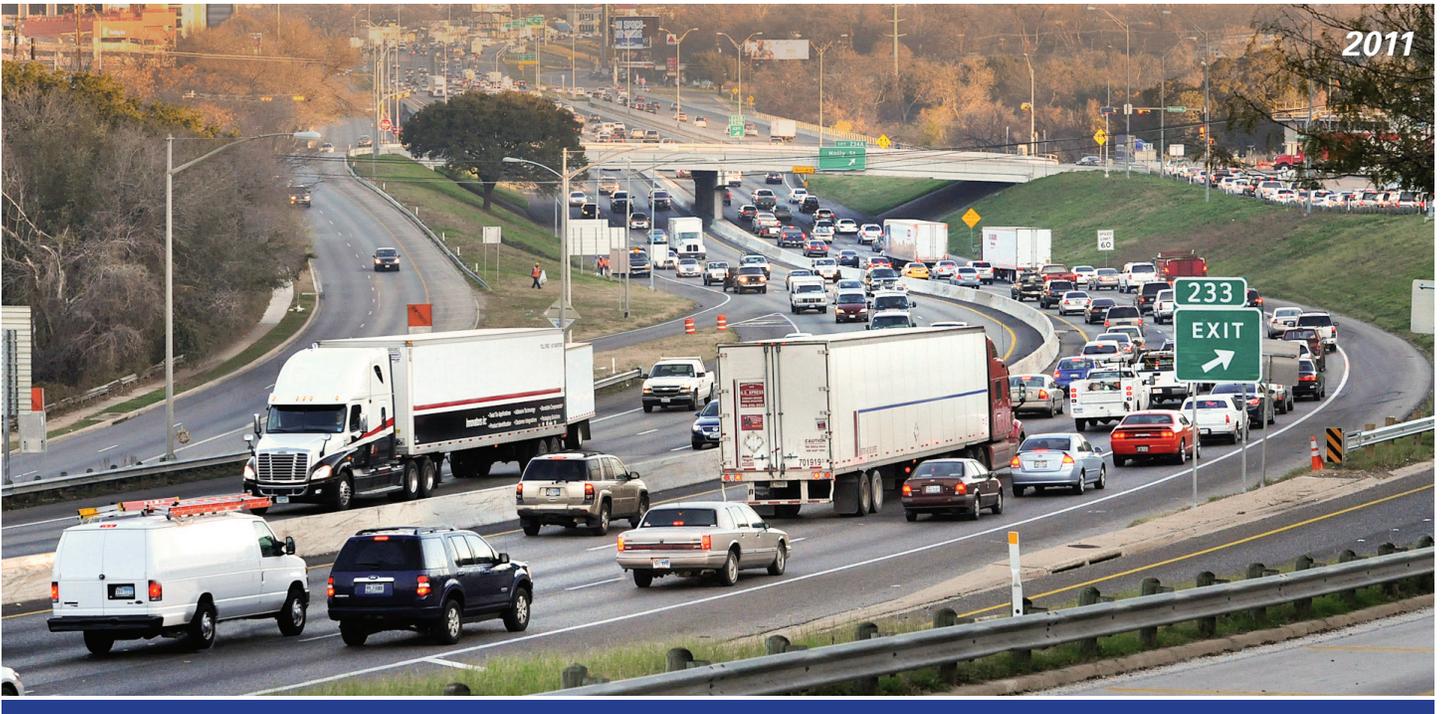


Mobility Investment Priorities Project

Executive Summary Early Recommendations Report

February 2012



BACKGROUND

The most congested metropolitan highways in Texas are becoming even more overcrowded, resulting in lost time and wasted fuel topping \$10 billion per year—more than \$800 for the average Texas household. Two-thirds of Texas residents live in urban areas that are ranked in the 40 most congested U.S. metropolitan areas, and three areas (Houston, Dallas-Fort Worth and Austin) are in the top 15. Perhaps more disturbing, however, is the fact that not only is congestion high, but Texas traffic problems are also increasing faster than in similar U.S. areas. The four largest areas (including San Antonio) rank in the 15 fastest growing congested urban areas in the U.S. over the last 15 years.

INTRODUCTION

Legislative Action to Address Most Congested Roadways

Recognizing the urgency of the congestion problem in Texas, the 82nd Texas Legislature set aside \$300 million for fiscal years 2012-2013 to “acquire right of way, conduct feasibility studies and project planning, and outsource engineering work for the most congested roadway segments in each of the four most congested regions of the state as listed in the *State’s Top 100 Most Congested Roadways as of January 1, 2011.*” (Source: Rider 42, Texas Department of Transportation Appropriations, Page VII 34-35, General Appropriations Act, 2011.) This effort addresses, in part, the challenges outlined by the Texas 2030 Committee in its 2011 report, *It’s About Time: Investing in Transportation to Keep Texas Economically Competitive.*

About the Mobility Investment Priorities Project

The Texas Legislature directed the Texas Transportation Institute (TTI) to work with the Texas Department of Transportation (TxDOT) and local transportation agencies to use the \$300 million to facilitate and coordinate a process to advance projects that will significantly improve mobility and strengthen the economy in the most congested regions—Austin, Dallas-Fort Worth, Houston and San Antonio. This process has resulted in the Mobility Investment Priorities Project, developed in coordination with agencies in each of the four metropolitan areas to identify studies, identify design efforts, or purchase of rights-of-way that meet the goals of the Rider 42 legislation.

The information gained through the project is a product of dozens of conversations and analyses with TxDOT, Metropolitan Planning Organizations, Regional Mobility Authorities, major city and county governments, transit agencies and others. The actions and plans—both existing and proposed—in the most congested corridors were reviewed. Recommendations were made when consensus was reached about the effectiveness of a proposed action. This team approach will continue to be used to achieve the goals of Rider 42 in the remaining 18 months of the Mobility Investment Priorities Project.

This project complements existing planning and project development activities in these metropolitan areas and assists the agencies in prioritizing and targeting additional mobility improvement funds. It does not replace or supersede existing planning processes and products or current funding allocations for other programs.

Each area is developing its own set of projects, programs and plans to address the most congested sections of road. The mix of strategies will be different in each area. The intent of Rider 42 is to ensure that the areas are incorporating all of the best congestion reduction practices so it is clear to state leaders that funding is spent as effectively and efficiently as possible to address the state's most congested roadways. Each metropolitan area's vision and goals will result in different approaches. The project team is using public communication best practices to help ensure that the public's interests are reflected and the best congestion reduction practices are identified and implemented.

About This Early Recommendations Report

This report describes interim conclusions from the first few months of the two-year project. Other reports, additional recommendations, and other project ideas will be produced during the project timeframe. These initial findings may be modified upon more investigation, but these early recommendations identify projects that meet the standards identified in Rider 42 to “significantly reduce congestion in a cost-effective manner with a project that makes maximum usage of the possible management and financial options and allow agencies to continue with project development activities.”

Summary

The report includes a set of recommendations that will move major projects toward completion and improve mobility in the four metropolitan areas studied. More information is included about the actions and plans by all agencies for each of the most congested corridors. In 2007, Texas voters approved Proposition 12, allocating \$3 billion for highway improvements. Most of these studies or right-of-way purchases can be funded by Proposition 12 bond funds. All of the studies will improve the knowledge of the costs and benefits of major transportation improvements.

CONGESTION REDUCTION STRATEGIES

Rider 42 recognized the role that traffic operations and travel option strategies will play in Texas' future. Many of these strategies are relatively low-cost projects and programs. They have broad public support and can be rapidly implemented. These ideas require innovation, constant attention and adjustment, but they pay dividends in faster, safer and more reliable travel. Rapidly removing vehicle crashes, timing traffic signals so more drivers experience green lights, improving road and intersection designs, and/or adding a short section of roadway are relatively simple actions with big payoffs. These strategies are more fully described on the Mobility Investment Priorities Project website (mobility.tamu.edu/mip).



Strategies Deployed

Additional Capacity – Constructing new roadways reduces congestion; however, limited right-of-way in congested urban corridors makes this a costly approach. Exclusive or managed lanes can mitigate congestion by designating lanes for trucks or buses, or through the use of High Occupancy Vehicle (HOV)/High Occupancy Toll (HOT) lanes.



Traffic Management – Traffic management is an essential component of congestion mitigation and primarily an agency responsibility. It can help improve the efficiency of the system by rapidly clearing collisions and stalled vehicles or improving signal coordination so drivers experience green lights as they move in the peak travel direction, among many strategies.



Travel Options – Reducing single occupant vehicle trips by encouraging practices such as ridesharing or vanpooling can reduce roadway congestion. Private companies play the key role in offering employee options, such as flexible work hours, compressed work weeks and telecommuting. Shipping companies may also participate by, for example, choosing to transport goods overnight in an effort to meet deadlines, while also reducing roadway congestion during peak travel periods.



Funding – Funding is a critical aspect of transportation improvements. Projects and roadway improvements will not become reality without a funding mechanism in place. Traditional funding mechanisms, such as the motor fuel tax, general revenue funds and bonds still fund many transportation improvement projects; however, other funding opportunities should be identified in an effort to maximize flexibility in financing improvements.



Public Engagement – Public engagement is a crucial aspect of transportation planning, particularly when voter-approved funding mechanisms are considered to finance project costs. Public opinion of a proposed project can determine the success or failure of the project. Furthermore, public outreach is a necessary component of successful project planning and can ultimately benefit the decision-making process. Public engagement strategies are implemented by the public agency or a private consulting firm hired to conduct project meetings. There are a range of strategy costs and implementation mechanisms that vary according to the budget and project type.



EARLY RECOMMENDATIONS BY AREA

This report identifies the initial results of activities by TTI to coordinate studies in the four most congested areas of the state. Most of the funding in the recommendations is allocated to purchase right-of-way in a few corridors. These recommendations are appropriate for the current development stage in several of the corridors. Additional recommendations will be made for each area over the remaining period of the study.

The affected corridor/project with its top 100 congestion rank, the recommended early action and the funding request for each action are listed in the tables; a corresponding map illustrating the congested corridors and the recommended actions is also included. The specific parcels will be identified in subsequent requests by TxDOT. The studies and design efforts will likewise be specified and consultants hired (or in-house work initiated) as appropriate for each item.

Austin

- The recommendations build on several other congestion-reducing projects sponsored by other agencies, and will support development of major projects in the congested corridors.
- The Austin area identified \$18.5 million in recommended priority studies and design efforts from the total allocation of \$31.28 million in Proposition 12 funds.

Dallas/Fort Worth

- The Dallas-Fort Worth Metroplex has aggressively pursued significant congestion-reducing projects using a combination of traditional funding and comprehensive development agreements (CDA). The DFW corridors being developed under the CDA process will need relatively little additional analysis over the remainder of the Mobility Investment Priorities Project, as private developers will maintain responsibility for those corridors.
- Other studies are suggested for discussion with the public.
- Two recommended projects will use the full Dallas-Fort Worth Proposition 12 project development allocation of \$118.75 million.

Houston

- Houston's recommendations include a mix of right-of-way purchases, priority studies and design efforts to support one large, already funded construction project and several studies that will improve information about addressing the most congested sections.
- The five recommended actions will use \$86.35 million of the \$116.224 million in Proposition 12 funds.

San Antonio

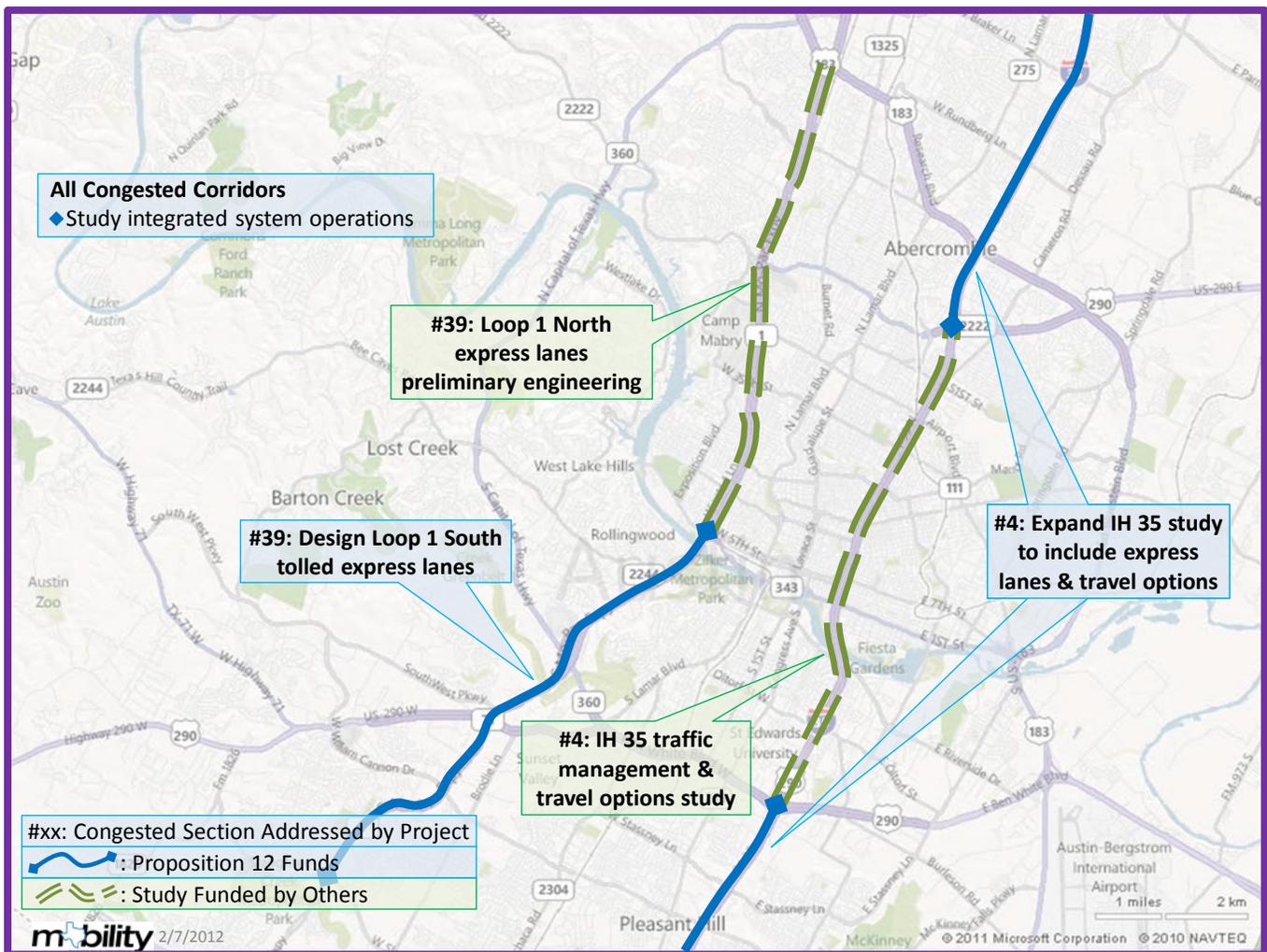
- Initial investigation of the five San Antonio corridors on the 50 most congested corridors list resulted in the identification of one interchange design to support a funded construction project and several on-going studies that should be monitored. Some modifications are recommended to existing studies that would position San Antonio to address the Rider 42 issues more comprehensively. A few new study ideas may accelerate the development of corridor solutions.
- The San Antonio recommendations and map describe the use of \$24.6 million of the \$33.74 million in Proposition 12 funds that are allocated to the San Antonio area.

Austin Early Recommendations

Rank	Corridor/Project	Recommended Early Action	Funding Request
39	Loop 1 South Managed Lanes	Tolled express lanes engineering (environmental clearance, final design & preparation for construction)	\$16.5 million
4	IH 35 Study Extension	Expand study limits & scope: express lanes, operations, and travel options	\$1.2 million
All Congested Corridors			
	Integrated Traffic Management	Comprehensive system operation engineering study including aggressive incident clearance	\$0.8 million
Total Request, February 2012			\$18.5 million

*Remaining Austin area Rider 42 allocation:

\$12.78 million

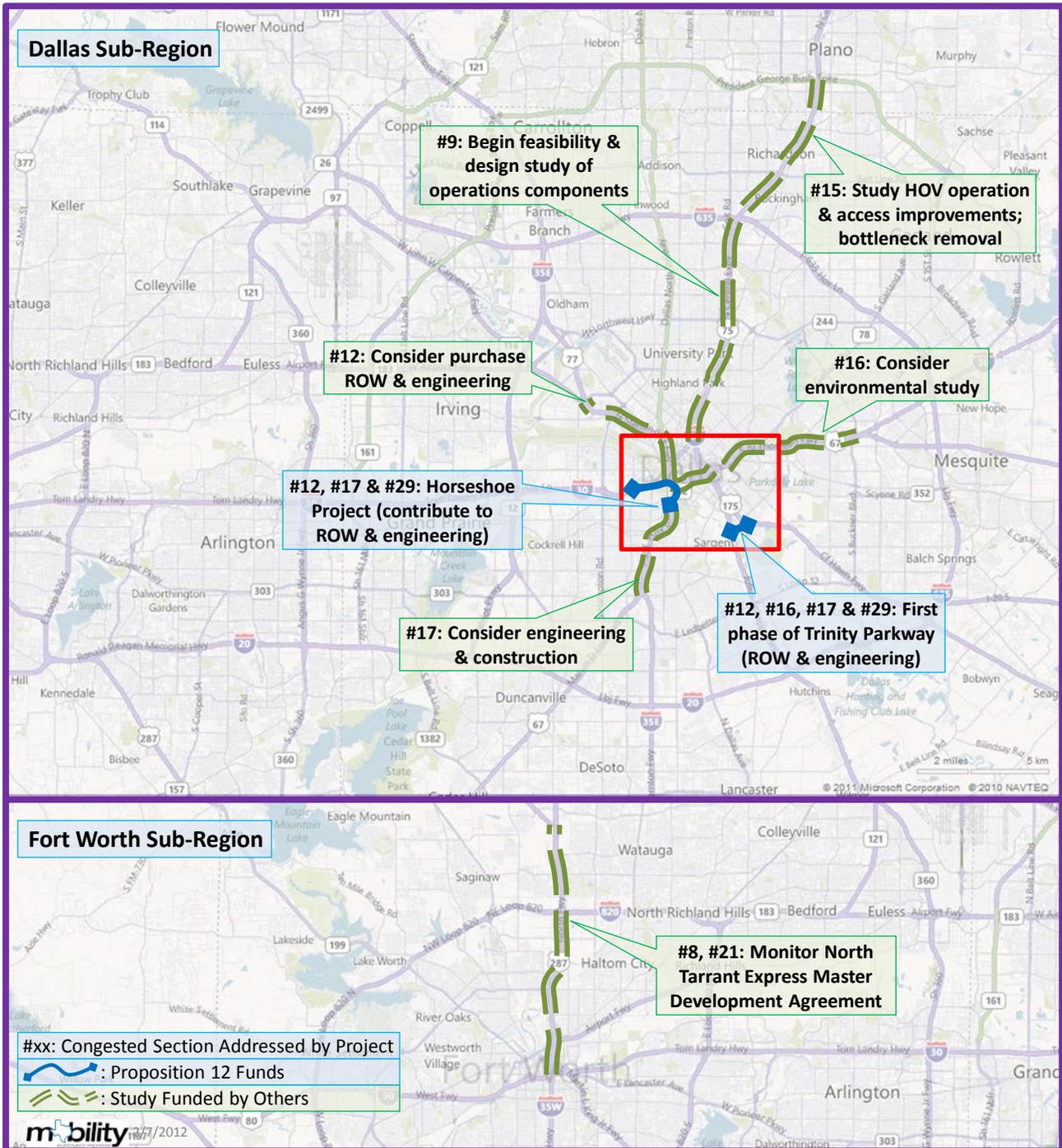


Dallas/Fort Worth Early Recommendations

Rank	Corridor/Project	Recommended Early Action	Funding Request
12, 17, 29	IH 30 & IH 35E Horseshoe	Engineering, purchase right-of-way (ROW) & adjust utilities	\$100.75 million
12, 16, 17, 29	Trinity Parkway Phase 1	Engineering, purchase ROW & adjust utilities	\$18.0 million
Total Request, February 2012			\$118.75 million

*Remaining Dallas-Fort Worth area Rider 42 allocation:

\$0.00

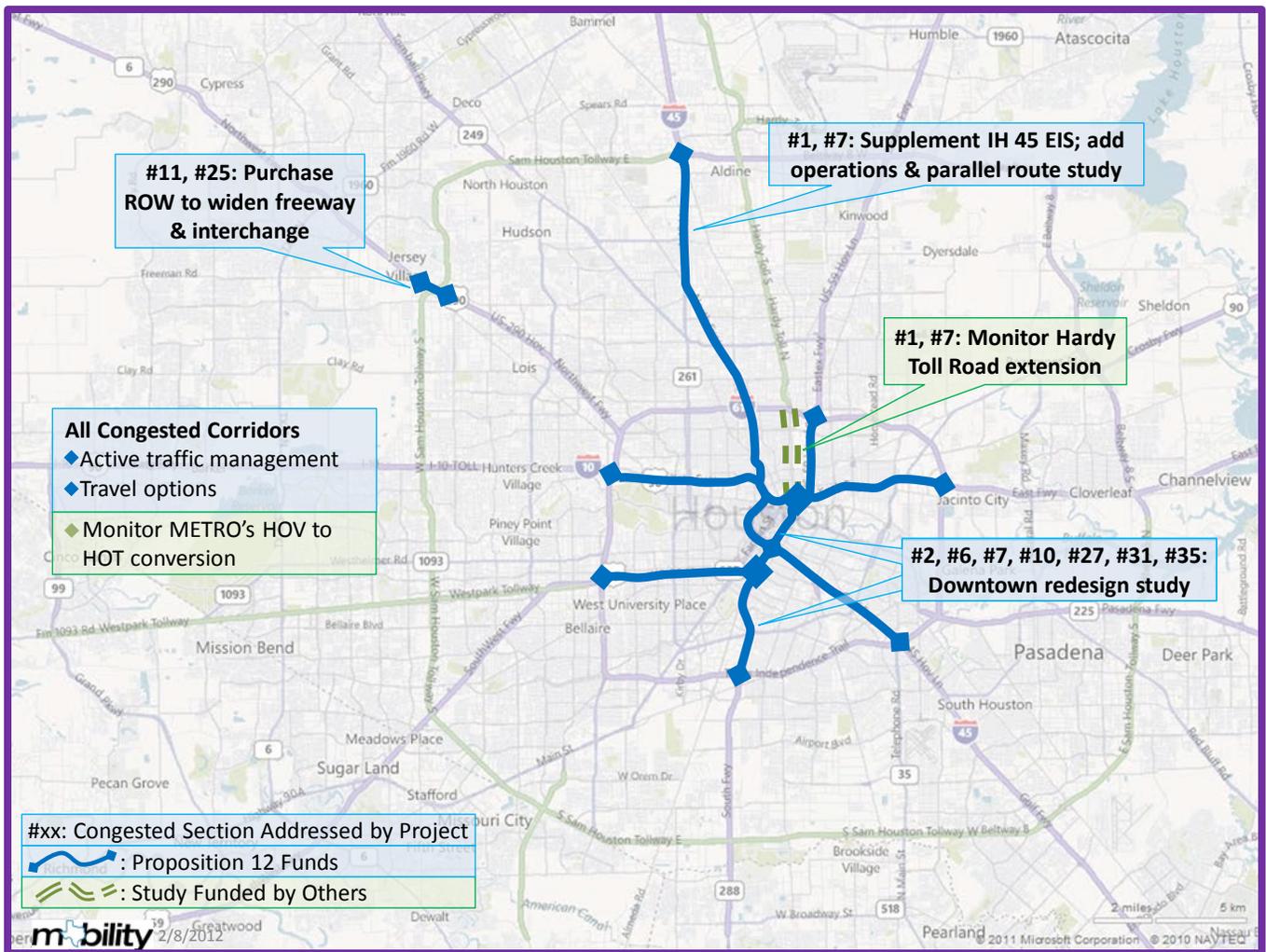


Houston Early Recommendations

Rank	Corridor/Project	Recommended Early Action	Funding Request
11, 25	US 290	Purchase ROW and adjust utilities to reconstruct the main lanes & Beltway 8 interchange	\$78.0 million
2, 6, 7, 10, 27, 31, 35	IH 45, US 59, IH 10 & SH 288 – Downtown Redesign Study	Feasibility study for long-term solutions to the downtown area and connecting freeways based on origin-destination travel patterns	\$5.0 million
1, 7	IH 45	Feasibility study and design of mobility improvements along major streets parallel to IH 45 North	\$2.0 million
All Congested Corridors			
Operational Improvements		Engineering study to identify locations & funding for operation treatments, including aggressive incident clearance	\$0.85 million
Travel Options		Engineering study for implementing travel option strategies	\$0.5 million
Total Request, February 2012			\$86.35 million

*Remaining Houston area Rider 42 allocation:

\$29.874 million



San Antonio Early Recommendations

Rank	Corridor/Project	Recommended Early Action	Funding Request
49	IH 35 Northeast	Conduct environmental study as recommended by planning and environmental linkages (PEL) study	\$13.0 million
38	US 281/Loop 1604 Interchange	Design four northern direct connector ramps	\$6.0 million
48	IH 35 Central	PEL study to define the needs & alternative improvements	\$1.0 million
48, 49	South Alternative Routes to IH 35	PEL study to define the needs & alternative improvements	\$2.5 million
48, 49	IH 410 Southwest	PEL study to define the needs and evaluate alternatives to IH 35	\$0.5 million
All Congested Corridors			
ITS/Transportation Management		Project planning & feasibility study to facilitate traffic & incident clearance (infrastructure, policies & practices)	\$1.0 million
Parking Strategies		Parking management project planning & feasibility study	\$0.3 million
Travel Option Strategies		Project planning & feasibility study to identify possible travel option strategies and champions	\$0.3 million
Total Request, February 2012			\$24.6 million

*Remaining San Antonio area Rider 42 allocation:

\$9.14 million

