APPENDIX F  SECTION 4(f) EVALUATION

Section 4(f) of the Department of Transportation Act of 1966, as amended, (49 United States Code (USC) 303) states that the US Department of Transportation (USDOT) may not approve the use of land from a significant publicly owned public park, recreation area, wildlife or wildfowl refuge, or any significant historic site unless a determination is made that:

- There is no feasible and prudent alternative to the use of land from the property; and
- The action includes all possible planning to minimize harm to the property resulting from such use.

A Section 4(f) use is defined as 1) permanent acquisition of a protected resource for a transportation project, or 2) temporary but adverse use of a protected resource. A Section 4(f) constructive use occurs when a transportation project does not incorporate land from a protected resource but the proximity impacts of the project are so severe that the attributes that qualify the resource for protection under Section 4(f) are substantially impaired or diminished.

Section 6009(a) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Pub. L. 109-59, amended existing Section 4(f) legislation at Section 138 of Title 23 and Section 303 of Title 49, USC. The first substantive revision to Section 4(f) since the 1966 USDOT Act, Section 6009 was amended to simplify the process and approval of projects that have only de minimis impacts on lands protected by Section 4(f). Under the new provisions, once the USDOT determines that a transportation use of Section 4(f) property only results in a de minimis impact, analysis of avoidance alternatives are not required and the Section 4(f) evaluation process is complete for that particular resource.

For parklands, a finding of de minimis impacts is made when, after public notice and opportunity for public review and comment, the transportation project will not adversely affect the activities, features, and attributes of the park eligible for protection under Section 4(f); and the finding has received concurrence from the officials with jurisdiction over the park. For historic sites, a finding of de minimis impact is made when, in accordance with the consultation process required under Section 106 of the National Historic Preservation Act (16 USC 470f), that the transportation program or project will have no adverse effect on the historic property.

This Appendix contains the Section 4(f) evaluation of impact of the Southeast Corridor project on parklands and historic properties. The Section 4(f) evaluation includes a description of each protected resource that may be impacted by the project. The description of each resource includes information on the location and characteristics of the property impacted, impacts of the project on the property, alternatives evaluated to avoid using the resource and measures to minimize harm, and coordination with the agency having jurisdiction over the resource. Chapter 1, Purpose and Need, and Chapter 2, Alternatives Considered, of the Final Environmental Impact Statement (FEIS) more fully describe the purpose and need.
for the project as well as the Locally Preferred Alternative (LPA) and the alternatives considered and eliminated in the Draft Environmental Impact Statement (DEIS).

F.1 Purpose and Need

Transportation improvements are needed in the Southeast Corridor to accommodate existing and future travel demands resulting from growth in population and employment and to address concerns related to limited transportation choices and provision of transit services between corridor activity centers. Other concerns relate to mobility of transportation-disadvantaged populations, provision of transportation facilities and services to support economic development, neighborhood revitalization, and air quality.

The proposed project provides for the implementation of a Bus Rapid Transit (BRT) service in the Southeast Corridor that: provides the necessary capacity to accommodate existing and future travel demands; improves connections to major activity centers, including downtown Houston, the universities area including Texas Southern University (TSU) and the University of Houston (UH), the Palm Center, and the Texas Medical Center (TMC); improves the mobility of corridor residents and workers; supports neighborhood revitalization and economic development; and reduces the demand for automobile use and parking. The proposed project also would support Metropolitan Transit Authority’s of Harris County (METRO’s) goals for protecting and enhancing community and environmental resources and would provide for a balanced transportation system through implementation of the METRO Solutions plan.

Additional discussion of the purpose and need for the project is presented in Chapter 1, Purpose and Need.

F.2 Proposed Alternatives

Prior to initiating the EIS, METRO conducted an alternatives analysis (AA) to identify transportation issues and to evaluate a range of mode and alignment alternatives to address transportation needs in the Southeast Corridor. The conclusions of the AA recommended both a new fixed-guideway transit line and improved bus service within the corridor.

Based on the results of the AA and following a successful voter referendum in 2003 approving the METRO Solutions plan, the METRO Board of Directors adopted a Locally Preferred Investment Strategy (LPIS) for the Southeast Corridor. The LPIS provides for the implementation of fixed-guideway transit facilities and services in the Southeast Corridor. The Board also adopted a Minimum Operable Segment (MOS). The MOS is approximately 6.8 miles in length and extends from downtown Houston southeast to Scott Street and along Scott Street and Griggs Road to the vicinity of Interstate Highway (IH)-610. The MOS is located geographically within the limits of the LPIS, which extends southeast to Hobby Airport. The MOS would be the first phase of the LPIS to be implemented.

The MOS adopted by METRO represents the base MOS alignment of the build alternatives evaluated in the DEIS. Its logical termini connect two major activity centers within the Houston Metropolitan area – downtown Houston and the universities area, which contains the UH and TSU. The MOS was found to have utility that is
independent of other future projects and does not depend on future investments to achieve its purpose and need.

The fixed-guideway transit service under the build alternatives evaluated in the DEIS could be operated using either light rail transit (LRT) or BRT vehicles. Although LRT was the transit technology adopted by the METRO Board for the Southeast Corridor in the METRO Solutions Transit plan, the plan was modified in 2005 to provide for implementation of BRT in the initial phase with conversion to LRT in 2025. The technology of BRT was proposed by METRO as an alternative for implementation in the Southeast Corridor in order to improve the cost effectiveness of the project for federal funding.

**F.2.1 Preferred Alternative**

The DEIS evaluated a LRT Alternative, a BRT Convertible Alternative, and a BRT Alternative. The FEIS identifies the BRT Convertible Alternative as the LPA, as shown in Figure F-1.

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**Figure F-1. Locally Preferred Alternative**

![Figure F-1. Locally Preferred Alternative](Source: Parsons Brinckerhoff, 2006.)
In addition to the LPA, the FEIS includes the evaluation of a No Build Alternative. The No Build Alternative consists of existing transportation services and facilities plus the METRO transit services and facilities that will be in operation in FY 2007 and the regional roadway/highway system that will be in place in 2025. It includes the METRORail Red Line, but incorporates no other new advanced high-capacity transit services. The No Build Alternative is used for comparison to determine the impacts of the build alternatives.

Additional discussion of the alternatives considered in the FEIS is presented in Chapter 2, Alternatives Considered.

**F.3 Section 4(f) Properties**

There are two Section 4(f) properties included in this evaluation; one NRHP-eligible historic district and one public park (see Table F-1 and Figure F-2). Evaluation of several other Section 4(f) resources (see Section 5.10 of the FEIS) concluded that there would be no direct or constructive use of those resources.

### Table F-1. Section 4(f) Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Type</th>
<th>Size</th>
<th>Ownership</th>
<th>Function/Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third Ward East Historic District</td>
<td>NRHP-eligible historic district</td>
<td>Approx. 77 acres</td>
<td>Various private landowners</td>
<td>Residential</td>
</tr>
<tr>
<td>MacGregor Park</td>
<td>Regional Park</td>
<td>82.8 acres</td>
<td>City of Houston Parks and Recreation</td>
<td>Recreation center, swimming pool, tennis courts, multi-use pavilion, baseball field, practice backstop, picnic area, playground, hike and bike trails, concessions</td>
</tr>
</tbody>
</table>

Source: Parsons Brinckerhoff, 2006.

**F.3.1 Third Ward East Historic District**

The Third Ward East Historic District is one of three National Register of Historic Places (NRHP) -eligible historic districts (as determined by the Texas State Historic Preservation Officer (SHPO) identified during reconnaissance surveys for the Southeast Corridor project. The three Third Ward Districts have been designated the Third Ward North, Third Ward East, and Third Ward West. These districts are located within the greater Third Ward of Houston, which is one of the city’s oldest areas. The Third Ward was historically and is currently home to a large African-American community, and many of the city’s black leaders emerged from this neighborhood.

The Third Ward East Historic District is a neighborhood of single-family residences and duplexes that is eligible for inclusion in the NRHP. The neighborhood consists primarily of simple frame, vernacular and Bungalow-type houses dating from the 1900s and 1930s. Rows of identical frame houses are present in this area. This potential historic district’s approximate boundaries are Scott Street to the west, Beulah Street to the south, Hadley Avenue and Gulf Freeway to the north, and Callie...
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and Leek Streets to the east. The majority of the contributing resources found within this historic district are located outside the project area. No contributing resources within the project area front on Scott Street, but the sides of a small number of contributing buildings face the street. It appears that the row of buildings that historically fronted on Scott Street was removed at an unknown date to accommodate the widening of Scott Street. The Third Ward East Historic District is eligible for the NRHP based on the architectural significance of the concentrations of intact historic buildings (Criterion C) from the early twentieth century and historical associations with the area’s growth and development and the local African-American community (Criterion A).

The Third Ward is served by a network of City streets and sidewalks. The area is also served by several METRO bus routes.
F.3.2 MacGregor Park

MacGregor Park is owned and maintained by the City of Houston Parks and Recreation Department. It is located on the west side of Martin Luther King Boulevard between Brays Bayou and Old Spanish Trail. MacGregor Park is classified as a regional park. Regional parks serve broad based recreational needs. Their large size permits large-scale development of both passive and active facilities offering a wide range of recreational activities. Regional parks include sizeable areas of undeveloped land with natural vegetation and/or water features. MacGregor Park includes a recreation center, swimming pool, tennis courts, multi-use pavilion, baseball field, disc golf course, practice backstop, picnic area, playground, hike and bike trails, and concessions within its 83-acre area. MacGregor Park also includes a sculpture by Gutzon Borglum, the creator of the sculpture at Mount Rushmore. MacGregor Park provides vehicle, pedestrian, and bicycle access. It is also served by several METRO bus routes.

F.4 Impacts to Section 4(f) Resources

Impacts to the two Section 4(f) resources discussed above are described in this section.

F.4.1 Impacts to the Third Ward East Historic District

Impacts to the NRHP-eligible Third Ward East Historic District under the LPA include acquisition of approximately 10 feet or right-of-way on the east side of Scott Street between IH-45 and Anita Street, as shown in Figure F-3. This would affect property of three contributing structures to the Third Ward East Historic District (see Table F-2). Two properties at 3505 Bremond Street and at 3502-4 Tuam Street, would be affected by 10 to 20 feet of land acquisition across the southern edge of each parcel. The third property, at 3515 McGowen Street, would be displaced by the realignment of the Scott Street/McGowen Street intersection and the entire property would be acquired (see Figure F-3). The impacts to the three contributing properties in the Third Ward East Historic District has been determined to be an adverse effect under Section 106 of the National Historic Preservation Act. The Texas SHPO has concurred with this determination (see Appendix E) and a Memorandum of Agreement (MOA) between FTA, METRO, and the SHPO has been prepared to mitigate the adverse effect (see Appendix H). Proposed mitigation measures include the preparation of a NRHP-nomination for a portion of the Third Ward for submittal to the SHPO.

F.4.2 Impacts to MacGregor Park

The LPA will locate the fixed-guideway alignment in the existing landscaped median of Martin Luther King Boulevard which runs along the east side of the park. This would comprise a use of the property as the Martin Luther King Boulevard median is within the park boundary. There would also be acquisition of small amounts of park
Figure F-3. Impacts to Contributing Structures in Third Ward East Historic District

Source: Parsons Brinckerhoff, 2006.
Table F-2. Impacted Properties in the Third Ward East Historic District

<table>
<thead>
<tr>
<th>Address</th>
<th>Building #</th>
<th>Present Use</th>
<th>NRHP Status</th>
<th>Potential Adverse Effect under Section 106</th>
</tr>
</thead>
<tbody>
<tr>
<td>3505 Bremond St.</td>
<td>270</td>
<td>Residential</td>
<td>Contributing element to the NRHP-Eligible Third Ward East Historic District</td>
<td>Proposed fixed guideway alignment could result in approximately 1,000 square feet of right-of-way acquisition along Scott Street</td>
</tr>
<tr>
<td>3515 McGowen St.</td>
<td>268</td>
<td>Residential</td>
<td>Contributing element to the NRHP-Eligible Third Ward East Historic District</td>
<td>Realignment of McGowen Street will result in the acquisition and removal of this property.</td>
</tr>
<tr>
<td>3502-4 Tuam St.</td>
<td>247</td>
<td>Residential</td>
<td>Contributing element to the NRHP-Eligible Third Ward East Historic District</td>
<td>Proposed fixed guideway alignment could result in approximately 2,000 square feet of right-of-way acquisition along Scott Street</td>
</tr>
</tbody>
</table>


property north of Martin Luther King Boulevard to provide turning lanes and a new signalized intersection at Martin Luther King Boulevard (see Figure F-4). These uses would not have a negative affect on the park’s activities or appearance and would not impair the recreational uses of the park. These impacts are considered de minimis under Section 4(f). The City of Houston Parks and Recreation Department has concurred with this finding (see Appendix E).

Table F-3 summarizes the impacts to Section 4(f) properties.

Table F-3: Impacts to Section 4(f) Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third Ward East Historic District</td>
<td>Adverse effect and use – approximately 10-20 feet of right-of-way acquisition on the east side of Scott Street between IH-45 and Anita Street. Includes taking of land from two contributing properties and relocation of one contributing historic building.</td>
</tr>
<tr>
<td>MacGregor Park</td>
<td>De minimis impact – small amounts of park property will be used within the median of MLK Blvd and on the north side of MLK Blvd within the park boundary. No impairment of park functions or activities.</td>
</tr>
</tbody>
</table>

Source: Parsons Brinckerhoff, 2006.

F.5 Avoidance Alternatives

The discussion of avoidance alternatives focuses on the Third Ward East Historic District where impacts have been identified. The impacts to MacGregor Park have been identified as de minimis impacts and therefore do not require discussion of avoidance alternatives.

Avoidance alternatives include those that avoid Section 4(f) resources with a new alignment location and those that avoid impacts through design modifications.
F.5.1 Location Alternatives

Development of alternatives for the Southeast Corridor followed established Federal Transit Administration (FTA) procedures for New Starts projects. A full range of alternatives for the Southeast Corridor were considered as part of the AA, completed in 2004. The AA identified and evaluated alternatives through a two-step process. The first step consisted of the identification and mapping of all potential rights of way conceivable for fixed-guideway transit, including arterial streets and active or abandoned railroad rights of way. In the initial step, alignment segments having “fatal flaws” that made them clearly inferior for further consideration were eliminated.

The second step involved the development of full-length corridor alternatives from the list of remaining alignment segments. The corridor alternatives were then subjected to more detailed evaluation of the benefits and the environmental, transportation, and economic impacts against the stated goals and objectives for the project as set forth in the purpose and need.

The AA also screened a long list of transit technologies capable of providing Advanced High Capacity Transit (AHCT), narrowing to the consideration of LRT and BRT with input from the Community Involvement Committee and general public. The technologies of LRT and BRT were selected for detailed evaluation with the corridor alignment alternatives.

Because the Third Ward Historic Districts comprise a large geographical area between the Downtown and UH, there were not a large number of alignment alternatives that completely avoided all three districts and still address the purpose and needs. However, two alternatives, in addition to the No Build Alternative, that avoid the use of these Section 4(f) properties were developed during the AA. These alternatives and the reasons for their elimination are described below.

F.5.1.1 Houston Belt & Terminal Railway and Burlington Northern Santa Fe Railway

Route segments utilizing the Houston Belt & Terminal (HB&T) Railway and Burlington Northern Santa Fe Railway (BNSF) Railway were considered in the initial identification and screening of potential route segments in the AA. These segments were not advanced for further consideration in the AA because of their lack of consistency with the project purpose and need, low ridership, and high costs. For these reasons they are not considered prudent alternatives. Railroad alignments are more appropriate for commuter rail which serves longer distance peak period trips. These types of trips are currently served by METRO using express buses operating in HOV/bus lanes on I-45. The need is for improved transit to serve shorter non-work and work trips not served by the peak oriented commuter service. The railroad alignments also would not serve the university areas of TSU and UH. The HB&T Railway alignment also conflicts with a future hike and bike trail planned by Harris County in the abandoned railroad right-of-way from Brays Bayou to Polk Street.

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F.5.1.2 Alternative SL-3

Alternative SL-3 was one of four complete alternatives developed from the viable route segments. Alternative SL-3 avoids the three documented Third Ward historic districts but would have the same de minimis impacts to MacGregor Park as the MOS alignment option identified in Section F.2 above. Alternative SL-3 was not advanced for consideration in the DEIS because it does not directly serve the Downtown area and hence the potential to generate ridership is significantly decreased. The Downtown area is the single largest activity and employment center served by the alternatives and the largest single destination for trips in the corridor. Alternative SL-3 also showed relatively low potential for attracting new transit riders, primarily due to the lesser travel time savings offered by this alternative. Overall, Alternative SL-3 does not meet the purpose and need for the project in terms of improving mobility, making regional connections, and providing economic development opportunity and is not considered a prudent alternative. Alternative SL-3 also traverses a portion of the Third Ward neighborhood and while it does not affect the identified historic districts, there is potential for additional historic properties within the SL-3 alignment.

F.5.1.3 No Build Alternative

The No Build Alternative is retained throughout the New Starts and NEPA process as a potential alternative as well as a baseline against which the other alternatives can be compared. The No Build Alternative would avoid the use of any Section 4(f) properties. However, the No Build alternative does not meet the project purpose and need as stated in Chapter 1 of the FEIS and therefore is not considered prudent. The No Build would not provide the transit investment in the Southeast Corridor needed to support the development/redevelopment included in local land use plans. The No Build would not effectively meet the projected travel demand in the corridor – congestion would likely continue to worsen, and the transit system would not successfully attract significant portion of this demand. The No Build would not contribute to improved air quality in the region, nor would it contribute to neighborhood revitalization and economic development of the area. Mobility of the area’s residents, many of whom are low-income and dependent upon public transit, would not be improved.

F.5.2 Design Alternatives

Design alternatives that avoid the use of the three Third Ward Historic Districts were also considered. These design alternatives include minor alignment shifts and a reduced facility.

F.5.2.1 Minor Shifts in Alignment

Currently the fixed-guideway alignment is generally centered on Scott Street with small right-of-way acquisitions on both sides. Because there are NRHP-eligible historic districts on both sides of Scott Street, shifting the alignment east or west would not avoid impacts to these Section 4(f) resources. Shifting to avoid one historic district could result in more severe impacts to another district, including...
potentially additional structure acquisitions. The net impact to the districts is less by maintaining the alignment in the center of Scott Street.

Shifts in alignment have been implemented in order to minimize impacts to the three historic districts as much as possible. The station platform at Leland Station was moved from the west side of Scott Street to the center of Scott Street (between the northbound and southbound tracks) to minimize the right-of-way acquisition along Scott Street in this area. This shift eliminated impacts to the Third Ward North Historic District. A shift to move the alignment to the north side of Scott Street in the vicinity of the University of Houston was also implemented to avoid impacts to the Third Ward West Historic District.

F.5.2.2 Eliminating Lanes on Scott Street

Eliminating a travel lane on Scott Street would provide sufficient right-of-way for the proposed BRT Convertible alignment without impacting the Section 4(f) properties. However, Scott Street is currently a four-lane facility that provides direct access to IH-45. Existing and future demand on this facility precludes the removal of any traffic capacity. Any capacity reduction would result in severe congestion and would impact access to the Third Ward neighborhood as well as to the interstate. Reducing the number of lanes on Scott Street is not considered a prudent alternative.

F.6 Measures to Minimize Harm

Impacts have been identified under the LPA to the Third Ward East Historic District. Every effort will be made in final design to avoid these impacts with further design options. Additional measures to minimize harm to historic properties have been developed in consultation with the SHPO. A Memorandum of Agreement (MOA) has been prepared between FTA, METRO, and the SHPO to document adverse effects on historic properties and measures to mitigate those effects. These measures include preparation of a NRHP nomination for a portion of the Third Ward for submittal to SHPO. The MOA is contained in Appendix H.

De minimis impacts were identified to MacGregor Park under the LPA. While these impacts will not impair the recreational uses or activities at the park. METRO will minimize harm to MacGregor Park by replacing any trees lost as a result of the minor use of the park. The Tree Preservation Plan will comply with the City of Houston Tree and Shrub Ordinance (No. 1999-425) and will be reviewed by the City of Houston Parks and Recreation Department. The location of replacement trees within the park would be determined in consultation with the City of Houston Parks and Recreation Department. Other mitigation committed to by METRO includes a new signalized intersection with left-turn lanes at the park entrance on Martin Luther King Boulevard and a transit station at Old Spanish Trail for access to the park.

F.7 Coordination

The SHPO and the City of Houston Parks and Recreation Department have been consulted regarding impacts to historic and park properties as a result of the project. The SHPO was involved in the identification of the project Area of Potential Effect for
The proposal to provide a fixed guideway transit system in the Southeast Corridor has the potential to impact two Section 4(f) properties – one historic district and one park.

The LPA affects the Third Ward East Historic District with minor right-of-way acquisition and one potential structure relocation. These impacts are considered adverse effects and a use under Section 4(f). Impacts to MacGregor Park under the LPA have been found to be de minimis.

Avoidance alternatives including alternative alignments and design options have been developed and evaluated for their prudence and feasibility. Impacts to the Section 4(f) resources described in this document have been determined to be unavoidable and all possible measures to minimize harm have been incorporated into the planning and preliminary engineering. Mitigation measures for impacts to the Third Ward East Historic District will be documented in a Memorandum of Agreement as part of the Section 106 process. Should additional impacts to Section 4(f) properties be identified during final design, this evaluation will be updated as necessary.