

WELCOME

Please sign in and:

- Explore the exhibits
- Submit a comment form
- Fill out a community survey
- Ask questions



MOPAC SOUTH
ENVIRONMENTAL STUDY



HOW TO SUBMIT COMMENTS

Today at the Open House:



Give comments verbally to the court reporter



Fill out a comment form

Electronic Method:



Go to the website: ***www.MoPacSouth.com***



Send a fax to 512-996-9784

Mail:



Central Texas Regional Mobility Authority

c/o MoPac South Environmental Study

3300 North IH-35, Suite 300

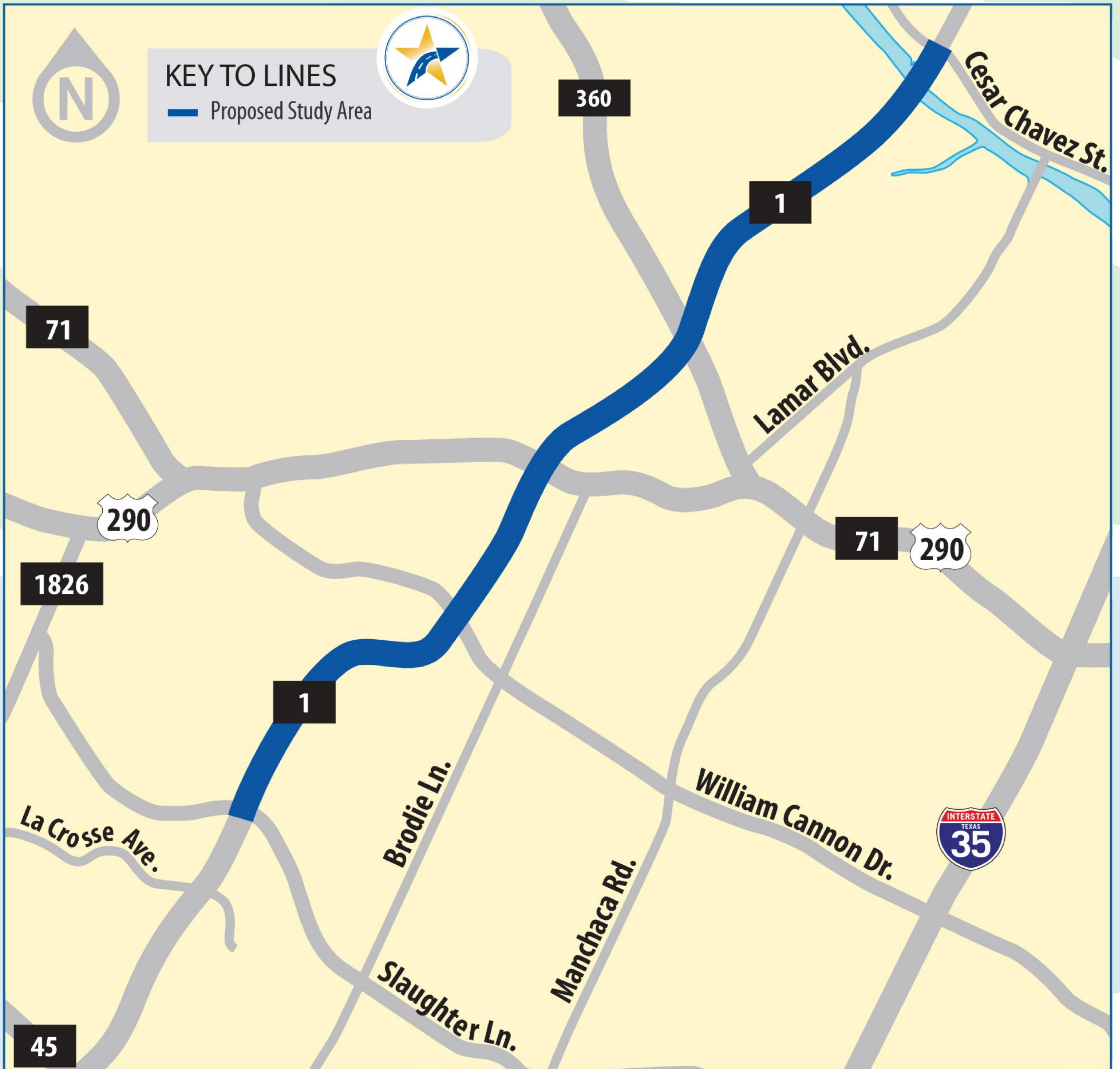
Austin, Texas 78705

All comments must be received by **March 9, 2015** to be part of the official record of the Open House.



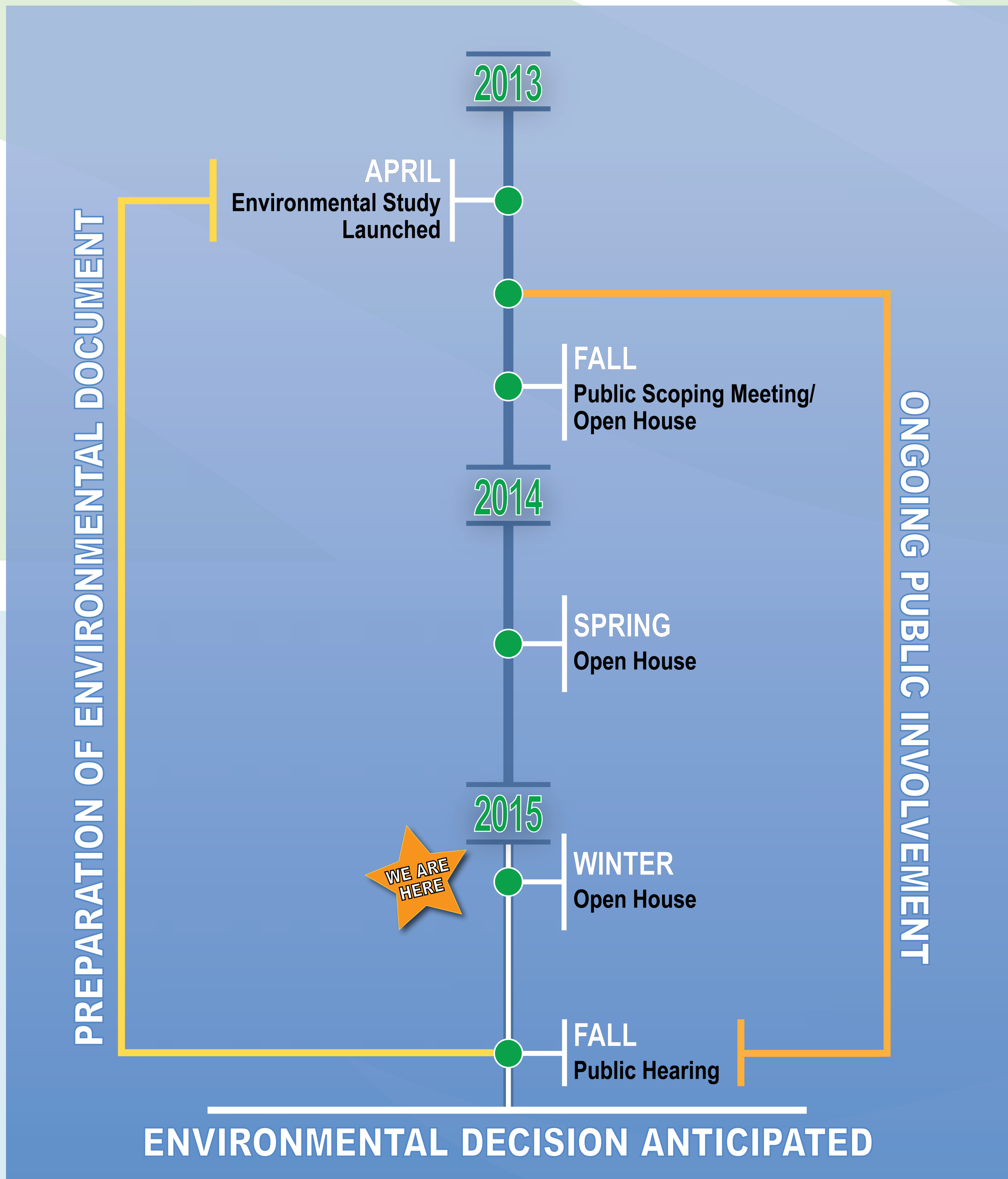
MoPAC SOUTH
ENVIRONMENTAL STUDY

STUDY LOCATION



MoPac South
ENVIRONMENTAL STUDY

ANTICIPATED TIMELINE



The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 16, 2014, and executed by FHWA and TxDOT.



MOPAC SOUTH
ENVIRONMENTAL STUDY

PURPOSE OF THE OPEN HOUSE

- Learn more about the MoPac South Environmental Study
- Review the results of the alternatives evaluation process
- Review and provide input on:
 - The recommended reasonable alternative
 - Context Sensitive Solutions (CSS)



AGENCIES AND THEIR ROLE IN THE ENVIRONMENTAL PROCESS

Who They Are	What They Do
<p>Decision Making Agency TxDOT Environmental Division</p>	<ul style="list-style-type: none"> Review and approve the Environmental Assessment and technical reports
<p>Lead Agencies Central Texas Regional Mobility Authority TxDOT Austin District</p>	<ul style="list-style-type: none"> Manage environmental and engineering process Provide technical review and guidance
<p>National Environmental Policy Act Technical Work Group</p> <ul style="list-style-type: none"> U.S. Army Corps of Engineers Texas Historical Commission <p>Texas Parks and Wildlife Department Barton Springs Edwards Aquifer Conservation District Capital Area Metropolitan Planning Organization* Capital Metro City of Austin City of Rollingwood City of West Lake Hills</p> <p>Invited:</p> <ul style="list-style-type: none"> U.S. Fish and Wildlife Service U.S. Department of Agriculture - Natural Resources Conservation Service U.S. Department of Interior - Office of Environmental Policy and Compliance <p>U.S. Environmental Protection Agency Texas Commission on Environmental Quality Lower Colorado River Authority Travis County City of Sunset Valley LBJ Wildflower Center</p>	<ul style="list-style-type: none"> Provide input on the: Purpose and Need for the project; screening and development of alternatives; methodologies to define impacts; and identification of the preferred alternative. Review the draft and final EA
<ul style="list-style-type: none"> Agencies that provide potential permits and other approvals for this project. <p>* Capital Area Metropolitan Planning Organization prepares the Long-Range Transportation Plan that identifies potential projects and allocates state and federal funding for both environmental studies and construction projects.</p>	



HOW DO WE DECIDE IF A ROAD GETS CONSTRUCTED?



LEGEND

- Project Team: engineers, planners, scientists, traffic modelers and other experts
- Process to Decide if a Road Gets Constructed
- Community members provide input at stakeholder meetings, through online surveys and emails

WHAT ARE WE TRYING TO DO? (PROJECT PURPOSE)

- Provide an opportunity for reliable travel times
- Improve operational efficiency
- Create a dependable and consistent route for transit
- Facilitate reliable emergency response

85% of respondents agree or strongly agree that the Draft Purpose and Need for this project are appropriate.

Source: Community Survey, spring 2014

WHAT PROBLEMS NEED TO BE ADDRESSED? (PROJECT NEED)

- Current and forecasted congestion levels are creating unreliable travel times

TRAVEL TIME (IN MINUTES) between Cesar Chavez and Slaughter			
	2013	2035 (NO BUILD)	ADDITIONAL TRAVEL TIME
Morning peak period northbound (7-9 a.m.)	15	47	+32
Evening peak period southbound (4-6:30 p.m.)	12	45	+33

Source: CDM-Smith 2014 using INRIX speed data, CAMPO 2035 Travel Demand Model, observed congested speeds in October 2013, and Bluetooth data

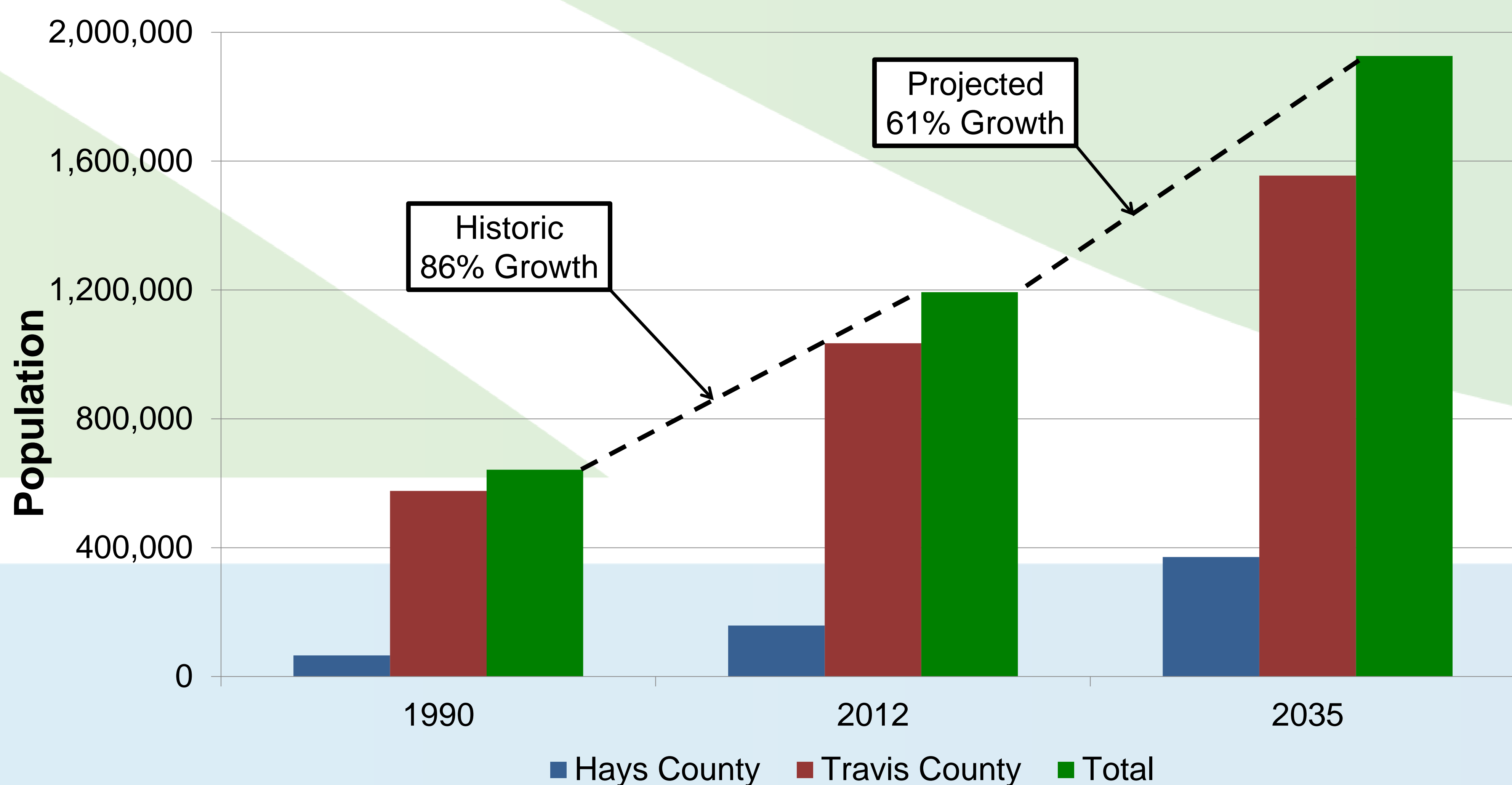
- Under the No Build Alternative (Do Nothing), it could take an additional ½ hour to drive between Cesar Chavez Street and Slaughter Lane in 2035
- Emergency response times are impacted by traffic congestion



WHAT PROBLEMS NEED TO BE ADDRESSED? (PROJECT NEED)

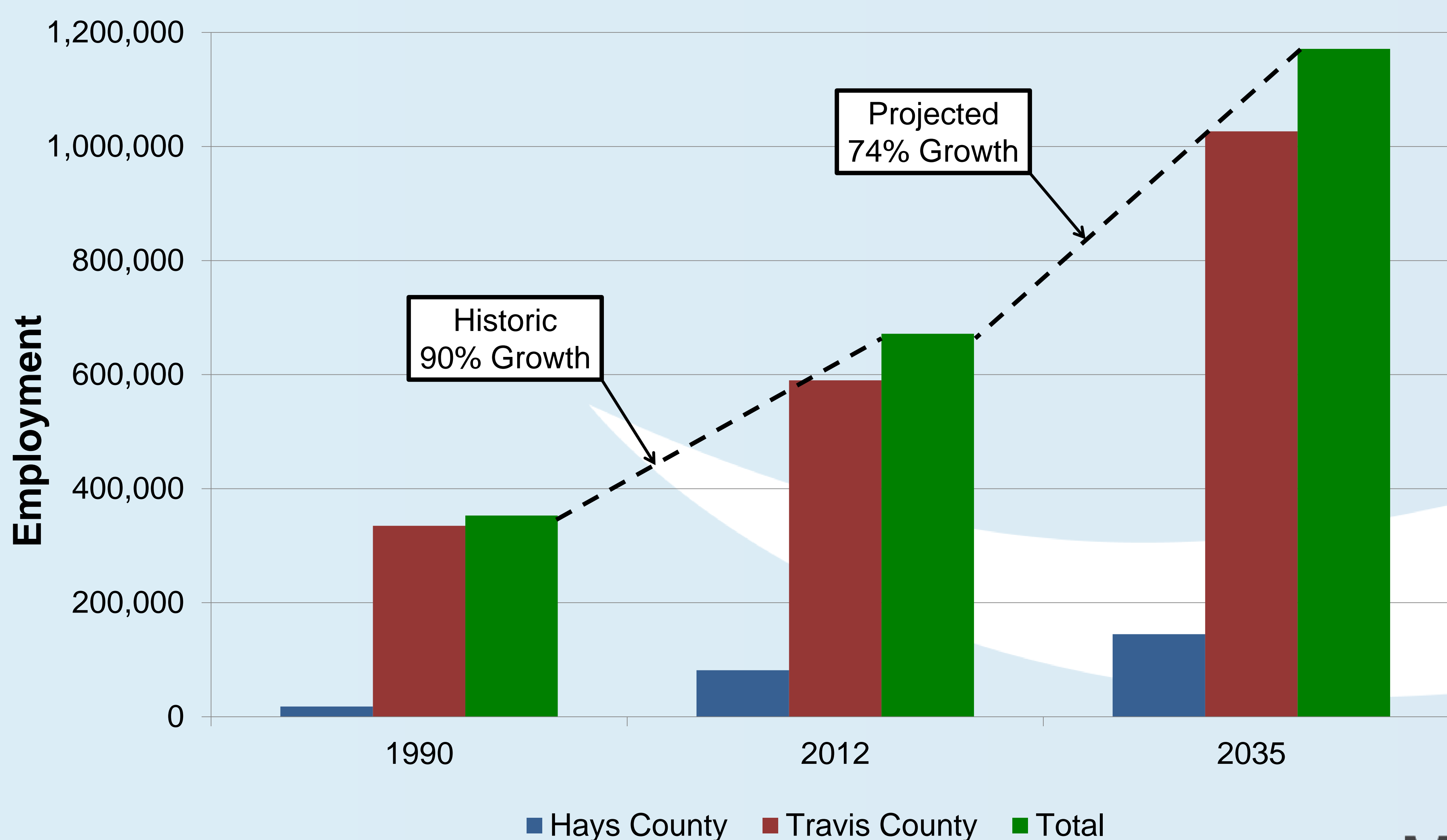
- Forecasted population and employment growth in Travis and Hays counties

HISTORIC AND PROJECTED POPULATION



Source: U.S. Census Bureau: 1990 Census & 2008-2011 American Community Survey; CAMPO 2035 Forecast

HISTORIC AND PROJECTED EMPLOYMENT



Source: U.S. Census Bureau: 1990 Census & 2008-2011 American Community Survey; CAMPO 2035 Forecast



PROJECT GOALS AND OBJECTIVES

- Provide consistency with local and regional plans
- Reduce congestion delay and provide travel time savings for all roadway users
- Be constructible without unnecessary impacts to the natural and human environment*
- Avoid and minimize impacts to water quality*
- Deliver relief in a timely manner*
- Facilitate congestion management*
 - Increase opportunities for transit and ridesharing
 - Increase opportunities for pedestrians and bicyclists

**Major theme identified through public input provided via fall 2013 and spring 2014 Community Surveys.*



MOPAC SOUTH
ENVIRONMENTAL STUDY

PRELIMINARY ALTERNATIVES (WHAT WAS EVALUATED)

IN EACH DIRECTION, ADD ONE OR MORE:

GENERAL PURPOSE LANE

- Standard traffic lanes available for use by all types of vehicles

HIGH OCCUPANCY VEHICLE (HOV) LANE

- Traffic lanes reserved (during peak travel times or longer) for vehicles with a driver and one or more passengers, including carpools, vanpools and public transit buses

TRANSIT ONLY LANE

- Traffic lanes reserved (during peak travel times or longer) for transit vehicles only, such as transit buses and vanpools

EXPRESS LANE

- Special separated lanes that are designed to remain free-flowing
- Utilize variable toll pricing to manage the amount of traffic in the lane
- Tolls increase when traffic is heavy and decrease when traffic is light and provide a reliable travel time
- Toll-free for emergency services, public transit buses, and registered vanpools



PRELIMINARY ALTERNATIVES (WHAT WAS EVALUATED)

TRANSPORTATION SYSTEM MANAGEMENT (TSM)/ TRANSPORTATION DEMAND MANAGEMENT (TDM)

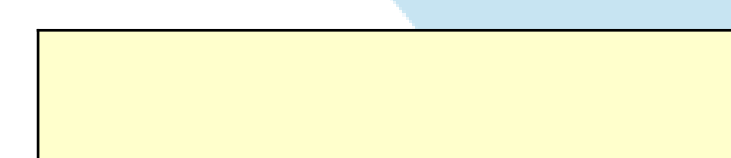
- Do not increase capacity
- Low cost TSM strategies enhance safety, manage congestion, and improve traffic flow. Examples include: ramp metering, traffic signal synchronization, incident management, bus pullouts, intersection improvements
- TDM strategies manage or decrease demand for auto-related travel and/or alternatives to single-occupant vehicles (transit, carpool, vanpool, bicycle). Examples include incentives/disincentives, such as: congestion pricing, alternative work environments and telecommuting

NO BUILD (DO NOTHING)

- Proposed improvements to MoPac South would not be constructed; assumes all other projects in the CAMPO Plan would be constructed

DOES THE ALTERNATIVE MEET THE PURPOSE AND NEED FOR THE PROJECT?

Preliminary Alternatives	Provide opportunity for reliable travel times	Improve operational efficiency	Create a dependable and consistent route for transit	Facilitate reliable emergency response	Carried forward for additional evaluation?
General Purpose Lanes		✓		✓	
High Occupancy Vehicle (HOV) Lanes	✓ HOV Vanpools Buses	✓	✓	✓	✓
Transit Only Lanes	✓ Vanpools Buses	✓	✓	✓	✓
Express Lanes	✓ SOV HOV Vanpools Buses	✓	✓	✓	✓
Transportation System Management (TSM)/ Transportation Demand Management (TDM)*		✓		✓	
No Build (Do Nothing)					✓



Alternatives carried forward for additional evaluation

Blank = No

✓ = Yes

* Although TSM and TDM are not being advanced, some of these strategies may be incorporated as part of the recommended build alternative

76% of respondents agree or strongly agree that the evaluation criteria for the preliminary alternatives are appropriate.

Source: Community Survey, spring 2014



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ALTERNATIVES THAT MEET THE PURPOSE AND NEED

- High Occupancy Vehicle (HOV) Lanes
- Transit Only Lanes
- Express Lanes

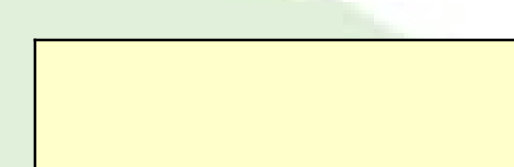
These alternatives were evaluated further using the project goals and objectives:

- Reduce congestion delay and provide travel time savings for all roadway users
- Be constructible without unnecessary impacts to the natural and human environment
- Avoid and minimize impacts to water quality
- Deliver relief in a timely manner
- Facilitate congestion management
 - Increase opportunities for transit and ridesharing
 - Increase opportunities for pedestrians and bicyclists

Note: All build alternatives are consistent with local and regional plans

REDUCE CONGESTION DELAY AND PROVIDE TRAVEL TIME SAVINGS FOR ALL ROADWAY USERS

Is this alternative able to:	No Build	Reasonable Alternatives		
		HOV Lanes	Transit Only Lanes	Express Lanes
Reduce congestion delay and provide travel time savings for all roadway users?		✓ (Better)	✓ (Worst)	✓ (Best)



Alternatives carried forward for additional evaluation

Blank = No

✓ = Yes

2035 Peak Period Travel Time and Congestion Delay (minutes)							
Peak direction of travel	No Build	Reasonable Alternatives					
		HOV Lanes Alternative		Transit Only Lanes Alternative		Express Lanes Alternative	
		HOV	General Purpose	Transit Only	General Purpose	Express	General Purpose
Free flow*	7	7	7	7	7	7	7
Northbound in the morning (7-9 a.m.)	47	7	40	7	40-47	8	37
Southbound in the evening (4-6:30 p.m.)	45	7	37	7	37-45	8	26

Source: CDM Smith, September 2014, using CAMPO 2035 Travel Demand Model

*Note: The time it takes to travel between Cesar Chavez Street and Slaughter Lane at the posted speed limit.

2035 Annual Travel Time Savings Compared to the No Build (hours)	
Reasonable Alternatives	Hours Saved
HOV Lanes	1.8 million
Transit Only Lanes	200,000
Express Lanes	3.1 million

Source: CDM Smith, September 2014, using CAMPO 2035 Travel Demand Model

Accommodating Travel Modes for All Roadway Users

- Single occupant vehicles (SOV) comprise an overwhelming share of the work trips in Travis and Hays counties
 - Express Lanes would serve all travel modes (SOV, 2-3 person carpool or vanpool, transit, bike, walk, taxi, and motorcycles)
 - HOV Lanes and Transit Only Lanes have a limited ability to serve diverse travel modes
 - No Build Alternative would serve all travel modes, but not well

Source: 2010-2012 American Community Survey, U.S. Census



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February 26, 2015



BE CONSTRUCTIBLE WITHOUT UNNECESSARY IMPACTS TO THE NATURAL & HUMAN ENVIRONMENT

Is this alternative able to:	No Build	Reasonable Alternatives		
		HOV Lanes	Transit Only Lanes	Express Lanes
Be constructible without unnecessary impacts to the natural and human environment?	N/A	✓	✓	✓

Alternatives carried forward for additional evaluation
 Blank = No
✓ = Yes

All reasonable alternatives would require:

- Approximately 1/3 acre of additional right-of-way (based on preliminary schematic, fall 2014)

None of the reasonable alternatives would require:

- Land from parks or historic sites
- Residential relocations
- Business displacements

Over 90% of respondents agree or strongly agree that the goal of any proposed improvement should be to protect the environment.

Source: Community Survey, fall 2013



AVOID AND MINIMIZE IMPACTS TO WATER QUALITY

Is this alternative able to:	No Build	Reasonable Alternatives		
		HOV Lanes	Transit Only Lanes	Express Lanes
Avoid and minimize impacts to water quality?		✓	✓	✓

Alternatives carried forward for additional evaluation
 Blank = No
✓ = Yes

Avoidance and Minimize Measures	No-Build	Reasonable Alternatives		
		HOV Lanes	Transit Only Lanes	Express Lanes
Incorporate permanent water quality best management practices (BMPs)*	✓	✓	✓	✓
Utilize hazardous materials traps	✓	✓	✓	✓
Meet or exceed Edwards Aquifer Protection Program (EAPP) requirements		✓	✓	✓
Stormwater runoff to receive treatment before discharge to the environment		✓	✓	✓
Water quality BMPs designed to create hydrographs with an extended period of discharge, which will benefit downstream recharge opportunities in the receiving waterways		✓	✓	✓
Detention ponds to provide downstream water quality benefits by helping to limit additional stream bank erosion		✓	✓	✓

*Permanent structural BMPs will be incorporated into the project where applicable following the TCEQ guidance document, RG-348: Complying with the Edwards Aquifer Rules – Technical Guidance on Best Management Practices. They may include a combination of the following items:

- Extended detention basins
- Sand filter systems
- Grassy swales
- Vegetative filter strips
- Permeable friction course

82% of respondents agree or strongly agree that the goal of any proposed improvement should be to avoid and minimize impacts to water quality.

Source: Community Survey, spring 2014



DELIVER RELIEF IN A TIMELY MANNER

Is this alternative able to:	No Build	Reasonable Alternatives		
		HOV Lanes	Transit Only Lanes	Express Lanes
Deliver relief in a timely manner?				✓

Alternatives carried forward for additional evaluation
 Blank = No
✓ = Yes

- Only Express Lanes can deliver relief in a timely manner (without major changes to the Regional Transportation Plan (RTP))
- If a build alternative other than Express Lanes is selected, it would require other sources of funding to be identified, which would likely delay the improvement
- Toll financing for MoPac South is included in the CAMPO 2035 financially constrained RTP
- Toll financing would provide the ability to fund and construct the improvements sooner

82% of respondents agree or strongly agree that the goal of any proposed improvement should be to deliver relief in a timely manner.

Source: Community Survey, spring 2014



MoPac South
ENVIRONMENTAL STUDY

FACILITATE CONGESTION MANAGEMENT

Is this alternative able to:	No Build	Reasonable Alternatives		
		HOV Lanes	Transit Only Lanes	Express Lanes
Facilitate congestion management by increasing opportunities for transit and ridesharing?		✓	✓	✓
Facilitate congestion management by increasing opportunities for pedestrians and bicyclists?		✓	✓	✓

Alternatives carried forward for additional evaluation
 Blank = No
✓ = Yes

All reasonable alternatives include:

- Benefits for transit users and ride sharing
 - Toll-free for emergency services, public transit buses, and registered vanpools
- Bicycle and pedestrian facilities where reasonable and feasible
 - All three reasonable build alternatives would include a shared use path that would allow pedestrians and bicyclists to travel safely and efficiently along the corridor
 - Facilities will be developed in accordance with regulations under the U.S. DOT's Policy Statement on Bicycle and Pedestrian Accommodation (FHWA, 2010):
 - Ensuring safety and security for both motorized and non-motorized users
 - Including intermodal facilities and connectors
 - Designing for accessibility
 - Providing opportunity for public participation in the planning process

72% of respondents agree or strongly agree that the goal of any proposed improvement should be to increase opportunities for transit and ridesharing; and 55% agree or strongly agree that any proposed improvement should be to increase opportunities for pedestrians and bicyclists.

Source: Community Survey, spring 2014



FURTHER EVALUATION OF ALTERNATIVES THAT MEET THE PURPOSE AND NEED

Is this alternative able to:	No Build	Reasonable Alternatives		
		HOV Lanes	Transit Only Lanes	Express Lanes
Reduce congestion delay and provide travel time savings for all roadway users?		✓ (Better)	✓ (Worst)	✓ (Best)
Be constructible without unnecessary impacts to the natural and human environment?	N/A	✓	✓	✓
Avoid and minimize impacts to water quality?		✓	✓	✓
Deliver relief in a timely manner?				✓
Facilitate congestion management by increasing opportunities for transit and ridesharing?		✓	✓	✓
Facilitate congestion management by increasing opportunities for pedestrians and bicyclists?		✓	✓	✓

 Alternatives carried forward for additional evaluation

Blank = No

✓ = Yes

Note: All build alternatives are consistent with local and regional plans

Over 70% of respondents agree or strongly agree that the evaluation criteria for reasonable alternatives are appropriate.

Source: Community Survey, spring 2014



MOPAC SOUTH
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CONCLUSIONS

EXPRESS LANES ALTERNATIVE is recommended for the following reasons:

- ✓ Offers reliable travel times for single occupancy vehicles, high occupancy vehicles, vanpools, buses and emergency vehicles
- ✓ Provides the shortest peak period travel time for all vehicles, including those using the general purpose lanes
- ✓ Provides over 3 million hours of annual travel time savings for all users compared to the No Build Alternative. That's about 1.7 times more savings than HOV Lanes and 13 times more savings than Transit Only Lanes
- ✓ Avoids unnecessary impacts to the natural and human environment and avoids and minimizes impacts to water quality
- ✓ Delivers relief in a timely manner
- ✓ Increases opportunities for transit and ridesharing and includes new bicycle and pedestrian facilities



CONCLUSIONS

HOV LANES and **TRANSIT ONLY LANES** are not recommended because of the following reasons:

- Exclude Single Occupancy Vehicle trips (over 70% of peak period commuters) from the opportunity for reliable travel times
- Result in longer delays for vehicles using the general purpose lanes as compared to the Express Lanes Alternative
- Lead to underutilized capacity, even during peak periods
- Cannot deliver relief in a timely manner (without major change to regional funding)



ENVIRONMENTAL CONSIDERATIONS

These social, economic, and environmental issues are being considered:

- Land Use
- Social Impacts including Environmental Justice (includes tolling analysis)
- Relocation Impacts
- Economic Impacts (includes tolling analysis)
- Pedestrian and Bicycle Facilities
- Air Quality
- Traffic Noise
- Geology/Soils
- Water Quality
- Wetlands
- Water Body Modifications
- Floodplains
- Vegetation
- Wildlife
- Threatened or Endangered Species
- Historic and Archeological Resources
- Hazardous Materials
- Visual Impacts
- Construction Impacts
- Indirect Impacts
- Cumulative Impacts
- Mitigation and Permit Requirements
- Context Sensitive Solutions

NEXT STEPS

- Compile and consider input from tonight's meeting
- Continue to listen to and engage the community
- Continue developing the Express Lanes Alternative
- Analyze the recommended alternative compared to the No Build Alternative (Do Nothing)

How to stay involved:

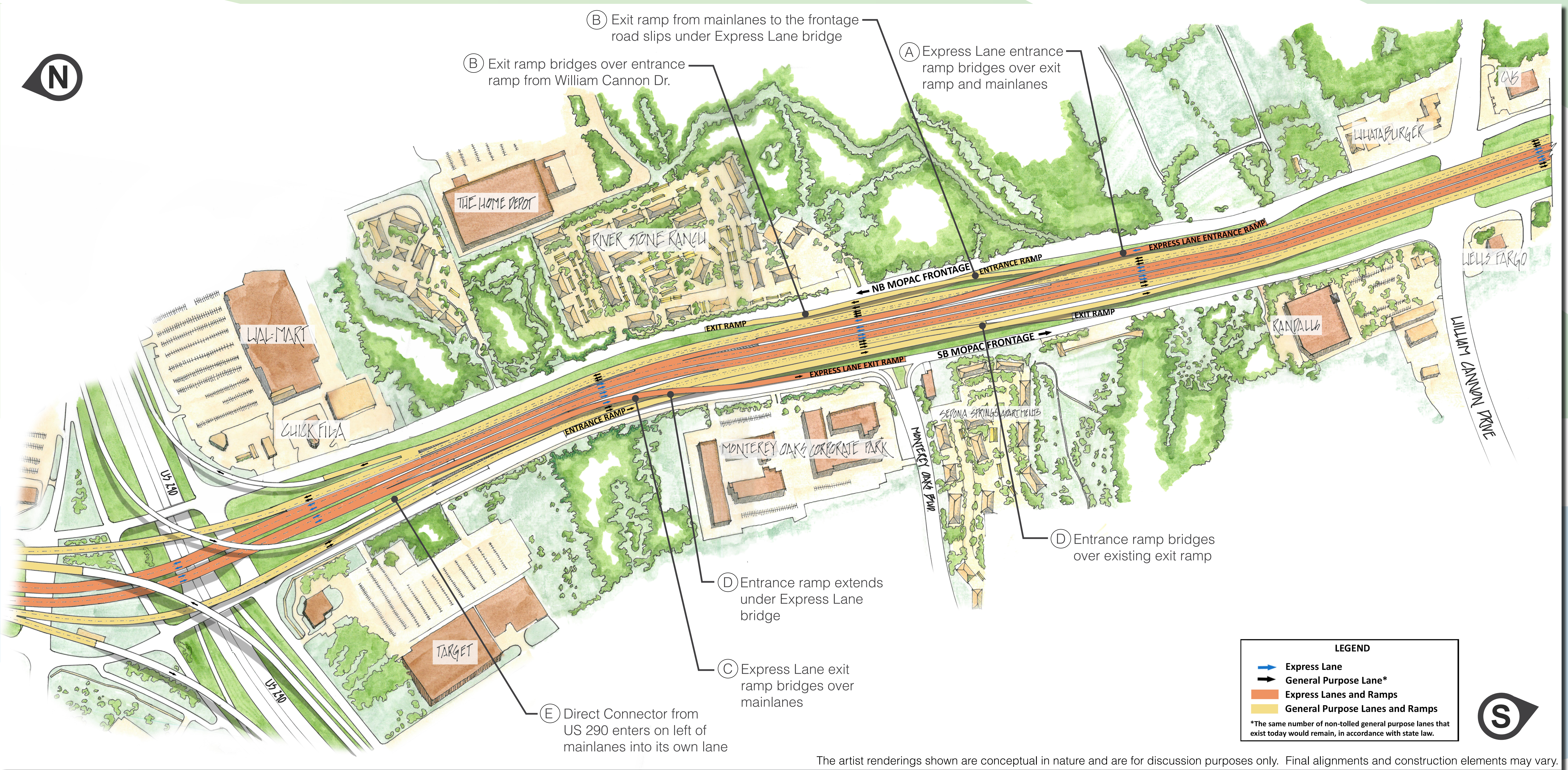
- Visit www.MoPacSouth.com
- Sign-up for the e-newsletter
- Follow us on  Twitter **@MoPacSouth**
- Call the study team:
512-996-9778
- Participate in meetings
- Invite the study team to meet with your group



US 290 & WILLIAM CANNON DRIVE



RAMP IMPROVEMENTS - US 290 & WILLIAM CANNON DRIVE

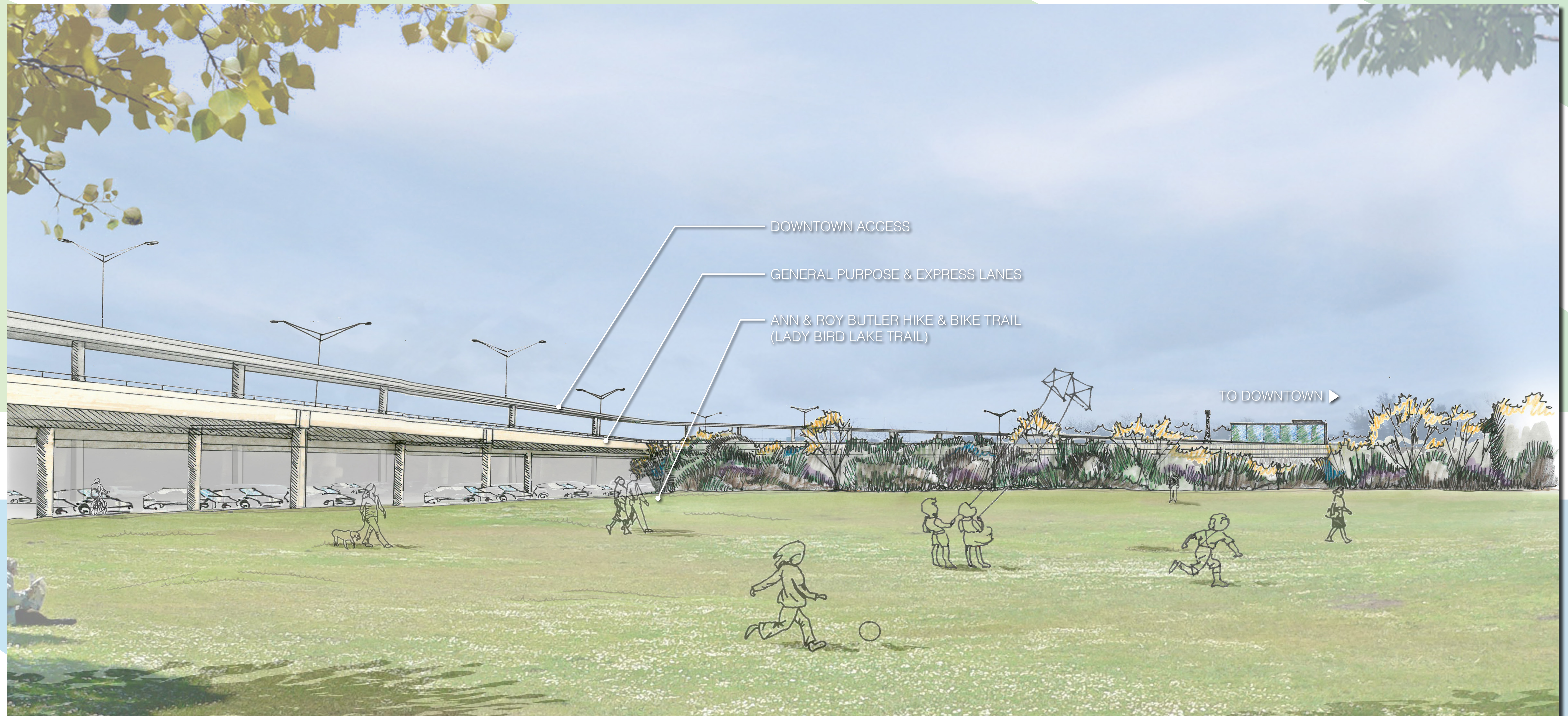


The artist renderings shown are conceptual in nature and are for discussion purposes only. Final alignments and construction elements may vary.

NORTHBOUND IMPROVEMENTS	RAMP CONFIGURATION	BENEFITS OF PROPOSED CONFIGURATION
(A) Northbound Express Lanes will have a separate entrance ramp	Ramp will bridge over the general purpose lanes; Express Lane ramp will be in the approximate location of the existing entrance ramp	Traffic entering Express Lanes from William Cannon Drive will not interfere with MoPac general purpose lane traffic
(B) Existing northbound entrance ramp will be shifted north and the northbound exit ramp will be shifted south	Exit ramp will slip under the Express Lane ramp and bridge over the relocated entrance ramp	Entering traffic from William Cannon Drive and traffic exiting to the frontage road are separated and no longer conflict with each other
No change required to the northbound to eastbound direct connection to US 290	Existing condition	N/A

SOUTHBOUND IMPROVEMENTS	RAMP CONFIGURATION	BENEFITS OF PROPOSED CONFIGURATION
(C) Southbound Express Lanes will have a separate exit ramp	Ramp will bridge over the general purpose lanes and tie into the frontage road north of William Cannon Drive	Traffic exiting Express Lanes to access William Cannon Drive will not interfere with MoPac mainlane traffic
(D) Existing southbound entrance ramp from the frontage road to the general purpose lanes will be lengthened	Ramp will extend under southbound Express Lane exit ramp and over existing exit ramp; ramp will tie into MoPac general purpose lanes north of the William Cannon Drive bridge	Entering traffic from the frontage road and traffic exiting to William Cannon Drive are separated and no longer conflict with each other
(E) Westbound to southbound direct connection from US 290 will tie into MoPac on the left side of the general purpose lanes	Direct connector ramp will stay in its current location; MoPac general purpose lanes will be re-aligned to the right of the direct connector ramp	Traffic from US 290 direct connector will enter MoPac in its own lane; vehicles traveling along MoPac will not weave across US 290 traffic to exit at William Cannon Drive

PROPOSED MOPAC EXPRESS LANES FROM ZILKER PARK



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PROPOSED MOPAC EXPRESS LANES FROM ZILKER CLUBHOUSE



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ENVIRONMENTAL STUDY

CONTEXT SENSITIVE SOLUTIONS PRIORITIES

What items are most important to you?



Landscaping



Bridge Enhancements



Defining Characteristics



Water Quality Enhancements



Wall Textures



Bicycle / Pedestrian Facilities



Public Art



Roadway Signage



CONTEXT SENSITIVE SOLUTIONS PRIORITIES

What items are most important to you?

Landscaping

Bridge Enhancements

Defining Characteristics

Water Quality Enhancements

Wall Textures


Bicycle / Pedestrian Facilities

Public Art

Roadway Signage

Please place a dot below your priority

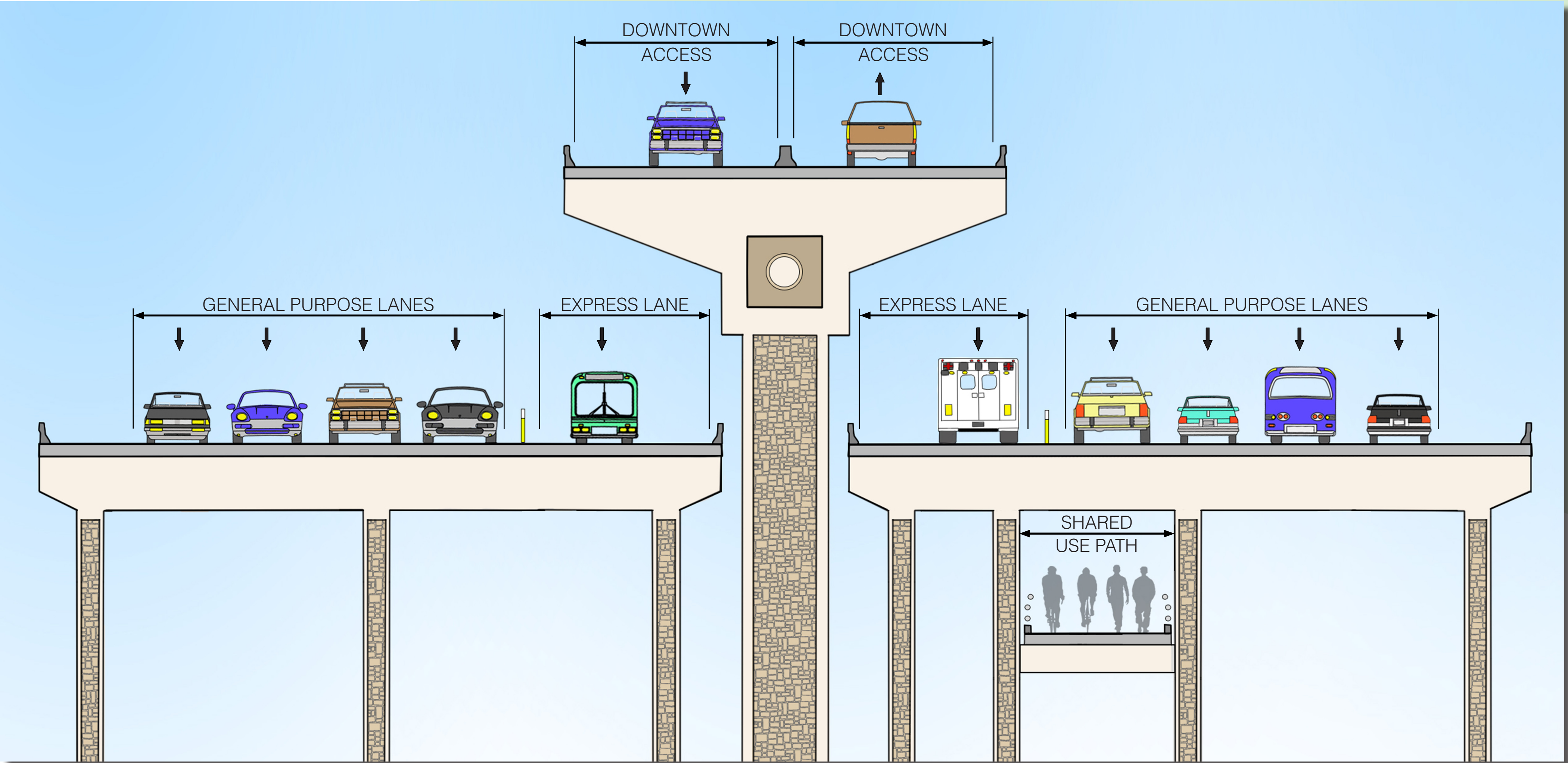
Priority Colors

- 1st 
- 2nd 
- 3rd 

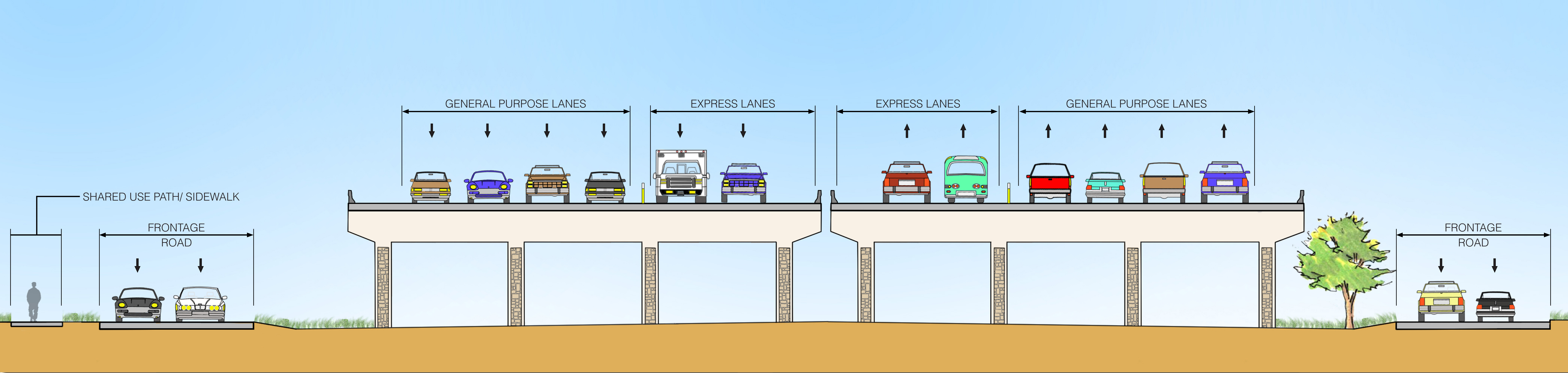
Please leave any additional comments



MOPAC SOUTH TYPICAL SECTIONS



Crossing at Lady Bird Lake



Bridge at Bee Cave Road

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