

PLANNING COMMISSION WORKSHOP

Presented by:

City of Houston

Planning and Development Department &
Public Works and Engineering Department

December 13, 2012



Workshop Topics

City Mobility Plan, Phase 1

City Mobility Plan, Phase 2

- Inner West Loop Sub-Area Study

Future Applications



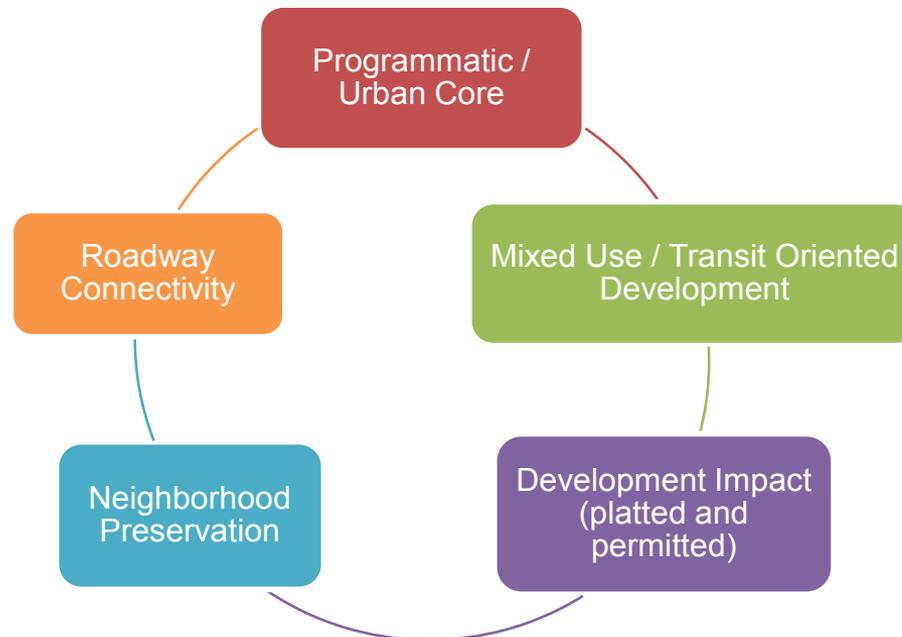
CITY MOBILITY PLAN

PHASE 1



City Mobility Plan, Phase 1

- 2007 - 2009
- Regional Traffic Analysis comparing 2008 and 2035 demographics and context
- Other factors considered



City Mobility Plan, Phase 1

Outcomes

- New Travel Demand Model (CUBE) for Region (shared by City and H-GAC)
- Proposal for new street classification – **collector**
- Multimodal street classification compared to existing IDM street classifications from PWE
 - Existing Street Types
- Multimodal street sub-classifications by street ROW cross sections and context
- Refine and finalize
 - Functional street classification system
 - Transportation improvements at corridor / area level

Cross Sections

Boulevard

Avenue

Couplet

Street

Local

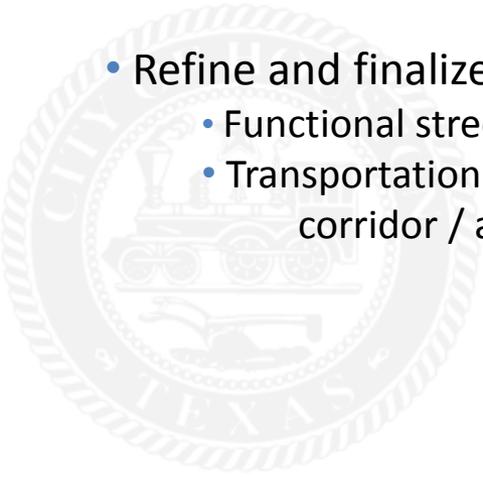
Context

Urban

Suburban

Transit

Industrial



City Mobility, Plan Phase 1

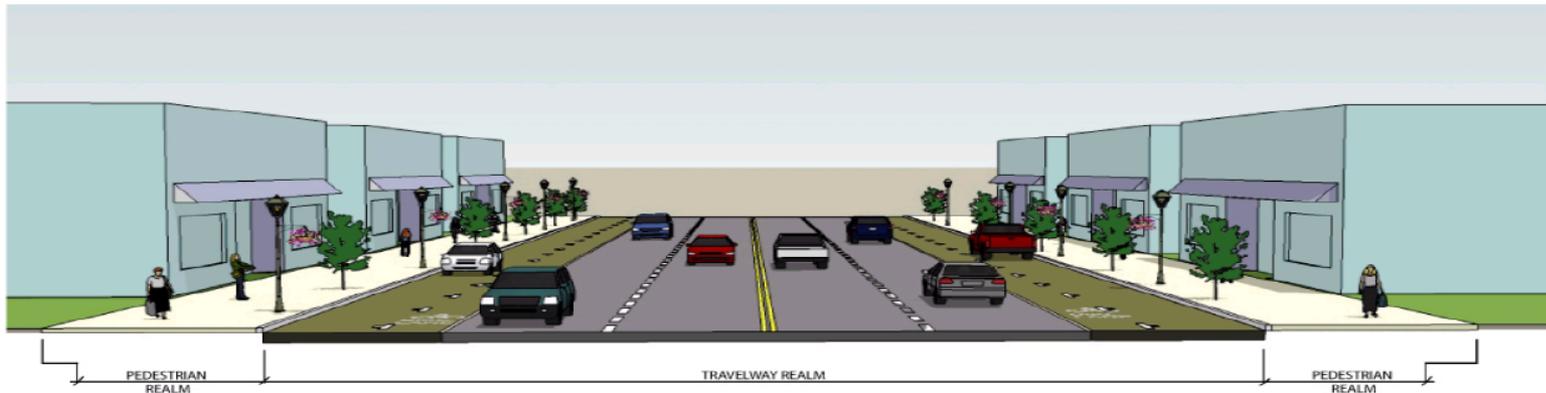
Infrastructure Design Manual, Appendix 2, Chapter 10

CITY MOBILITY PLAN (CMP)					MAJOR THOROUGHFARE AND FREEWAY PLAN (MTFP)				
MULTI MODAL CLASSIFICATION					EXISTING CLASSIFICATION				
Proposed ROW	Number of Lanes	Avg Daily Traffic Vol (vpd)	Design Speed (mph)	PRINCIPAL THOROUGHFARE	THOROUGHFARE	MAJOR COLLECTOR	COLLECTOR	LOCAL STREET	
				>5 miles >30,000 vpd Design Speed 45 mph ROW: 60' - 400'	>3 miles >20,000 vpd Design Speed 45 mph ROW: 50' - 210'	1 - 2 miles >5,000 vpd Design Speed 45 mph ROW: 50' - 150'	1 - 2 miles >5,000 vpd Design Speed 45 mph ROW: 50' - 150'	<1 mile <5,000 vpd Design Speed 35 mph Min 50'	
BOULEVARD									
Urban	100'-140'	4-8	15,000-50,000	45					
Suburban	100'-120'	2-6	500-50,000	45					
Transit	120'	4-6	1,500-30,000	45					
Industrial	100'-120'	4-6	15,000-50,000	45					
AVENUE									
Urban	80'-100'	2-4	1,500-30,000	45					
Suburban	80'-100'	2-4	1,000-20,000	45					
Transit	100'	2	1,500-15,000	45					
Industrial	80'-100'	3-5	5,000-35,000	45					
COUPLET									
	60'-100'	2-5	1,000-25,000	45					
STREET									
Urban	60'	2	1,000-10,000	35					
Suburban	60'	2	500-5,000	35					
LOCAL STREET									
Residential Main	60'-70'	2	≥1,500	35					
Residential High Density	55'-60'	2	350-750	35					
Residential Std Density	50'-65'	1+	250-350	35					

 Indicates Shared Classification

City Mobility, Plan Phase 1

Infrastructure Design Manual, Appendix 2, Chapter 10



URBAN AVENUE DESIGNATION							
Minimum R.O.W. (feet)	PEDESTRIAN REALM		TRAVELWAY REALM				ADT (vpd)
	Sidewalk (feet)	Tree Well or Swale (feet)	On-Street Parking (feet)	Bike Lane (feet)	Median Width (feet)	Lane Widths (feet)	
80	20 x 2 = 40	TW	8 x 2 = 16	N/A	N/A	2 x 12 = 24	1,500-15,000
	10 x 2 = 20	TW	18 x 2 = 36 *	N/A	N/A		
	15 x 2 = 30	TW	8 x 2 = 16	5 x 2 = 10	N/A		
	10 x 2 = 20	TW	18 x 2 = 36 *	N/A	N/A		
	22 x 2 = 44	TW	N/A	6 x 2 = 12	N/A	2 x 12 + 1 x 14 (CLTL)* = 38	5,000-20,000
	21 x 2 = 42	TW	N/A	N/A	N/A		
	13 x 2 = 26	TW	8 x 2 = 16	N/A	N/A		
	8 x 2 = 16	TW	8 x 2 = 16	5 x 2 = 10	N/A		
	15 x 2 = 30	TW	N/A	6 x 2 = 12	N/A		
	16 x 2 = 32	TW	N/A	N/A	N/A		
100	8 x 2 = 16	TW	8 x 2 = 16	N/A	N/A	4 x 12 = 48	10,000-30,000
	10 x 2 = 20	TW	N/A	6 x 2 = 12	N/A	4 x 12 = 48	
	13 x 2 = 26	TW	8 x 2 = 16	5 x 2 = 10	N/A	4 x 12 = 48	
100	20 x 2 = 40	TW	N/A	6 x 2 = 12	N/A	4 x 12 = 48	10,000-30,000

* Angle Parking

CITY MOBILITY PLAN

PHASE 2

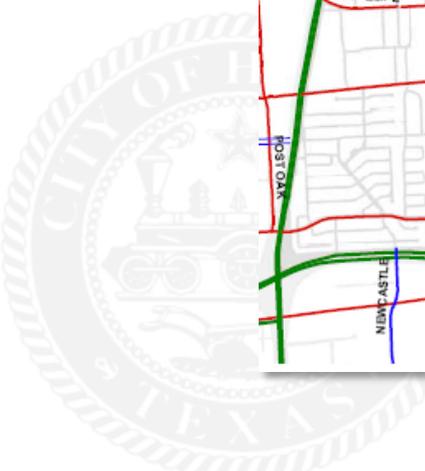
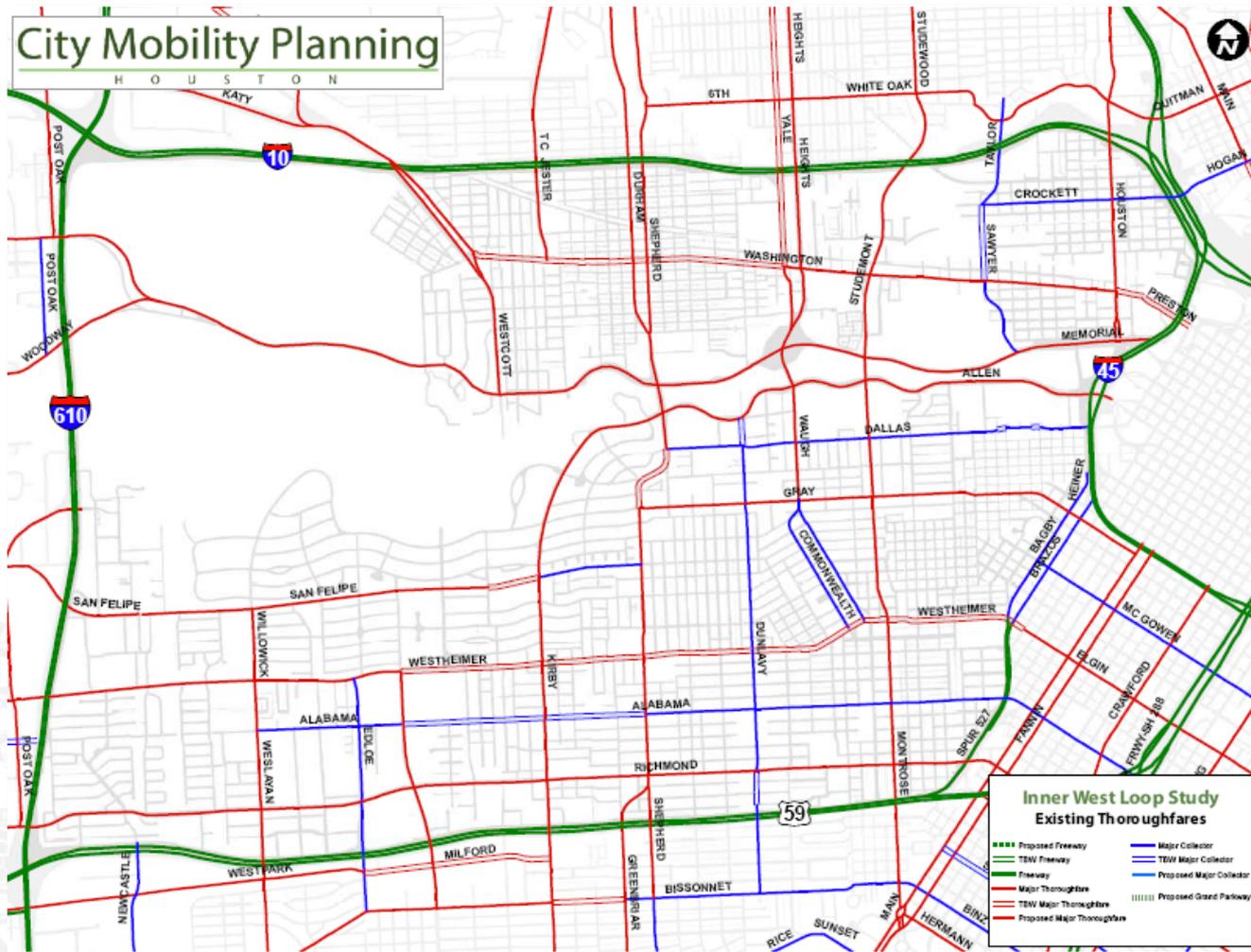


City Mobility Plan, Phase 2

- Utilizing Sub-area studies
 - Updated inventory of street assets within City
 - Determination of gaps within roadway network
 - New analysis of Travel Demand Modeling
 - Public Participation
 - goals, objectives and recommendations
 - Study recommendations can be used by Rebuild Houston and amendments to MTFP



Inner West Loop Study



Inner West Loop Study



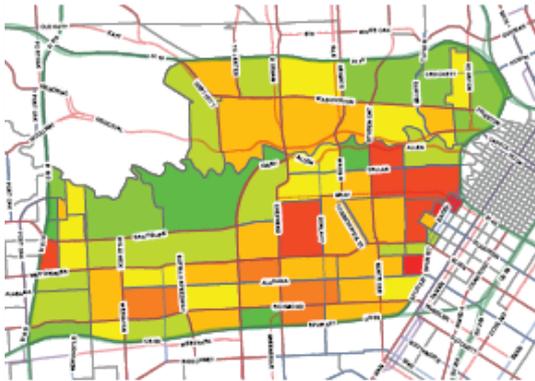
- Travel Demand Forecasting
 - Increased transit availability
 - Planning and Operation Solutions
 - Combination of transit and interchange reconfiguration
- Define Future Mobility Needs
 - Inventory major thoroughfares, collectors and local streets
 - Travel demand forecasting refinement
 - Future major intersections analysis and development
 - Mitigating future conditions
 - Mitigating long-term AM and PM peaks



Inner West Loop Study

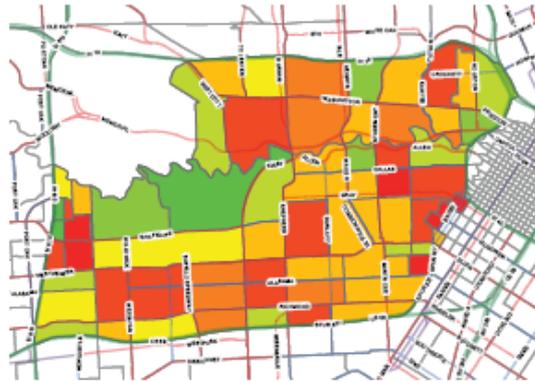


Population Density by TAZ



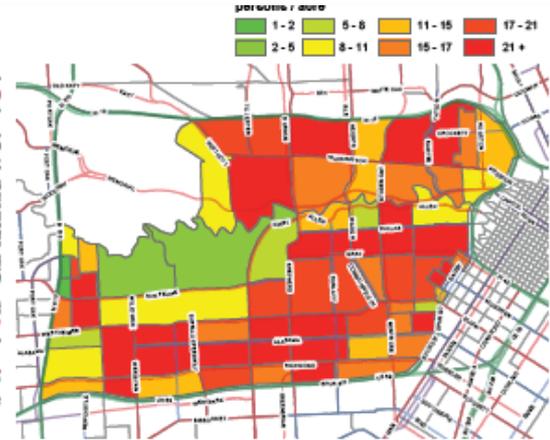
Average 9.8 persons/acre (without Memorial Park)

2010



Average 12.7 persons/acre (without Memorial Park)

2018



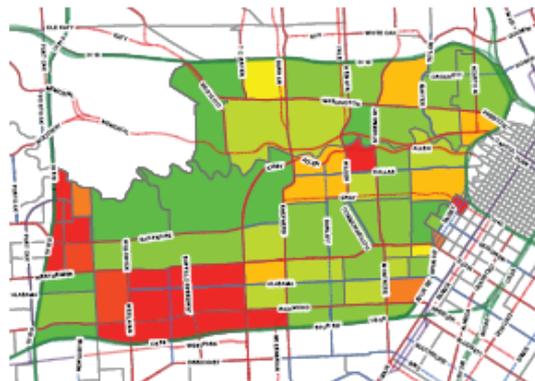
Average 16.9 persons/acre (without Memorial Park)

2035

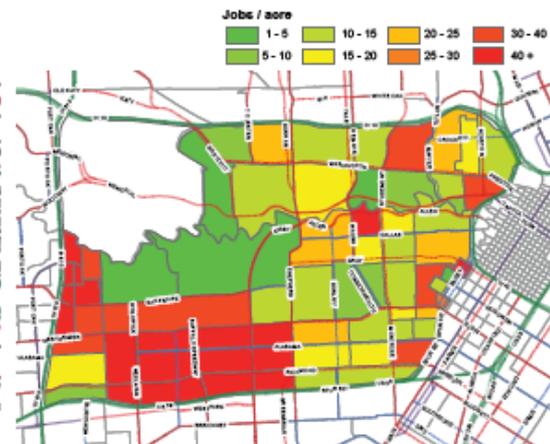
Employment Density by TAZ



Average 15.1 jobs/acre (without Memorial Park)



Average 20.7 jobs/acre (without Memorial Park)



Average 33.7 jobs/acre (without Memorial Park)

Inner West Loop Study

Outcomes

- Addition of a **collector** street classification
- Add alternative design standards for IDM Ch. 10
- Identification of poorly operating future intersections and challenges
- Recognize multimodal corridors across City



FUTURE



Inner West Loop Study

Waugh / Commonwealth from West Gray to Westheimer



Existing Conditions

Waugh and Commonwealth function as an **Urban Couplet** that serves primarily to access surrounding residential uses. A majority of both corridors allow on street parking along one side of the street and a bicycle lane along the other. The Commonwealth corridor has continuous sidewalks throughout the entire segment, while there are a few gaps in the Waugh corridor's sidewalk network. The couplet is appropriately designated as a **Major Collector** through this segment given the connections to the arterial system and the amount of local streets that access the facilities for trips to and from the surrounding housing.

Identified Needs

This section of Waugh and Commonwealth could benefit from a better definition of the pedestrian realm, including the completion of the sidewalk gaps along Waugh. Continuing to provide on-street parking and a bicycle facility that is on-street is desired for both of these corridors. The bike facility provides a greater connection into a larger regional network through Waugh to the north. There are several instances where the sidewalk network would benefit from the implantation of ADA compliant ramps, and as improvements are made to the sidewalks these projects will need to be programmed.

Future Vision

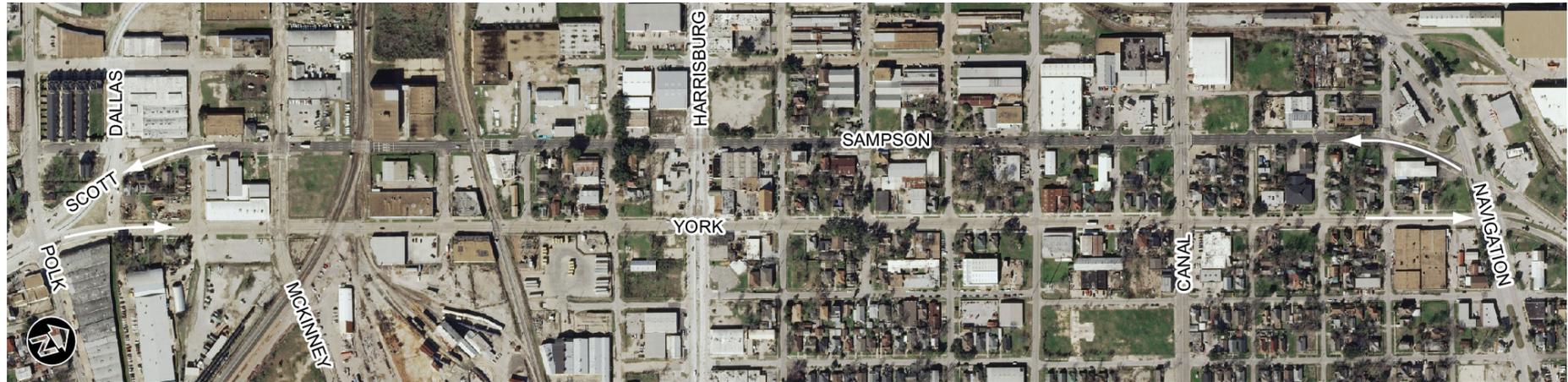
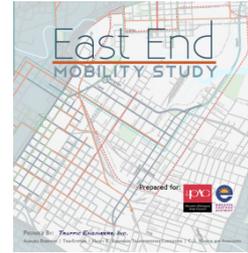
The future corridors are very similar in nature to the existing facilities. Given the surrounding residential uses, and the character of the current roadways, these facilities are not likely to change very much in the future. The couplet will continue to act as a Major Collector but designation and an **Urban Couplet** is appropriate given the Multi-Modal Classification System.

Key Factors



Multi-Modal Classification (MMC):

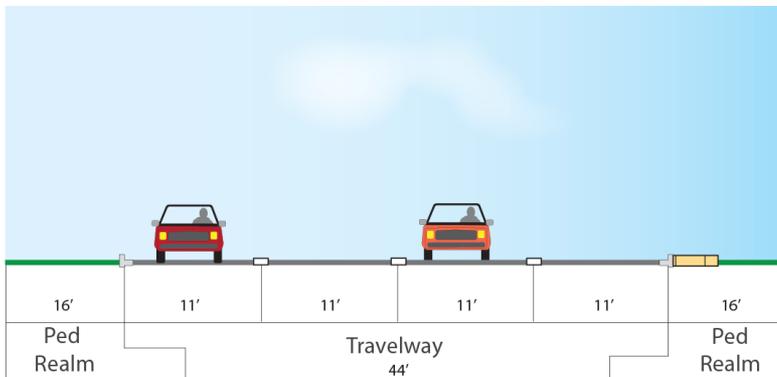
East End Mobility Study Example: York/Sampson



T-4-80

Major Thoroughfare - Four Lanes - 80' ROW

80' R.O.W

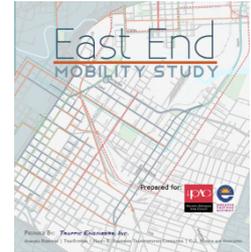


EXISTING CONDITION

- 1-way Couplet (Polk to Navigation)
- 2011 MTFP Classification
 - T-4-80 (MTFP)
 - 4 Lanes
 - Major Thoroughfare

Multi-Modal Classification (MMC):

East End Mobility Study Example: York/Sampson



East End Mobility Study Findings:

- Couplet currently provides 8 lanes of traffic (4 on Sampson & 4 on York)
- Capacity for future and projected along two corridors indicates that a total of 4 – 6 lanes across these two roadways is sufficient.
 - York Street: 8,000 – 12,000 ADT
 - Sampson Street: 8,000 – 13,000 ADT
- Revise Multi-modal transportation choices based on:
 - Public Input: Desire for more transportation options
 - Context: Urban
 - Use: Pedestrian, Transit, Bicycle, Freight & Auto

MMC ELEMENTS

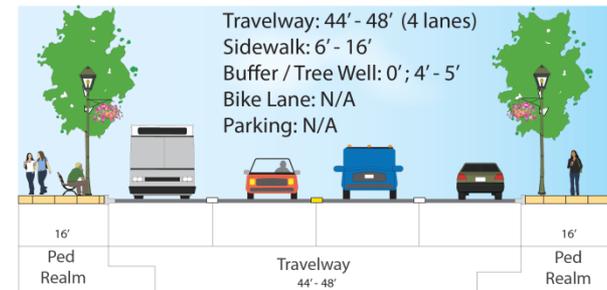
York	Urban
Context	Urban
Pedestrian	●
Bikeway	
Buffer	
Freight	●
Parking	
Transit	●

PROPOSED MMC

York

4-Lane, 2-way Urban Avenue (Major Thoroughfare)

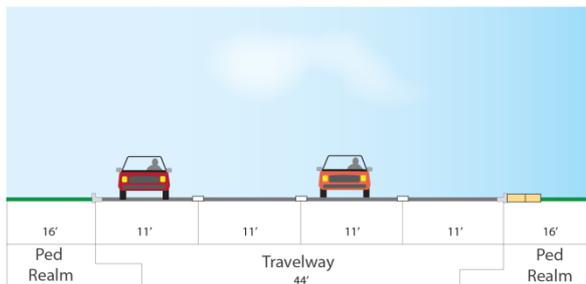
80' R.O.W



T-4-80

Major Thoroughfare - Four Lanes - 80' ROW

80' R.O.W



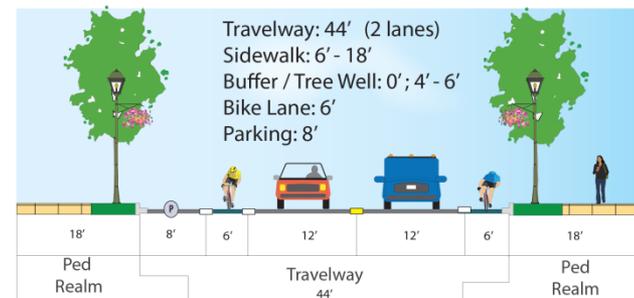
Sampson

Sampson	Urban
Context	Urban
Pedestrian	●
Bikeway	●
Buffer	●
Freight	●
Parking	●
Transit	●

Sampson

2-Lane, 2-way Urban Street (Major Collector)

80' R.O.W



QUESTIONS?



PLANNING &
DEVELOPMENT
DEPARTMENT

