY LINE	FM 3009	EXPAND FROM 2 LANES TO 4 LANES WITH RAISED MEDIAN OR CONTINUOUS LEFT TURN LANE, BIKE LANES AND SIDEWALKS		\$21,700,000	COMAL	Sep-2020
2025	1433-01-029	5324	FM 2252	AT EVANS ROAD	.	CONSTRUCT INTERSECTION OPERATIONAL IMPROVEMENTS, INCLUDING WIDENING OF CIBOLO CREEK BRIDGE		\$7,500,000	BEXAR	Sep-2020
2025	2452-02-083	3913	SL 1604	SH 16	US 281	EXPAND 4 TO 10 LANE EXPRESSWAY -INCLUDING 2 HOV-SPECIAL PURPOSE LANES & PHASE 1 DIRECT CONNECTORS AT IH 10 W		\$368,300,000	BEXAR	May-2021
2025	2452-03-113	3786	SL 1604	US 281	REDLAND ROAD	EXPAND 4 TO 10 LANE EXPRESSWAY -INCLUDING 2 HOV-SPECIAL PURPOSE LANES		\$30,000,000	BEXAR	May-2021
2025	2452-02-117	5332	SL 1604	AT FM 2696- BLANCO RD	.	INTERSECTION OPERATIONAL IMPROVEMENTS		\$43,000,000	BEXAR	May-2021
2025	0025-02-215	5396	IH 10	GRAYTOWN RD	GUADALUPE/BEXAR COUNTY LINE	EXPAND FROM 4 LANE TO 6 LANE EXPRESSWAY		\$154,000,000	BEXAR	Jan-2021
2025	3508-01-029	5382	SH 151	LP 1604	IH 410	EXPAND FROM 4 LANE TO 6 LANE EXPRESSWAY		\$80,000,000	BEXAR	May-2021
2025	0016-05-120	5553	IH 35	AT FM 725	.	INTERSECTION OPERATIONAL IMPROVEMENTS		\$6,000,000	COMAL	Jun-2021
FY 2022 TIP and MTP Amendments										
2025	0521-04-285	5376	IH 410	AT US 281/SAN PEDRO	.	INTERCHANGE IMPROVEMENTS		\$70,000,000	BEXAR	Sep-2021
2025	2452-01-066	9110.2	SL 1604	MACDONA-LACOSTE RD.	US 90 W	EXPAND FROM 2 LANES TO 4 LANE DIVIDED		\$40,000,000	BEXAR	Sep-2021
2025	0535-01-074	5385	IH 10	US 90A	SH 130	EXPAND FROM 4 LANE TO 6 LANE EXPRESSWAY		\$200,000,000	GUADALUP	Apr-2021
FY 2023 MTP Amendments										
2025	2452-04-017	5554	SL 1604	MARTINEZ CREEK	FM 1346 - HOUSTON ST	EXPAND FROM 2 LANES TO 4 LANE DIVIDED		\$12,000,000	BEXAR	Sep-2022
FY 2025 MTP Amendments										
2035	0291-10-099	9112.2	SH 16	GUILBEAU RD	LOOP 1604	OPERATIONAL IMPROVEMENTS - EXPANSION		\$35,000,000	BEXAR	Sep-2024
2035	0291-10-100	9112.1	SH 16	IH 410	GUILBEAU ROAD	OPERATIONAL IMPROVEMENTS - EXPANSION		\$65,000,000	BEXAR	Sep-2024
Remove From MTP	2452-04-014	9108	SL 1604	IH 10 EAST	FM 1346 - HOUSTON ST	EXPAND FROM 2 LANES TO 4 LANE DIVIDED		\$32,000,000	BEXAR	Sep-2028
FY 2026-2045 MTP Amendments										
2035	0016-06-900	5555	IH 35	FM 3009	GUADALUPE/COMAL COUNTY LINE	EXPAND FROM 6 LN TO 10 LN EXPY- ADD <u>2</u> NEW EXPRESS LANES INCLUDING 2 HOV-SPECIAL USE LANES		\$140,000,000	GUADALUP	Sep-2029
2035	0016-05-111	4014	IH 35	GUADALUPE/COMAL COUNTY LINE	FM 1103	EXPAND FROM 6 LN TO 10 LN EXPY - ADD <u>2</u> NEW EXPRESS LANES INCLUDING 2 HOV-SPECIAL USE LANES		\$160,000,000	COMAL	Sep-2029
2035	0017-10-168	61.2	IH 35	IH 410 S	IH 410 N	EXPAND 8 TO 12 LN EXPY -ADD <u>2</u> NEW EXPRESS LANES INCLUDING 2 HOV-SPECIAL USE LNS & CONNS AT IH 410 S & IH 410N		\$568,530,500	BEXAR	Sep-2029
2035	2452-02-000	5556	SL 1604	AT IH 10 W	.	PHASE 2 DIRECT CONNECTORS		\$175,000,000	BEXAR	Sep-2029
2035	2452-03-087	3530	SL 1604	REDLAND RD.	IH 35 NORTH	EXPAND 4 TO 10 LANE EXPRESSWAY -INCLUDING 2 HOV-SPECIAL PURPOSE LANES		\$179,659,167	BEXAR	Sep-2029
2035	2452-01-053	3912	SL 1604	BRAUN RD.	SH 16	EXPAND 4 TO 8 LANE EXPRESSWAY –CONSTRUCT 4 NEW MANAGED LANES		\$47,417,043	BEXAR	Jan-2030
2035	2452-01-052	3911	SL 1604	WEST MILITARY DRIVE	BRAUN RD	EXPAND 4 TO 6 LANE EXPRESSWAY -CONSTRUCT 2 NEW MANAGED LANES; INCLUDING MANAGED LANE DIRECT CONNECTORS AT SH 151		\$16,897,467	BEXAR	Jan-2030
2035	2452-01-029	2020	SL 1604	US 90	WEST MILITARY DR	EXPAND 4 TO 6 LANE EXPRESSWAY -CONSTRUCT 2 NEW MANAGED LANES; INCLUDING MANAGED LANE DIRECT CONNECTORS AT US 90		\$118,486,058	BEXAR	Jan-2030
2035	2020-02-031	9110.1	SL 1604	IH 35 S	0.7 MI NORTH OF FM 2536	EXPAND FROM 2 LANES TO 4 LANE DIVIDED		\$28,000,000	BEXAR	Sep-2030
2035	2452-01-000	5557	SL 1604	MACDONA-LACOSTE RD.	0.7 MI NORTH OF FM 2536	EXPAND FROM 2 LANES TO 4 LANE DIVIDED		\$4,000,000	BEXAR	Sep-2030
2035	3212-04-900	5558	FM 3351	SH 46	KENDALL/COMAL COUNTY LINE	EXPAND FROM 2 TO 4 OR 6 LANES WITH CENTER TURN LANE. BIKE LANES AND SIDEWALKS		\$24,000,000	KENDALL	
2035	3212-05-901	5559	FM 3351	KENDALL/COMAL COUNTY LINE	KEENELAND DR	EXPAND FROM 2 TO 4 OR 6 LANES WITH CENTER TURN LANE. BIKE LANES AND SIDEWALKS		\$23,200,000	COMAL	
2035	1268-02-900	5560	FM 1103	RODEO WAY	MAIN STREET	EXPAND TO 4 LANES WITH MEDIAN, TURN LANES, SIDEWALK AND BIKE LANES		\$13,400,000	GUADALUPE	
2045	0016-04-112	5375	IH 35	GUADALUPE RIVER	HAYS / COMAL COUNTY LINE	OPERATIONAL IMPROVEMENTS INCLUDING RAMP REVISIONS AND INTERSECTION IMPROVEMENTS-CONVERT FRONTAGE ROAD TO ONE WAY		\$60,000,000	COMAL	Sep-2034
2045	0016-05-114	5383	IH 35	GUADALUPE RIVER	FM 1103	OPERATIONAL IMPROVEMENTS INCLUDING RAMP REVISIONS INTERSECTION IMPROVEMENT		\$89,000,000	COMAL	Sep-2034

	Project spun off of an existing project; ex: environmentally clear Corridor A-C; projects become A-B and B-C
	Reconfigured projects based on TPB approved IH 35 and Loop 1604 resolutions in June and August 2018
	Category 7 projects
	Funding revisions between these projects
	Projects added; partial corridor already in MTP/TIP; for environmental clearance purposes
	Projects moving between years

**FY 2019-2022 Transportation Improvement Program
Locally Funded/Regionally Significant Projects**

Name MPO Number	Limits From: Project Description	To:	Responsible Agency
			Network Year
Alamo/Commerce/Losoya Intersection 5423.0 10/2018	Commerce Close Losoya Street to vehicle traffic	Market	CoSA 2025
Broadway 5412.0 10/2018	Houston Street Reduce from 6 lanes with CTL to 4 lanes with CTL, bike acc and sidewalks	Hildebrand	CoSA 2025
Bulverde Road 5408.0 10/2018	Butterleigh Road Expand from 2 travel lanes and CTL to 4 travel lanes and CTL	North of Quiet Meadow Street	CoSA 2025
Commerce Street 5417.0 10/2018	Frio Reconstruct roadway, add CTL, bike lanes and sidewalks	Colorado	CoSA 2025
Commerce Street 5413.0 10/2018	St. Mary's Street Reduce from 4 travel lanes to 3 travel lanes with sidewalks	Santa Rosa Street	CoSA 2025
DeZavala Road 5418.0 10/2018	IH 10 Widen roadway, add CTL, bike lanes and sidewalks	Lockhill Selma	CoSA 2025
Evans Road 5432.0 10/2018	Bulverde Road Expand from 2 to 4 lanes with operational and drainage improvements including curb and sidewalk	TPC Parkway/Dusty Canyon	BC 2025
Evans Road 5433.0 10/2018	TPC Parkway/Dusty Canyon Expand from 2 to 4 lanes with operational and drainage improvements	Hanging Oak	BC 2025
Fredericksburg Road 5407.0 10/2018	N. Flores Reduce from 4 to 2 lanes, upgrade drainage, add new traffic signals and provide sidewalks	Woodlawn	CoSA 2025
Ingram Road 5419.0 10/2018	Potranco Road Construct road extension on new alignment with bike acc and sidewalks	Ingram Road Dead End	CoSA 2025
Jones Street 5424.0 10/2018	at Camden Construct roundabout	and St. Mary's Streets	CoSA 2025
North Main Avenue & Soledad Street 5414.0 10/2018	Pecan Street Reduce from 7 travel lanes to 4 lanes with CTL, bike lanes and sidewalks	Navarro Street	CoSA 2025

**FY 2019-2022 Transportation Improvement Program
Locally Funded/Regionally Significant Projects**

Name MPO Number	Limits From: Project Description	To:	Responsible Agency
			Network Year
North New Braunfels Avenue 5409.0 10/2018	E. Houston Street Reduce from 4 travel lanes to 2 travel lanes with a CTL and sidewalks	Burleson	CoSA 2025
Old FM 471 5429.0 10/2018	Talley Road Add continuous left turn lane with operational and drainage improvements including curb and sidewalk	FM 471	BC 2025
Prue Road 5420.0 10/2018	Babcock Road Expand from 2 to 4 lanes with CTL, Bike lanes and sidewalks	Laureate Drive	CoSA 2025
Rittiman Road 5410.0 10/2018	IH 35 Extend right turn lane from Rittiman to IH 35	Castle Cross Drive	CoSA 2025
Santa Rosa Street 5415.0 10/2018	Cesar Chavez Blvd Reduce from 6 lanes with CTL to 4 lanes with CTL, bike acc and sidewalks	Martin Street	CoSA 2025
South Alamo Street 5416.0 10/2018	Market Street Reduce from 6 lanes with CTL to 4 lanes with CTL, bike acc and sidewalks	Cesar Chavez Blvd	CoSA 2025
St. Mary's Street 5422.0 10/2018	at Navarro Construct roundabout	and Nueva Streets	CoSA 2025
Talley Road 5431.0 10/2018	FM 1957 Expand from 2 to 4 lanes with operational and drainage improvements including curb and sidewalk	Wideman Blvd	BC 2025
Talley Road 5430.0 10/2018	Old Talley Road Expand from 2 to 4 lanes with operational and drainage improvements including curb and sidewalk	FM 471	BC 2025
Thousand Oaks Drive 5411.0 10/2018	Wetmore	Perrin Beitel	CoSA 2025
West Military Drive & Ingram Road Connectors 5421.0 10/2018	W. Military Dead End Construct road extension on new alignment with bike acc and sidewalks	Potranco Road	CoSA 2025

FY 2019 Transit Project Amendments

Alamo Area MPO Transportation Improvement Program

San Antonio TxDOT District

YOE=Year of Expenditure

<u>General Project Information</u>		<u>Funding Information (YOE)</u>	
Project Sponsor:	VIA Metropolitan Transit	Federal Funding Category:	FTA - Section 5307
MPO Project Number:	10201.1	Federal (FTA) Funds:	\$1,409,698
Apportionment Year:	2017	State Funds from TxDOT:	\$0
Project Phase:	C	Other Funds:	\$352,425
Project Description:	Transit: Operating Expenses Preventive Maintenance	Fiscal Year Cost:	\$1,762,123
		Total Project Cost:	\$1,762,123
		TDC Requested:	\$0
		TDC Awarded:	\$0
		Date TDC Awarded:	N/A
Section 5309 ID #:	N/A	TIP Amnd	<u>add project</u>
TIP Amnd Approval:	TPB Approved 10-22-18	Remarks:	

<u>General Project Information</u>		<u>Funding Information (YOE)</u>	
Project Sponsor:	VIA Metropolitan Transit	Federal Funding Category:	FTA - Section 5307
MPO Project Number:	10201.2	Federal (FTA) Funds:	\$456,670
Apportionment Year:	2016	State Funds from TxDOT:	\$0
Project Phase:	C	Other Funds:	\$114,168
Project Description:	Transit: Operating Expenses Preventive Maintenance	Fiscal Year Cost:	\$570,838
		Total Project Cost:	\$570,838
		TDC Requested:	\$0
		TDC Awarded:	\$0
		Date TDC Awarded:	N/A
Section 5309 ID #:	N/A	TIP Amnd	<u>add project</u>
TIP Amnd Approval:	TPB Approved 10-22-18	Remarks:	

<u>General Project Information</u>		<u>Funding Information (YOE)</u>	
Project Sponsor:	VIA Metropolitan Transit	Federal Funding Category:	FTA - Section 5307
MPO Project Number:	10201.3	Federal (FTA) Funds:	\$303,170
Apportionment Year:	2016	State Funds from TxDOT:	\$0
Project Phase:	C	Other Funds:	\$75,793
Project Description:	Capital Improvements Bus Stop Improvements Hardware/Software	Fiscal Year Cost:	\$378,963
		Total Project Cost:	\$378,963
		TDC Requested:	\$0
		TDC Awarded:	\$0
		Date TDC Awarded:	N/A
Section 5309 ID #:	N/A	TIP Amnd	<u>add project</u>
TIP Amnd Approval:	TPB Approved 10-22-18	Remarks:	

<u>General Project Information</u>		<u>Funding Information (YOE)</u>	
Project Sponsor:	VIA Metropolitan Transit	Federal Funding Category:	FTA - Section 5307
MPO Project Number:	10201.4	Federal (FTA) Funds:	\$3,636,916
Apportionment Year:	2015	State Funds from TxDOT:	\$0
Project Phase:	C	Other Funds:	\$909,229
Project Description:	Transit: Operating Expenses Preventive Maintenance	Fiscal Year Cost:	\$4,546,145
		Total Project Cost:	\$4,546,145
		TDC Requested:	\$0
		TDC Awarded:	\$0
		Date TDC Awarded:	N/A
Section 5309 ID #:	N/A	TIP Amnd	<u>add project</u>
TIP Amnd Approval:	TPB Approved 10-22-18	Remarks:	

FY 2019 Transit Project Amendments

Alamo Area MPO Transportation Improvement Program

San Antonio TxDOT District

YOE=Year of Expenditure

<u>General Project Information</u>		<u>Funding Information (YOE)</u>	
Project Sponsor:	VIA Metropolitan Transit	Federal Funding Category:	FTA - Section 5307
MPO Project Number:	10201.5	Federal (FTA) Funds:	\$1,209,234
Apportionment Year:	2015	State Funds from TxDOT:	\$0
Project Phase:	C	Other Funds:	\$302,309
Project Description:	Capital Improvements	Fiscal Year Cost:	\$1,511,543
	Bus Stop Improvements	Total Project Cost:	\$1,511,543
	Hardware/Software	TDC Requested:	\$0
		TDC Awarded:	\$0
Section 5309 ID #:	N/A	Date TDC Awarded:	N/A
TIP Amnd Approval:	TPB Approved 10-22-18	TIP Amnd	<u>add project</u>
		Remarks:	

<u>General Project Information</u>		<u>Funding Information (YOE)</u>	
Project Sponsor:	VIA Metropolitan Transit	Federal Funding Category:	FTA - Section 5307
MPO Project Number:	10203	Federal (FTA) Funds:	\$570,315
Apportionment Year:	2019	State Funds from TxDOT:	\$0
Project Phase:	O	Other Funds:	\$570,315
Project Description:	Transit: AACOG Operating Projects	Fiscal Year Cost:	\$1,140,630
	Transportation Services for New Braunfels, Cibolo, McQueeney, Marion, Schertz, etc	Total Project Cost:	\$1,140,630
		TDC Requested:	\$0
		TDC Awarded:	\$0
Section 5309 ID #:	N/A	Date TDC Awarded:	N/A
TIP Amnd Approval:	TPB approved 10-22-18	TIP Amnd	<u>revise cost</u>
		Remarks:	

FY 2019 Transit Project Amendments

Alamo Area MPO Metropolitan Transportation Plan

San Antonio TxDOT District

YOE=Year of Expenditure

<u>General Project Information</u>		<u>Funding Information (YOE)</u>	
Project Sponsor:	VIA Metropolitan Transit	Federal Funding Category:	FTA - Section 5307
MPO Project Number:	10201.1	Federal (FTA) Funds:	\$1,409,698
Apportionment Year:	2017	State Funds from TxDOT:	\$0
Project Phase:	C	Other Funds:	\$352,425
Project Description:	Transit: Operating Expenses Preventive Maintenance	Fiscal Year Cost:	\$1,762,123
		Total Project Cost:	\$1,762,123
		TDC Requested:	\$0
		TDC Awarded:	\$0
		Date TDC Awarded:	N/A
Section 5309 ID #:	N/A	MTP Amendment:	add project
MTP Amend Appr:	TPB Approved 10-22-18		

<u>General Project Information</u>		<u>Funding Information (YOE)</u>	
Project Sponsor:	VIA Metropolitan Transit	Federal Funding Category:	FTA - Section 5307
MPO Project Number:	10201.2	Federal (FTA) Funds:	\$456,670
Apportionment Year:	2016	State Funds from TxDOT:	\$0
Project Phase:	C	Other Funds:	\$114,168
Project Description:	Transit: Operating Expenses Preventive Maintenance	Fiscal Year Cost:	\$570,838
		Total Project Cost:	\$570,838
		TDC Requested:	\$0
		TDC Awarded:	\$0
		Date TDC Awarded:	N/A
Section 5309 ID #:	N/A	MTP Amendment:	add project
MTP Amend Appr:	TPB Approved 10-22-18		

<u>General Project Information</u>		<u>Funding Information (YOE)</u>	
Project Sponsor:	VIA Metropolitan Transit	Federal Funding Category:	FTA - Section 5307
MPO Project Number:	10201.3	Federal (FTA) Funds:	\$303,170
Apportionment Year:	2016	State Funds from TxDOT:	\$0
Project Phase:	C	Other Funds:	\$75,793
Project Description:	Capital Improvements Bus Stop Improvements Hardware/Software	Fiscal Year Cost:	\$378,963
		Total Project Cost:	\$378,963
		TDC Requested:	\$0
		TDC Awarded:	\$0
		Date TDC Awarded:	N/A
Section 5309 ID #:	N/A	MTP Amendment:	add project
MTP Amend Appr:	TPB Approved 10-22-18		

<u>General Project Information</u>		<u>Funding Information (YOE)</u>	
Project Sponsor:	VIA Metropolitan Transit	Federal Funding Category:	FTA - Section 5307
MPO Project Number:	10201.4	Federal (FTA) Funds:	\$3,636,916
Apportionment Year:	2015	State Funds from TxDOT:	\$0
Project Phase:	C	Other Funds:	\$909,229
Project Description:	Transit: Operating Expenses Preventive Maintenance	Fiscal Year Cost:	\$4,546,145
		Total Project Cost:	\$4,546,145
		TDC Requested:	\$0
		TDC Awarded:	\$0
		Date TDC Awarded:	N/A
Section 5309 ID #:	N/A	MTP Amendment:	add project
MTP Amend Appr:	TPB Approved 10-22-18		

FY 2019 Transit Project Amendments

Alamo Area MPO Metropolitan Transportation Plan

San Antonio TxDOT District

YOE=Year of Expenditure

<u>General Project Information</u>		<u>Funding Information (YOE)</u>	
Project Sponsor:	VIA Metropolitan Transit	Federal Funding Category:	FTA - Section 5307
MPO Project Number:	10201.5	Federal (FTA) Funds:	\$1,209,234
Apportionment Year:	2015	State Funds from TxDOT:	\$0
Project Phase:	C	Other Funds:	\$302,309
Project Description:	Capital Improvements	Fiscal Year Cost:	\$1,511,543
	Bus Stop Improvements	Total Project Cost:	\$1,511,543
	Hardware/Software	TDC Requested:	\$0
Section 5309 ID #:	N/A	TDC Awarded:	\$0
MTP Amend Appr:	TPB Approved 10-22-18	Date TDC Awarded:	N/A
		MTP Amendment:	add project

<u>General Project Information</u>		<u>Funding Information (YOE)</u>	
Project Sponsor:	VIA Metropolitan Transit	Federal Funding Category:	FTA - Section 5307
MPO Project Number:	10203	Federal (FTA) Funds:	\$570,315
Apportionment Year:	2019	State Funds from TxDOT:	\$0
Project Phase:	O	Other Funds:	\$570,315
Project Description:	Transit: AACOG Operating Projects	Fiscal Year Cost:	\$1,140,630
	Transportation Services for New Braunfels, Cibolo, McQueeney, Marion, Schertz, etc	Total Project Cost:	\$1,140,630
Section 5309 ID #:	N/A	TDC Requested:	\$0
MTP Amend Appr:	TPB approved 10-22-18	TDC Awarded:	\$0
		Date TDC Awarded:	N/A
		MTP Amendment:	revise cost

Transportation Policy Board

September 24, 2018

10. Monthly Status Reports

Purpose

The purpose of this agenda item is to provide information on several important issues.

Issue

Reports will be presented as follows:

- a. Alamo Regional Mobility Authority (Green)
- b. Air Quality Issues (Rath)
- c. City of San Antonio (Frisbie)
- d. San Antonio Mobility Coalition (Boyer)
- e. Texas Department of Transportation (Jorge)
- f. VIA Metropolitan Transit (Arndt)
- g. Others

Action Requested

For information, discussion and action as necessary.

Transportation Policy Board

September 24, 2018

11. Executive Session - Pursuant to Chapter 551, Subchapter D, Texas Government Code

At any time during the meeting of the MPO Transportation Policy Board, the Board reserves the right to adjourn into executive Session at any time to discuss any of the matters listed on the posted agenda, as authorized by Texas Government Code Section 551.071 (consultation with attorney), Section 551.072 (deliberations about real property), Section 551.074 (personnel matters), and Section 551.086 (economic development).

12. Adjourn