

US 90A/Southwest Rail Corridor
Environmental Impact Statement

Scoping Information Package

Prepared for:
The Metropolitan Transit Authority of Harris County, Texas

January 10, 2011

Introduction

The Houston region has the seventh largest economy in the country and also ranks among the fastest growing. Strong growth in population and jobs strains the transportation infrastructure of the region making future mobility a major concern. The Houston-Galveston Area Council (H-GAC), the Texas Department of Transportation (TxDOT), the Metropolitan Transit Authority of Harris County (METRO), and other area transportation providers work closely together to address the growing concerns for future mobility needs.

Within this multimodal planning framework, METRO's long-term transit plan, METRO Rail Expansion Program, offers transportation alternatives in major corridors throughout the region. The plan offers better connections, faster and shorter trips, and longer hours of service. METRO is undertaking multiple environmental and preliminary engineering studies in several corridors.

METRO and the Federal Transit Administration (FTA) are initiating the *preparation* of an Environmental Impact Statement (EIS) for the US 90A/Southwest Rail Corridor. The US 90A/Southwest Rail Corridor has been identified in the Houston-Galveston Area Council (H-GAC) *2035 Regional Transportation Plan Update (2035 RTP Update)* (H-GAC, October 2010) and the *METRO Solutions 2025 Plan* (METRO, August 2003), as a priority transportation investment.

Project Study Area

The study area is located within the Houston urban area and is defined as being within a half-mile radius of the US 90A/Southwest rail corridor. The majority of the study area is within Harris County, with a small portion within Fort Bend County. The corridor is about nine miles long, linking the City of Houston and the City of Missouri City. It extends from the Fannin South Station at the southern terminus of the existing METRORail Red Line to South Gessner Road/FM 2234 and US 90A.

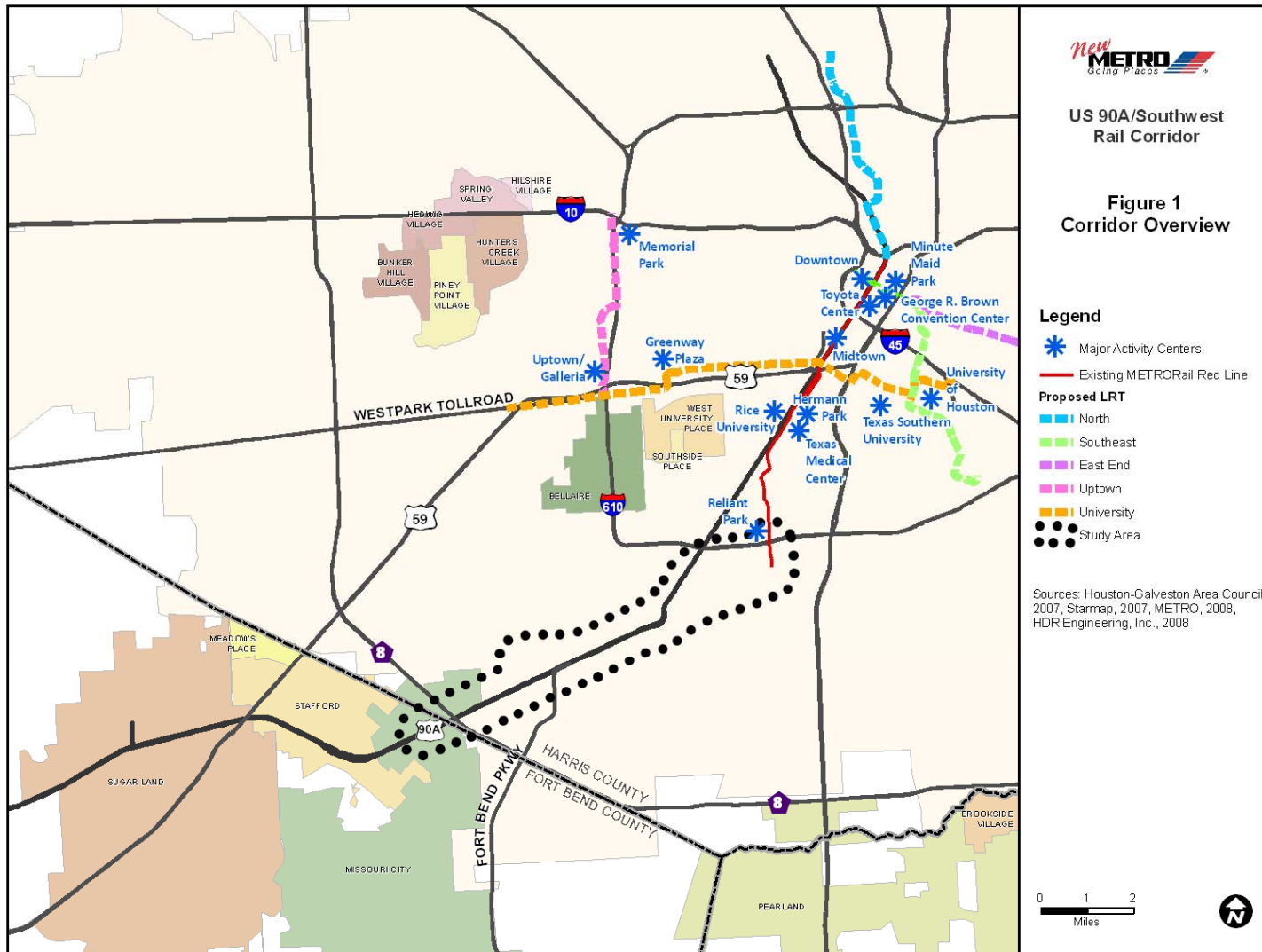
Figure 1, Corridor Overview, shows the study area and regional context, including county and city boundaries, major activity centers, and the existing and planned METRORail system.

US 90A, a major northeast-to-southwest highway, runs the length of the study area. IH-610 borders the study area on the north and Beltway 8 borders the study area on the west. The study area is bisected by the Union Pacific (UP) freight railroad; the study area parallels the UP Glidden subdivision and is intersected by the UP Terminal subdivision.

The study area has large tracts of vacant land for which transit-supportive development is being planned. An 84.2 acre site at IH-610 and Fannin Street, formerly occupied by Six Flags Astroworld amusement park, is being considered for a 3.7 million square foot mixed-use development. Similarly Buffalo Lakes, a 260 acre, large undeveloped area located near Holmes Road and Buffalo Speedway, is being planned for development as a mixed-use project with approximately 3,150 residential units and 2.7 million square feet of office, retail and entertainment space.

US 90A/Southwest rail corridor would connect important employment areas such as Downtown Houston and the Texas Medical Center (TMC) (with 130,000 and 74,000 existing jobs respectively) with the cities of Missouri City and Stafford (with a combined population of nearly 100,000 residents and 32,000 jobs) [US Census Bureau, 2007 and 2008]. The corridor would also link Fort Bend County/southwest Harris County and other major activity centers currently served by the existing METRORail Red Line, including several college campuses (the University of Houston, Houston Community College and Rice University) and cultural, sports and entertainment complexes (Reliant Park, Minute Maid Park, Toyota Center, the Houston Zoo, and the Museum District).

Figure 1: US 90A/Southwest Rail Corridor Overview



What is Scoping?

The purpose of the scoping process is to determine the scope of the EIS to ensure that issues are identified early and properly studied. The end result of scoping is to ensure that the draft EIS produced for public review and comment is thorough and balanced. The scoping process should identify concerns of both the agencies and the affected public and should clearly define the environmental issues and alternatives to be examined in the EIS. If there are important environmental or social impacts that the agencies and public want considered, the time to raise these issues is during the scoping process. If there are additional alternatives that should be considered, the scoping meeting is the place to ask that they be analyzed. If there are concepts for minimizing environmental harm that should be evaluated, these should be raised at the scoping meeting. All reasonable alternatives and potentially significant project impacts need to be identified and examined early in the process. In this way, the EIS can be structured to best address public and agency concerns and help lead to better decisions in the end.

As defined by the National Environmental Policy Act (NEPA):

“There shall be an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to the proposed action. This process shall be termed scoping”. (40 Code of Federal Regulations, Section 1501.7)

The scoping process will be conducted by the Federal Transit Administration (FTA) and METRO. The scoping process will include some or all of the following activities:

- Development of proposed alternatives and alignments for evaluation, and identification of environmental issues to be addressed.
- Public and agency scoping meetings to receive input to help refine proposed alternatives and identify potential environmental issues.
- Communications with affected local, regional, State, and Federal agencies and other organizations regarding issues within their jurisdiction or areas of concern.
- Careful consideration of written and oral comments made during the scoping comment period.
- Meetings with groups, organizations, and individuals to identify major project issues early in the process.
- Scoping Information Report describing the results of the scoping process, including comments received.
- Ongoing public and agency communication regarding the continued refinement of design alternatives.

Once the scope of the environmental study, including significant environmental issues to be addressed, is settled, an annotated outline of the document will be prepared and shared with interested agencies and the public. The outline serves at least three worthy purposes, including (1) documenting the results of the scoping process; (2) contributing to the transparency of the process; and (3) providing a clear roadmap for concise development of the environmental document

The dates, times and locations of the public and agency scoping meetings are described in the “*How to Get Involved*” section (see page 4).

All earlier informational meetings are also part of the scoping process, and all input received from the public and agencies at these informational meetings will have the same consideration as those received during the formal scoping meetings. Additionally, written comments are encouraged from all interested parties and will be accepted by the project staff throughout the scoping comment period which ends March 11, 2011. Any comment received after March 11, 2011 will be considered during the planning studies, but may not be included in the Scoping Information Report.

Scoping Comment Opportunities

Public Involvement Program

The public involvement program for the US 90A/Southwest rail corridor rail project includes a unique, well-planned outreach effort with a variety of public involvement tools and techniques to ensure that the diverse interest groups in the corridor have the opportunity to participate and provide input. In addition to the scoping meetings, public meetings will be held at various locations along the corridor at key milestones during this study in order to provide information and obtain input. Members of the study team will also be available to meet with the many established residential, community, and business organizations within the area to make presentations about the study and to hear about the issues and concerns that are important to stakeholders. All comments that are received during the study process will be considered in the decision-making process.

Study Schedule

The following is an overview of the schedule for the studies.

Environmental Analysis	January 2011 - April 2011
Prepare Draft Environmental Impact Statement (DEIS)	January 2011 - June 2011
Public Hearing on DEIS	September 2011
Prepare Final Environmental Impact Statement (FEIS)	TBD – Date will be based on Federal Funding Strategy for US 90A/Southwest Rail Corridor Project

How to Get Involved

An agency scoping meeting will be held at the following location:

Houston-Galveston Area Council
3555 Timmons, Conference Room A, 2nd Floor
Houston, Texas 77027
February 14, 2011
2:00 p.m. – 4:00 p.m.

Public scoping meetings (in open house format) will be held during August 2010 to communicate information about the study and to seek input from the community. Please attend the meeting that is most convenient to you. Additional meetings will be scheduled later in the year as the study progresses.

February 15, 2011 11:00 A.M. – 2:00 P.M.	February 15, 2011 6:00 P.M. – 8:00 P.M.	February 16, 2011 6:00 P.M. – 8:00 P.M.	February 22, 2011 6:00 P.M. – 8:00 P.M.
Waterside Cafe Texas Medical Center 6550 Bertner St. #1 Houston, TX 77030	Missouri City Community Center 1522 Texas Parkway Missouri City, TX 77489	The Power Center Southeast Ballroom 12401 S. Post Oak Rd. Houston, TX 77045	Westbury High School Atrium 11911 Chimney Rock Houston, TX 77035

You can also obtain information and contact us about issues for the US 90A/Southwest Rail Corridor project from the project website at www.ridemetro.org.

Planning Process

The US 90A/Southwest Rail Corridor project is being undertaken in accordance with the project development process through which Federal, State, and local officials plan and make decisions regarding transit and highway capital investments. The development process contains the following phases:

1. Conceptual Engineering/Draft Environmental Impact Statement
2. Preliminary Engineering/Final Environmental Impact Statement
3. Final Design
4. Construction
5. Operation

In the first phase of project development, alternatives will be evaluated based on consideration of environmental, socio-economic, transportation, and financial issues, as well as community input. At the conclusion of the DEIS, a public hearing will be held to take comments on the technical findings and recommendations. The LPA will be carried forward as the preferred alternative in the FEIS. The METRO Board of Directors will select/adopt a Locally Preferred Alternative (LPA) in full consideration of public and agency input on the technical recommendations. The project is further refined and mitigation measures finalized during preliminary engineering and the development of the FEIS. Following receipt of a Record of Decision (ROD) from FTA and funding commitments, the project will be advanced into final design, property acquisition (if required), and construction. The ROD would represent the final environmental clearance for the preferred alternative and would include all mitigation measures committed to in the FEIS.

Purpose & Need for Transit Improvements

The US 90A/Southwest Rail Corridor project has been identified in the H-GAC 2035 RTP Update and the METRO Solutions 2025 Plan as a priority transportation investment.

The US 90A/Southwest Rail corridor continues to increase in population and employment with limited traffic capacity on existing streets and highways resulting in increased travel time, delays, and air pollution. Portions of the US 90A/Southwest Rail corridor are already densely developed. New development and redevelopment is occurring along the corridor and is expected to generate

increased travel demand. In particular, high density, mixed use developments are planned in the corridor.

Travel patterns in the corridor are influenced by US 59 as it connects the southwestern end of the study area in Fort Bend County to Downtown Houston and the TMC. Much of the growth in traffic along US 59 is a result of residential growth in Fort Bend County, as well as an increase in population and employment in major activity centers in Houston, including Downtown Houston and the TMC. High levels of congestion on US 59 result in traffic being diverted onto US 90A and the local road network.

Over the past few decades, both Fort Bend County and Harris County have experienced steady and significant population and employment growth. Future projections indicate that the rate of growth will continue to be high over the next 25-30 years, particularly in Fort Bend County. By 2035, population in the study area is projected to increase by 46 percent from 21,903 to 31,897, households by 49 percent from 8,079 to 12,039, and employment by 42 percent from 24,157 to 34,242.¹

Growth is generating greater demand than can be met by existing transportation facilities and other planned improvements. The US 90A/Southwest rail corridor project will fill an important role in meeting the overall mobility needs for southwest Houston.

The strongest travel patterns for the US 90A/Southwest Rail Corridor study area currently exists to/from the TMC, with 27,174 daily trips. This relationship is projected to continue and daily trips are projected to increase to 31,855 by 2035. There are also important existing travel patterns to/from the study area and to/from Uptown/Galleria, Downtown, and Greenway Plaza and these are all projected to increase substantially by 2035

To/From	Existing Trips	2035 Trips
TMC	27,174	31,855
Uptown/Galleria	18,752	23,913
Downtown	11,924	18,620
Greenway Plaza	10,642	15,166

Source: H-GAC 2005 and 2035 Person Trip Tables

METRO does provide bus service in the US 90A/Southwest Rail corridor; however buses operate in mixed-flow traffic on city streets for a portion of their route. As a result, bus travel times are influenced by roadway congestion which is anticipated to increase. Peak period bus travel times can be as much as 30 percent longer than travel times during off-peak periods. In addition to slower peak period travel times, the reliability of bus service in the US 90A/Southwest Rail Corridor study area is influenced by incident-induced congestion and delays.

A review of existing conditions indicates many transportation challenges and opportunities exist within the corridor. The challenges, which provide a strong indication of the need for enhanced public transit service for the study area, include existing and future traffic congestion on freeways and thoroughfares, and slow bus speeds (between 10 and 14 mph on local routes and 22.5 mph on express route) due to traffic congestion.

¹ Source: Houston-Galveston Area Council (H-GAC), designated Metropolitan Planning Organization (MPO) for the Houston metropolitan area.

The 2035 RTP Update includes \$87 billion worth of transportation system investments, including added capacity roadway and transit projects. Even with this investment, transit, traffic congestion is expected to continue to increase due to population and employment growth in the region. A trend towards increasing congestion and less than desirable levels of service is also expected to occur in the US 90A/Southwest Rail Corridor and additional person-moving capacity will be needed (2035 RTP Update, 2010).

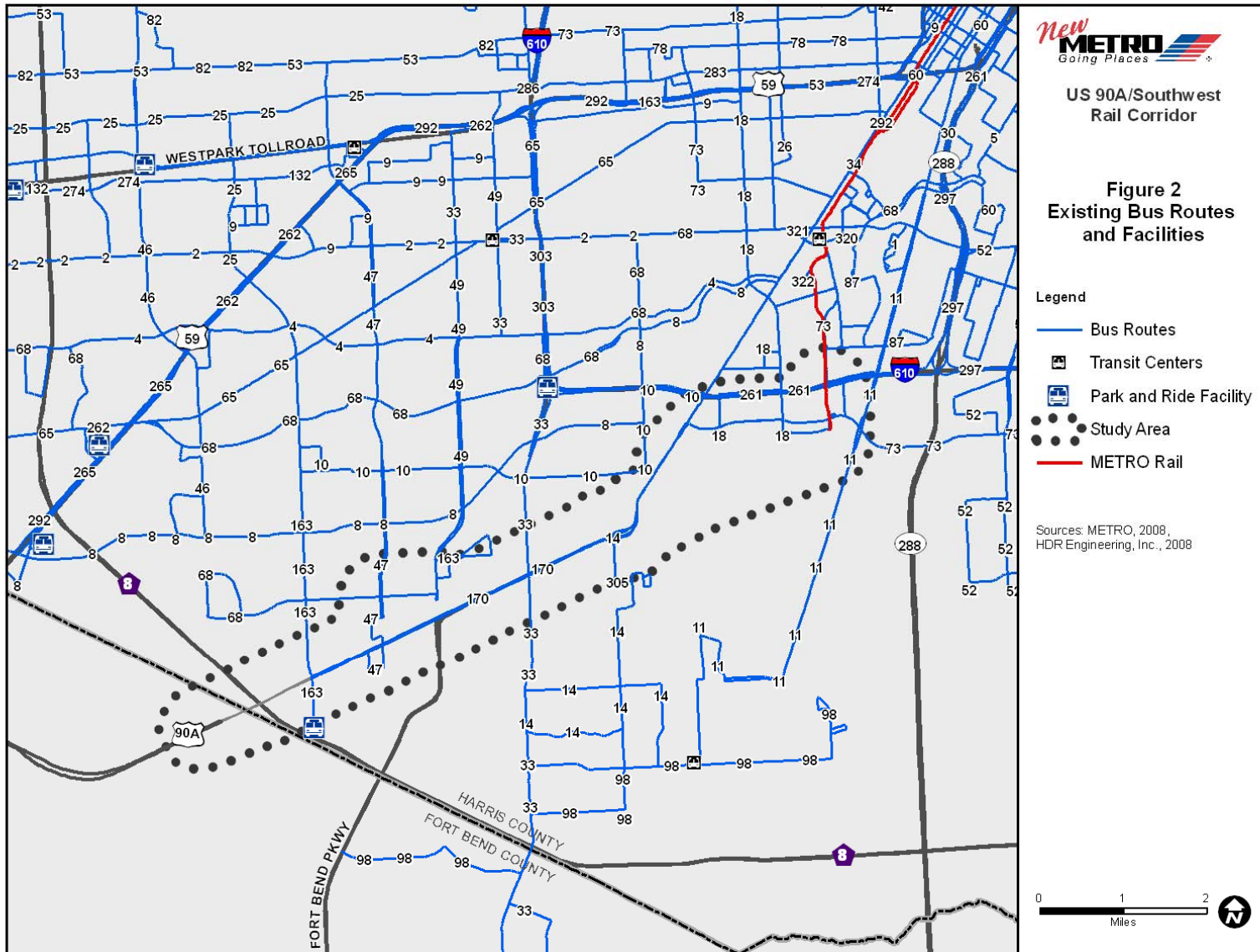
The transportation system deficiencies in the US 90A/Southwest Rail corridor include the following:

- Heavy congestion on US 59 which serves similar travel markets as US 90A. US 59 was reconstructed and widened to its ultimate width in 2004 and it cannot be widened to increase capacity because of limited right-of-way and existing development patterns.
- The existing single, reversible High Occupancy Vehicle (HOV) lane on US 59 cannot serve both inbound and outbound travel demand at the same time. Current directional splits for the main lanes are 66 percent inbound and 34 percent outbound during the morning peak period, and 58 percent outbound and 42 percent inbound during the evening peak period (Texas Transportation Institute, 2006).
- Anticipated population and employment growth is expected to intensify traffic congestion in the corridor.
- Lack of alternatives to single occupant vehicles (SOV) to serve the growing demand to access major activity and employment centers such as Downtown Houston, the TMC, and other activity centers.

Existing METRO bus service within the US 90A/Southwest Rail Corridor is shown in Figure 2. It includes seven bus routes directly serving the corridor, as follows:

- 14 Hiram Clarke
- 18 Kirby Limited
- 33 Post Oak Crosstown
- 47 Hillcroft Crosstown
- 73 Belfort Crosstown
- 163 Fondren Limited
- 170 Missouri City

Figure 1: Existing Bus Routes and Facilities



All bus routes in the study area operate in mixed-flow traffic on city streets for a portion of their route. Bus travel times are influenced by roadway congestion especially during peak period of travel. Peak period bus travel times can average as much as 30 percent longer than travel time during other times of the day (see Table 1.) In addition to slower peak period travel times, the reliability of bus service in the study area is influenced by incident-induced congestion and delays. Reliable travel times are essential to increasing transit patronage and decreasing dependence on SOV.

Table 1: Increase in Bus Travel Times During Peak Periods

Route	Increase in Travel Time During Peak Periods
14 Hiram Clarke	18%
18 Kirby Limited	23%
33 Post Oak Crosstown	31%
47 Hillcroft Crosstown	22%
73 Bellfort Crosstown	19%
163 Fondren Limited	19%
170 Missouri City	0%

Source: METRO, March 2009

METRO also provides light rail service at the northern terminus of the corridor with the existing METRORail Red Line.

Existing deficiencies in the public transit system within the study area are as follows:

- Slow and congested connections to the regional transit system between the US 90A/Southwest Rail corridor and major activity centers throughout the Houston area.
- Slow and unreliable bus speeds due to existing and projected traffic congestion.
- Existing and projected demand for high capacity transit service with reliable travel times.
- Need for better connectivity to the existing and planned METRORail system.

The Houston metropolitan area is a severe nonattainment area for the eight-hour ground level ozone standard. At a minimum, transportation improvements must not degrade air quality and should strive to reduce mobile source emissions in the future. Providing alternatives to SOV travel is a key ingredient in reducing mobile source emissions.

The purpose of the proposed project is to improve mobility, accessibility, and system linkage between the major residential areas in Missouri City and Stafford with major employment centers, such as Downtown Houston and the TMC. The proposed transit improvement would provide a high capacity transit alternative to the traffic congestion in the corridor and further the implementation of the METRO Rail Expansion Program.

A key component of rail service in the US 90A/Southwest Rail Corridor would be the regional connectivity that it would offer. The proposed US 90A/Southwest Rail Corridor service would connect to the existing METRORail Red Line, which would provide access to Downtown, Midtown, the Museum District and other major activity centers. Good connectivity to mainline transit service is important for maintaining and expanding transit ridership. Without convenient transit network

access, ridership in the US 90A/Southwest Rail corridor would be adversely affected by decreased bus speeds and increased travel times directly attributable to increased traffic congestion.

In summary, the US 90A/Southwest Rail corridor has many transportation challenges and opportunities that need to be addressed, including the following:

- Regional transit system connectivity between US 90A/Southwest Rail corridor and major activity centers and destinations.
- Providing additional transit capacity in the US 90A/Southwest Rail corridor.
- Improving interregional connections to the existing and planned METRORail system through interlining with the METRORail Red Line.
- Existing and projected future traffic congestion on freeways and thoroughfares within the corridor.
- Reducing travel delay, thereby helping improve air quality.
- Planned high density, mixed use development that will be dependent on future high capacity transit service.

Other transportation needs will be identified and described as the scoping process proceeds. FTA and METRO seek public and agency comment on the purpose and need for transit improvements in the US 90A/Southwest Rail corridor.

Definition of Alternatives

For purposes of stimulating discussion during the scoping process, the initial list of alternatives for consideration is as follows (see Figure 3):

Preliminary alternatives identified include a No Build Alternative and several Build Alternatives described below. Additional alternatives may emerge from comments received during the scoping process. Technology alternatives will be addressed during the EIS process including those alternatives that would require use of Federal Railroad Administration (FRA) compliant rail vehicles, such as would be case with Build Alternative 3. The initial list of alternatives proposed for consideration is as follows:

No Build Alternative: This alternative includes all transportation facilities and services programmed for implementation by 2030. This alternative includes highway and roadway improvements, as well as transit facilities. The H-GAC 2035 RTP serves as the basis for defining the elements of the No Build Alternative. The No Build Alternative proposes no major transit or transportation improvements in the US 90A/Southwest Rail corridor.

Alternative 1 – North of UP Railroad –Buffalo Lakes/West Belfort: This light rail transit (LRT) alternative begins in the vicinity of Beltway 8 and US 90A and runs northeast along the north side of the UP Railroad right-of-way. It turns north and runs through the future Buffalo Lakes development. At West Belfort Road, it turns east and follows West Belfort Road to Fannin Street, where it turns north to connect to the existing METRORail Red Line. A Hillcroft/West Airport Alignment Option turns north at Hillcroft Street and then east onto West Airport Boulevard. After crossing Chimney Rock Road, it merges back along the north side of the UP Railroad right-of-way.

Alternative 2 – North of UP Railroad/Fannin: This LRT alternative begins in the vicinity of Beltway 8 and US 90A and runs northeast along the north side of the UP Railroad right-of way. At Fannin Street it turns north to connect to the existing METRORail Red Line. A Hillcroft/West Airport

Alignment Option turns north at Hillcroft Street and then east onto West Airport Boulevard. After crossing Chimney Rock Road, it merges back along the north side of the UP Railroad right-of-way.

Alternative 3 – UP Right-of-Way – Fannin: This commuter rail alternative begins in the vicinity of Beltway 8 and US 90A and runs northeast within the UP Railroad right-of-way. At Fannin, it turns north to connect to the existing METRORail Red Line.

Alternative 4 – Between UP Railroad and US 90A – Buffalo Lakes/West Bellfort: This LRT alternative begins in the vicinity of Beltway 8 and US 90A and runs northeast between the UP Railroad and US 90A. It turns north and runs through the future Buffalo Lakes development. At West Bellfort Road, it turns east and follows West Bellfort Road to Fannin Street, where it turns north and connects to the existing METRORail Red line.

Alternative 5 – South of US90A – Buffalo Lakes/West Bellfort: This LRT alternative begins in the vicinity of Beltway 8 and US 90A and runs northeast along the south side of the US 90A. It turns north and runs through the future Buffalo Lakes development. At West Bellfort Road, it turns east and follows West Bellfort Road to Fannin Street, where it turns north to connect to the existing METRORail Red Line.

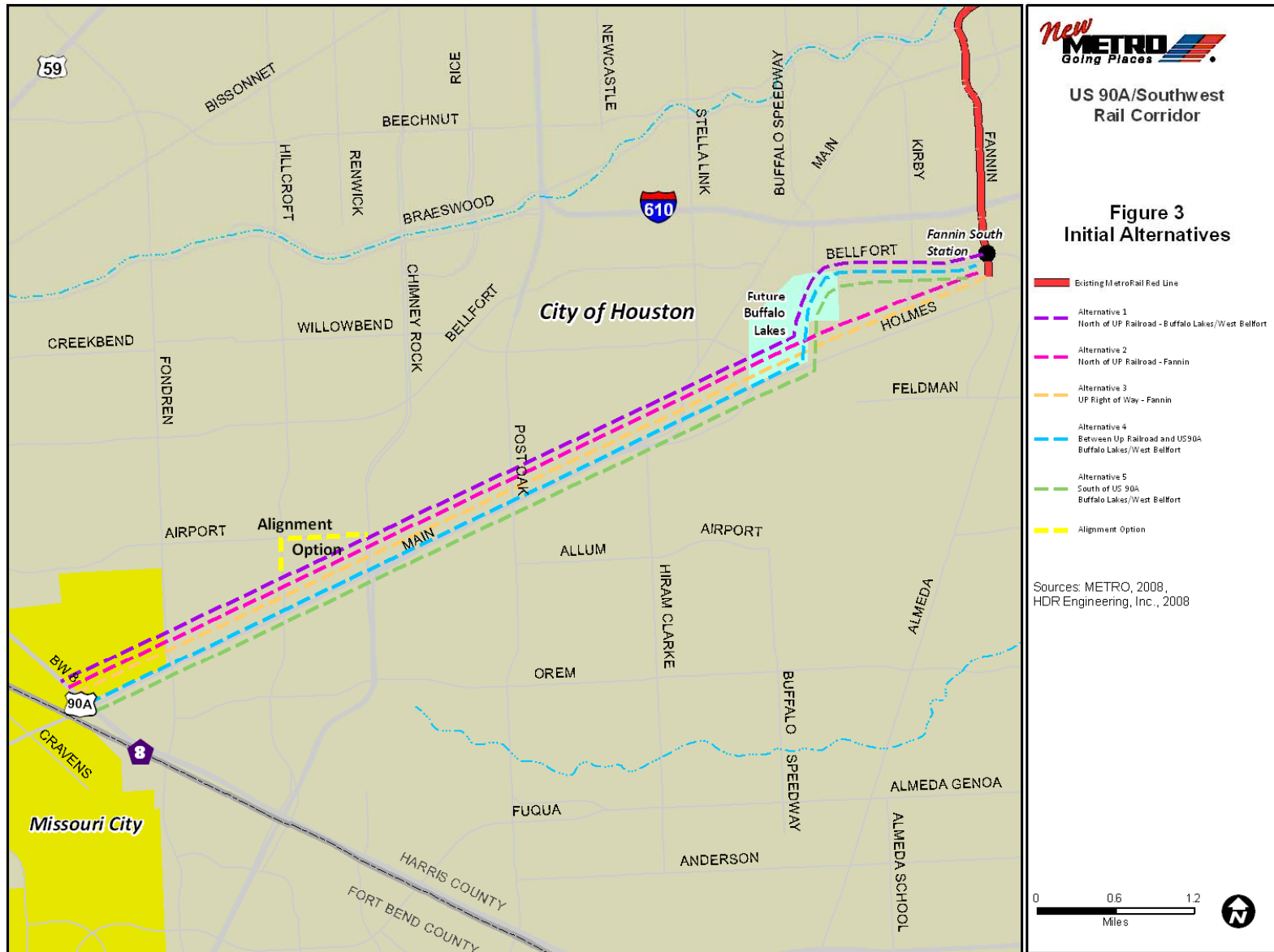
Issues to Be Addressed

The preliminary set of alternatives that has been identified would use Union Pacific Rail Road (UPRR) Right-of-way (ROW), TxDOT ROW, newly acquired right-of-way, or a combination of each. Each of the proposed alternatives may pose different environmental concerns for analysis. Alignments using UPRR ROW could have potential impacts in the areas of freight rail operations, noise and vibration, hazardous materials, water quality, floodplains, and aesthetics. Proposed alignments that use TxDOT ROW of South Main (US 90A) could have impacts in the areas of noise and vibration, water quality, traffic, and floodplains. Newly acquired ROW could have potential environmental impacts on a broader range of categories such as wetlands, floodplains, parkland, residential and industrial property displacements, noise and vibration, threatened and endangered species, and cultural resources. The proposed project would occur in the Houston-Galveston region, which is classified as a “severe” non-attainment area for ground level ozone; therefore, all alternatives would be investigated for air quality impacts

Environmental justice issues will be examined for all alternatives, and Limited English Proficiency and Title VI requirements documented. The indirect and cumulative effects of the proposed project would also be analyzed in the EIS.

The EIS will take into account both positive and negative impacts, direct and indirect impacts, short-term and long-term impacts and site specific and corridor wide impacts. The impact evaluation will be consistent with all Federal, State, and local criteria, regulations and policies. The EIS will identify measures to avoid, minimize, and mitigate adverse environmental and community impacts.

Figure 3: Initial Alternatives



Source: Houston METRO 2010