



PLANNING COMMISSION ACTION

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 METRO Rail 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.

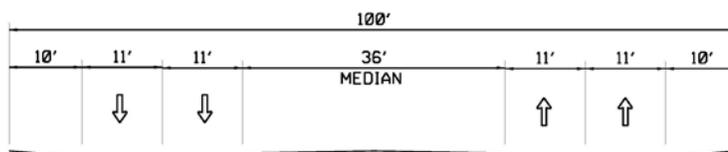
City of Houston's Major Thoroughfare and Freeway Plan (MTFP) currently classifies Kirby Drive from Reed Road to the Houston City Limits as a Major Thoroughfare with four lanes and 100 feet of right-of-way (T-4-100). This dimension is based on a cross-section of four lanes of traffic (two in each direction), 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.

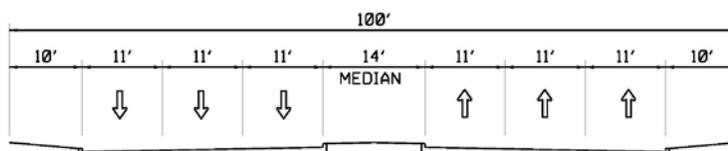
The preferred right-of-way width needed to accommodate light rail is 120 feet. This width can safely and functionally contain a two-way rail guideway, four lanes of traffic, left turn lanes and space behind the curbs for sidewalks and utilities. There is also space for a boarding station within the 120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



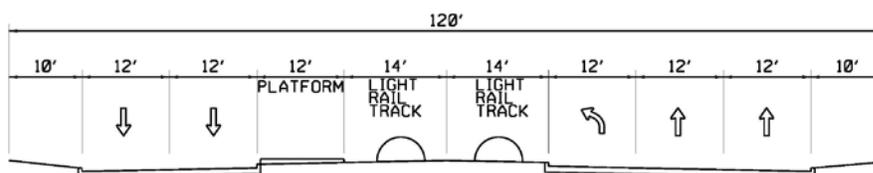
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MTFP TYPICAL 4-LANE CROSS SECTION



MTFP TYPICAL 6-LANE CROSS SECTION



PROPOSED LRT TYPICAL CROSS SECTION

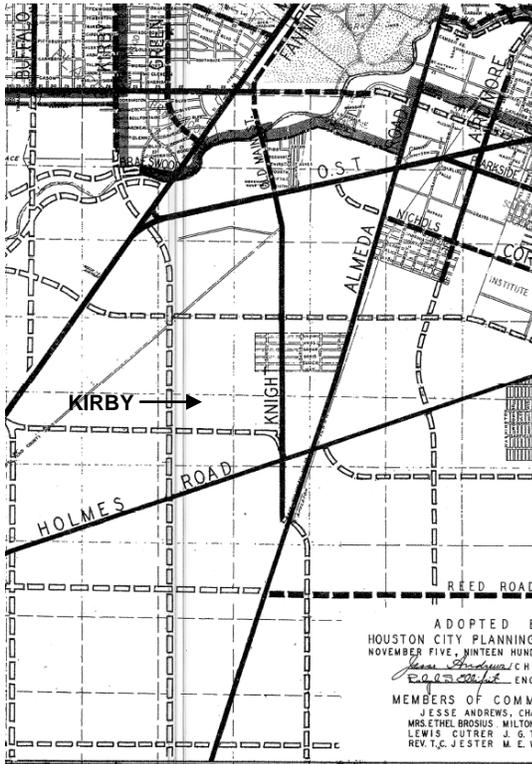
Principal thoroughfares are streets that are designed to carry high volumes of traffic and connect major generators of traffic, such as employment centers, commercial & industrial centers, major residential communities and other activity centers. They are designed to provide higher degree of mobility 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.

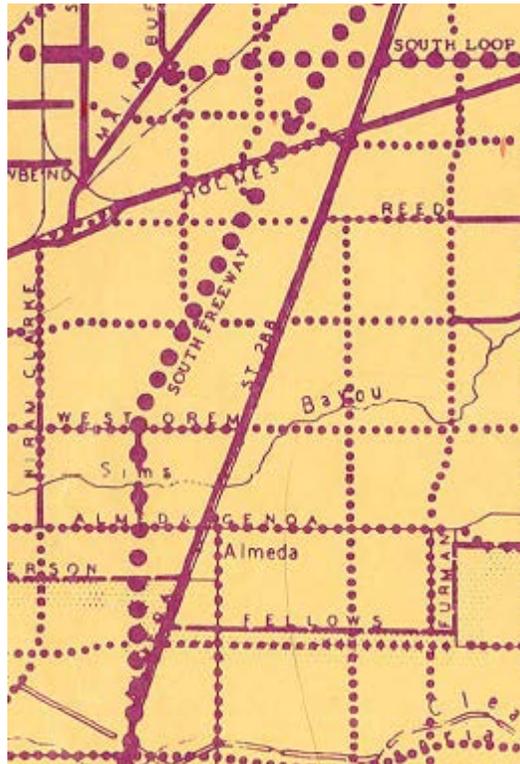
The 1966 MTFP map identifies the termination of Fannin Drive at Almeda and the extension of Kirby Drive south of Almeda. The map also indicates sufficient width ROW for Kirby Drive north of Reed Road. South of Fuqua/Almeda-Genoa the proposed Kirby Drive aligns with Karalas Lane and Woods Lane. In 1986 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.



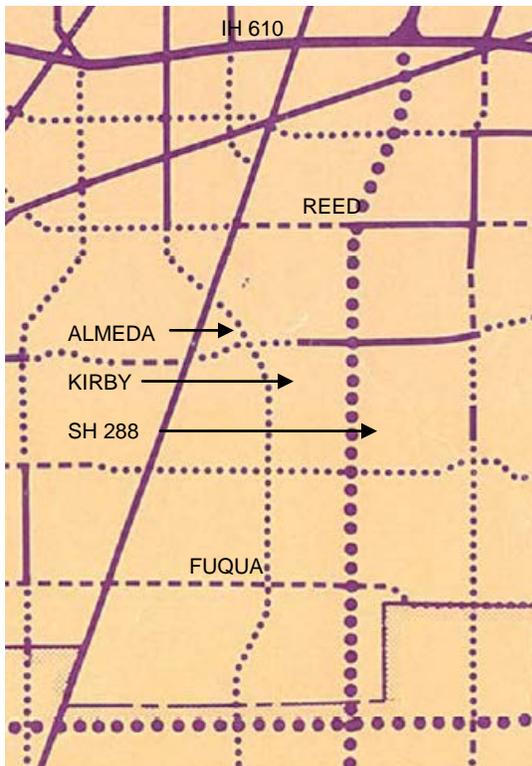
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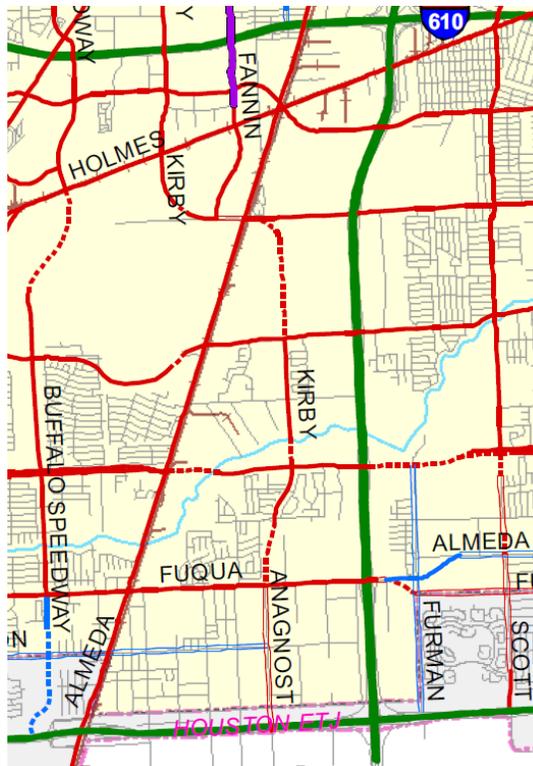
1942 Major Street Plan



1957 MTFP



1966 MTFP



2011 MTFP



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STAFF RECOMMENDATION

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)

STAFF JUSTIFICATION

The proposed extension of Kirby Drive from Holmes Road to Beltway 8 would connect City of Houston Central Business District and Texas Medical Center to City of Pearland's Town Center while providing increased access to future developments throughout the Central Southwest Super neighborhood. Kirby Drive would function as a principal thoroughfare. Kirby Drive north of IH 610 is currently designated as a principal thoroughfare on the MTFP Hierarchy Classification Table. Designating Kirby Drive south of IH 610 to City of Houston's ETJ, as a Principal Thoroughfare, would be consistent with the function of the roadway.

Additionally, Kirby Drive connects a number of activity & employment centers to residential neighborhoods along the corridor's built roadway. Currently SH 288 is the primary north-south corridor that connects City of Pearland to the Texas Medical Center and Houston's Central Business District, but fails to provide ample access to primarily underdeveloped properties between Holmes Road and Beltway 8. As a parallel corridor to SH 288 Kirby Drive provides a viable alternative with ample circulation opportunities for future developments which are will be prohibited from direct access along the higher capacity roadway, SH 288. The extended alignment would complement and further enhance the existing Fannin Park & Ride and MetroRail Fannin South Station located at the Fannin Street/W. Bellfort Ave intersection. By requiring the 120' ROW now, ample space will be ensured vehicle and transit needs spurred by increased development. Additionally this will make the corridor attractive for development as it would provide options for mobility. In short, the proposed 120' right-of-way preserves a corridor of 4 travel lanes and turn lanes for vehicular mobility, while maintaining additional adequate space for transit lines and station platforms.

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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



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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



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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	
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.



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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	Almeda	Proposed Kirby	P-6-100	Sufficient width
Airport	Proposed Kirby	SH 288	P-6-100	Sufficient width
Orem	Almeda	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 an 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 Thoroughfare	north-south	0.92
Almeda	Reed	Airport	Principal Thoroughfare	north-south	1.08
Airport	Almeda	Proposed Kirby	Principal Thoroughfare	west-east	0.65
Airport	Proposed Kirby	SH 288	Principal Thoroughfare	west-east	0.59
Orem	Almeda	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



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5. Mobility

Kirby Drive is 12.5 mile corridor inside the City of Houston ETJ and approximately 3.9 miles in the City of Pearland. South of Reed Road it runs parallel to SH 288, and is spaced approximately one mile west of the freeway. The proposed extension of Kirby Drive between Holmes and Beltway 8 will provide access to existing developments like the City Park Subdivision, Houston Amateur Sports Park, Houston Rodeo and other proposed developments along the corridor. The provided extension will also increase accessibility to the Sims Bayou which is currently designated as a proposed shared-use path in the COH bikeway plan providing increased diversification of mobility options and increased north-south & east-west connectivity throughout the Central Southwest neighborhood.

North-south mobility in the general area is currently limited to SH 288 or Almeda Road. Kirby Drive between Holmes Road and Orem Drive is planned for improvement on the City of Houston Capital Improvement Program (CIP). The proposed extension of Kirby to Orem will allow for redevelopment by improving north-south mobility and access to employment centers like TMC and Greenway Plaza. Increased connectivity between the Hiram Clarke and Fannin South Transit Centers, at Fannin/West Belfort and Faqua Street/Buffalo Speedway intersections, respectively, will be further enhanced increasing accessibility to both rail and bus transit options throughout the study area.

