



City Mobility Planning Heights-Northside Sub-regional Mobility Study

Study Team:

City of Houston
H-GAC
METRO
TxDOT

Consultant:

Kimley-Horn and Associates
Gunda Corporations

Final Public Meeting
04/01/2014

Agenda

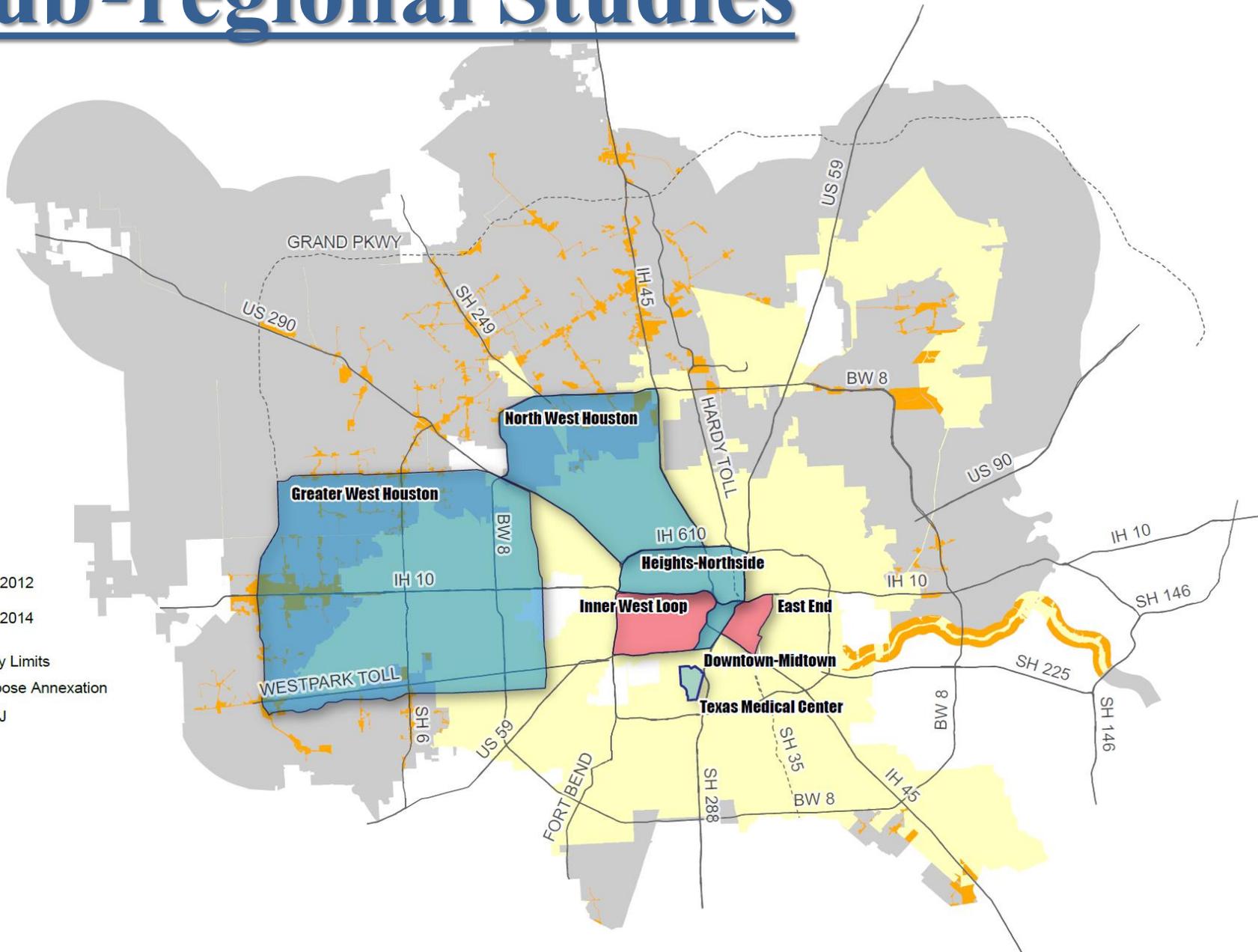
- Sub-regional Studies
 - » Purpose of Study
 - » What We Evaluated
 - » Sub-regional Planning Process
- What We Found
 - » What We Heard
 - » General Findings
 - » Opportunities/Challenges
- Recommendations/Outcomes
 - » Changing Mobility Considerations
 - » System Maps
 - » Corridor Discussion
- Next Steps

I. Sub-regional Studies

LEGEND

Status of Plan

-  Complete in 2012
-  Complete in 2014
-  Houston City Limits
-  Limited Purpose Annexation
-  Houston ETJ

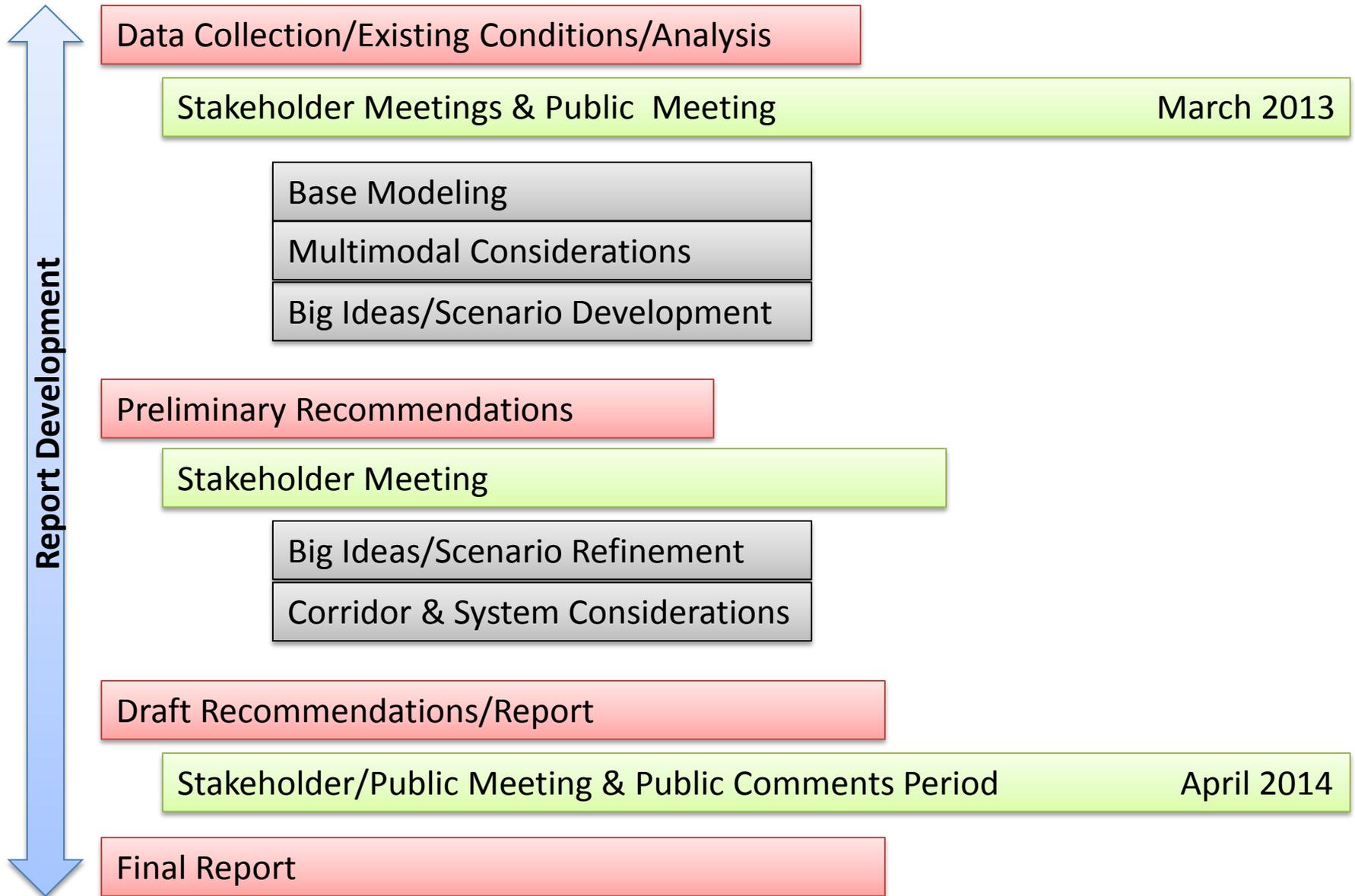


What We Evaluated

- Roadway and intersection improvements
- Improve the efficiency of the system we have
- Pedestrian connectivity
- Bicycle connectivity
- Transit connectivity and access
- Multi-Modal street classification



Sub-regional Planning Process

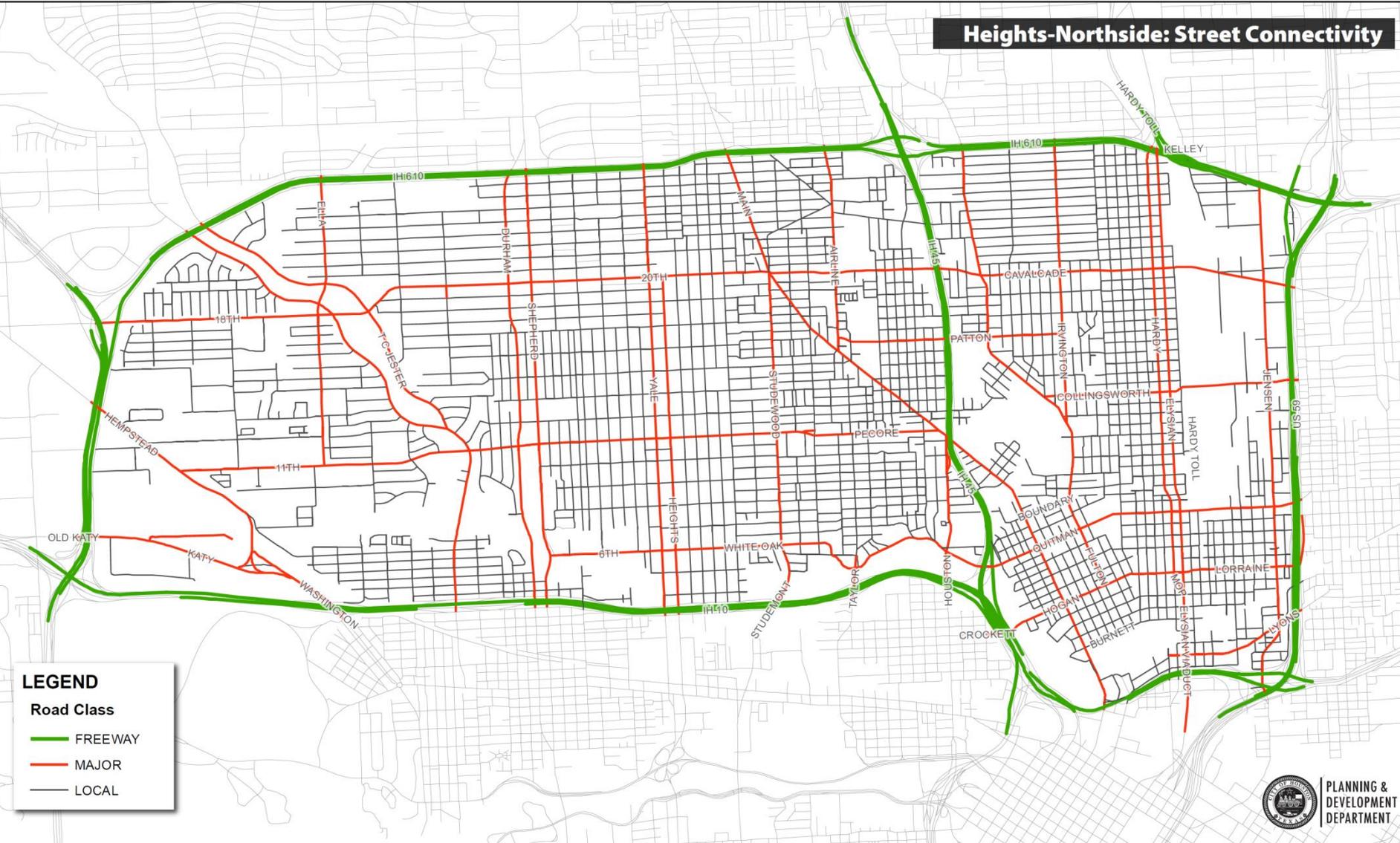


Study Area



Existing Network – Urban Grid

Heights-Northside: Street Connectivity



LEGEND

Road Class

- FREEWAY
- MAJOR
- LOCAL



II. What We Found

What We Heard

- Congestion is a primary concern
 - Increased densification resulting in vehicular congestion and safety concerns for non-vehicular modes
- Maintain Urban landscape
- Preservation of Heights Blvd
- Safer (wider) Bike Lanes
 - More Bike Facilities (Northside)
 - Increased access to Off-Street Trails
- Intersections: multimodal safety
 - Pedestrian crosswalks
 - Bicycle Confusion
- Enhanced modal connectivity to new light rail

General Findings

- Congestion is minimal & mainly at Interstate intersections
 - Minimal intersection failure
 - Anticipated growth in population tested
- Predominately Urban Context
 - Urban Grid
 - Old Suburban
- Neighborhood amenities throughout study area
- Population in favor of increased bike-ped network/safety is a concern
 - More on-street
 - Connection of off-street

Opportunities/ Challenges

- TDM Model indicate relatively moderate congestion levels in 2035
- Enhance Pedestrian and Bicycle Network
- Enhance Transit Frequency
- Right-of-way Constraints
- Physical Barriers – Highways & Bayou
- Multimodal Balance – One size fits all?

III. Report Outcome

- Introduction
- Existing Conditions
- Community Involvement
- Defining Future Mobility Conditions
- Changing Mobility Considerations
- Balanced Approach
- Outcomes
- Next Steps
- Appendix

Priority Elements

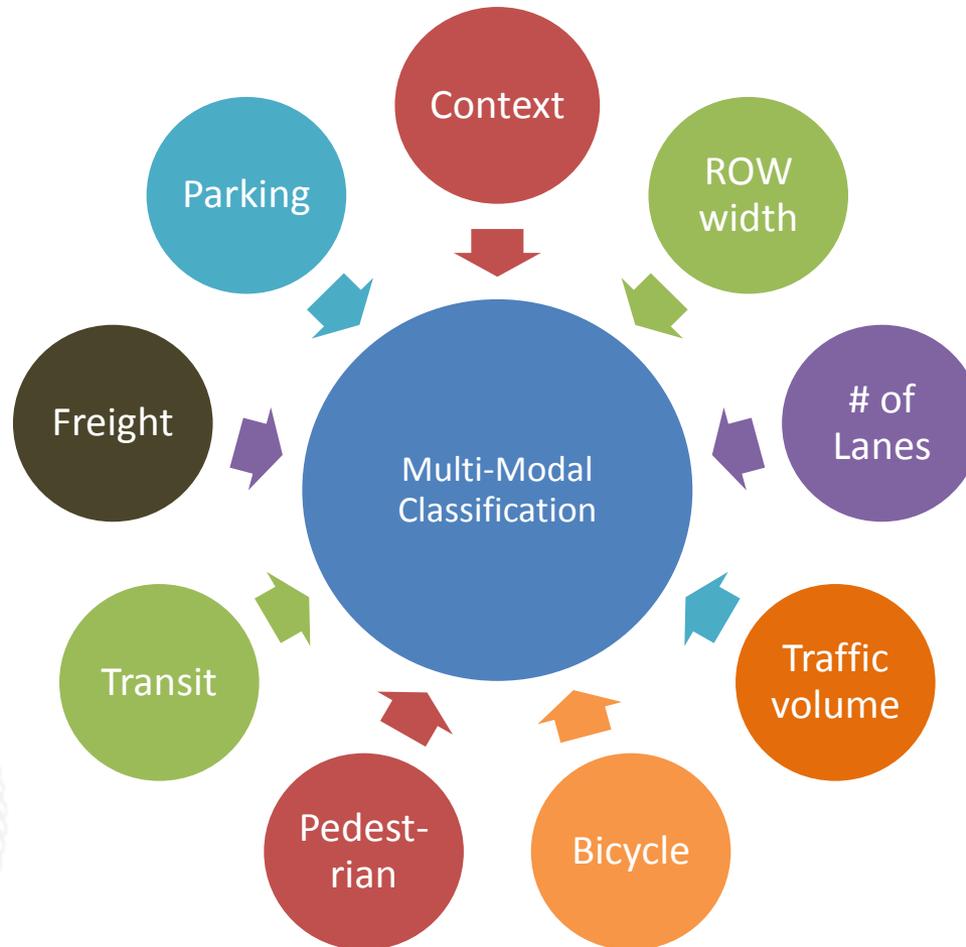


Changing Considerations

- Complete Streets
- Health in Communities
 - Mode choice + access
- Sidewalk Design Considerations
 - Edge zone vs. Furnishing zone vs. Frontage vs. Throughway
- Bicycle User
 - Class of Riders (A, B, C)
 - Facility Types
- Transit considerations
 - Changing Demographic/Gen Y
- Intersection Design
 - Toolbox consideration

Balancing Needs

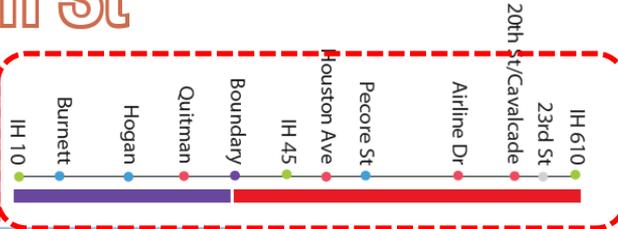
Multi-Modal Classification Street Type



Corridor Level Analysis

North Main St

Key Factors



EXISTING CONDITIONS:		FUTURE CONDITIONS:	
Existing Lanes	2/4	MTFP Designation	T-4-70/80; T-2-70-90
Existing Counts Range	4,500-16,000	Future Volume Range	11,500-28,000
Right-of-way	65'/70'	Proposed MMC	Urban /Transit Avenue
Median/CTL/Undivided	Undivided	Median/CTL/Undivided	Undivided

Existing Condition

North main St can be sectioned into 2 segments: IH 610 to Boundary; Boundary to IH 10. The segment from Boundary to IH 10 is part of the light-rail line. It is comprised of 2 travel lanes with 2 rail lines down the center. The remainder of the corridor is 4 lanes undivided. The current designation of North Main St on the MTFP is **Major Thoroughfare**.

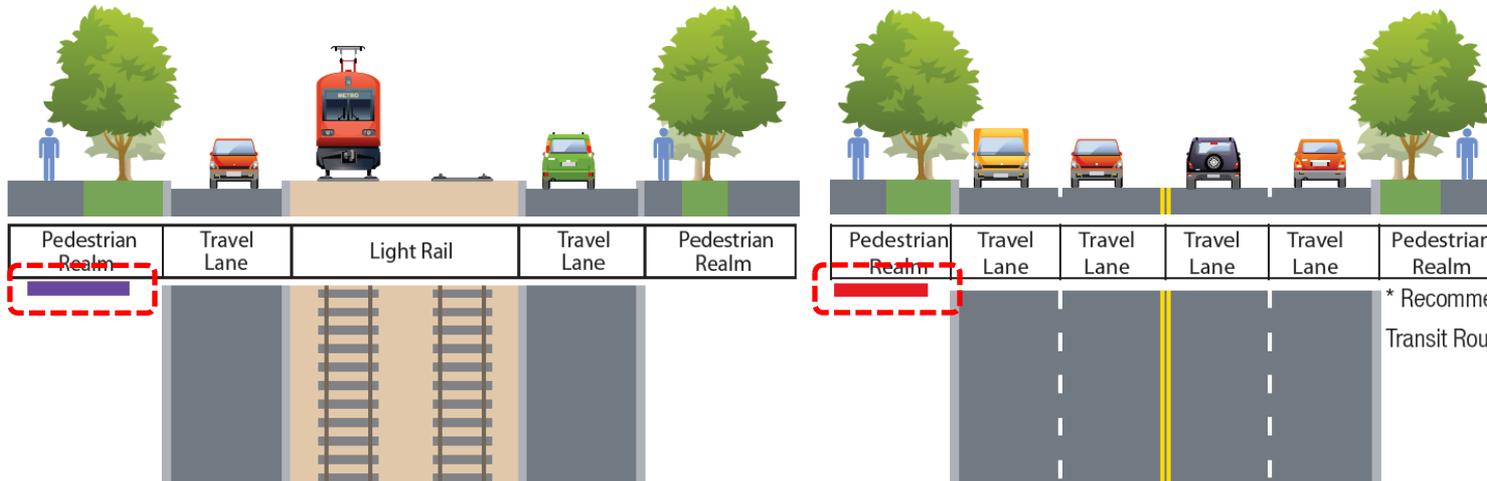
Identified Needs

Another study conducted prior to this one contains recommendations for North Main Street from IH 10 to Boundary. The Northside - Livable Centers Study (2010), conducted by Wan Meter Williams Pollack, identified the challenges of North Main Street and the costs of recommended improvements. They recommended North main Street be redesigned to accommodate the light rail line, and 1 travel lane on each side.

Future Vision

As with Fulton, the portion of Main Street from Boundary to IH 10 will retain its classification as a **Transit Avenue**. The remainder of the corridor is recommended to maintain its 4-lane design and function and **Urban Avenue** designation. The portion of the corridor without light rail is recommended to have a High Frequency Transit Route. A bicycle route should also be considered for the portion of the corridor from 20th/Cavalcade to IH 610 due to the limited Right-of-way.

Possible Option(s):

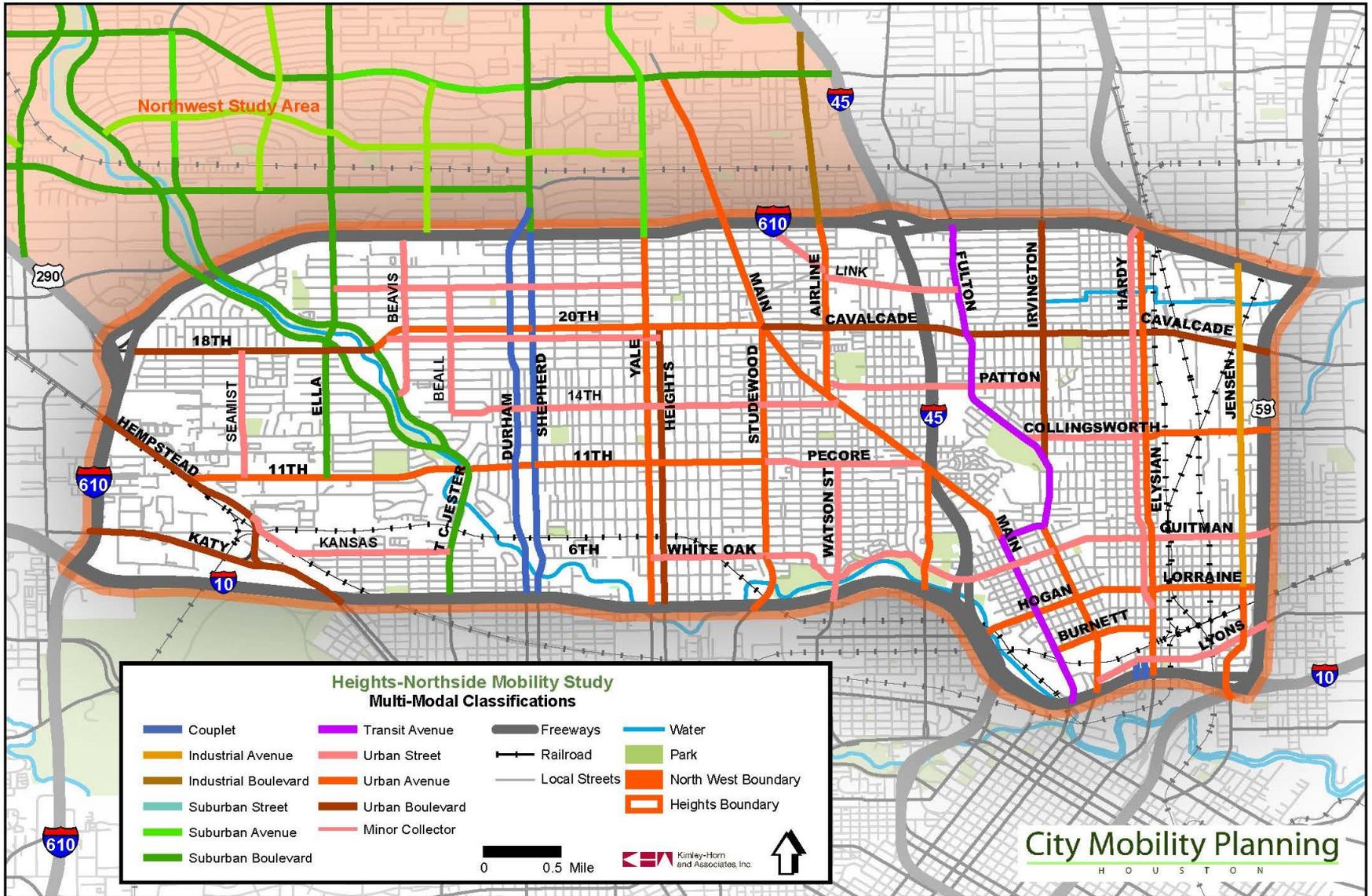


* Recommended High Frequency Transit Route and Bicycle Route

Summary Sheets

STREET NAME	FROM	TO	EXISTING FUNCTIONAL CLASS	MEDIAN/CTL/ UNDIVIDED	MTFP ROW	NUM LANE	EXIST VOLUME RANGE	2035 VOLUME RANGES	MTFP IMPROVEMENT	UPDATED FUNCTIONAL CLASS	PROPOSED MMC	BIKE FACILITY	PARKING	TRANSIT	PED REALM
W 20TH ST	ETC JESTER BLVD	SHEPHERD DR	T-4-70	UNDIVIDED	70'	2	6,600-10,000	5,000-22,000	T-4-70	MAJOR THOROUGHFARE	URBAN AVENUE	X		X-Express	X
W & E 20TH ST	SHEPHERD DR	N. MAIN ST	T-4-70	UNDIVIDED	70'	4	8,700-9,500	10,000-20,000	T-4-70	MAJOR THOROUGHFARE	URBAN AVENUE	X		X-Express	X
W 18TH ST	I-610	ETC JESTER BLVD	T-4-100	MEDIAN	100'	4	11,000-14,500	19,500-29,000	T-4-100	MAJOR THOROUGHFARE	URBAN BOULEVARD	X		X-Express	X
W 19TH ST	20TH ST	SHEPHERD DR	LOCAL 2-70	UNDIVIDED	70'	2	4,000-5,500	10,000-12,500	C-2-70	MINOR COLLECTOR	URBAN STREET		X	X-Local	X
W 19TH ST	SHEPHERD DR	HEIGHTS BLVD	LOCAL 4-70	UNDIVIDED	70'	4	2,000-4,500	12,500	C-2-70	MINOR COLLECTOR	URBAN STREET			X-Local	X
W CAVALCADE ST	N MAIN ST	Airline	T-4-90	MEDIAN	90'	4	10,900	22,100	T-4-90	MAJOR THOROUGHFARE	URBAN BOULEVARD	X		X-Express	X
W CAVALCADE ST	Airline	I-45	T-4-100	MEDIAN	90'	4	10,900	22,100	T-4-100	MAJOR THOROUGHFARE	URBAN BOULEVARD	X		X-Express	X
W CAVALCADE ST	IH 45	US-59	T-4-100	MEDIAN	100'	4	15,500	24,200	T-4-90; IRVINGTON TO I-45; T-4-100	MAJOR THOROUGHFARE	URBAN BOULEVARD	X		X-Express	X
PATTON ST	AIRLINE DR	IRVINGTON BLVD	C-4-60-70	UNDIVIDED	60'	4	3,500-7,300	5,000-9,000	IRVINGTON TO FULTON : C-3-60; FULTON TO IH45: C-4-70 WEST OF 45: C-3-70	MAJOR COLLECTOR	URBAN STREET	X			
W 11TH ST	HEMPSTEAD HWY	SHEPHERD DR	T-4-100	MEDIAN	100'	4	6,800-8,200	7,500-35,500	T-4-100	MAJOR THOROUGHFARE	URBAN AVENUE	X (Partial)		X-Express	X
E 11TH ST	SHEPHERD DR	STUDEWOOD ST	T-4-70	UNDIVIDED	70'	4	7,700-14,400	7,500-28,000	T-4-70	MAJOR THOROUGHFARE	URBAN AVENUE			X-Express	X
E 11TH ST	STUDEWOOD ST	MICHAUX ST	C-4-70	UNDIVIDED	70'	2	7,700	8,000	C-2-70	MINOR COLLECTOR	URBAN STREET		X	X-Express	X
PECORE ST	STUDEWOOD ST	N MAIN ST	C-2-60	UNDIVIDED	60'	2	7,800-8,100	6,500-13,000	C-2-60	MINOR COLLECTOR	URBAN STREET		X	X-Local	X
W 6TH ST	SHEPHERD DR	YALE	T-2-60	UNDIVIDED	60'	2	50-1,000	1,500	N/A	REMOVE STREET from plan	N/A				
W 6TH ST	YALE	HEIGHTS BLVD	T-2-60	UNDIVIDED	50'-60'	2	50-1,000	1,500	C-2-60	MAJOR COLLECTOR	URBAN STREET	X*	X		X
WHITE OAK DR	HEIGHTS BLVD	STUDEWOOD ST	T-2-60	UNDIVIDED	60'	2	5,500-9,000	4,000-13,500	C-2-60	MAJOR COLLECTOR	URBAN STREET	X (Partial)	X		
WHITE OAK DR	STUDEWOOD ST	I-45	T-2-70	UNDIVIDED	70'	2	5,500-9,000	4,000-13,500	C-2-70	MAJOR COLLECTOR	URBAN STREET	X (Partial)	X		
QUITMAN ST	I-45	Fulton	T-2-60	UNDIVIDED	60'	2	5200-8,000	9,500-13,500	C-2-60	MAJOR COLLECTOR	URBAN STREET	X		X-Local	X

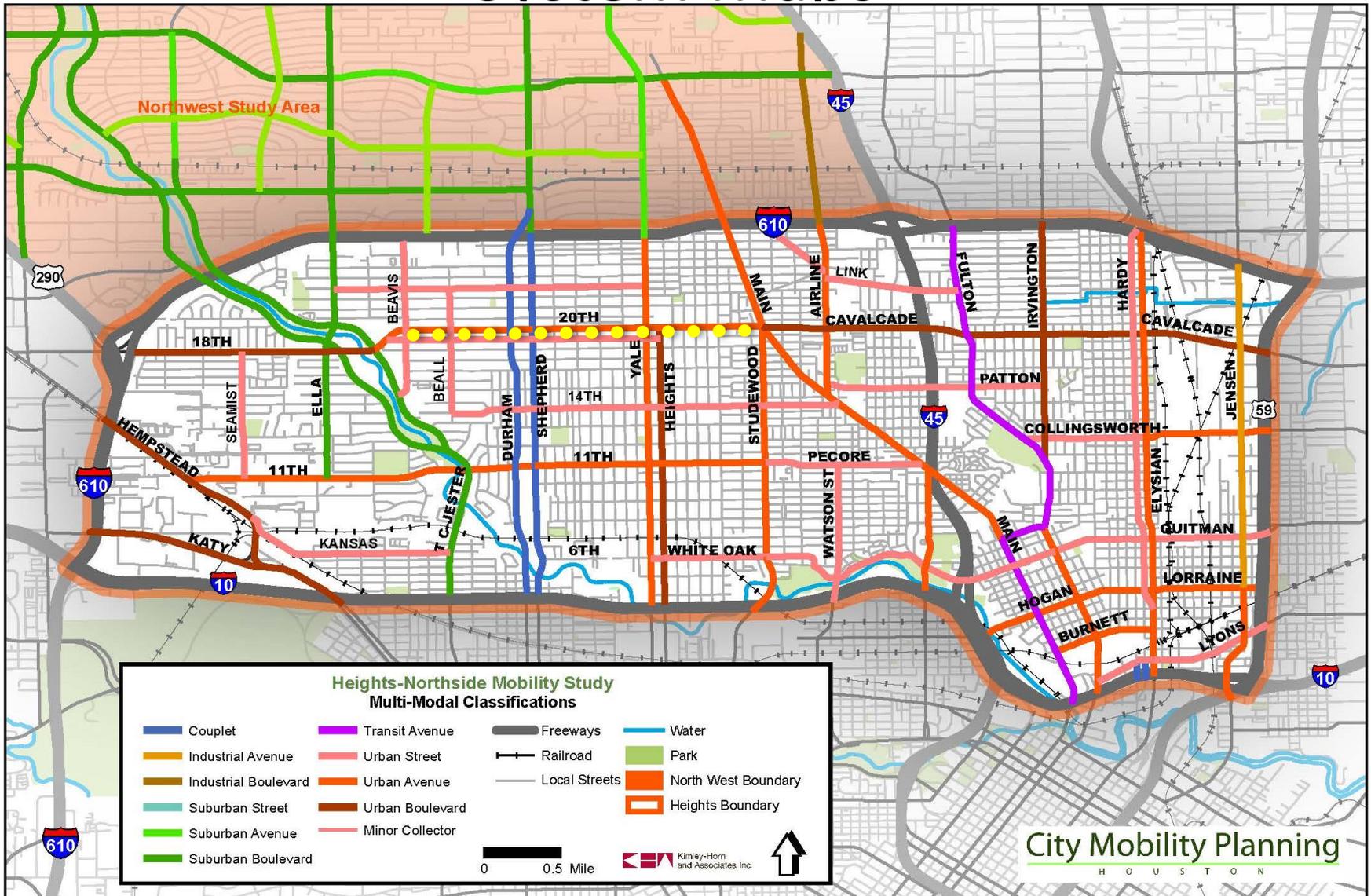
System Maps



Corridor Recommendations

- 20th Street
- Quitman
- Elysian-Hardy

System Maps



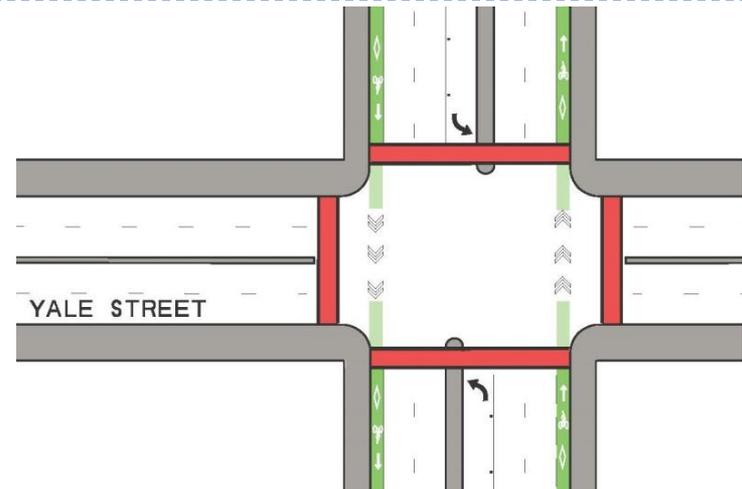
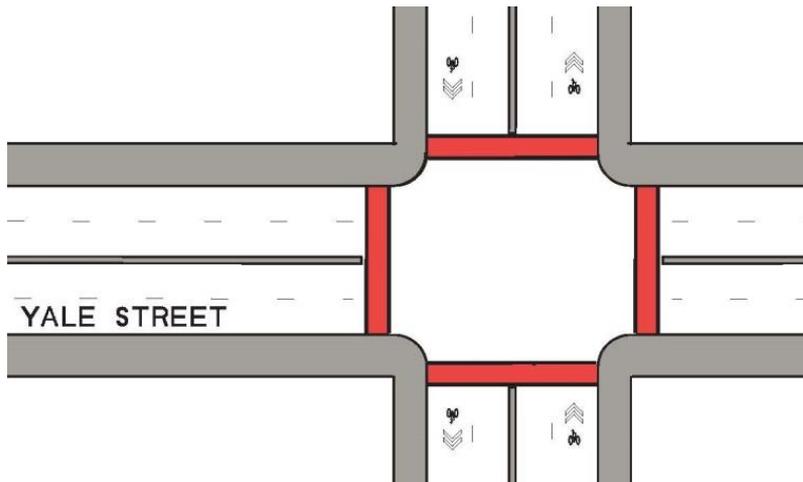
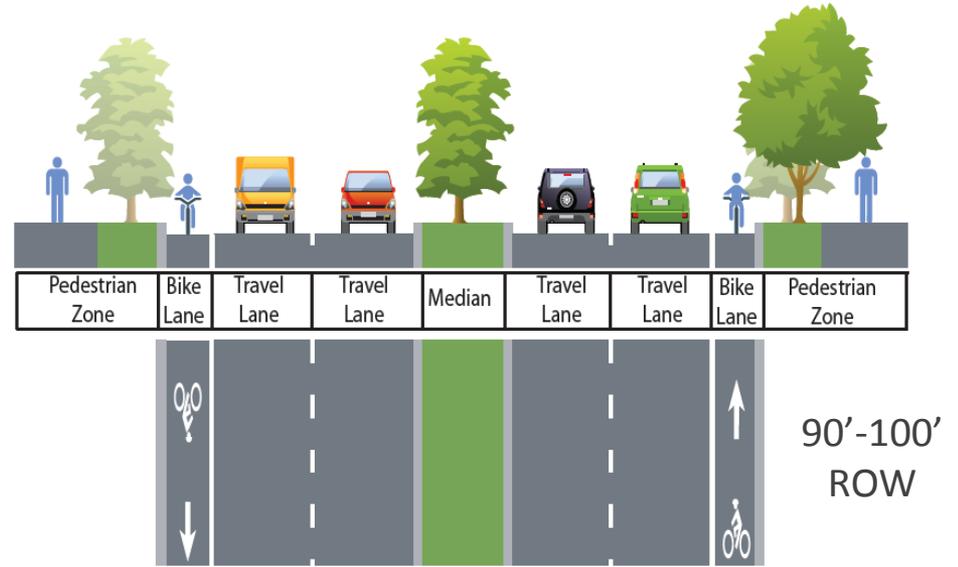
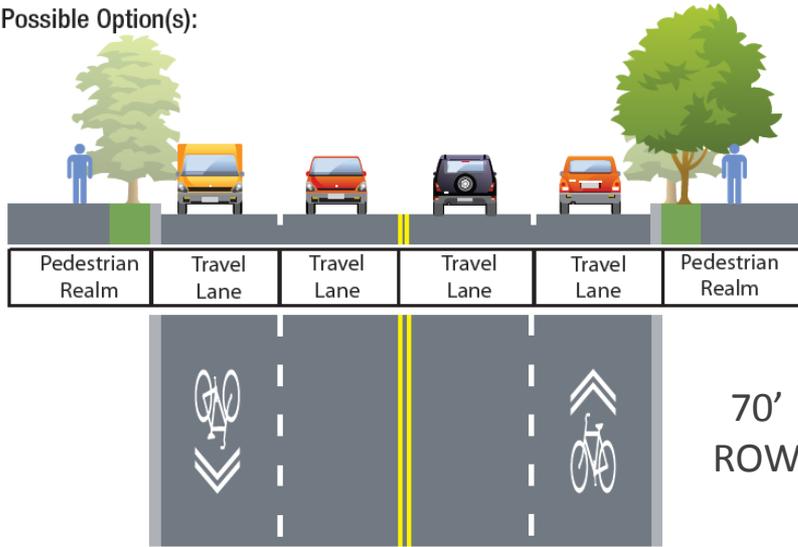
20th Street

Key Factors



EXISTING CONDITIONS:		FUTURE CONDITIONS:	
Existing Lanes	2-4	MTFP Designation	T-4-70
Existing Counts Range	6,600-10,000	Future Volume Range	5,000-22,000
Right-of-way	70'	Proposed MMC	Urban Avenue
Median/CTL/Undivided	Undivided	Median/CTL/Undivided	Undivided

Possible Option(s):



Quitman Street

Key Factors



Existing Condition

Quitman Street runs east/west in the Northside area as a 2-lane undivided corridor. It operates within 50'-60' of Right-of-way with 16' wide lanes. It is identified on the MTFP as **Major Thoroughfare**. Quitman Street intersects with North Main, where METRO has established a "Kiss and Ride" drop-off facility for the newly constructed light-rail. The corridor also provides an underpass to US 59 and T's into Liberty Road just outside of the Study Area.

Identified Needs

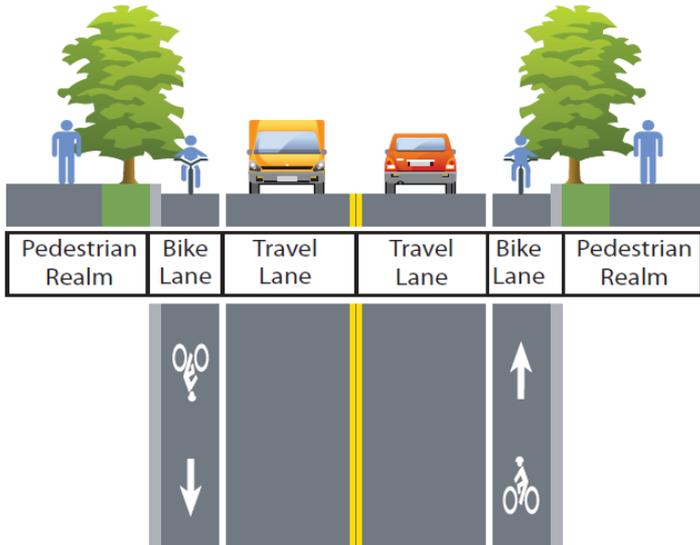
Public input regarding Quitman Street was vast and diverse. Most intersections along the corridor need improvement, especially at Tackleberry. This intersection needs enhanced crosswalk features in front of Jeff Davis High School and Marshall Middle School. Other comments referred to a need to enhance pedestrian facilities along the corridor. This can be done by widening sidewalks and enriching the zone with pedestrian scaled lighting, and cleaning up overgrown foliage. Creating better means for pedestrians (and potentially bicyclist) to travel to the schools and connect to the light-rail at North Main Street is essential to the future development of the corridor. Traffic calming devices and truck regulations along the corridor would have an impact on the flow and safety of the corridor.

Future Vision

Given the future volume ranges it is recommended that this corridor be reclassified on the MTFP as a **Major Collector**. Additionally, focus on improving Quitman Street will revolve around pedestrian facilities. Improving and widening sidewalks to create a safe and comfortable environment for pedestrians is key along this corridor. Landscaping should be added to help slow speeding traffic along the corridor. The corridor is recommended as a sharrow, given the width of the lanes. The sharrow will benefit residents and stakeholders of this corridor traveling to local schools, businesses and the light-rail line. The multi-modal classification for Quitman Street is an **Urban Street**. A local bus facility is recommended for the corridor.

EXISTING CONDITIONS:		FUTURE CONDITIONS:	
Existing Lanes	2	MTFP Designation	C-2-50/60
Existing Counts Range	5,200-8,000	Future Volume Range	9,500-13,500
Right-of-way	50'/60'	Proposed MMC	Urban Street
Median/CTL/Undivided	Undivided	Median/CTL/Undivided	Undivided

Possible Option(s):



Recommendations:

- Downgraded on MTFP to **Major Collector**
 - Increased neighborhood access
 - Decreased speeds
 - Accommodation of bicycle traffic
- **Urban Street**
 - Promote enhanced pedestrian access

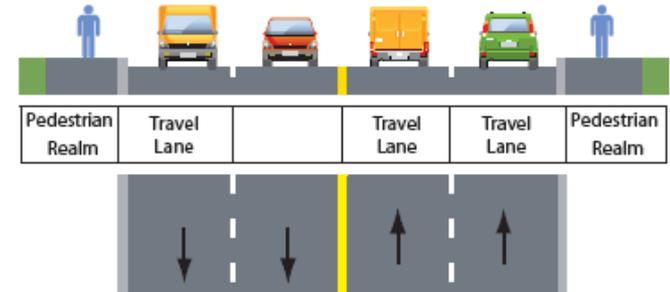
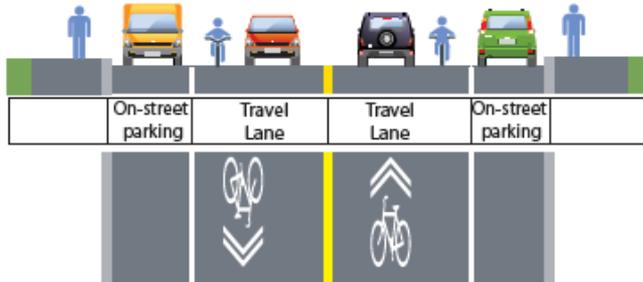
* Recommended Local Bus Route

Hardy - Elysian

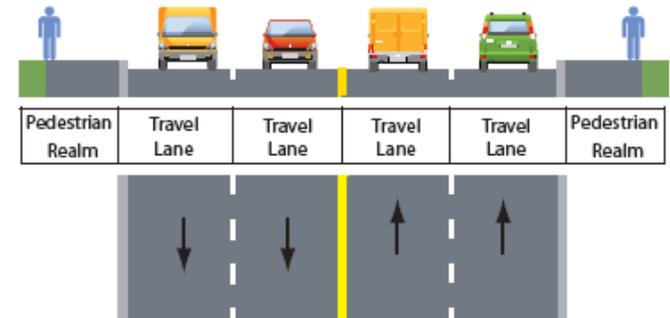
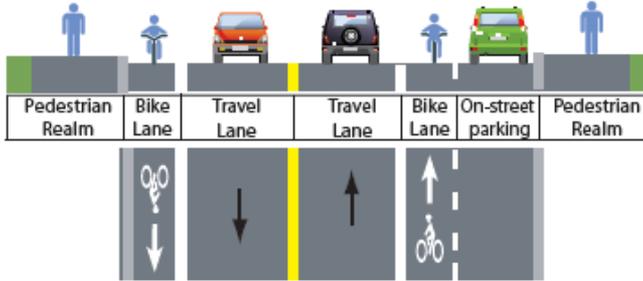
Hardy

Elysian

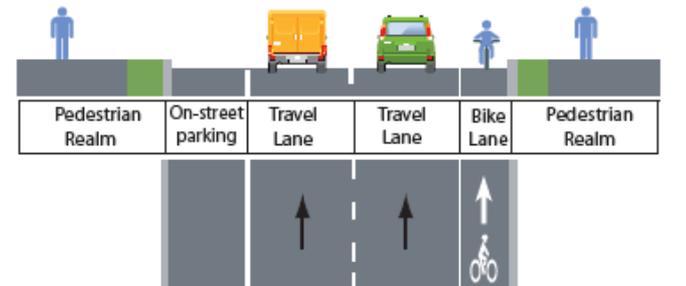
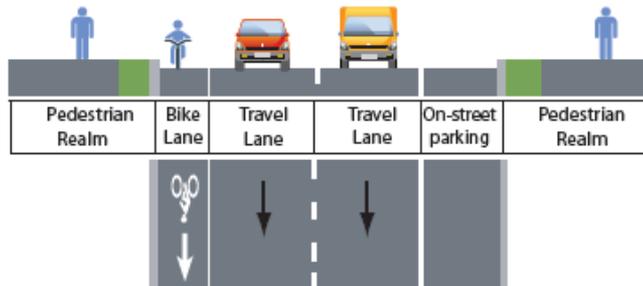
Hardy: 2-Way,
Neighborhood Sharrow
&
Elysian: 2-Way,
High Capacity Corridor



Hardy: 2-Way,
Neighborhood Bike Lane
&
Elysian: 2-Way,
High Capacity Corridor



1-Way, Couplet
with Bike Lane



Next Steps

- Open House
 - Corridor Sheets are provided for Comment
 - Comment Cards provided at each table
 - City Staff & Consultants on hand for questions
- Public Comment Period (**Friday May 2, 2014**)
 - 1 month review
 - Read Report & Recommendations
 - Tell Us what you think!

Take A Flier & Comment!

Heights-Northside.org

- Submit Comments
- Interactive Recommendations Map
- Draft Report
- Project Email: mobility.planning@houstontx.gov