
Environmental Assessment
for the
Intermodal Terminal

Prepared for:

The Metropolitan Transit Authority of Harris County



September 2006

**Environmental Assessment
for the
Intermodal Terminal
Houston, Texas**

Prepared for

**The Metropolitan Transit Authority of Harris County
METRO Solutions**

Prepared by

**LOPEZGARCIA GROUP
1825 Market Center Blvd., Suite 150
Dallas, Texas 75207**

September 2006

 **Printed on Recycled Paper**

EXECUTIVE SUMMARY

The subject of this Environmental Assessment (EA) is the design and construction of an Intermodal Terminal (IT) project located north of downtown Houston. The National Environmental Policy Act (NEPA) of 1969 requires that federal agencies prepare an EA for any major federal action to determine if the project would have a significant impact on the environment. An EA was prepared by the Metropolitan Transit Authority of Harris County (METRO) under its responsibilities as the local lead agency to implement the IT. This EA documents all comments received during public meetings and reflects key decisions made by the METRO Board of Directors. This document has been submitted in coordination with the Federal Transit Administration (FTA), the lead federal agency.

The purpose of the EA is to inform the affected agencies and the public of potential environmental, social and economic impacts associated with the proposed IT and the No-Build Alternative. The No-Build Alternative represents the base condition for identifying impacts associated with the proposed project. The EA serves as the primary document to facilitate review of the proposed project by federal, state and local agencies and the general public. The EA documents the purpose and need for the project and describes the alternatives considered. It addresses in detail the anticipated transportation and environmental impacts of the project and identifies any appropriate mitigation measures that may be required to minimize such impacts.

A series of public meetings was conducted within the study area for interested parties including private citizens, community groups, the business community, elected officials and public agencies. The EA reflects the decisions made by the METRO Board of Directors and also includes responses to comments received during the public meetings. It is anticipated that the completion of the Final EA will result in a Finding of No Significant Impact (FONSI) by the FTA, permitting the project to be advanced to final design and construction.

This Executive Summary highlights the most noteworthy findings of the Final EA relative to the document's major headings:

- Purpose and Need,
- Alternatives Considered,
- Affected Environment, and
- Environmental Consequences.

PURPOSE AND NEED

METRO's multi-modal transit system is early in its ultimate development. The success of the Main Street Light Rail Transit (LRT) and extensive High

Occupancy Vehicle system, demonstrates the region's commitment to supporting further transportation enhancements. As this multi-modal system further develops, the IT would serve the following purposes:

- increase regional connectivity/transit effectiveness,
- offer an alternative to single-occupancy vehicle (SOV) travel, and
- improve access and increase economic development opportunities.

As the Houston region continues to expand, the impact on its associated infrastructure will be stretched. For transportation, surface streets will become further congested; travel time will be increased for drivers and transit riders; and air quality will further deteriorate. METRO Solutions is one component of the region's efforts to address these transportation issues. The specific transit investment of the proposed IT in the north downtown area would meet the following needs:

- Provide increased connections of major employment, entertainment, commercial and educational activity centers throughout the region;
- Improve air quality by reducing traffic congestion near the downtown area;
- Improve transit service through reduced travel time and increased reliability;
- Contribute to improvements in unacceptable regional air quality; and
- Improve regional mobility through effective and efficient transit.

ALTERNATIVES CONSIDERED

In 2005, the Houston Downtown Management District initiated an inter-governmental agency analysis of the transit needs in the METRO service area through the use of a feasibility study referred to as the Houston Intermodal Center/Multimodal Terminal Feasibility Study. This study was conducted in support of METRO Solutions, the region's comprehensive long range transit plan and was financed with contributions from METRO, the Texas Department of Transportation (TxDOT), the City of Houston, the Main Street Coalition and Midtown Management District. This effort was guided by a 32-member steering committee composed of neighborhood representatives, University of Houston – Downtown staff, City of Houston and Harris County officials and representatives from private transportation entities. This analysis sought to solicit input from stakeholders regarding how they might use the facility, determine the best location for the facility and build a cohesive group of IT stakeholders who would support funding applications for the facility.

A Regional Location Analysis was undertaken to identify areas within the Houston region that would be suitable to locate the proposed IT. The analysis was based on information developed from multiple transportation providers and the project's steering committee. Seven general areas were identified within the region as candidates for accommodating the proposed facility (**Figure 2-1**). The Regional Location Analysis identified a Zone A (North Downtown) as the highest ranking alternative site for the following reasons:

- connectivity to the greatest number of existing transportation infrastructure elements in the region,
- connectivity to the greatest number of proposed transportation infrastructure elements in the region,
- best overall proximity to major regional activity centers,
- greatest amount of vacant and/or underutilized land in close proximity to existing and proposed transportation infrastructure and
- most consistent land use patterns, which are compatible with the development of an IT.

The feasibility study further refined the possible locations within Zone A. To further evaluate seven sub-areas (**Figure 2-2**), an evaluation matrix for three primary goals (transportation and mobility, economic opportunity and investment and site characteristics), was developed and is provided below (**Table ES-1**).

As a result of the Location Analysis, the White Oak and Hardy Yards sub-areas were identified by the Feasibility Study as best suited to meet the purpose and need of the proposed project.

Table ES-1. Sub-Area Evaluation Matrix

Criteria	Site							
	White Oak	Hardy Yards	Wilson Property	IH 10/US 59	East Bayou	Bus Barn	Post Office	
Transportation and Mobility								
1.1	Operation and Maintenance Cost	●	●	●	●	●	●	
1.2	Intermodal Connectivity	●	●	●	●	●	●	
1.3	Accessibility	●	●	●	○	○	○	
1.4	Travel Time Savings	●	●	●	●	●	●	
Economic Opportunity and Investment								
2.1	Consistency with Land Use Patterns	●	●	●	●	○	●	
2.2	Proximity to Existing and Planned Development	○	●	●	○	○	●	
2.3	Proximity to Developed and Re-developable Land	●	●	●	●	●	○	
2.4	Resident/Neighborhood Sentiment	●	●	●	●	●	●	
2.5	Business Community Sentiment	●	●	●	●	●	●	
2.6	Environmental Impacts	●	●	●	●	○	●	
Site Characteristics								
3.1	Positive Community Impact	●	●	●	●	●	●	
3.2	Avoid Business and Resident Relocations	●	●	○	○	●	○	
3.3	Personal Security	●	●	○	○	○	○	
3.4	Environmental Clearance/Remediation	Environmental review to be conducted following selection of preferred sites at METRO.						●
3.5	Visibility	●	●	●	●	●	●	
3.6	Capital Cost	●	●	○	●	●	○	
3.7	Ease of Site Acquisition	●	●	○	●	●	●	
3.8	Ability to Phase Construction	●	●	●	●	●	●	
Key: ● Very Good ● Good ○ Poor								

Source: Houston Intermodal Center/Multimodal Terminal Feasibility Study (2005).

AFFECTED ENVIRONMENT

Professionals qualified in their fields have identified the existing natural and built environmental conditions in the Study Area. This existing conditions information formed the basis of impact assessment investigations for each category. Impact assessment categories that were identified in the Study Area include:

- Land Use,
- Social and Economic Conditions,
- Visual and Aesthetic Resources,
- Parkland Resources,
- Soils and Geology,
- Ecosystems,
- Water Resources,
- Noise and Vibration Levels,
- Air Quality Conditions,
- Hazardous and Regulated Material Locations,
- Cultural Resources, and
- Traffic and Transportation Conditions.

Detailed information regarding the affected environment in the project Study Area is provided in Chapter 3 of the EA.

ENVIRONMENTAL IMPACTS

This EA identifies the potential environmental consequences of the No-Build and Build Alternatives. The majority of the proposed undertaking is located within ¼-mile of the junction of the Union Pacific Railroad (UPRR) and Main Street. Property acquisitions are required and associated land use impacts are identified. Chapter 4 of the EA details these and all other associated environmental consequences associated with the No-Build and Build Alternatives. No significant impacts are anticipated with the No-Build Alternative. **Table ES-2** summarizes the potential impacts of the selected alternative and related mitigation measures.

Table ES-2. Summary of Environmental Impacts

Subject Area	Impacts	Mitigation Approach
Land Use and Economics	No adverse impacts anticipated	N/A
Property Acquisitions and Displacements	4 displaced residents 8 displaced businesses	-Acquisition and relocation assistance following federal policies and procedures.
Visual and Aesthetics	-Potential Impacts in Near Northside Neighborhood -Potential Impacts to North Main Street	-Coordination with Near Northside Neighborhood during final design. -Configured facilities and massing in response to

		neighborhood context.
Parkland	No significant Impacts	N/A
Soils and Geology	-Project construction activities would include removal of vegetation, exposure of the soil, loss of topsoil productivity in areas not currently paved and short-term increased susceptibility to wind and water erosion.	-Best management practices (BMPs) would be utilized, such as silt fencing, vegetative filter strips, straw bale dikes and diversion ditches.
Natural Communities	-Loss of vegetation in the White Oak Bayou	-Commitment to further assessment and planning for tree preservation and replacement
Threatened and Endangered species	No significant Impacts	N/A
Water Resources	-Construction could cause minor sediment run off into surface water. -Minor increase in automobile related chemicals -Modifications to the existing storm sewer systems -Minor impacts in shallow groundwater quality during construction	-Compliance with the Texas Pollutant Discharge Elimination System (TPDES) General Permit for Storm Water Discharges from Construction Activities -Develop and implement a Storm Water Pollution Prevention Plan -Temporary and permanent storm water control measures (BMPs) would be utilized before, during and following construction to avoid or minimize the addition of contaminants to storm water
Noise and Vibration	-No severe noise impacts to adjacent properties. -Moderate impacts for residents on Burnett Street from increased vehicle traffic -No projected vibration impacts	-Possible mitigation measures such as noise barriers and sound insulation
Air Quality	-No adverse impacts	N/A
Hazardous Materials	-2 locations of high	-Areas impacted to be

	<p>concern -22 locations of moderate concern</p>	<p>determined during final design -Mitigation needs dependent on impacts at each individual property</p>
Cultural Resources	<p>Impacts to be determined once Texas Historical Commission (THC) concurrence is received</p>	<p>To be stipulated in MOA between THC, FTA, and METRO</p>
Traffic and Transportation	<p>-No adverse impacts</p>	<p>N/A</p>
Safety and Security	<p>-Pedestrian/vehicle interface -Pedestrian safety</p>	<p>-Coordination with fire, police, emergency services -Crossing approaches to be signed -Incorporate Crime Prevention Through Environmental Design</p>
Construction Impacts	<p>-Temporary and limited duration impacts</p>	<p>-Institute BMP</p>
Environmental Justice	<p>-Potentially adverse impacts to Near Northside neighborhood</p>	<p>-Coordinate and mitigate with community</p>