# PUBLIC HEARING REPORT

## 2012-01 *Kirby Drive*

**APPLICANT:** Metropolitan Transit Authority of Harris County (METRO)

**KEY MAP:** 472 D, H, M, R, V, Z **LAMBERT:** 5350 to 5353
**JURISDICTION:** Houston, Harris County **DISTRICT/PRECINCT:** Dist. D, K/ Pcnt. 1

**PROPOSAL:**
Reclassify the existing and proposed alignment of major thoroughfare Kirby Drive between Fannin and the City of Houston ETJ from a designated 100-foot Major Thoroughfare (T-4-100) to 120-foot Principal Thoroughfare (P-4-120)

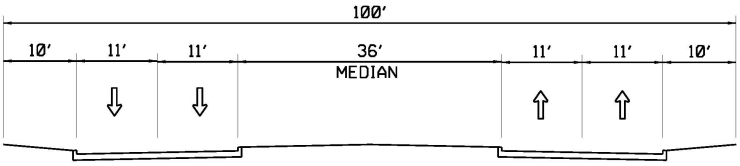
**APPLICANTS JUSTIFICATION & HISTORY:**
METRO is currently in the process of drafting its 2040 METRO Vision Long Range to identify where future High Capacity Transit would be needed. Robust growth and heavy congestion on SH 288 have led METRO to recognize the need for high capacity transit in the south to Brazoria County. As METRO looks to extend the existing METRORail system, the need to preserve corridors for future rail service is of high importance in order to reduce property impacts and project costs.

As a parallel roadway to SH 288, Kirby Drive is a potential corridor for high capacity transit service. Based on preliminary studies, Kirby Drive has been identified as a viable high capacity transit alignment in the corridor. In order to maintain the option it is important to preserve sufficient right-of-way.

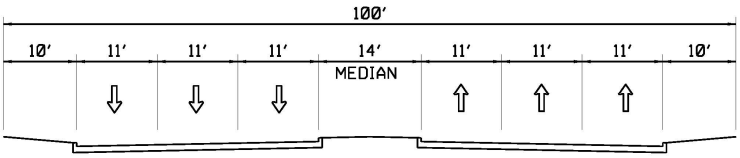
City of Houston's Major Thoroughfare and Freeway Plan (MTFP) currently classifies Kirby Drive from Reed Road to the Houston City Limits as a Major Thoroughfare with four lanes and 100 feet of right-of-way (T-4-100). This dimension is based on a cross-section of four lanes of traffic (two in each direction), a center median to allow for left turn lanes, and space on each side of the roadway for sidewalks and underground utilities. A one hundred foot right-of-way width is sufficient for this configuration and would provide the opportunity to add lanes in each direction for a six lane roadway as demand warrants.

Kirby Drive is currently designated within the City of Houston as a Principal Thoroughfare between Shepherd Drive and IH 610 South;. Kirby (aka Anagnost) is designated a Major Thoroughfare between IH 610 South inside City of Houston's corporate limits. A small section designated as a Major Thoroughfare lies from those corporate limits to Beltway 8 belonging in the ETJ. Kirby Drive aligns with Allen Parkway (approximately 2.1) which is also designated as a Principal Thoroughfare between Shepherd Drive and the Central Business District. Kirby is approximately a 12.5 mile long major roadway within City of Houston's limits and ETJ. It is planned to be extended further south into Brazoria County to align with existing Kirby Drive in the City of Pearland. The overall length within the ETJ should therefore be designated as a Principal Thoroughfare.

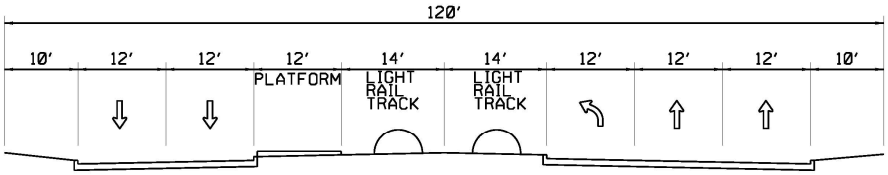
The preferred right-of-way width needed to accommodate light rail is 120 feet. This width can safely and functionally contain a two-way rail guideway, four lanes of traffic, left turn lanes and space behind the curbs for sidewalks and utilities. There is also space for a boarding station within the 120 feet. Cross-sections of the proposed right-of-way modifications are shown in cross section exhibit.




MTFP TYPICAL 4-LANE CROSS SECTION




MTFP TYPICAL 6-LANE CROSS SECTION

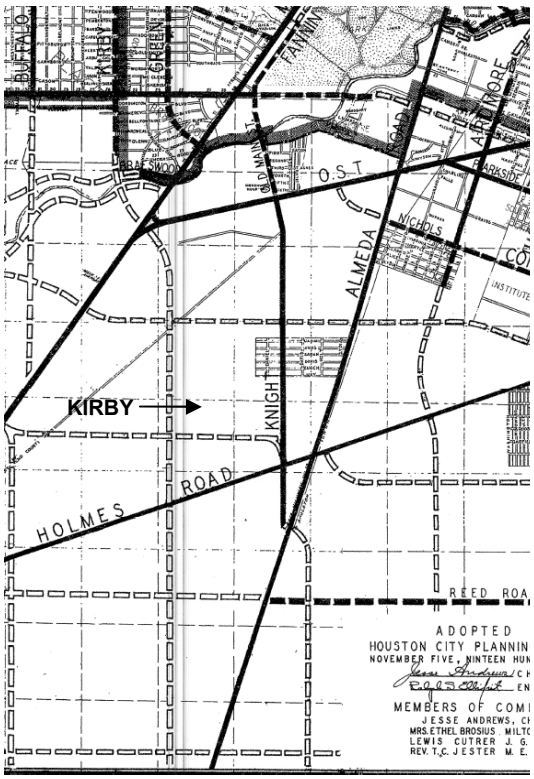



PROPOSED LRT TYPICAL CROSS SECTION

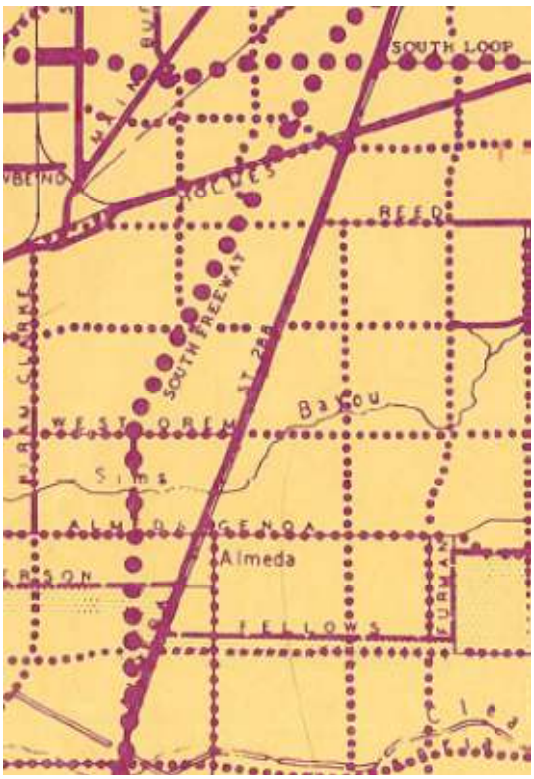
Principal thoroughfares are streets that are designed to carry high volumes of traffic and connect major generators of traffic, such as employment centers, commercial & industrial centers, major residential communities and other activity centers. They are designed to provide higher degree of mobility and typically run for longer distances, providing connections to freeways and other thoroughfares. Kirby Drive with Allen Parkway extends from the Central Business District connecting Upper Kirby District, US 59, Rice Village, West University Place, Reliant Park, IH 610, Beltway 8 and City of Pearland. It also connects a number of existing residential communities in City of Houston and Brazoria County.

Kirby Drive has been designated as a major thoroughfare on the MTFP since 1942. The alignment extended due south of Holmes Road. In 1957 the Kirby Drive is realigned to terminate at proposed South Freeway south of Holmes Road and west of Almeda Road. Later in 1964 when the proposed South Freeway was realigned to its current location, Kirby Drive was realigned to be extended to Almeda Road south of Airport Boulevard.

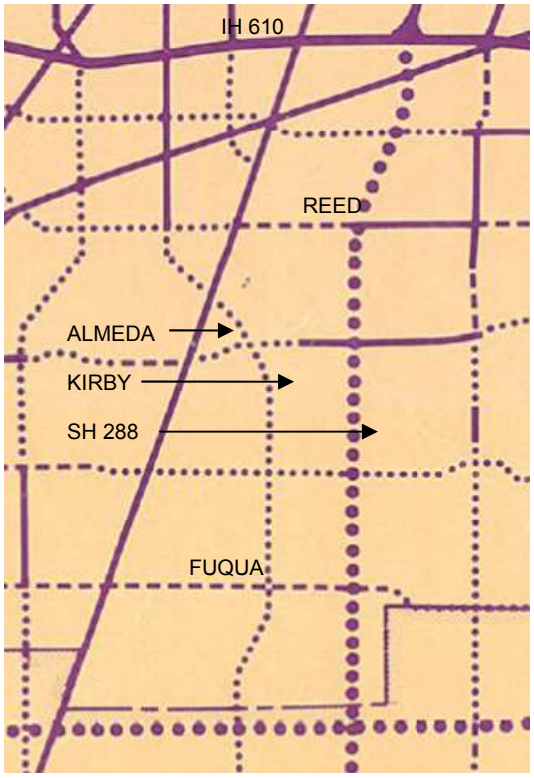
The 1966 MTFP map identifies the termination of Fannin Drive at Almeda and the extension of Kirby Drive south of Almeda. The map also indicates sufficient width ROW for Kirby Drive north of Reed Road. South of Fuqua/Almeda-Genoa the proposed Kirby Drive aligns with Karalas Lane and Woods Lane. In 1986 Fannin Drive is realigned to extend to Reed Road in its current alignment. In 1993 Kirby Drive, south of Almeda-Genoa was realigned to extend along Anagnost in its current alignment. In 1997 Anderson Road west of Kirby/Anagnost is designated as a major collector street. Recently in 2008 Kirby Drive between Holmes Road and Airport was realigned along Reed Road to negate the need for an overpass of the Union Pacific railroad.




1942 Major Street Plan




1957 MTFP




1966 MTFP

2011 MTFP

## 1. Population & Employment Projections

According to 2010 Census, Texas grew by 20% in ten years, to over 25 million people, recording about a quarter of the nation's overall growth. The rate of growth in Texas was twice the national average. Harris County is the most populous county (4 million) in Texas. Today, 2.1 million people live within the City of Houston and another 2 million live in the City's extraterritorial jurisdiction (ETJ). Since 2000, the City of Houston added 146,000 people (8 %) to its population. Houston's ETJ however grew 35 % during the same time period.

Houston and its ETJ's rich employment sector are home to more than 1.8 million jobs, making it the state's most populous and robust economic center. More than one million jobs are located within the City limits and are saturated within the City's eight major activity centers.

One of the greatest challenges to Houston's mobility is that by 2035 significant numbers of residents are projected to live outside the City limits in the ETJ; while the major employment growth is expected to occur within the City limits. This increase in distance between the population and employment centers will result in more travel, greater travel time, and longer travel delays.

In addition to anticipated growth within the ETJ, an additional 550,000 new residents are expected within the current city limits. The most notable population growth is projected to occur inside Loop 610. It reflects efforts to create a dense urban core through mixed-use development strategies.

To compare the result between 2000 and 2010 Census, the subject area's population grew by 84.6 % from 7,698 to 14,210 which demonstrates a percent change significantly higher than that of the City of Houston's growth.

The Houston-Galveston Area Council (H-GAC) projects that over the next 25 years (2010 – 2035), the population within the study area* will increase from 14,210 to 62,676 (48,466 persons), or 341%. The number of persons per acre is projected to increase from approximately 1.4 to approximately 6.4. During the same period, H-GAC estimates that the total jobs in the subject area will increase from 20,106 to 72,213 (52,107 jobs), or 259%. The number of jobs per acre is projected to increase from approximately 2.0 to 7.3.

Expressed in percentages, both the subject area's population growth and job growth are expected to undergo a greater percent change is expected to be more than that of the City of Houston's at 341% vs. 24% and 259% vs. 37%, respectively.

| Year | Population (Persons/ Acre) | % Chg | Households (Households/ Acre) | % Chg | Jobs (Jobs/ Acre) | % Chg |
|---|---|---|---|---|---|---|
| 2010 | 1.4 | | 0.6 | | 2.0 | |
| 2018 | 2.4 | 66% | 1.0 | 51% | 2.9 | 41% |
| 2025 | 3.4 | 43% | 1.3 | 38% | 3.8 | 30% |
| 2035 | 6.4 | 86% | 2.5 | 87% | 7.3 | 95% |
| Change (2010 to 2035) | 4.8 | 341% | 1.9 | 292% | 5.3 | 259% |
| City of Houston Change (2010 to 2035) | | 24% | | 31% | | 37% |
| City of Houston ETJ Change (2010 to 2035) | | 43% | | 48% | | 39% |

*Source: H-GAC's 2035 Regional Growth Forecast*
** Data represents population, jobs, and households in 12 Traffic Analysis Zones (TAZ) encompassing approximately 9,868 acres around the proposed amendment. Population projections do not include projections for group housing.*

## 2. Land Use & Platting Activity

For the period 2008 to present, platting activity in the general area where the Kirby Road MTFP amendment (from Fannin Street to the City of Houston's ETJ boundary) is being requested was non-residential in nature. Of the approximately 347 acres platted, 299 acres were designated for commercial or other non-residential uses. Residential platting activity comprised 13% (48 acres) of the platting activity in the area. Four sections of the single-family residential development - City Park West comprised 33 acres and 209 lots; whereas the multifamily development, Landmark at City Park replat no 1, comprised of 284 units on a 15 acre site.

| Subdivision Plat Name | Action Date | Key Map | Land Use | Property Size (acres) | Number of Lots |
|---|---|---|---|---|---|
| Airport Boulevard Estates GP | July 5, 2012 | 572H | General Plan | 106 | |
| Texas Port Recycling Almeda Genoa Subdivision | June 7, 2012 | 572V | Commercial | 19 | |
| West Orem Drive from SH 288 to drainage fee strip west of Furman STD | February 2, 2012 | 573J | Other | 1 | |
| City Park West Sec 7 | September 15, 2011 | 572R | SF Residential (public street) | 7 | 52 |
| City Park West Sec 8 | September 15, 2011 | 572R | SF Residential (public street) | 6 | 31 |
| City Park West Sec 5 | November 12, 2009 | 572R | SF Residential (public street) | 9 | 47 |
| City Park West Sec 6 | October 29, 2009 | 572R | SF Residential (public street) | 12 | 79 |
| Rodeo Auxiliary Facilities Sec 1 replat no 1 and Extension subdivision | September 17, 2009 | 573J | Transportation and Utility | 61 | |
| Houston Amateur Sports Park Subdivision | June 25, 2009 | 573E | Unrestricted | 97 | |
| Almeda Genoa Plaza Subdivision | May 28, 2009 | 572V | Unrestricted | 15 | |
| Taztaz Plaza Subdivision | October 9, 2008 | 572V | Commercial | 1 | |

| Subdivision Plat Name | Action Date | Key Map | Land Use | Property Size (acres) | Number of Lots |
|---|---|---|---|---|---|
| Reserve at City Park Subdivision | April 10, 2008 | 572M | Transportation and Utility | 12 | |
| Skyline Ranch GP | February 28, 2008 | 573J | General Plan | 162 | |
| Skyline Ranch Reserve Subdivision | February 28, 2008 | 573J | Unrestricted | 92 | |
| Landmark at City Park replat no 1 | January 31, 2008 | 572M | Multi-family | 15 | 284 |

## 3. Right-Of-Way Status

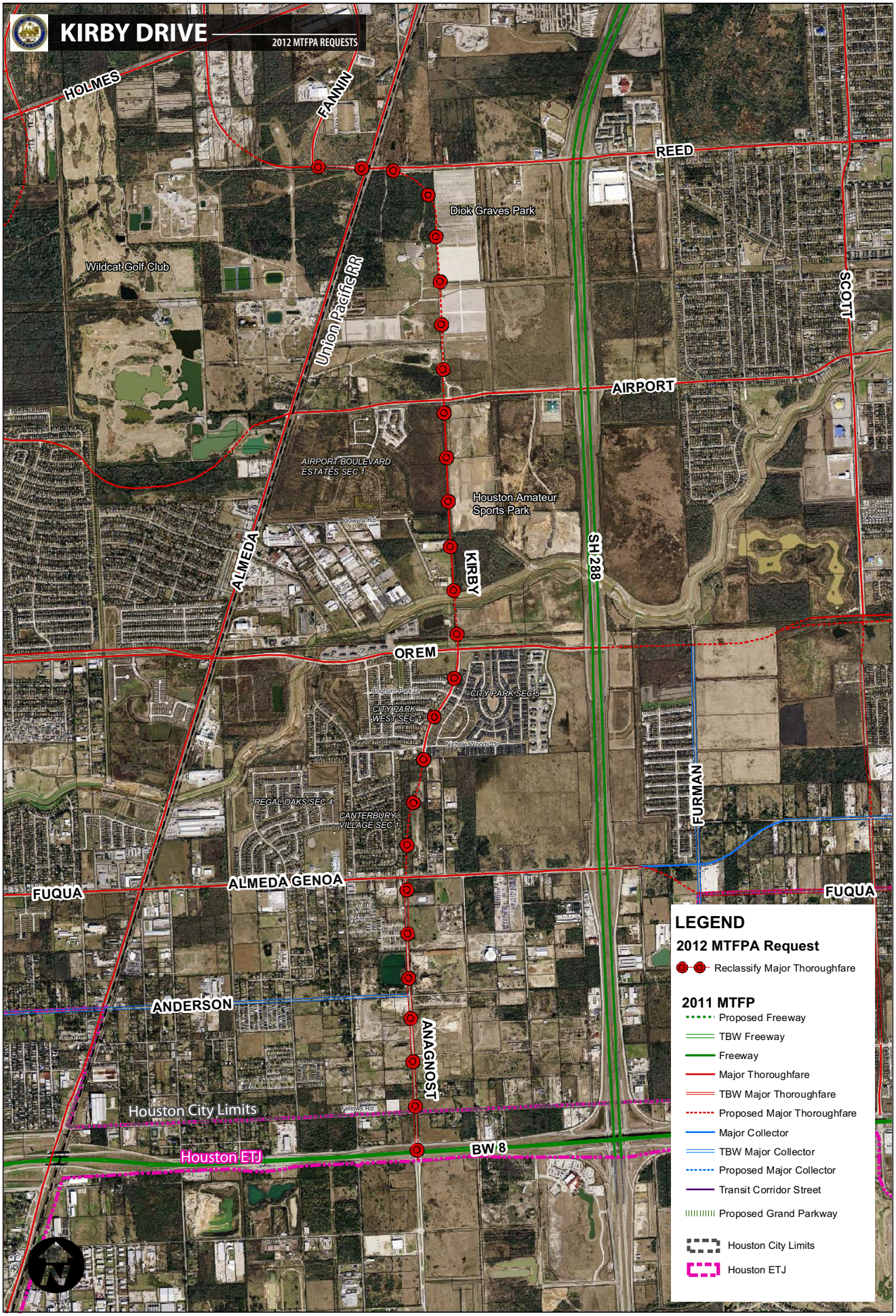
Kirby Drive, from Fannin to Almeda Genoa, aligns with Reed Road and is identified as a to-be-widened major thoroughfare planned for four lanes and a 100' right-of–way (ROW). To ensure adequate ROW without compromising future mobility and infrastructure needs, Kirby is recommended "to be widened" to a principal thoroughfare with six lanes and a 120' right-of-way. Portions of Kirby south of Airport and Orem have been improved as a 100' ROW with a 4-lane boulevard cross-section. Extension of Kirby from Almeda Genoa to Beltway 8 would follow the existing alignment of the Anagnost corridor, which will be widened to mimic Kirby Drive's revised dimensions. The other major thoroughfare corridors in the study area are of sufficient width, with the exception of Anderson, which is designated "to be widened" from Almeda to Anagnost.

| Street | From | To | Classification | Status |
|---|---|---|---|---|
| Kirby | S. Fannin | Almeda | T-4-100 | To be widened |
| Kirby | Almeda | Airport | T-4-100 | To be acquired |
| Kirby | Airport | Sim Bayou | T-4-100 | Sufficient width |
| Kirby | Sim Bayou | Orem | T-4-100 | To be acquired |
| Kirby | Orem | End of City Park Subdivision | T-4-100 | Sufficient width |
| Kirby | End of City Park Subdivision | Almeda Genoa | T-4-100 | To be acquired |
| Anagnost | Almeda Genoa | Anderson | T-4-100 | To be widened |
| Anagnost | Anderson | BW 8 | T-4-100 | To be widened |
| Reed | Almeda | SH 288 | T-4-100 | Sufficient width |
| Almeda | Holmes | Reed | P-6-120 | Sufficient width |
| Almeda | Reed | Airport | P-6-100 | Sufficient width |
| Airport | Alemda | Proposed Kirby | P-6-100 | Sufficient width |
| Airport | Proposed Kirby | SH 288 | P-6-100 | Sufficient width |
| Orem | Alemda | Kirby | T-4-100 | Sufficient width |
| Orem | Kirby | SH 288 | T-4-100 | Sufficient width |
| Almeda Genoa | Almeda | Anagnost | T-4-100 | Sufficient width |
| Almeda Genoa | Anagnost | SH 288 | T-4-100 | Sufficient width |
| Anderson | Almeda | Anagnost | C-4-70 | To be widened |

## 4. Major Thoroughfare Spacing

The Kirby Drive/Anagnost and Almeda Road major thoroughfares provide and essential north-south connection through the study area, west of SH 288. East-west connectivity is enhanced by a network of thoroughfares spaced approximately one mile apart along Kirby Drive/Anagnost corridor. Anderson is the only designated major collector within the study area is spaced at approximately half mile between Almeda Genoa and Beltway 8.

| Street | From | To | Street Type | Direction | Spacing (mile) |
|---|---|---|---|---|---|
| Kirby | S. Fannin | Almeda | Major Thoroughfare | north-south | 0.22 |
| Kirby | Almeda | Airport | Major Thoroughfare | north-south | 1.17 |
| Kirby | Airport | Orem | Major Thoroughfare | north-south | 1.05 |
| Kirby | Orem | Almeda Genoa | Major Thoroughfare | north-south | 1.01 |
| Anagnost | Almeda Genoa | Anderson | Major Thoroughfare | north-south | 0.49 |
| Anagnost | Anderson | BW 8 | Major Thoroughfare | north-south | 0.66 |
| Reed | Almeda | SH 288 | Major Thoroughfare | west-east | 0.89 |
| Almeda | Holmes | Reed | Principal Thoroughare | north-south | 0.92 |
| Almeda | Reed | Airport | Principal Thoroughare | north-south | 1.08 |
| Airport | Alemda | Proposed Kirby | Principal Thoroughare | west-east | 0.65 |
| Airport | Proposed Kirby | SH 288 | Principal Thoroughare | west-east | 0.59 |
| Orem | Alemda | Kirby | Major Thoroughfare | west-east | 1.04 |
| Orem | Kirby | SH 288 | Major Thoroughfare | west-east | 0.59 |
| Almeda Genoa | Almeda | Anagnost | Major Thoroughfare | west-east | 1.13 |
| Almeda Genoa | Anagnost | SH 288 | Major Thoroughfare | west-east | 0.83 |
| Anderson | Almeda | Anagnost | Major Collector | west-east | 1.30 |




0 0.25 0.5 1 Miles

Planning & Development Department, City of Houston