

BIKE AND PEDESTRIAN SAFETY IN THE ALAMO AREA

Allison Blazosky, Alamo Area MPO

Getting bike and pedestrian planning rolling in the Alamo Area MPO involves explaining **the influence that active transportation has on our health, air quality, traffic congestion and safety**

1 in 8

San Antonians
is diabetic

Adult obesity of

35.1%

Half

of trips are
shorter than 3
miles



(above) Photo by David Kozlowski; (below) photo by Javion Ray

The **3-C process** is a requirement of Metropolitan Planning Organizations (MPOs)

cooperative

No single agency has responsibility for the entire transportation system

comprehensive

Encompasses all transportation modes and all local land use and economic development plans

continuous

Planning should address both short-term needs and a long-term vision

The Transportation Policy Board (TPB) is made up of local **elected and appointed** officials

- **Councilman Ray Lopez, MPO Chair**
- **Commissioner Kevin Wolff, MPO Vice-Chair**
- **Gerald Lee, Board Member**
- **John Clamp, Chairman**
- **Commissioner Tommy Adkisson**
- **Commissioner Sergio Rodriguez**
- **Renee Green, County Engineer**
- **Commissioner Kevin Webb**
- **Councilman Jeff Haberstroh**
- **Mayor Gale Pospisil**
- **Councilmember Diego Bernal**
- **Councilmember Shirley Gonzales**
- **Councilmember Ron Nirenberg**
- **John Dugan, Planning Director**
- **Mike Frisbie, TCI Director**
- **Mayor Don Keil**
- **Mayor Chris Riley, Leon Valley**
- **Commissioner Kyle Kutscher**
- **Mayor Tom Daly, City of Selma**
- **Mario Jorge, District Engineer**
- **Dr. Richard Gambitta, Board Member**

City of San Antonio

Bexar County

Advanced Transportation District

Alamo Regional Mobility Authority

Bexar County

Bexar County

Bexar County

Comal County

City of Boerne

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

Greater Bexar County Council of Cities

Guadalupe County

Northeast Partnership

TxDOT, San Antonio District

VIA Metropolitan Transit

21

voting members

Bike and pedestrian projects and policies are integrated into **three key documents** required of MPOs

2 years

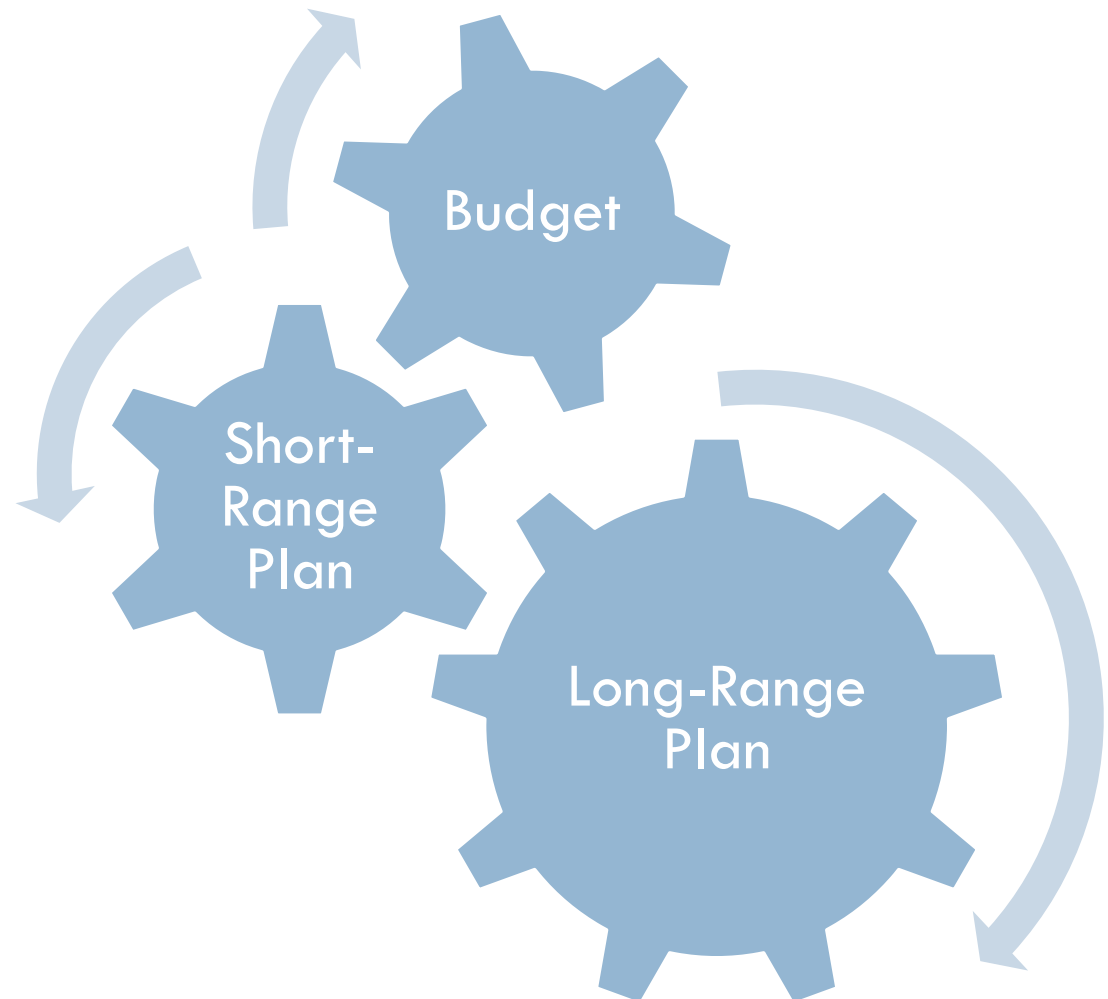
Unified Planning
Work Program

4-5 years

Transportation
Improvement Program

25 years

Metropolitan
Transportation Plan



The **2010 San Antonio Regional Bicycle Travel Patterns Study** estimated the number of residents who bike and surveyed the reasons people bike, barriers to biking and type of preferred facilities and improvements

2 years

Unified Planning
Work Program

4-5 years

Transportation
Improvement Program

25 years

Metropolitan
Transportation Plan

**2010 San Antonio Regional Bicycle
Travel Patterns Study**

November 2010

...helping organizations make better decisions

ETC Institute
725 West Frontier Circle
Olathe, Kansas
66061

Project Manager: Chris Tatham
Phone: 913-829-1215
Fax: 913-829-1591
E-mail: ctatham@etcinstitute.com

ETC
Institute

The **Transportation Improvement Program (TIP)** is a 4-5 year fiscally-constrained list of federally and state funded projects.

2 years

Unified Planning
Work Program

4-5 years

Transportation
Improvement Program

25 years

Metropolitan
Transportation Plan

FY 2014-2019 Transportation Improvement Program
Alphabetical Listing of Roadway, Bicycle, Pedestrian and Rideshare Projects

Updated:
April 28, 2014

Project Name MPO Project Number TxDOT Project Number	Limits From: Project Description	To:	Construction Cost Fiscal Year Responsible Agency
36th Street 4030.0 0915-12-496	Billy Mitchell Extend 36th Street along existing Wagner/Tinker; exp to 4 lane divided w/raised median, LTL, bike lanes & sidewalk	Duncan	\$5,900,000 FY 2015 CoSA
Binz Engleman Road 4004.0 0915-12-545	Springfield Reconstruct roadway with sidewalks and bike lanes	0.4 Mi east of Ackerman Road	\$2,119,072 FY 2016 Kirby
BS 46-C 4039.0 0215-02-048	Kerlick Lane Expand from 2 lanes to 4 lanes	Landa Street	\$9,000,000 FY 2014 New Braunfels
Bulverde Road 3988.0 0915-12-509	Marshall Road Reconstruct and widen to 4 lanes with shoulder/bike route, curbs, ramps, bridge construction and drainage improvements	Wilderness Oak	\$8,097,480 FY 2015 BxCo
Callaghan Road 3998.0 0915-12-516	IH 410 Expand from 2 to 4 lanes, including turn lanes, sidewalks, & drainage improvements	Spur 421 (Bandera Road)	\$10,703,426 FY 2015 CoSA
FM 1516 4002.0 1477-01-040	FM 1976 Realign and widen roadway from 2 to 4 lanes with CLTL, sidewalks and bike lane	FM 78	\$8,403,801 FY 2016 TxDOT

The **long-range transportation plan** forecasts transportation needs for the next 25 years and lists the goals, visions and projected transportation projects for the region.

2 years

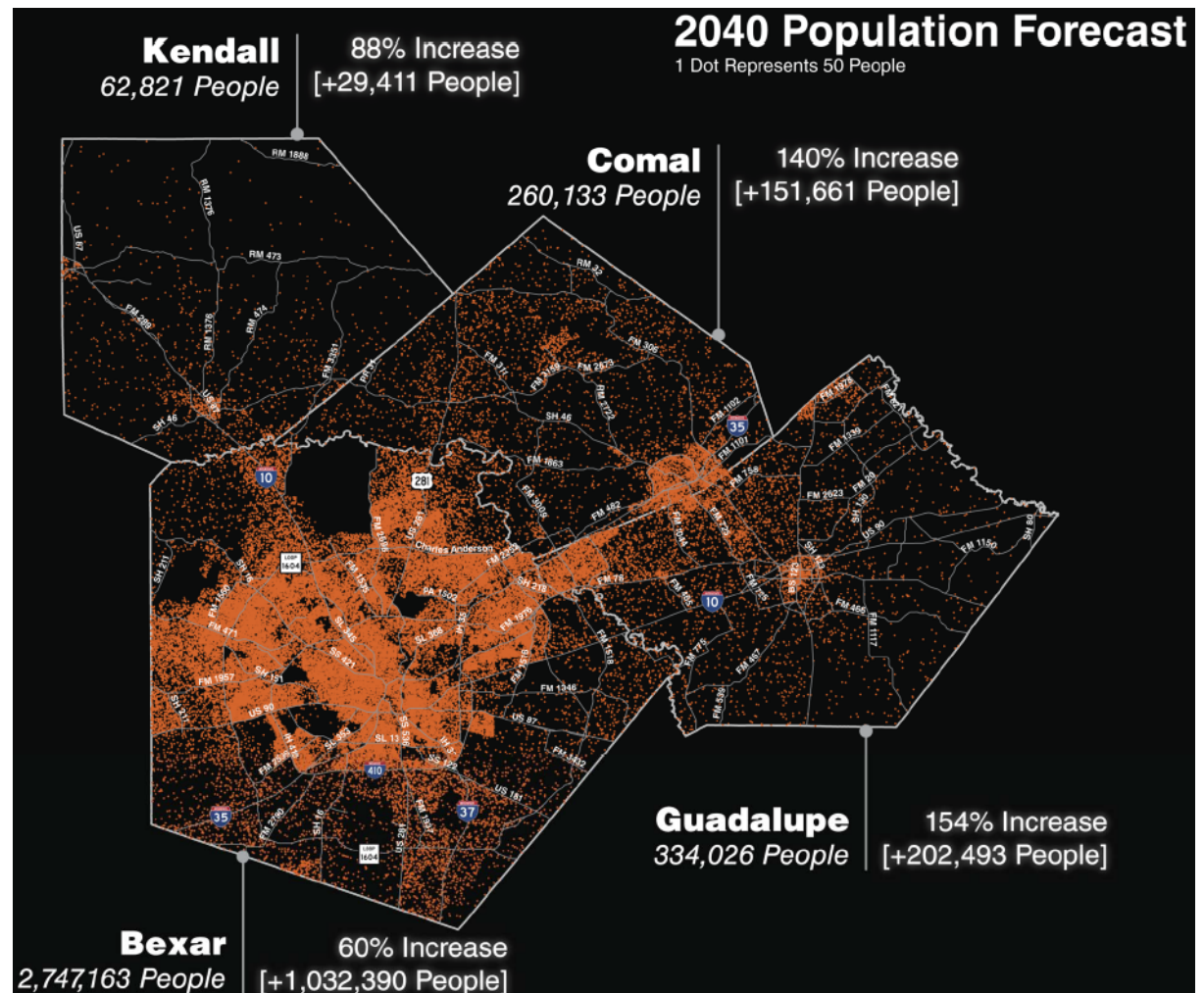
Unified Planning
Work Program

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Transportation Plan



The Alamo Area MPO's **Walkable Community Program** is made up of three activities



**Talks and
Bike Rodeos
at Schools**



**Share the
Road Talks**



Walkable Community Workshops

The MPO assists with **bike rodeos that use hands-on bike riding** to reinforce safe bicycling habits for children and **talks with 3rd, 4th and 5th graders** prior to the event to introduce safe pedestrian and bicycling behavior



**Talks and
Bike Rodeos
at Schools**



**Share the
Road Talks**



Walkable Community Workshops

Talks with motorists emphasize **sharing the road** safely with pedestrians and bicyclists



**Talks and
Bike Rodeos
at Schools**



**Share the
Road Talks**



Walkable Community Workshops

Walkable Community Workshops bring together residents and the MPO's transportation partners to help a community **identify infrastructure improvements** that would encourage walking and bicycling



**Talks and
Bike Rodeos
at Schools**



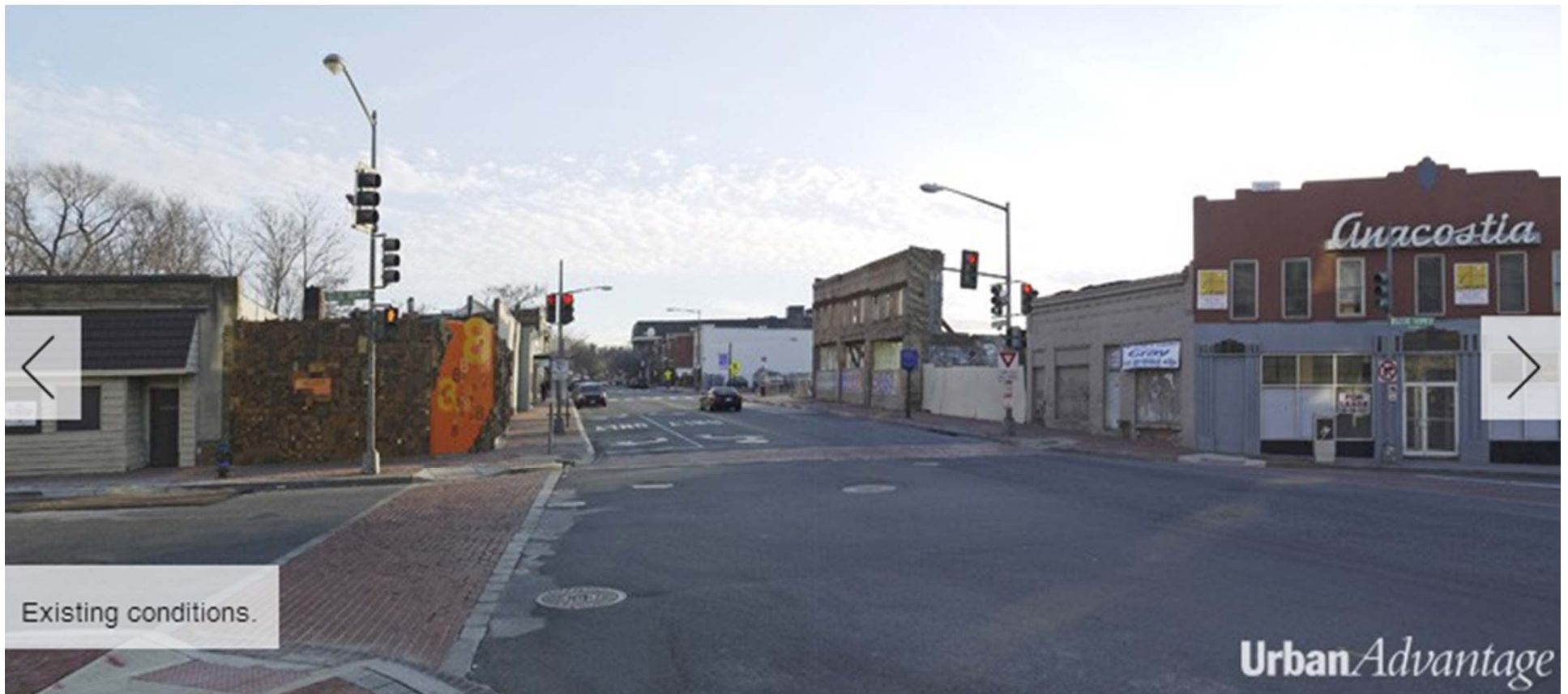
**Share the
Road Talks**



Walkable Community Workshops

Safety is an important element of a walkable community, a community where trips can be and are made by walking, bicycling or public transportation

- Security
- Aesthetics
- Access
- Land Use
- Safety



Existing conditions.

UrbanAdvantage

Safety is an important element of a walkable community, a community where trips can be and are made by walking, bicycling or public transportation

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The MPO gets crash data from **TxDOT's Crash Records Inventory System (CRIS)**

□ Motor vehicle crashes involving bicycles

Year	Crashes	Fatalities
2010	226	2
2011	230	2
2012	242	4

► Motor vehicle crashes involving pedestrians

Year	Crashes	Fatalities
2010	675	33
2011	474	33
2012	584	42

The **MPO's Safety Program** organizes crash data by type and uses Tableau to sort by specific variables like day of week, time of day and posted speed limit

Overview

Click on a Year

2010 | 2011 | 2012

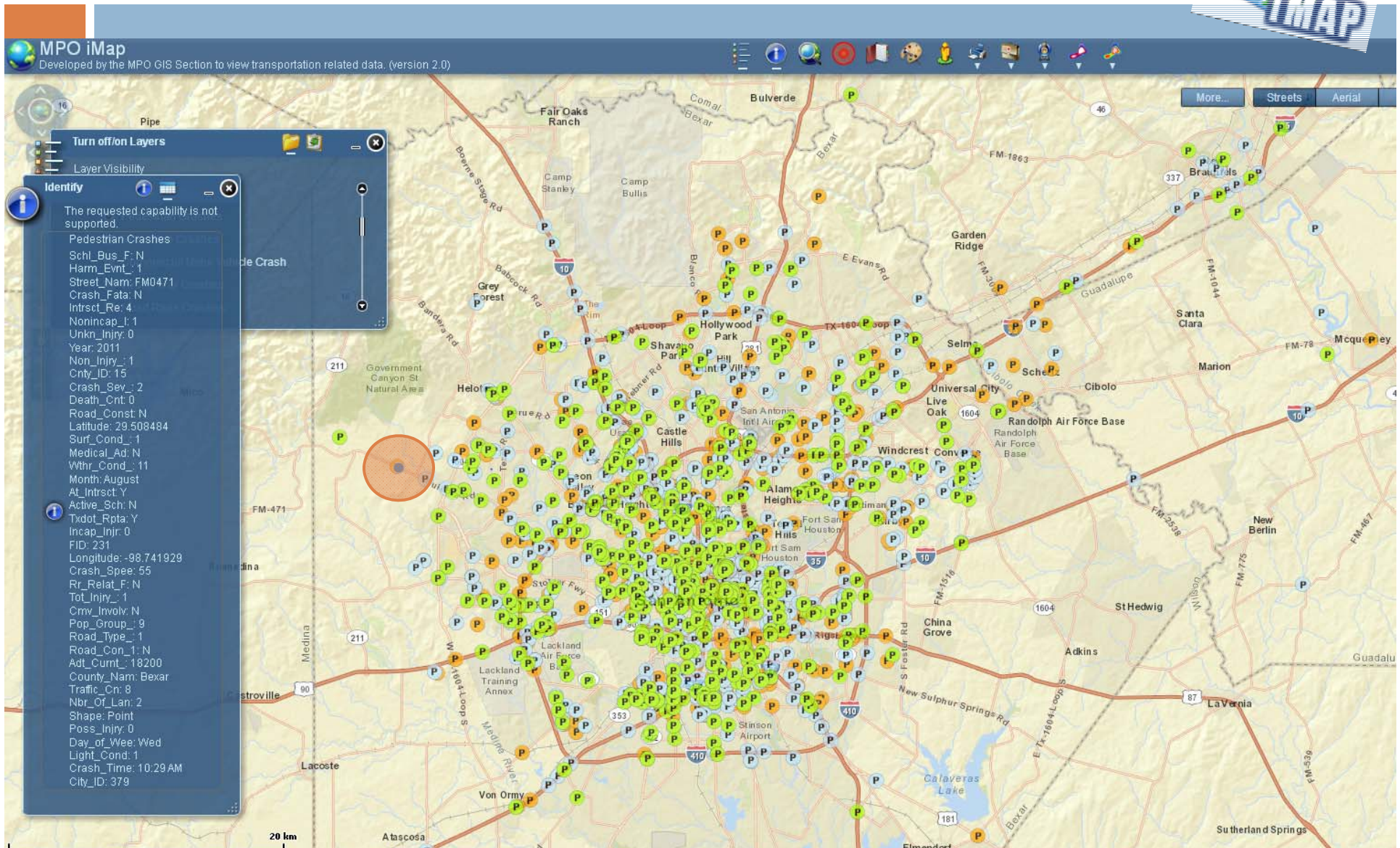
Speeding

Crash Years 2010 - 2012

WRONG WAY

Crash Years 2010 - 2012





It's important that data the MPO collects on numbers and attitudes then **gets out to the community**

325,000

residents ride
a bike each month

72%

of residents want
better bike facilities

Walking, bicycling and
transit account for

5%

of trips in
Bexar County but

~25%

of all traffic fatalities
in Bexar County are
bicyclists and pedestrians

Most crashes involving **bicyclists**
occur at intersections, but most fatal
crashes occur at non-intersections

Most crashes involving (and fatal for) **pedestrians** occur at non-intersections

The MPO's **Bicycle and Pedestrian Mobility Advisory Committees** (BMAC and PMAC) have a history of interagency coordination



Alamo Area Metropolitan Planning Organization

HOME ABOUT US GET INVOLVED COMMITTEES & AGENDAS NEWSROOM PLANNING LIBRARY

"We Plan to Keep You Moving!"

Pedestrian Mobility Advisory Committee (PMAC)

Agenda Only | Full Package | Membership List | Bylaws/Policies | Archives

The Pedestrian Mobility Advisory Committee (PMAC) advises the MPO Transportation Policy Board on pedestrian issues for the metropolitan area. PMAC's goal is to plan for safe, effective and accessible network of sidewalks and pedestrian amenities throughout the region. PMAC is comprised of agency staff members and interested citizens, including the mobility impaired community.

Meeting Information:

When: Third Wednesday of the month at 3:30 p.m.

Where: MPO Conference Room B at 825 South Saint Mary's St. [View map](#)

* Meeting dates, times, and locations may vary. Please confirm the meeting information with the agenda posted on our website or by calling us at 210.227.8651.

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.

Bicycle Mobility Advisory Committee (BMAC)

Agenda Only | Full Package | Membership List | Bylaws/Policies | Archives

The Bicycle Mobility Advisory Committee (BMAC) was established by the Alamo Area Metropolitan Planning Organization (MPO) Transportation Policy Board in 2014 to improve bicycle mobility within the Alamo Area MPO Study Area. BMAC's vision is for the region to be distinguished as a travel on and off-road and cycling is recognized as a clean, healthy, and affordable form of transportation and recreation.

month at 6:00 a.m.

at 825 South Saint Mary's St. [View map](#)

BMAC

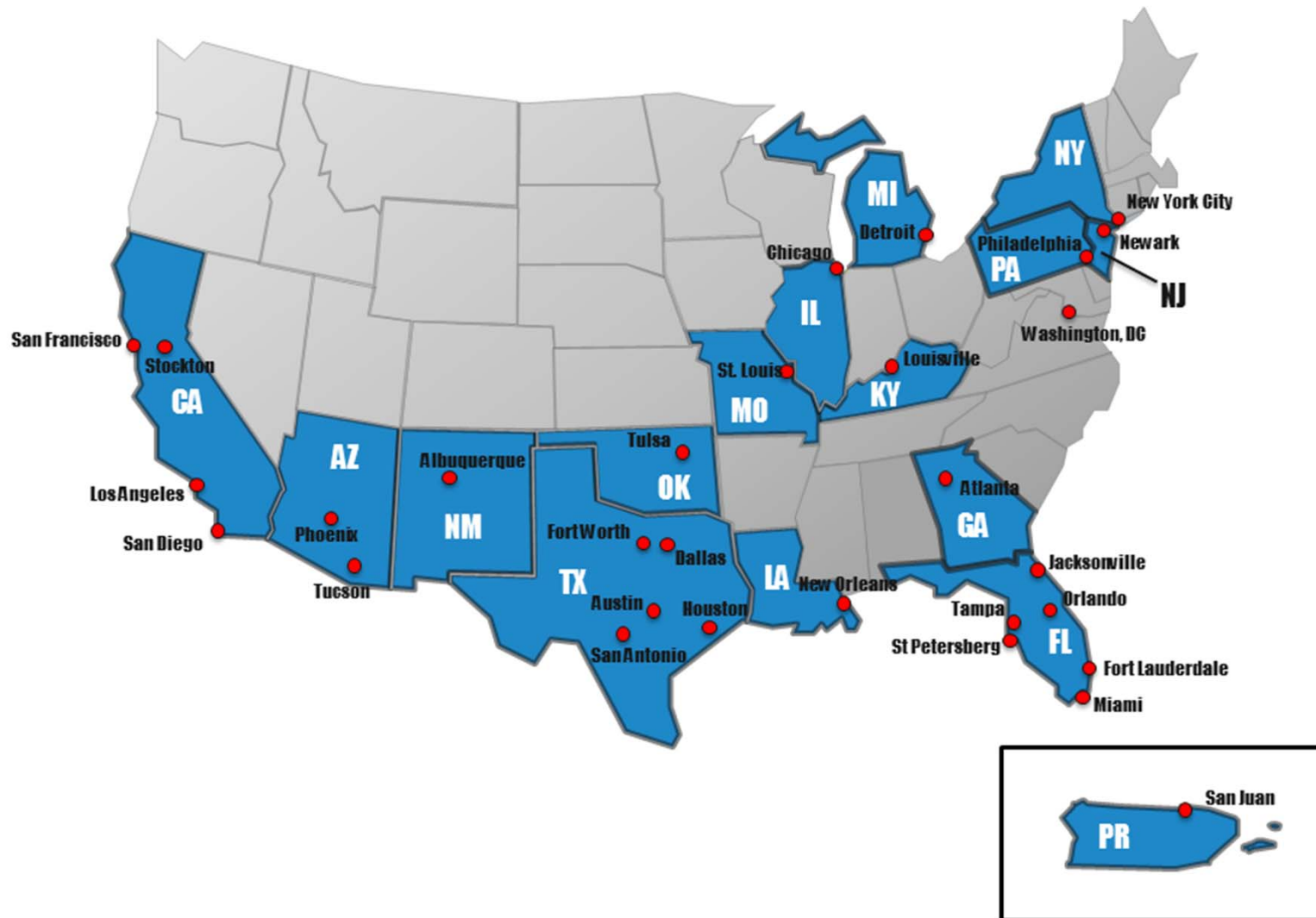
BICYCLE MOBILITY ADVISORY COMMITTEE

San Antonio-Bexar County Metropolitan Planning Organization

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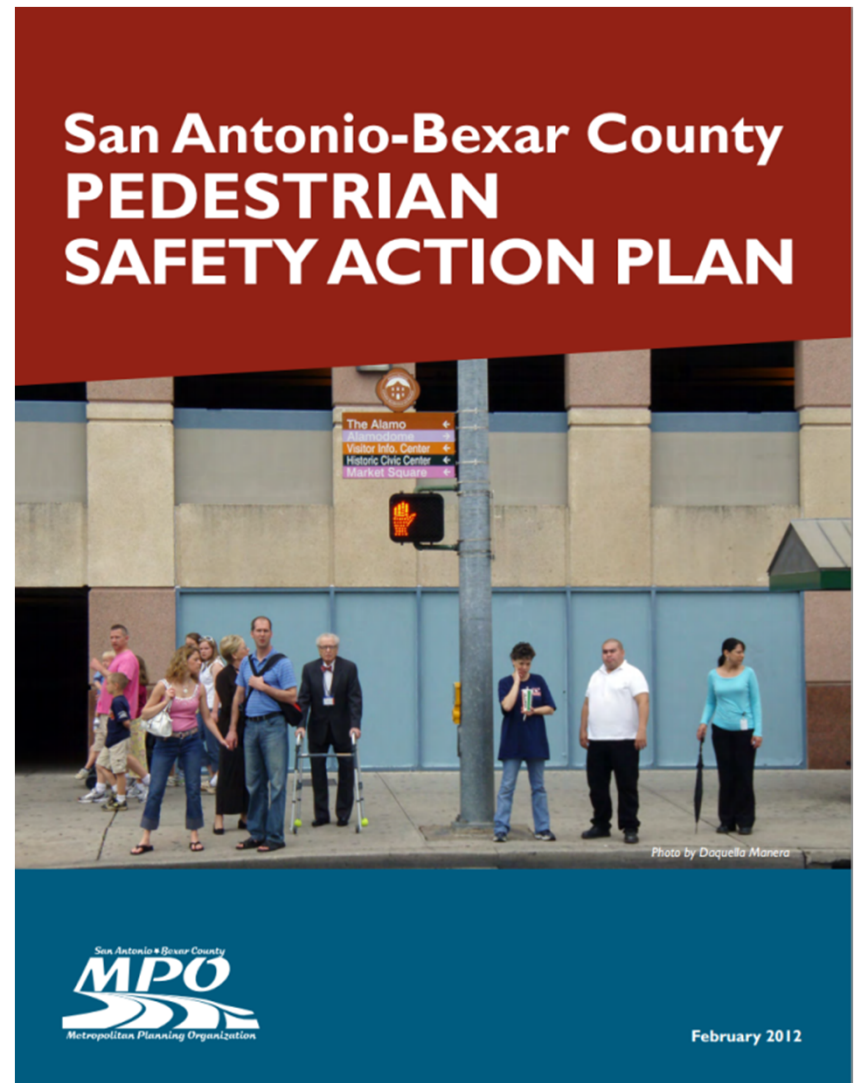
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Texas and San Antonio are designated a **Pedestrian Safety Focus State and City**. Focus Cities **exceed the national average of 20** annual pedestrian fatalities or a pedestrian fatality rate of >2.33 per 100,000 population



The **Pedestrian Safety Action Plan** provides a roadmap for **reducing pedestrian crashes** and **increasing walking trips**

- 2009: FHWA's workshop on "Developing a Pedestrian Safety Action Plan"
- 2010: Communities Putting Prevention to Work grant funded the study, overseen by BMAC and PMAC
- 2011: community outreach, crash data analysis, development of a toolkit with 43 recommended countermeasures
- 2012: Adoption by the TPB and distribution to partner agencies



MINI-TRAFFIC CIRCLES

Mini-traffic circles are circular islands that are installed in the center of appropriate residential street intersections to reduce traffic speeds and collisions. Traffic circles require vehicles to reduce speed while allowing continuous traffic flow. They can be installed in lieu of signals or stop signs. Mini-traffic circles can be landscaped or paved. Vegetation should be planted/maintained so that it does not block visibility. Mini-traffic circles should be accompanied by tight curb radii on the adjacent corners to reduce right turning vehicle speeds. Larger vehicles such as school buses that make wider turns can be accommodated by building traffic circles with mountable curbs. Traffic circles may be designed to accommodate transit vehicles using a mountable curb (or truck apron), however, in general, streets with transit routes should not be considered for traffic circles.

Current Use in the City of San Antonio/Bexar County Region: Mini-traffic circles have not been used in the San Antonio/Bexar County Region.

Recommendations for the City of San Antonio/Bexar County Region: All traffic calming features should be installed only after completing a thorough analysis of potential impacts on the surrounding street network. Consider installing mini-traffic circles on:

- Intersections of residential streets with high design speeds where there is a history of crashes
- Bicycle routes (residential streets that are signed or otherwise designated as bicycle routes)

Crash Reduction Factors	Reference/Guidance	Examples
Traffic circles CFR = 90% (City of Seattle)	<ul style="list-style-type: none"> ▪ PedSafe – Traffic Circles ▪ City of Seattle Traffic Circle Program 	<ul style="list-style-type: none"> ▪ Seattle, WA ▪ Portland, OR



Mini-traffic circle combined with chicane at a T intersection



Traffic circle with a mountable curb - Seattle, WA.

Location	Photo of Location	Issue/Condition Addressed by Countermeasure
Location # 1 Stormy Meadow and Stormy Hill (See also "Chicanes" countermeasure profile).		A traffic circle at this location would provide: <ul style="list-style-type: none"> ▪ A reduction in vehicle speeds on roads that otherwise provide little in the way of traffic calming ▪ Improved safety along routes travelled by children walking to/from school
Location # 2 Every other, or every third, intersection along Spring Valley Rd and Spring Mist Rd (Spring Creek Neighborhood)		Traffic circles at these locations would provide: <ul style="list-style-type: none"> ▪ A reduction in vehicle speeds on roads that otherwise provide little in the way of traffic calming ▪ Improved safety along routes travelled by children walking to/from school ▪ For the elimination of stop control at the intersection

Note: This information is provided for illustrative purposes only and is not intended to require any agency to implement these improvements

MID-BLOCK STAGGERED SIGNAL

A mid-block, staggered, two-stage traffic signal at a crossing island (also known as a Z-crossing) can reduce impacts on motor vehicle flow while helping pedestrians cross multi-lane roadways. The two crossings are separated by a fenced median that provides a walk/wait area and a pedestrian stops one direction of traffic at a time. An issue with staggered crosswalks is that they may present a challenge for visually impaired pedestrians who can be disoriented by changes in the direction of the walkway leading to the road. A solution is to provide detectable warnings and/or railings to help realign the pedestrian perpendicularly to the roadway just before the second crossing. A two-stage traffic signal should not be installed without the staggered (Z) crossing since a pedestrian may look at the wrong pedestrian indicator causing them to "WALK" when they should be stopped for traffic.

Current Use in the City of San Antonio/Bexar County Region: Mid-block staggered signals have not been implemented.

Recommendations for the City of San Antonio/Bexar County Region: Use this treatment sparingly. When used, focus on the following types of locations:

- Locations with high pedestrian volumes
- High crash locations
- Locations with high use by populations over represented in the crash data such as children, seniors, and persons with disabilities
- Locations that provide a better alternative to nearby intersections that are complex, relatively high speed, and/or have a history of pedestrian crashes

Crash Reduction Factors	Reference/Guidance	Examples
CRF=54%	<ul style="list-style-type: none"> Safe Routes to School Guide – Tools to Reduce Crossing Distances for Pedestrians PedSafe – Case Study No. 34 	<ul style="list-style-type: none"> PedSafe – Staggered Median Bellevue, WA

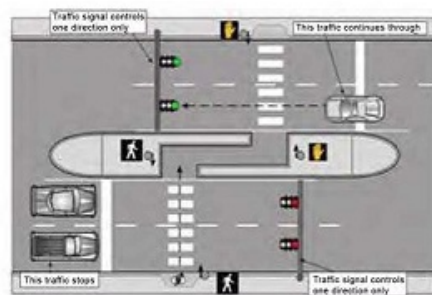


Diagram of mid-block staggered signal



Mid-block staggered signal for arterial crossing

Location	Photo of Location	Issue/Condition Addressed by Countermeasure
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Location # 1

Fredericksburg Rd
8300 block, near Las
Almas Apartments and
transit stops



Apartments and mid-block transit stops are generators of pedestrian traffic. A mid-block staggered signal would provide:

- A safe crossing opportunity
- A reduction in the number of pedestrians crossing the street at unmarked mid-block locations

Location # 2

S W.W. White Rd at
Lord Rd

Also see "median" countermeasure profile



This location is a long block (approximately a quarter mile between crossings) with retail and transit stops along its length. A staggered mid-block crossing would:

- Reduce potential for mid-block crashes associated with pedestrians crossing the roadway at unmarked locations
- Allow pedestrians to cross a 4-lane roadway in two stages

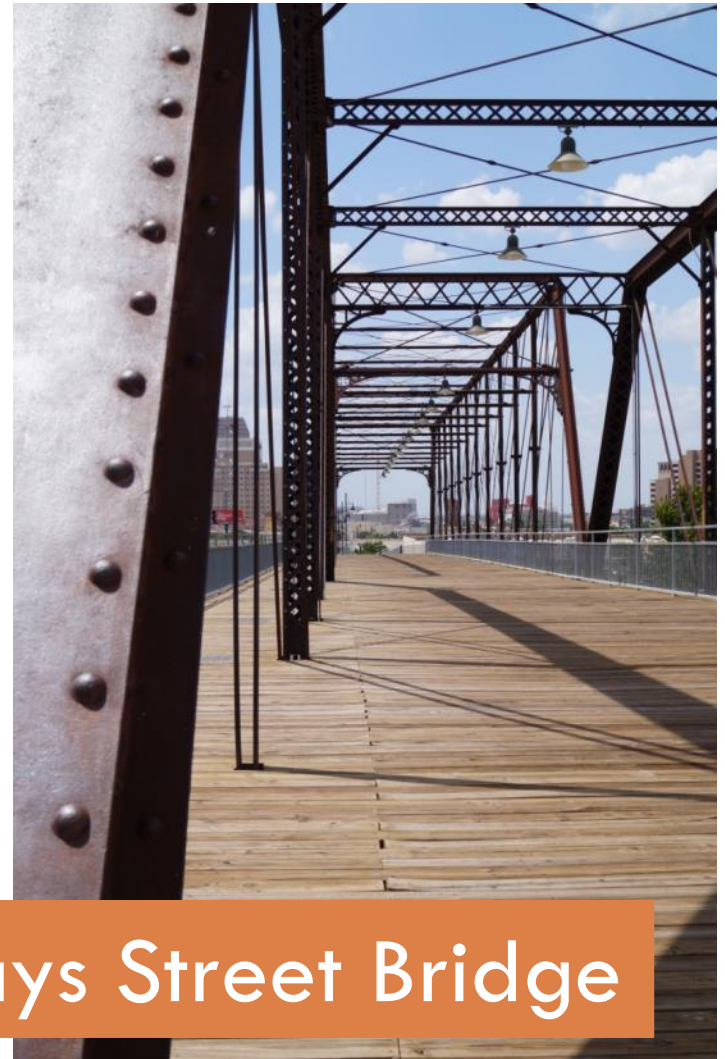
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The MPO supports planning efforts and funds local bike and pedestrian projects through the TIP and other federal programs

B-cycle Expansion

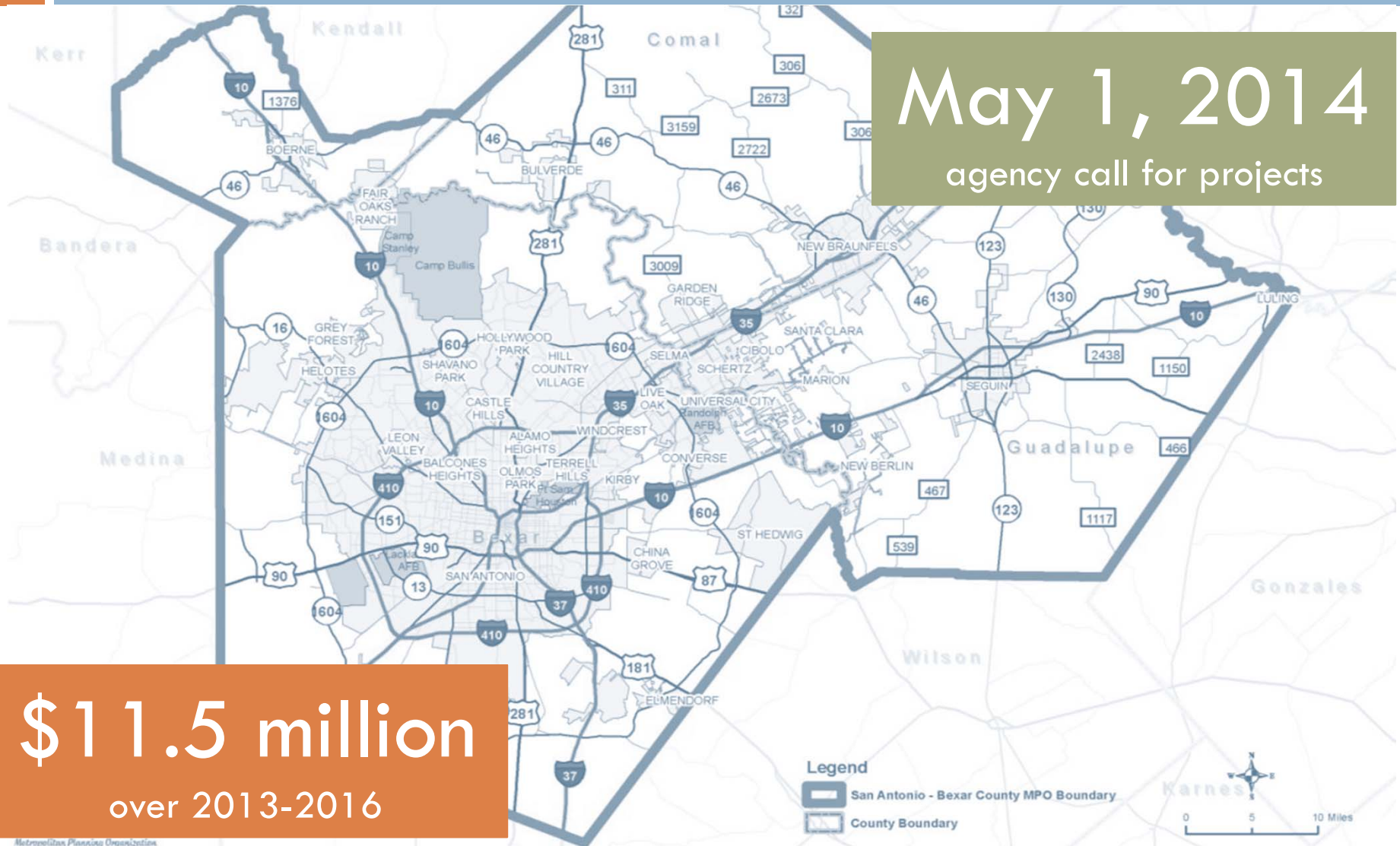


Hays Street Bridge



May 1, 2014
agency call for projects

\$11.5 million
over 2013-2016



Questions?



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Photo from <http://blog.mysanantonio.com/downtown/>