Pedestrian and Bicycle Special Districts Study
Phase 2—Third Ward Pilot Project

conducted by
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Introduction

In June 2003, the Houston-Galveston Area Council (H-GAC) selected the Walter P. Moore Bicycle and Pedestrian Study Team (WPM Study Team) to perform a study to identify districts where there are significant opportunities to replace vehicle trips with pedestrian or bicycle trips and to improve pedestrian and bicycle safety. The March 2004 Phase I report described the process of identifying and ranking districts on their potential for success. Phase I was followed by the selection of a district and sponsor by H-GAC for a pilot study. This Phase II report documents the district identification, sponsor selection, community planning workshops, public involvement and project selection processes. Descriptions of the selected projects and their expected benefits are also covered. The report’s Appendix contains the Phase II Pilot Project Transportation Improvement Program (TIP) submittal, cost estimates, air quality benefits of the TIP projects, description of TxDOT’s Safe Routes to School Program and the notes from the focus groups and public involvement meetings.

In the selected district, the Third Ward, community leaders were invited to focus group meetings and told the consultants what’s most important about the neighborhood related to walking and bicycling. The WPM Study Team heard the leaders’ vision and identified several real projects that could be implemented quickly to help reach the vision. H-GAC hopes this study will be a successful model for district-based pedestrian-bicycle planning and project development that can be used by cities and counties throughout the region. In addition to developing short-term demonstration projects for the 2006–2008 TIP, the WPM Study Team also hoped to identify future Surface Transportation Enhancement Program (STEP) projects. It looked at ways to integrate pedestrian and bicycle facilities with today’s bus transit and METRO’s future light rail transit to Third Ward neighborhoods and destinations. Safe routes to elementary and middle schools, Midtown’s Houston Community College Central Campus and the Texas Southern University and the University of Houston Main Campuses are needed.

The WPM Study Team consists of Walter P. Moore & Associates, Inc., Gulf Coast Institute, Euclid Studio, Lorin Gaertner, Transight, LLC (John Ciccarelli) and Walkable Communities, Inc. (Dan Burden). The WPM Study Team was guided by a Steering Committee consisting of members of the H-GAC Bicycle and Pedestrian Technical Advisory Committee. Project participants included the City of Houston Planning and Development Department, OST/Almeda Tax Increment reinvestment Zone (TIRZ), Greater Southeast Management District, the Third Ward Redevelopment Council, Project Row Houses and other community leaders.
Sponsor and District Selection

Using the list of high-ranking districts developed in Phase I, H-GAC staff contacted agency staff to identify potential sponsors for the Phase II pilot project. Because all the highest-ranking districts were in Houston or Galveston, only these two cities were contacted.

Because ten of the top twelve ranked districts were in the City of Houston, developing a pilot project there was a priority. However, it became evident that, even with the prospect of federal funding participation, local funding was not likely to be available directly from the City. The City of Houston Planning and Development Department advised the selection of a district within a TIRZ or a Management District, which could be sources of the required matching funds. Use of this criterion, along with the Phase I scoring, resulted in the selection of a district in the Greater Third Ward for project development. This district had the following attributes:

- High-scoring district
- Within the Greater Southeast Management District
- Adjacent to the OST/Almeda TIRZ
- Street network, transit service, and land use conducive to pedestrian and bicycle travel
- Build on earlier planning efforts.

The Third Ward has a wide range of qualities that support walking and bicycling. Factors include the age of residents, transit service, shops near homes, parks, health facilities, schools, nearby universities and other public facilities such as the Riverside Health Clinic and the Third Ward Multi-Service Center.

Once selected, H-GAC solicited the commitment of project sponsors including; City of Houston Planning and Development Department, OST/Almeda TIRZ, Greater Southeast Management District, and the Third Ward Redevelopment Council. A series of initial briefings were held with these organizations, as well as with the District City Council members serving the Third Ward area, after which the project identification and public involvement process began. The stakeholders are also involved with the City of Houston sponsored Third Ward Connectivity Project described on the following pages.
The Third Ward Connectivity Project is the result of a previous planning study conducted in the Third Ward. Within the study area, the Old Spanish Trail (OST)/Almeda TIRZ and City of Houston Third Ward Connectivity Project conceives of improvements for Old Spanish Trail, Blodgett and Elgin to link residents of the Third Ward to the Main Street rail line. Plans call for transforming the three popular east-west corridors in the Third Ward similar to the improvements recently completed on the north-south Almeda Corridor. Streetscape design recommendations are proposed that will link current and future transit stops. Funding for the $2.4 million TSCP project comes from the City of Houston, Third Ward Redevelopment Council, OST/Almeda TIRZ and METRO. Plans include gateway treatments at US 59/SH 288, street furniture, special lighting, streetscape enhancements and sidewalk improvements. Funding is available for OST and Blodgett and plans are ready to bid. Due to a lack of funding, plans have not been so fully developed for Elgin. The plans are posted on the City’s website under Planning and Development Department’s long range planning Third Ward to Main Street Connectivity Project documentation. Many other neighborhood plans have been proposed in the past.

The WPM Study Team looked at the area in the Third Ward Connectivity Project bounded by IH-45, Scott Street, Old Spanish Trail (OST) and Almeda for a specific district that would support the greatest public benefit. The Elgin corridor between the Columbia Tap and Emancipation Park was identified as the place most likely to succeed. An aerial photograph of the final study area and the illustrated concept appears on page 18. Less than a month after the workshops, the WPM Study Team submitted the projects described in the Appendix to the H-GAC TIP.
Third Ward Connectivity Project Plan, provided by M2L
Community Planning Workshops

The WPM Study Team gathered on July 20, 2004 for a bike ride field inspection of the study area. The team saw inconsistent sidewalks, the need for benches at bus stops and boarded up storefronts needing glass windows to create live edges along streets. Preliminary ideas related to traffic calming solutions were identified. All projects in the public rights of way will require the City’s approval and will therefore need to be approved by the Public Works and/or Parks and Recreation departments.

The Third Ward has “good bones” to support walking and bicycling. A boom of interest by real estate speculators is visible. The community is concerned about recent influx of new urban dwellers, which will increase rents, home values and taxes impacting low-income residents and seniors on fixed incomes. Community planning workshops were held to bring neighbors together to discuss what they have lost that they want to get back and what improvements they want to see made within one block of their home or business.

Discussion over the weekend-long workshop attracted a diverse group of invited leaders, owners and renters who were asked what it would take for them to walk more. They want to walk but the facilities are lacking and poor lighting, specifically for pedestrians, pose obstacles to encouraging new walking trips. A champion willing and capable of providing matching funds and overseeing the implementation of the ideas is needed. Over the course of the study, the Greater Southeast Management District, created by State Representative Garnet Coleman and directed by Damon Williams, came forward to be the champion to sponsor the projects identified by the participants.

Participants suggested that numerous agencies help the Third Ward achieve pedestrian and bicycling goals. As an example, METRO’s plans for light rail high capacity transit on Scott Street will connect downtown, the East Downtown District, the Third Ward, Texas Southern University, University of Houston and businesses on OST to Hobby Airport. METRO can immediately improve the circuitous bus routes through the district and the City of Houston can construct the much-needed Columbia Tap rails to trails project. The Team heard over and over again the community’s support for the Columbia Tap Project and their eagerness to move this important pedestrian-bicycle link between Buffalo Bayou and Brays Bayou through the Third Ward forward.
Public Involvement Process

The public involvement process was part of an intensive, weeklong planning process. The process began with team preparation, fieldwork, and one-on-one discussions between the consultant team and H-GAC staff. Five separate public meetings were held:
- Focus group meeting with community leaders (July 23, 2004)
- Focus group meeting with local business leaders (July 23, 2004)
- Focus groups meeting with elected officials and agency representatives (July 23, 2004)
- Planning workshop (July 24, 2004)
- Open house and presentation (July 26, 2004)

Summaries of the public meetings are included in the appendix. The following notes are based on community input from the meetings.

Focus Group 1—Elected Officials and Agency Representatives
Friday, July 23, 2004 • 9:00–10:15 a.m.

Participants
Rick Flanagan, Houston Fire Dept.; Eldridge Peugh, Council Member Ronald Green office; Scott Barker, METRO; Angel Tate, Congresswoman Sheila Jackson Lee’s office; Rochelle Lastrope, Congresswoman Sheila Jackson Lee’s office; Steve Tinnermon, Mayor Bill White’s office

Synopsis
The Elected Officials and Agency Representatives brought insight from Sheila Jackson Lee’s office, the Mayor’s office, the Fire and Police departments and METRO. The participants are very interested in the Third Ward’s future and Steve Tinnermon commented that the Mayor is very supportive of the project and is looking for a model that can be used in other parts of town. Participants suggested that pedestrian and bicycle improvements need to focus on convenience, safety, lighting and non-intrusive changes. The major points of discussion dealt with transit service and public safety issues. A summary of each follows.
Transit Service

Participants were interested in seeing pedestrian and bicycle projects that would interface with METRO’s current local bus service and its future light rail transit (LRT). This could happen by developing transit centers and park and ride lots with bicycle storage and security, placing bike racks on busses and improving sidewalk connections between transit stops.

The Third Ward is critical to the success of METRO. It has only 5% of METRO’s service area but contributes 23% of its ridership. Existing transit use in the area is already high and saturated with local bus service. Service changes in the Third Ward are designed to simplify and shorten transit trips in the area providing limited stop express service to the Texas Medical Center from the Southeast transit center. However, the transit center is not situated well to serve shoppers to the HEB grocery store across Scott along OST and there is no direct local bus route to the Fiesta Grocery store on Main Street. A more understandable east-west bus route is needed to serve the community and the desired connection to the Fiesta grocery store in Midtown.

The future LRT stations along Scott Street will be in the vicinity of Elgin, Wheeler, Cleburne, and near the Southeast transit center. The current schedule for the southeast corridor LRT alignment is: complete Draft Environmental Impact Statement by the end of 2004, Preliminary Engineering in 2005, final design 2006-7 and construction 2007–10, depending on downtown
issues and federal financial support such as congressional support, FTA approval and competition from other cities for the limited transit dollars. Today, the universities have their own shuttle service and future LRT stations would intercept the shuttles. It is expected that the proposed LRT stops near TSU and the Southeast transit center would experience the heaviest traffic of the proposed line, at least initially. METRO’s program to use artists to design LRT stations along Main Street has been well received and could be a model of how to reflect the surrounding neighborhood in the significant transit improvements.

The safety of children walking and bicycling in the Third Ward is a concern today

Public Safety
Pedestrian and bicyclist safety is heightened when considering the prospect of stimulating more walking and bicycling trips. Ways to improve safety include making pedestrians and bicyclists more visible to motorists and making paths more visible and logical to cyclists. Some are concerned that the location of bike trails may open up certain areas to crime. For greater acceptance, neighborhoods need to buy-in to the location of trails rather than having them imposed on the neighborhoods.

The City believes that 80% of Emergency Medical Service (EMS) response time is currently within 4–5 minutes. EMS teams have been added to improve service, but peak times are a challenge. Changes have been made determining the type of care for EMS recipients to reduce unnecessary ambulance runs. Patients are normally taken to Ben Taub, Hermann or LBJ hospitals depending on the level of trauma. None of the proposed projects would have any impact, positive or negative, on emergency response time.

Bicycle safety education is being provided to many age groups. Police go to schools, community groups and community functions such as Christmas events and set up mock cities/intersections for 9- to 17-year-olds to discuss on-street bicycle situations. One of the participants asked, “There is a perception/issue about bike lanes contributing to crime—is there any truth to that?” The consultants responded, “Experience says the more eyes on a street (by adding pedestrian or bike traffic) the less likelihood and frequency of crime. This perception is 90% fear. Often people assume a new trail/lane will attract undesirable activities/people. The reality is that if you ask neighbors, they will create their own desired environment for the trail.”
Focus Group 2—Local Business Leaders
Friday, July 23, 2004 • 10:30–11:45 a.m.

Participants
Zinetta Birney, Tax Increment Reinvestment Zone board; Kevin Calfee, City of Houston Planning and Development

Synopsis
There was concern that no community members were part of the study team. The team’s response was that when the project began, there was no indication that the selected project would be in this area. While the team could have been reformulated once the study area was selected, this would have caused scheduling and contracting problems. Therefore, the decision was made to continue with the original team.

The team heard that it is important to tie the proposed Columbia Tap rails to trails project to new walkability projects. In the past TSU has been concerned about hike and bike trails going through TSU, but otherwise the larger community supports it.
Focus Group 3—Local Community Leaders
Friday, July 23, 2004 • 2:00–3:30 p.m.

Participants
Rick Lowe, Project Row Houses; Zach Moser, Third Ward Community Bike; Damon Williams, Greater Southeast Management District; Shawn Leventhal, TWRC

Synopsis
Participants wanted the team to seek ways to connect “good” pedestrian gathering places to other areas to make the Third Ward more comfortable to walk around. Current plans for Blodgett will make improvements bringing the street up to modern standards but not necessarily create an ideal walking environment. Many businesses are thriving and new commerce should be attracted that makes sense for the area. Useful destinations should be connected to encourage walking and cycling. Safety issues were discussed, streets needing attention identified, Dowling Street was specifically discussed and short-term improvements brainstormed.

Safety Issues
Improve coordination among existing transportation projects. Some of the top issues identified are safety, lighting, wayfinding, well-designed sidewalks, shade and the need for narrower roadways. The Third Ward is not considered a high-crash area. However, participants want to improve safety for people using wheelchairs and motorized scooters. Students do not necessarily pick the shortest route but instead may take a longer one based on safe zones and other circumstances. Ryan Middle School near Dowling and Elgin has unsafe walking conditions and there are extremely large amounts of students walking near traffic on Cleburne. Traffic is too fast on Dowling, Elgin and Alabama causing safety concerns for students in particular. Crosswalks are missing between major intersections and there are almost no sidewalks on Elgin. There aren’t many high fences or barriers in the neighborhood, and there is a comfortable feeling of community. A few people protect their homes and businesses with bars on the windows, but most people seem to prefer a more open approach.
The Community Bike Center offers bikes for youth to repair and keep

Both current and future conditions must be considered when selecting an area to improve. Streets should be selected to improve based on the existing conditions, but the area is developing and as conditions change whatever plan is agreed upon needs to respond to the changes. Identifying street segments or block faces would be better than entire streets. Segments of streets to consider include parts of OST, Elgin, Blodgett (E-W corridors), Dowling, Ennis, Almeda and Live Oak.

Dowling Street
Dowling Street connects the Third Ward to the east side of downtown. Its right-of-way (ROW) is about 80 feet and the roadway is approximately 60 feet wide. Dowling Street is now a favored route to Minute Maid Park. Traffic conflicts with pedestrians pose a serious problem but increasing the width of sidewalks rather than reducing the number of roadway lanes may better serve pedestrian safety. On-street parking causes automobile traffic weaving. Between Holman and Blodgett, Dowling has many neighborhood businesses without on-street parking.

Short Term Improvements
Short-term pedestrian improvements such as curb extensions and other pedestrian amenities should be planned for parts of Hutchins, Elgin, Dowling, Holman, and Live Oak and in the vicinity of Douglas Elementary, Ryan Middle School and Blackshear Elementary Schools. Like the discussion the team heard in the second focus group, this group wants to see improvements that will make the Columbia Tap rails to trails project an attractive linear park through the community.
Design Workshop—Open to the Public
Saturday, July 24, 2004 • 9:00 a.m.–1:00 p.m.

Participants
Rick Lowe, Project Row Houses; Zach Moser, Third Ward Community Bike; Shawn Leventhal, TWRC, Cleveland Turner, Flowerman; Paul Charles, Third Ward Redevelopment Council; E. T. Reed, Project Row Houses; Bill Milligan, WALIPP; Robert Pruitt, Otabenga Jones Art Collaborative; Jamal Cyrus, Otabenga Jones Art Collaborative; and Adrian Peters

Synopsis
At the July 24 workshop, residents created a prioritized list of pedestrian, bicycling and traffic issues to be addressed. The team described the theory of healthy streets and traffic calming. They also explained potential physical treatments that can be used to improve the street environment for all users. Using this as a base line, participants were then given the opportunity to propose changes to create walkable, healthy streets.

Most of the workshop participants had been involved in the focus groups, and were off to a good start. Worktables were set up throughout the Third Ward Multi-Service Center. Teams were formed to begin to develop ideas. Facilitators circulated among the tables to provide any assistance requested from the participants. A summary of the worktable results can be found in Appendix 3.

A poster of existing attributes of the study areas was created by the WPM Study Team. The community has historic houses and architecture, and is a mix of houses from the very old to the very new. Large and small houses are mixed within the area. The groups noted that some streets are wider than needed for current traffic capacity. Sidewalks tend to be in a poor state of repair, and there are areas where sidewalks are missing altogether. It was noted that shelter at transit stops was inadequate. Some streets were noted to be more rural in nature, having ditches and culverts instead of curb and gutter. Sidewalks are not always present on these rural cross-sections. Existing sidewalk widths are not always adequate to serve the needs of pedestrians.

The area needs to be friendly to pedestrians and street design should be compatible with traffic demand and adjacent land use. Destinations that attract walking trips are desired. The condition
of sidewalks needs to be attractive and safe, without tripping hazards and steep sections. The lack of shade was noted, as well as the lack of visual attractions. Wheelchair users have to use the street due to lack of adequate sidewalks in some areas. It was noted that pedestrians feel much safer at night if illumination is present.

The discomfort to pedestrians caused by vehicle traffic was noted. High-speed traffic right next to pedestrian ways was seen as a problem. Noise and a feeling of not being safe while crossing at intersections were also noted.

Examples of safe streets for bicycles and safe crosswalks for pedestrians

Open House and Presentation—Open to the Public

Monday, July 26, 2004 • 6:30 p.m.—9:00 p.m.

Participants
Rick Lowe, Project Row Houses; Shawn Leventhal, TWRC, Cleveland Turner, Flowerman; Paul Charles, Third Ward Redevelopment Council; Bill Milligan, WALIPP; Robert Pruitt, Otabenga Jones Art Collaborative; Jamal Cyrus, Otabenga Jones Art Collaborative; Theola Petteway, OST/Almeda Authority; Shannon Woodard; Teri Kaplan, TxDOT; Seth Capion, Third Ward Community Bike Center; Chad Butler, Community Bike Center; Damon Williams, Greater Southeast Management District.

Synopsis
Participants from the weekend workshop attended the final workshop at the Third Ward Multi-Service Center. Over 20 exhibits were on display and a PowerPoint presentation was given to present the results of the weekend. Discussion given to the team was incorporated in the Pilot Project submittal to H-GAC’s Transportation Improvement Plan.
Project Selection

The team reviewed the work generated by the community. Draft solutions were filtered through physical constraints and judged, when applicable, on potential to increase pedestrian and cycling trips while improving safety. The team prepared conceptual engineering drawings for the identified locations from which final recommendations will be selected. The following lists were distilled from the workshop.

Community Concerns

Residents are concerned with:

- Speeding around schools
- Lack of useful retail within walking distance
- Lack of sidewalks and poor maintenance
- Lack of trees; barren landscapes
- Difficulty crossing streets
- Poor lighting of streets and sidewalks
- Wheelchair users must often ride in street
- Too many unattractive ditches
The Columbia Tap Rails to Trails Project in the heart of the Third Ward will connect downtown and Buffalo Bayou to Brays Bayou and the Texas Medical Center

Community Ideas

- Revised lane configurations
- Curb extensions at selected streets
- Roundabouts
- Bike lanes
- 10-foot width travel lanes next to bike lanes
- Adequate and well-maintained sidewalks
- Transit shuttles from light rail to universities
- High-visibility sidewalks and crossing islands, especially at schools
- Increase public art by working with local and regional artists

Projects Proposed by the Community

- Alabama bike route
- Elgin/Dowling intersection
- Pedestrian crossing safety improvements
- Emancipation park streetscape with diagonal parking
- Dowling commercial corridor
- Columbia Tap rails to trails project
Map M-1: Third Ward Proposed Improvements
Projects Proposed by the Study Team and H-GAC Staff

The study team, in concert with H-GAC staff, began a process to select actual projects that would be eligible candidates for the 2006–2008 Transportation Improvement Program (TIP). The projects have demonstrated public support and had to be feasible from a funding standpoint. They had to have the financial support of the Greater Southeast Management District. Also, as this is a pilot project, the projects needed to be fairly modest and non-controversial to attract the maximum level of support from all stakeholders necessary for timely implementation. Three projects were initially selected, with two being selected for the TIP submittal. The projects are described in detail in the subsequent paragraphs.

Replace narrow, deteriorated, or missing sidewalks with new 5´ sidewalks

Existing Conditions
Many of the sidewalks in the study area are 4´ wide or less. Many sidewalks are cracked, heaved, non-continuous, or blocked by utility poles or other obstructions.

Description
Provide 5´ sidewalks on both sides of designated streets within an area bounded by Elgin, Ennis, Alabama, and Dowling. Provide ADA-compliant design features. Provide opportunities for irrigation and landscaping between the sidewalk and the street. No new right-of-way is expected to be needed.

Construction
Demolish and remove existing sidewalk, except where it is economical to widen the existing sidewalk instead of replacing it. Relocate any signs that interfere with the desirable sidewalk location. Adjust any manholes or other utilities that may need to be in the sidewalk. Provide irrigation systems. Provide or upgrade street and driveway crossings to comply with ADA. Construct 5´ sidewalks along both sides of street.

Cost Estimate
$89,000
Curb Extensions and Crossing Islands at Holman at Delano and at Holman at Ennis

Existing Conditions
Holman at Delano: All four legs of the intersection have 80´ rights of way. Holman and the north leg of Delano have pavement widths of approximately 40 feet; the south leg of Delano has a pavement width of approximately 34 feet. The intersection is controlled by stop signs on Delano. Holman is marked with a dashed yellow centerline.

Holman at Ennis: Both legs of Ennis and the west leg of Holman have 80´ rights of way. The east leg of Holman has a 70´ right-of-way. Pavement widths are approximately 40 feet on all legs. The intersection is controlled by stop signs on Ennis. Holman is marked with a dashed yellow centerline.

Description
Provide curb extensions and a splitter island at the east leg of the intersection of Holman at Delano and at the west leg of Holman at Ennis. Provide on-street parking, protected by the curb extensions, on Holman between Delano and Ennis. Provide approximately 200´ of 5´ sidewalks associated with the curb extensions at both intersections. Provide upgraded illumination at both intersections. Provide irrigation and landscaping at the curb extensions and in the splitter islands. No new right-of-way is expected to be needed.

Construction
Demolish existing pavement in the east part of the intersection of Holman at Delano and in the west part of the intersection of Holman at Ennis. Remove and salvage traffic signs. Demolish and remove pavement and base in all areas to be landscaped. Provide soil and plants for landscaped areas. Provide irrigation systems. Demolish and remove existing sidewalk. Construct 5´ sidewalks within curb extensions at both intersections. Provide signing and pavement markings.

Cost Estimate
$126,000
Modern Roundabout at the Intersection of Elgin at Dowling

Existing Conditions
Elgin and the north leg of Dowling have 80´ rights of way. The south leg of Dowling has a 74´ right-of-way. Elgin is a four lane divides street with left turn bays at the intersection. Dowling is an undivided street of approximately 45´ width. The intersection is controlled by a traffic signal. The paving of Dowling north of the intersection is new and in very good condition. The other three legs of the intersection are in fair condition.

Description
Provide a modern roundabout at the intersection of Elgin at Dowling. Transition from existing street cross-section to the modified cross-section over a distance of approximately 300 feet on each leg. Provide on-street parking, protected by “bulbouts” on all four legs of the intersection. Provide raised landscaped median island on all four approaches. Provide landscaping in the bulbled areas at each corner of the intersection. Provide 5´ sidewalks for a distance of 300 feet on each side of all four legs of the intersection. Illuminate the intersection and approaches for approximately 300 feet from the intersection. It is estimated that 20´ corner clips will be needed in all four corners, for a total of 800 square feet of new right-of-way. The Modern Roundabout prompted plenty of discussion at the Saturday workshop. Even though the community leaders eventually warmed up to the concept of a modern roundabout at the intersection of Elgin at Dowling, the Team and H-GAC were unable to find a sponsor willing to take on the job of acquiring the acquisition of ROW for the corner clips or provide the needed matching funds.

Construction
Demolish existing pavement within the intersection. Remove and salvage signal equipment. Demolish and remove pavement and base in all areas to be landscaped. Provide soil and plants for landscaped areas. Provide irrigation systems. Demolish and remove existing sidewalk. Construct 5´ sidewalks along both sides of all four legs.

Cost Estimate
$356,000 (plus the cost of additional right-of-way, if needed)
Appendix 1

Phase II Pilot Project TIP Submittal

Replace narrow, deteriorated, or missing sidewalks with new 5’ sidewalks. Provide Curb Extensions and Crossing Islands at Holman at Delano and at Holman at Ennis

Existing Conditions

Many of the sidewalks in the study area are 4’ wide or less. Many sidewalks are cracked, heaved, non-continuous, or blocked by utility poles or other obstructions.

Holman at Delano: All four legs of the intersection have 80’ rights of way. Holman and the north leg of Delano have pavement widths of approximately 40 feet; the south leg of Delano has a pavement width of approximately 34 feet. The intersection is controlled by stop signs on Delano. Holman is marked with a dashed yellow centerline.

Holman at Ennis: Both legs of Ennis and the west leg of Holman have 80’ rights of way. The east leg of Holman has a 70’ right-of-way. Pavement widths are approximately 40 feet on all legs. The intersection is controlled by stop signs on Ennis. Holman is marked with a dashed yellow centerline.

Description

Provide 5’ sidewalks on both sides of designated streets within an area bounded by Elgin, Ennis, Alabama, and Dowling. Provide ADA-compliant design features. Provide opportunities for irrigation and landscaping between the sidewalk and the street.

Provide curb extensions and a splitter island at the east leg of the intersection of Holman at Delano and at the west leg of Holman at Ennis. Provide on-street parking, protected by the curb extensions, on Holman between Delano and Ennis. Provide approximately 200’ of 5’ sidewalks associated with the curb extensions at both intersections. Provide upgraded illumination at both intersections. Provide irrigation and landscaping at the curb extensions and in the splitter islands.

New Right-of-Way Required

No new right-of-way is expected to be needed.

Construction

Demolish and remove existing sidewalk, except where it is economical to widen existing sidewalk instead of replacing it. Relocate any signs that interfere with the desirable sidewalk location. Adjust any manholes or other utilities that may need to be in the sidewalk. Provide irrigation systems. Provide or upgrade street and driveway crossings to comply with ADA. Construct 5’ sidewalk along both sides of street.

Demolish existing pavement in the east part of the intersection of Holman at Delano and in the west part of the intersection of Holman at Ennis. Remove and salvage traffic signs. Demolish and remove pavement and base in all areas to be landscaped. Provide soil and plants for landscaped areas. Provide irrigation systems. Demolish and remove existing sidewalk. Construct 5’ sidewalk within curb extensions at both intersections. Provide signing and pavement markings.
**Funding Sources**
To be determined.

**Cost Estimate**
See spreadsheets on pages 27 and 28.

**Disclaimer**
All dimensions used are based on available mapping. No survey has been conducted. While the estimates in this report address the issue of underground and overhead utilities, these have not been identified nor have any estimates been made regarding costs for and adjustments to the utilities.

**Air Quality Benefits** - Replace narrow, deteriorated, or missing sidewalks with new 5’ sidewalks & Curb Extensions and Crossing Islands at Holman at Delano and at Holman at Ennis

**Key Data/Assumptions**
5,183 person trips in TAZ
1.48 average vehicle occupancy (person trips per vehicle trip)
0.9% reduction in vehicle trips due to project
8.6 miles per vehicle trip
local intrazonal vehicle type mix

**Results**
NOx reduced: 0.134 kg/day
VOC reduced: 0.280 kg/day

This project provides attractive and functional sidewalks in the areas in which they are most needed. The improvement in the pedestrian environment will make this travel mode more attractive. It will also increase the attractiveness of transit as a travel mode. The net result anticipated is a modest decrease in automobile trips, vehicle miles traveled, and associated vehicle emissions.

There are very few studies on the effect of microscale pedestrian improvements on travel patterns. The “Making the Land Use, Transportation, Air Quality Connection” (LUTRAQ) demonstration project is one such study (1000 Friends of Oregon (1993): Making the Land Use Transportation Air Quality Connection—The Pedestrian Environment—Volume 4A, available at http://ntl.bts.gov/DOCS/tped.html). Special attention was given to the quality of the pedestrian environment as gauged by the Pedestrian Environment Factor (PEF), a composite measure of “pedestrian friendliness.” The four variables included in the PEF are: ease of street crossings, sidewalk continuity, local street characteristics (grid vs. cul-de-sac) and topography. Each of these is given a score of 1–3, resulting in a maximum PEF score of 12. Most significant to this project was the finding that a higher PEF score for a zone was accompanied by a lower automobile mode share for that zone. A one-point increase in PEF was accompanied by a decrease in automobile mode share of 1.8 percent.

The sidewalk improvements proposed here will greatly increase sidewalk continuity in an area of about 36 blocks of the Greater Third Ward neighborhood. Although PEF was not field-verified,
this improvement is expected to increase the PEF score by 1 based on sidewalk continuity benefits. While the Portland study would suggest a 1.8 percent decrease in automobile mode share, The WPM Study Team estimate a more conservative 0.9 percent decrease.

The number of automobile trips generated by this zone is estimated at 3,502 per day based on 5,183-person trips/day divided by the regional average vehicle occupancy of 1.48. The average vehicle trip distance of 8.6 miles is calculated using 1995 regional trip characteristics by trip type (e.g. home-based work) weighted by the distribution of work, non-work and non-home trips modeled for TAZ 460 (Table 1). According to the 2000 census, work trip travel times for this neighborhood are not significantly different from the regional average.

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<thead>
<tr>
<th>Trip Purpose</th>
<th>1995 Regional Average Distance (miles)</th>
<th>Number of Trips in TAZ 460</th>
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<tr>
<td>Home-Based Work</td>
<td>12.9</td>
<td>508</td>
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<td>Home-Based School</td>
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<td>505</td>
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<tr>
<td>Home-Based Shopping</td>
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<td>Home-Based Other</td>
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<tr>
<td>Non-Home-Based</td>
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<td>3,159</td>
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<tr>
<td>All purposes</td>
<td>9.3</td>
<td>5,182</td>
</tr>
<tr>
<td>Weighted average</td>
<td>8.6</td>
<td></td>
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</table>

Sources: Technical Memo RE: Houston-Galveston 1995 Household Travel Survey from David Pearson, Texas Transportation Institute to Jerry Bobo, H-GAC, December 20, 1996 and 2000 Person Trip Tables provided by H-GAC August 7, 2003. Home-based, non-work trips are assumed to be evenly distributed between school, shopping and other.

VMT reduced are calculated to be 271 per day based on multiplication of the average trip distance (8.6), number of vehicle trips in the zone (3,502) and the percentage of trips reduced by the project (0.9%).

<table>
<thead>
<tr>
<th>ROADWAY TYPE</th>
<th>LDGV</th>
<th>LDGT1</th>
<th>LDGT2</th>
<th>HDGV</th>
<th>LDDV</th>
<th>LDDT</th>
<th>HDDV</th>
<th>MC</th>
<th>All Vehicles</th>
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<tr>
<td>LOCAL (INTRAZONAL)</td>
<td>0.59</td>
<td>0.242</td>
<td>0.072</td>
<td>0.032</td>
<td>0.002</td>
<td>0.003</td>
<td>0.059</td>
<td>0.001</td>
<td>1.00</td>
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</table>

<table>
<thead>
<tr>
<th>EMISSIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC (g/mile)</td>
</tr>
<tr>
<td>NOx (g/mile)</td>
</tr>
</tbody>
</table>

Vehicle emissions are calculated by multiplying VMT by the weighted average emission rates by vehicle type (average emission rates by vehicle type multiplied by the fraction of such vehicles measured regionally on the Local (intrazonal) road type as shown in Table 2).
### Preliminary Estimate of Provide 5' sidewalk in an area bounded by Elgin, Ennis, Alabama, & Dowling
(Cost is per 1000' of street centerline.)

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Est. Qty.</th>
<th>Unit Price</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Identification Sign</td>
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<td>$550.00</td>
<td>$550.00</td>
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<tr>
<td>NPDES Compliance</td>
<td>LS</td>
<td>1</td>
<td>$1,000.00</td>
<td>$1,000.00</td>
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<tr>
<td>Relocate Traffic Signs</td>
<td>EA</td>
<td>10</td>
<td>$200.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Flagmen Hours</td>
<td>HR</td>
<td>0</td>
<td>$18.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Remove Conc. Base with Asphalt Overlay</td>
<td>SY</td>
<td>0</td>
<td>$7.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Remove Conc. Curb or Esplanade Curb</td>
<td>LF</td>
<td>200</td>
<td>$2.50</td>
<td>$500.00</td>
</tr>
<tr>
<td>Remove Conc. Curb and Gutter</td>
<td>LF</td>
<td>200</td>
<td>$6.00</td>
<td>$1,200.00</td>
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<tr>
<td>Remove Existing Conc. Sidewalk or Driveway</td>
<td>SY</td>
<td>100</td>
<td>$5.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>Sawed Joint</td>
<td>LF</td>
<td>100</td>
<td>$10.00</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Trench Safety Systems</td>
<td>LS</td>
<td>0</td>
<td>$3,400.00</td>
<td>$0.00</td>
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<tr>
<td>Roadway Excavuation</td>
<td>CY</td>
<td>0</td>
<td>$5.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>6 inch Conc. Sidewalks or Driveways</td>
<td>SF</td>
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<td>$3.25</td>
<td>$325.00</td>
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<td>$27,000.00</td>
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<td>$0.00</td>
</tr>
<tr>
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<td>TON</td>
<td>0</td>
<td>$40.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Asphaltic Level-Up Course Type &quot;D&quot;</td>
<td>TON</td>
<td>0</td>
<td>$40.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Tack Coat (.10 Gal/Sy)</td>
<td>GAL</td>
<td>0</td>
<td>$2.00</td>
<td>$0.00</td>
</tr>
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<td>9&quot; Reinf. Conc. Pavm't for Bus Lanes/Pads</td>
<td>SY</td>
<td>0</td>
<td>$49.00</td>
<td>$0.00</td>
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<tr>
<td>Adjust Exist. M.H. Frame and Cover to Grade</td>
<td>EA</td>
<td>10</td>
<td>$500.00</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>6 inch Conc. Curb, all Heights</td>
<td>LF</td>
<td>240</td>
<td>$4.50</td>
<td>$1,080.00</td>
</tr>
<tr>
<td>Monolithic Conc. Curb and Gutter</td>
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<td>$12.50</td>
<td>$0.00</td>
</tr>
<tr>
<td>Full Depth Repair Existing Conc. Pavement (7&quot;)</td>
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<td>$66.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Board Exp. Jt.</td>
<td>LF</td>
<td>100</td>
<td>$3.30</td>
<td>$330.00</td>
</tr>
<tr>
<td>Board Exp. Jt., 4&quot;-8&quot; Deep (No Load Transfer Device)</td>
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<td>1</td>
<td>$2.20</td>
<td>$2.20</td>
</tr>
<tr>
<td>Buttons and Striping</td>
<td>LS</td>
<td>0</td>
<td>$1,000.00</td>
<td>$0.00</td>
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<tr>
<td>Permanent Traffic Signs</td>
<td>LS</td>
<td>0</td>
<td>$1,500.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Pref. Pavm't Marking (4&quot; Wide) White or Yellow</td>
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<td>0</td>
<td>$1.50</td>
<td>$0.00</td>
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<tr>
<td>Pref. Pavm't Marking (8&quot; Wide) White</td>
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<td>0</td>
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<td>$0.00</td>
</tr>
<tr>
<td>Pref. Pavm't Marking (12&quot; Wide) White</td>
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<td>$0.00</td>
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<td>Pref. Pavm't Marking (24&quot; Wide) White</td>
<td>LF</td>
<td>0</td>
<td>$9.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Pref. Pavm't Marking, Turning Arrow</td>
<td>EA</td>
<td>0</td>
<td>$175.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Pref. Pavm't Marking, Elongated Word &quot;Only&quot;</td>
<td>EA</td>
<td>0</td>
<td>$200.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Pref. Pavm't Marking, Dedicated Bus Lane (Diamond Symbol)</td>
<td>EA</td>
<td>0</td>
<td>$100.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Adjust W.M. Box or Valve Box to Grade</td>
<td>EA</td>
<td>10</td>
<td>$175.00</td>
<td>$1,750.00</td>
</tr>
<tr>
<td>Repair Existing Inlet</td>
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<td>$2,400.00</td>
</tr>
<tr>
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<td>EA</td>
<td>0</td>
<td>$1,500.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Cement Stabilized Sand</td>
<td>TON</td>
<td>10</td>
<td>$20.75</td>
<td>$207.50</td>
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<tr>
<td>Sodding</td>
<td>SY</td>
<td>200</td>
<td>$2.00</td>
<td>$400.00</td>
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<tr>
<td>Irrigation System for Landscaped Areas</td>
<td>LS</td>
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<td>$12,000.00</td>
<td>$12,000.00</td>
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<tr>
<td>Remove, Replace and Relocate Exist. Inlet</td>
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<td>Remove and Salvage Existing Traffic Signal</td>
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<tr>
<td>Remove and Salvage Existing Traffic Signs</td>
<td>LS</td>
<td>0</td>
<td>$500.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Adj. Utilities (Gas, Ovrhd. &amp; Undrgrd. Elect., TV, Cable, Phone)</td>
<td>LS</td>
<td>0</td>
<td>$0.00</td>
<td>$0.00</td>
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<tr>
<td>Luminaire and Foundation</td>
<td>EA</td>
<td>0</td>
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<td>$0.00</td>
</tr>
<tr>
<td>Conduit for Luminaire Power</td>
<td>LF</td>
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<td>$10.00</td>
<td>$0.00</td>
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<tr>
<td>Additional Right-of-way</td>
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<tr>
<td>Engineering</td>
<td>LS</td>
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<td>$10,000.00</td>
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</table>

**TOTAL** $67,244.70

Contingency (20%) $13,448.94

Subtotal $80,693.64

TxDOT Review (10%) $8,069.36

**TOTAL** $88,763.00
### Preliminary Estimate of Curb Extensions and Crossing Islands at Holman at Delano and at Holman at Ennis

<table>
<thead>
<tr>
<th>Description</th>
<th>Unit</th>
<th>Est. Qty</th>
<th>Est. Unit Price</th>
<th>Total Cost</th>
</tr>
</thead>
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<td>Project Identification Sign</td>
<td>EA</td>
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<td>$550.00</td>
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<td>$5,000.00</td>
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<td>Traffic Control Systems</td>
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<td>$5,000.00</td>
<td>$0.00</td>
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<td>Flagmen Hours</td>
<td>HR</td>
<td>50</td>
<td>$18.00</td>
<td>$900.00</td>
</tr>
<tr>
<td>Remove Conc. Base with Asphalt Overlay</td>
<td>SY</td>
<td>360</td>
<td>$7.00</td>
<td>$2,520.00</td>
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<tr>
<td>Remove Conc. Curb or Esplanade Curb</td>
<td>LF</td>
<td>200</td>
<td>$2.50</td>
<td>$500.00</td>
</tr>
<tr>
<td>Remove Conc. Curb and Gutter</td>
<td>LF</td>
<td>200</td>
<td>$6.00</td>
<td>$1,200.00</td>
</tr>
<tr>
<td>Remove Existing Conc. Sidewalk or Driveway</td>
<td>SY</td>
<td>100</td>
<td>$5.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>Sawed Joint</td>
<td>LF</td>
<td>200</td>
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<td>$2,000.00</td>
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<tr>
<td>Trench Safety Systems</td>
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<td>Roadway Excavation</td>
<td>CY</td>
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<td>$600.00</td>
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<td>SF</td>
<td>100</td>
<td>$3.25</td>
<td>$325.00</td>
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<tr>
<td>4-1/2 Inch Conc. Sidewalks and Wheelchair Ramps</td>
<td>SF</td>
<td>2,000</td>
<td>$3.00</td>
<td>$6,000.00</td>
</tr>
<tr>
<td>Milling Asphaltic Surfaces</td>
<td>SY</td>
<td>1</td>
<td>$2.00</td>
<td>$2.00</td>
</tr>
<tr>
<td>2 inch Asphaltic Conc. Surfacing Type “D”</td>
<td>TON</td>
<td>1</td>
<td>$40.00</td>
<td>$40.00</td>
</tr>
<tr>
<td>Asphallic Level-Up Course Type “D”</td>
<td>TON</td>
<td>1</td>
<td>$40.00</td>
<td>$40.00</td>
</tr>
<tr>
<td>Tack Coat (.10 Gal/Sy)</td>
<td>GAL</td>
<td>1</td>
<td>$2.00</td>
<td>$2.00</td>
</tr>
<tr>
<td>9” Reinf. Conc. Pavm’t For Bus Lanes/Pads</td>
<td>SY</td>
<td>0</td>
<td>$49.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Adjust Exist. M.H. Frame and Cover to Grade</td>
<td>EA</td>
<td>5</td>
<td>$500.00</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>6 inch Conc. Curb, all Heights</td>
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<td>375</td>
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<tr>
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<td>$12.50</td>
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<tr>
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<td>$66.00</td>
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<td>Board Exp. Jt.</td>
<td>LF</td>
<td>100</td>
<td>$3.30</td>
<td>$330.00</td>
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<tr>
<td>Board Exp. Jt., 4”-8” Deep (No Load Transfer Device)</td>
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<td>$2.20</td>
<td>$2.20</td>
</tr>
<tr>
<td>Buttons and Striping</td>
<td>LS</td>
<td>1</td>
<td>$1,000.00</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Permanent Traffic Signs</td>
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<td>$2,500.00</td>
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<td>$900.00</td>
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<tr>
<td>Pref. Pavm’t Marking, Turning Arrow</td>
<td>EA</td>
<td>0</td>
<td>$175.00</td>
<td>$0.00</td>
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<tr>
<td>Pref. Pavm’t Marking, Elongated Word “Only”</td>
<td>EA</td>
<td>0</td>
<td>$200.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Pref. Pavm’t Marking, Dedicated Bus Lane (Diamond Symbol)</td>
<td>EA</td>
<td>0</td>
<td>$100.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Adjust W.M. Box or Valve Box to Grade</td>
<td>EA</td>
<td>4</td>
<td>$175.00</td>
<td>$700.00</td>
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<tr>
<td>Repair Existing Inlet</td>
<td>EA</td>
<td>4</td>
<td>$600.00</td>
<td>$2,400.00</td>
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<tr>
<td>Replace Type “B” Inlet with Type “B-B” Inlet</td>
<td>EA</td>
<td>1</td>
<td>$1,500.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>Cement Stabilized Sand</td>
<td>TON</td>
<td>10</td>
<td>$20.75</td>
<td>$207.50</td>
</tr>
<tr>
<td>Sodding</td>
<td>SY</td>
<td>360</td>
<td>$2.00</td>
<td>$720.00</td>
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<tr>
<td>Irrigation System for Landscaped Areas</td>
<td>LS</td>
<td>1</td>
<td>$5,000.00</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>Remove, Replace and Relocate Exist Inlet</td>
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<td>$2,000.00</td>
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<tr>
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<td>$2,000.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Remove and Salvage Existing Traffic Signs</td>
<td>LS</td>
<td>1</td>
<td>$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>Adj. Utilities (Gas, Ovrhd. &amp; Undrgrd. Elect. TV, Cable, Phone)</td>
<td>LS</td>
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<tr>
<td>Luminaire and Foundation</td>
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<td>$28,000.00</td>
</tr>
<tr>
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<td>400</td>
<td>$10.00</td>
<td>$4,000.00</td>
</tr>
<tr>
<td>Engineering</td>
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<td>$20,000.00</td>
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<td><strong>TOTAL</strong></td>
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<tr>
<td>Contingency (20%)</td>
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<tr>
<td>TxDOT Review (10%)</td>
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<td></td>
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<td><strong>$125,538.20</strong></td>
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</tbody>
</table>
Appendix 2

Funding Sources for Bicycle and Pedestrian Projects

Bicycle and pedestrian projects are broadly eligible for funding from almost all the major Federal-aid highway, transit, safety, and other programs. Bicycle projects must be “principally for transportation, rather than recreation, purposes,” and must be designed and located pursuant to the transportation plans required of states and metropolitan planning organizations.

The Pedestrian-Bicycle Special Districts Study developed a methodology for ranking areas based on their need for pedestrian and bicycle facility improvements. In addition to the ranking developed by the study, actual funding for specific projects depends on a range of non-technical issues. Projects with the best chance for funding and approval will generally have the following attributes:

- Community support
- Local government support
- Support of elected officials serving the community
- Financial backing form a local funding source (TIRZ or Management District)

Federal-Aid Highway Program

Surface Transportation Program (STP) funds may be used for the construction of bicycle transportation facilities and pedestrian walkways. TEA-21 added “the modification of public sidewalks to comply with the Americans with Disabilities Act” as an activity that is specifically eligible for the use of these funds. \textit{23 USC Section 217 (a)}

Ten percent of each state’s annual STP funds are set-aside for \textit{Transportation Enhancement Activities (TEAs)}. The law provides a specific list of activities that are eligible TEAs and this includes “provision of facilities for pedestrians and bicycles, provision of safety and educational activities for pedestrians and bicyclists,” and the “preservation of abandoned railway corridors (including the conversion and use thereof for pedestrian and bicycle trails).” \textit{23 USC Section 109(a)(35)}

Another 10 percent of each state’s STP funds are set-aside for the \textit{Hazard Elimination and Railway-Highway Crossing Programs}, which address bicycle and pedestrian safety issues. Each state is required to implement a Hazard Elimination Program to identify and correct locations, which may constitute a danger to motorists, bicyclists, and pedestrians. Funds may be used for activities including a survey of hazardous locations and for projects on any publicly owned bicycle or pedestrian pathway or trail, or any safety-related traffic calming measure.

\textbf{Congestion Mitigation and Air Quality Improvement Program} funds may be used for the construction of bicycle transportation facilities and pedestrian walkways. \textit{23 USC Section 217(a)}

\textbf{Job Access and Reverse Commute Grants} are available to support projects, including bicycle-related services, designed to transport welfare recipients and eligible low-income individuals to and from employment. \textit{TEA-21 Section 3037}
High Priority Projects and Designated Transportation Enhancement Activities identified by Section 1602 of TEA-21 include numerous bicycle, pedestrian, trails, and traffic calming projects in communities throughout the country.

Federal Transit Program

Title 49 U.S.C. (as amended by TEA-21) allows the Urbanized Area Formula Grants, Capital Investment Grants and Loans, and Formula Program for Other than Urbanized Area transit funds to be used for improving bicycle and pedestrian access to transit facilities and vehicles. Eligible activities include investments in “pedestrian and bicycle access to a mass transportation facility” that establishes or enhances coordination between mass transportation and other transportation. 49 USC Section 5307

TEA-21 also created a Transit Enhancement Activity program with a one percent set-aside of Urbanized Area Formula Grant funds designated for, among other things, pedestrian access and walkways, and “bicycle access, including bicycle storage facilities and installing equipment for transporting bicycles on mass transportation vehicles.” 49 USC Section 5307(k)

Highway Safety Programs

Pedestrian and bicyclist safety remain priority areas for State and Community Highway Safety Grants funded by the Section 402 formula grant program. A state is eligible for these grants by submitting a Performance Plan (establishing goals and performance measures for improving highway safety) and a Highway Safety Plan (describing activities to achieve those goals). 23 USC Section 402

Research, development, demonstrations and training to improve highway safety (including bicycle and pedestrian safety) are carried out under the Highway Safety Research and Development (Section 403) Program. 23 USC Section 403

Federal/State Matching Requirements

In general, the federal share of the costs of transportation projects is 80 percent with a 20 percent state or local match. However, there are a number of exceptions to this rule.

- Bicycle-related Transit Enhancement Activities are 95 percent federally funded.
- Hazard elimination projects are 90 percent federally funded. Bicycle-related transit projects (other than Transit Enhancement Activities) may be up to 90 percent federally funded.
- Individual Transportation Enhancement Activity projects under the STP can have a match higher or lower than 80 percent. However, the overall federal share of each state's Transportation Enhancement Program must be 80 percent.
- The state and/or local funds used to match federal-aid highway projects may include in-kind contributions (such as donations). Funds from other federal programs may also be used to match Transportation Enhancement, Scenic Byways, and Recreational Trails program funds.

Source: http://www.fhwa.dot.gov/environment/bikeped/bp-broch.htm
TxDOT’s Safe Routes to School Program

The Safe Routes to School (SRS) Program resulted from the enactment of House Bill 2204, 77th Legislature, 2001. HB 2204 added Transportation Code, §201.614 directing the Texas Department of Transportation (TxDOT) to establish the Safe Routes to School Program. The overall purpose of this program is to improve safety in and around school areas. While Safe Routes to School is an overall concept that includes education, enforcement, and safety construction improvements, TxDOT’s Safe Routes to School Program implemented by HB 2204 will only address safety construction improvements. The rules that established the SRS program were adopted by the TxDOT Commission and became effective on July 18, 2002.

Project proposal applications shall only be submitted by a political subdivision. School districts should contact their city or county offices to develop a project proposal. The proposal must be submitted to the District Engineer in the TxDOT Houston District Office, using the application form approved by the department and must be submitted within the published deadline. Applications and the rules for submission and selection will be available at each district office, at the division office in Austin and on this web site: www.dot.state.tx.us/trafficsafety/srs/.

The following guidelines determine what projects can be submitted:

- Projects may be located on or off the state highway system, but must be located on public property
- Must be located within a two mile radius of a school
- Federal funds requested will be limited to $500,000
- Projects can cover multiple school sites if similar work is performed at each site
- Local project funding match of 20% is required unless the project is located on the state highway system in which case TxDOT will provide the match
- A project on the state highway system will not be eligible if the district finds that the project interferes or disrupts any planned improvements or existing infrastructure

There are six categories of work eligible for funding:

- Sidewalk improvements
- Pedestrian/Bicycle crossing improvements
- On-Street bicycle facilities
- Traffic diversion improvements
- Off-Street bicycle and pedestrian facilities
- Traffic calming measures for off-system roads

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Appendix 3
Notes Taken at Public Meetings

Focus Group 1—Elected Officials and Agency Representatives
Friday, July 23, 2004 • 9:00–10:15 a.m.

Participants
Rick Flanagan, Houston Fire Dept.; Eldridge Peugh, Council Member Ronald Green office; Scott Barker, METRO; Angel Tate, Congresswoman Sheila Jackson Lee’s office; Rochelle Lastrope, Congresswoman Sheila Jackson Lee’s office; Steve Tinnerman, Mayor Bill White’s office

Presentation/Discussion
Jeff Taebel, H-GAC, offered introductory remarks, including project background and purpose.

Focus Group Discussion
What is important about this to project to make the Third Ward a great place/pilot project (desired outcomes)?

- Make sure trail/circulation design interfaces with transit/LRT. Ped and bike complements, but doesn’t compete with, transit.
- Not overburden the road space with more lanes for various modes.
- Opportunity to educate the new road user, esp. children, cyclists—rules of the road, helmet use, etc.
- Improve patient care of pedestrian crash victims; reduce injuries.
- Landscaping and aesthetic improvements, lighting and security improvements (call boxes)
- Bike racks, drinking fountains.
- Maintain integrity of neighborhood when making changes.
- Improve safety—make pedestrians and bikes more visible to motorists, make paths more visible/logical to cyclists.
- Focus on convenience, safety, lighting, non-intrusive changes; commission artists for beautification—creativity (within reason, sense of taste). Examples might include the Galleria lighting, Post Oak area.
- Mayor is very supportive of the project and is looking for a model that can be used in other parts of town.
- Address safety and security concerns. Location of bike trails may open up certain areas to crime. Need buy-in of neighborhoods for location of trails—not imposed on neighborhoods.

Does this area have a higher level of ped victims?
- Recording system is new, so data is not too complete yet.
When it comes to fixed rail, as well as flexible bus routes, what level of connectivity is needed—what tools do you know about that we can use and replicate?

- Transit centers and park and rides with bike racks
- Bike racks on busses (hopeful to see happen in near future)
- Interface bike lines/network and rail transit at strategic locations where bicycle storage and security can be provided.
- Improve sidewalk connections between transit stops; METRO invests in sidewalks at stops.

Is there interest or approach to improve security by adding “eyes on the street” by partnering with the neighborhood?

- Stations are located where there is already activity, so hopefully there is already natural surveillance at transit stations.
- There is a developing partnership with the universities to improve perception of safety, although existing stations are actually safe.
- Public feedback on proposed station locations is sought and considered.

Is there a shuttle service plan to bring people from the neighborhood to a station?

- Where there are crossings or several existing bus routes, bus service already exists. The universities have their own shuttle service now.

In some successful transit cities, half of ped injuries are related to transit (getting to the transit)—is this situation true in Houston?

- It may be, but there are no numbers to know this. I believe good traffic management and appropriate ped design can alleviate this type of problem.

Is target 4–5 min. EMS response able to be met in the third ward?

- 80% of response time is EMS currently
- In high-volume times, there are peak service teams that are added to improve service, but peak times are a challenge. Changes have been made on determining type of care for EMS recipients to reduce unnecessary ambulance runs to target resources better.
- Patients are normally taken to Ben Taub, Hermann or LBJ hospitals depending on level of trauma.

Are there any poor experiences with traffic calming for safety services?

- Speed hump placement has been a problem, although safety services have last say on location of proposed speed humps. We recognize their value on reducing speed and, therefore, serious injury; however their location can be a problem.

Is there an existing committee or model for working with the neighborhood on design issues?

- METRO hired an artist to design LRT stations to reflect the surrounding neighborhood. Each station has an art allotment in its budget. Seems to be well received.

Are there good examples in Houston of existing wayfinding?

- None known. Problems in the Memorial Parkway area.

Is there a history of educating children on bike safety?

- Yes—working with police, would go to schools (9- to 17-year-olds) and set up mock cities/intersections and discuss on-street bicycle situations. Parent response was good.
- Also presented to community groups and at community functions (Christmas events).
Are the station locations of the proposed Scott St. LRT yet known?

- Vicinity of Elgin, Wheeler, Cleburne, and near SW transit center
- Southmore and MacGregor, Leland
- Existing transit use in the area is already high and saturated with local bus service. It is 5% of service area but contributes 23% of ridership. Service changes are designed to simplify and shorten transit trips in the area.
- Expecting to provide limited stop express service to medical center from OST and Scott transit center.

Is there direct service from OST grocery shopping into neighborhood?

- There is much service to the nearby transit center, but not necessarily designed to bring shoppers to the grocery store.
- The transit center was actually built before the grocery store and helped promote the redevelopment of that activity node.

Questions about future transit service projects

- METRO continues to watch service opportunities in the south freeway to airport area.
- Current schedule for the SE corridor LRT alignment is: complete DEIS by end of 2004, PE in 2005, final design 2006-7, and construction 2007-10 depending on downtown issues. This depends on federal financial support (congressional support, FTA approval process and competition for transit dollars).
- It is expected that proposed LRT stops near university and transit center would experience heaviest traffic of the proposed line, at least initially.
- Question from participant: “There is a perception/issue about bike lanes contributing to crime. Is there any truth to that?”
  - Dan’s response: “Experience says the more eyes on a street (by adding ped or bike traffic) the less likelihood and frequency of crime. This perception is 90% fear.”
  - John’s response: “Often people assume a new trail/lane will be populated with existing undesirable activities/people. Ask neighbors if they would use the trail/bike lane: areas that ‘vote with their feet’ will create their own desired environment for the trail.”

Focus Group 2—Local Business Leaders

Friday, July 23, 2004 • 10:30–11:45 a.m.

Participants
Zinetta Burney, Tax Increment Reinvestment Zone board; Kevin Calfee, City of Houston Planning and Development

Presentation/Discussion
Jeff Taebel offered introductory remarks, including project background and purpose.

Focus Group Discussion
- (Question from participant): “How can the consultant team plan for the third ward with no community members as a part of the team? The team and approach appears paternalistic to someone who grew up in the neighborhood.”

What is important about this to project to make the third ward a great place/pilot project (desired outcomes)?
- Tie in Columbia Tap to new walkability projects.
• See the community with residents as guides.
• Talk to school principals to know where students walk.
• Community does not want hike and bike through TSU, but otherwise supports it. TSU is seen as an undesirable area; TSU does not want the Tap cutting right through campus(?)
• Contact Jennifer Austin/incorporate city’s long-range planning (plan already available to team).

Focus Group 3—Local Community Leaders
Friday, July 23, 2004 • 2:00–3:30 p.m.

Participants
Rick Lowe, Project Row Houses; Zach Moser, Third Ward Community Bike; Damon Williams, Greater Southeast Management District; Shawn Leventhal, TWRC

Presentation/Discussion
Jeff Taebel offered introductory remarks, including project background and purpose.

Focus Group Discussion
What is important about this to project to make the third ward a great place/pilot project (desired outcomes)?
• Ways to connect pedestrian gathering places
• Improve safety for people using wheelchairs and motorized scooters.
• Create favorable situations in existing “good” pockets to spread to other areas.
• Make area more comfortable to walk around: not much shade, services are spread apart.
• Foster commerce that makes sense for the area—current businesses thrive while new, needed businesses are attracted.
• Improve coordination among existing transportation projects.
• Make walking and cycling connected with useful destinations.

What are the top five issues to be addressed to get people to walk more?
• Safety: lighting, wayfinding, identified path
• Well-designed sidewalks: width, barrier-free
• Comfort: shade, narrower roadways

Can you identify the best streets to fix first?
• That could be done based on existing conditions, but the area is developing and so conditions may change. Both current and future must be considered.
• OST, Elgin, Blodgett (E-W corridors)
• Dowling, Ennis, Almeda, Live Oak (N-S corridors)
• Identifying street segments or block faces would be better than entire streets.
• Division Street used by students; students do not necessarily pick shortest route based on safe zones and other circumstances
• Middle school at/near Dowling and Elgin has unsafe walking conditions.
• Crosswalks missing between major intersections.
• Almost no sidewalks on Elgin.
• Currently planned improvements on Blodgett will only bring the street to standards, not necessarily create an ideal walking environment.
• Extremely large amount of student walking traffic on Cleburne.
Are there good models or examples of lighting?
- Theater district lights on Almeda: white light, well dispersed
- Planned for Blodgett: carriage lights

Do any streets have more than their share of cut-through traffic?
- Dowling Street is now a favorable access to the stadium
- Hutchins is a long-time traffic route for non-residents, may result from the freeway feeder road.
- Holman is used as a connector to Dowling from the university

Are there any streets that people shy away from due to traffic speeds?
- Dowling, Elgin, Alabama—students in particular

What are your thoughts about reducing the number of lanes on some streets to accommodate bike lanes, wider sidewalks, etc?
- On-street parking has been discussed for Dowling Street, although some people park in spite of a lack of on-street parking causing traffic weaving. Between Holman and Blodgett, Dowling has many neighborhood businesses without on-street parking.
- Dowling ROW is about 80 feet, roadway is 60-some feet: pedestrian safety may be better served by increasing width of sidewalk rather than reducing number of lanes.
- Dowling and Elgin is the major crossroads of the Third Ward.

Are there sensibilities about bars, fences, walls and other security devices?
- There aren’t many high fences or barriers in the neighborhood probably because residents are not afraid of other residents. There’s a comfortable community feeling.
- It’s very much about perception. A few people have instituted major security, but most people seem to prefer a more open approach.

Is enough being done with children to teach bicycle and traffic safety?
- Many helmets have been given away, but it is uncommon to see them worn.

Are there locations that are known for ped/bike crashes?
- Would expect there to be crashes at Live Oak and McGowen, a popular hangout location.
- Third Ward not considered a high-crash area
- Pool is a huge draw during the summer
- Ennis to Cleburne and beyond has ped destinations.

What do you think could be done in a short time frame with not a lot of money (say $500,000)?
- Curb extensions (possibly Hutchins and Elgin).
- Elgin and Dowling intersection
- Holman
- Hutchins (very wide)
- Live Oak (esp. at McGowen)
- Vicinities of Douglas ES, Ryan MS, Blackshear ES
- Columbia Tap trail would be attractive and provide a linear park through the community—but it hasn’t been delivered.

Would community accept housing facing open space, like the bayou or Columbia Tap?
- May be perceived as invasive unless there is a buffer or transition space between private space and the public open space.
Is there a group of neighborhood leaders that can help polish the study and see it to fruition?

- Probably if the work can be layered into people’s existing work; already busy people would not pursue a new project.

Design Workshop—Open to the Public

Saturday, July 24, 2004 • 9:00 a.m.—1:00 p.m.

Participants
Rick Lowe, Project Row Houses; Zach Moser, Third Ward Community Bike; Shawn Leventhal, TWRC, Cleveland Turner, Flowerman; Paul Charles, Third Ward Redevelopment Council; E. T. Reed, Project Row Houses; Bill Milligan, WALIPP; Robert Pruitt, Otabenga Jones Art Collaborative; Jamal Cyrus, Otabenga Jones Art Collaborative; and Adrian Peters

Presentation/Discussion
Jeff Taebel offered introductory remarks, including project background and purpose.

Brainstorming & Voting Results
- Walking destinations—retail (8)
- Kids crossing busy streets near schools (6)
- Elgin/Dowling intersection (5)
- Poor transit connections to local retail (5)
- Quality pavement needed for bikes—esp. on Alabama (5)
- Consider roundabouts—esp. at Elgin/Dowling intersection (5)
- Include public art (5)
- Sidewalks (5)
- Lighting needed (4)
- Shade needed—trees (4)
- Consider curb extensions at intersections (4)
- East-west transit route/connector needed (4)
- Scott Street—bike lane (4)
- Consider road diets—esp. on Almeda (4)
- Enhance pocket parks/neighborhood gathering places (4)
- Add visual enhancements (4)
- Old Spanish Trail (4)
- Poor crossings to Emancipation Park (3)
- Create people places (3)
- Ditches—walking and parking (3)
- Poor corner visibility at Alabama/Live Oak intersection (2)
- Too many parked cars at Dowling/Alabama intersection (2)
- Consider transit shuttles (2)
- Add buffers between bike lane and both curb and traffic (1)
- Provide better transit frequency/regularity over coverage (1)
- High speeds on main streets (1)
- Problem with broken glass (1)
- Identify high-crash intersections, then identify roundabout-suitable intersections (1)
- More shelter from rain needed (1)
- Long ped crossing distances at Cleburne/Tierwester intersection (1)
- Add transit shelters (0)
• Consider climate in transit shelter design (0)
• Concern about dogs (0)

**Additional Comments/Areas of Concern**
- Community homes at Alabama/Tierwester intersection
- Two-way stop on Tierwester has sight distance problem, crashes
- Man with disabilities uses scooter in street to cross roadways
- Apartments at Southmore/Scott intersection are dense, have low auto ownership, low lighting and questionable activities—needs more lighting
- Almeda—has a new sidewalk but puddles form at foot of ADA ramps, debris collects
- Sidewalk maintenance assistance needed—some folks can’t maintain, possibly annual sidewalk cleanup by City
- City needs to maintain sidewalks at abandoned properties—Number 1 issue!
- Demolish abandoned buildings
- It’s easy to get around by bike, but there are too few sidewalks
- Worst intersection: Old Spanish Trail & Scott St.—pedestrians jaywalk
- There are lights at intersections and parking lots but not always on the street
- Need maintenance of abandoned properties
- No street lights on Scott St. bridge

**Work Table 1 Presentation**
- Improve bus transportation
- Add skate parks
- Pursue Columbia Tap hike and bike trail
- Clean up sidewalks
- Improve crosswalks at several intersections
- Examine the challenging connection between Old Spanish Trail and Griggs
- Need more public art
- Prostitution on Live Oak between Alabama and Blodgett is a concern
- Provide better access to the museum district—current bus route is circuitous
- Improve difficult left turn from westbound Wheeler to Scott
- Improve Tierwester/Cleburne intersection for school children unloading from bus
- Provide some connection between Main Street and Scott Street LRT

**Work Table 2 Presentation**
- Dowling Road Diet; retain parking south of Alabama, reduce speeding north of Holman
- Gradual diet on Alabama, create boulevard on Elgin
- Improve dangerous Live Oak/Alabama intersection
- Emphasize public art—already planned in Row House area
- Improve student crossings of Elgin
- Pursue Columbia Tap hike and bike trail with linear park
- Add bike routes on Hutchins, Alabama, possibly Cleburne
- Provide crosswalks to entrances of Emancipation Park
- Roundabout at Elgin/Dowling, possibly at Dowling/Alabama
- Explore new drainage ideas in the area of Douglas Elementary School
- Enhance neighborhood gathering places
- Examine bike access along Wheeler through campuses
- Reduce high speeds on Scott Street—it is a barrier because of heavy traffic