

# SH 249 Access Management Study

## Public Meeting No. 1



NOVEMBER 13, 2014



**CDM  
Smith**

IN ASSOCIATION WITH

**HNTB**  
**The Lentz Group**  
**CJ Hensch**



# Meeting Agenda

## Project Overview

- Study Purpose
- Access Management

## Existing Conditions

- Land Use Characteristics
- Transportation Characteristics
- Corridor Needs and Issues

## Next Steps



# Study Participants

- **Steering Committee**

- H-GAC
- TxDOT
- Harris County
- City of Houston
- METRO
- Harris County Toll Road Authority
- Northwest HFD
- Houston Intercontinental Chamber of Commerce
- Aldine ISD
- Klein ISD
- Near Northwest Management District

- **Stakeholders**

- **Consultants**

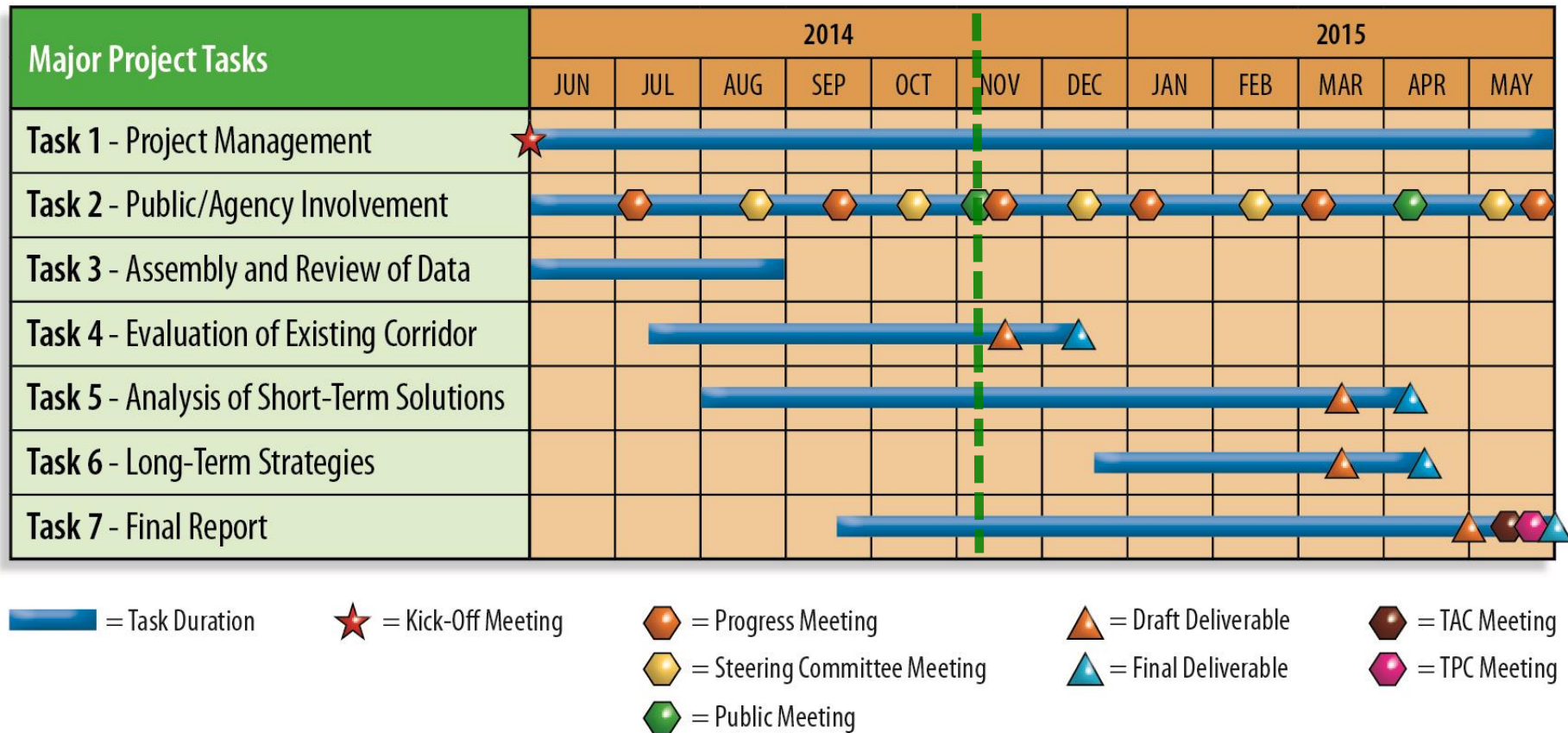
- CDM Smith
- HNTB
- The Lentz Group
- CJ Hensch & Associates

- **General Public**





# Project Schedule



# Public Meeting No. 1

**Open House Format**

**Comment Form/Handout**

**1" = 100' SH 249 Roll Plot**

**Please give us your input on  
the comment form and on  
the roll plot.**



# Project Purpose

## Identify Short-, Medium-, and Long-Range Transportation Improvements to Enhance:

- Traffic Flow
- Safety
- Quality of Life
- Regional Connectivity



# Potential Study Goals

Improve mobility and safety for all transportation modes

Develop a uniform access management strategy for the corridor

Identify low-cost/implementable short-term solutions

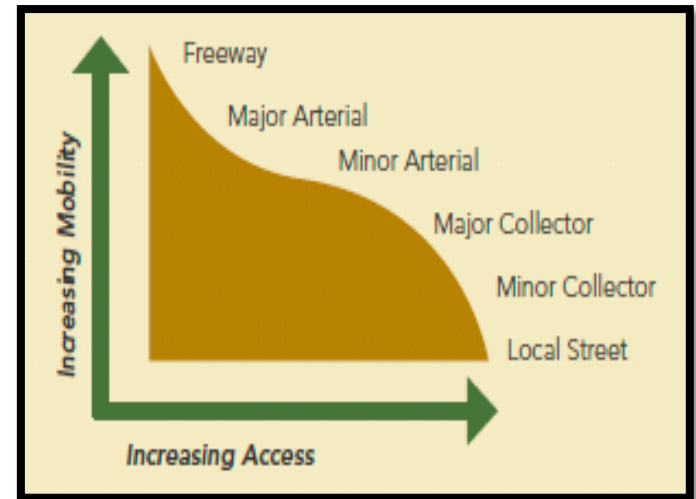
Develop innovative long-term transportation strategies to enhance corridor and regional connectivity



# What is Access Management?

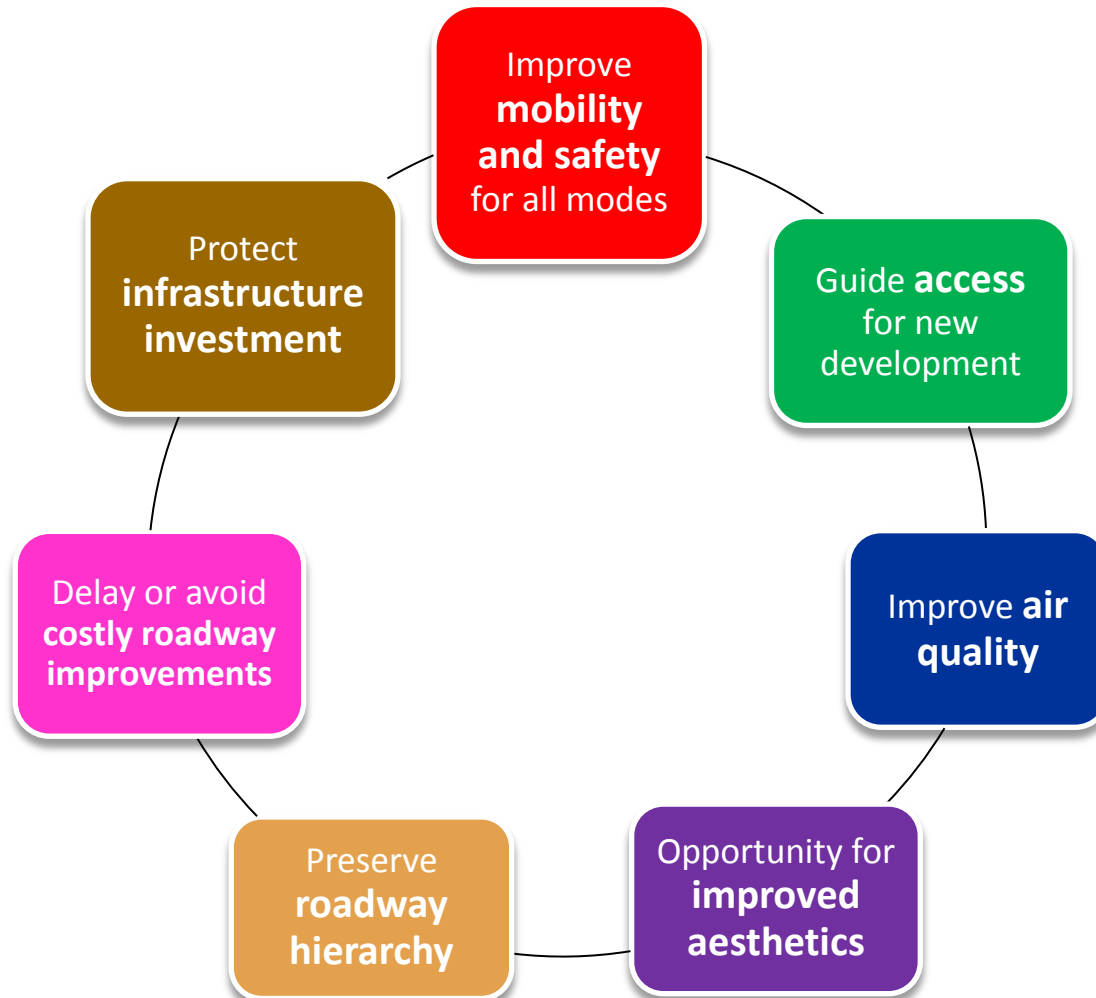
## Transportation strategy to:

- Control access between roadways and land uses
- Help shape corridor development
- Improve safety for all road users
- Maximize roadway capacity

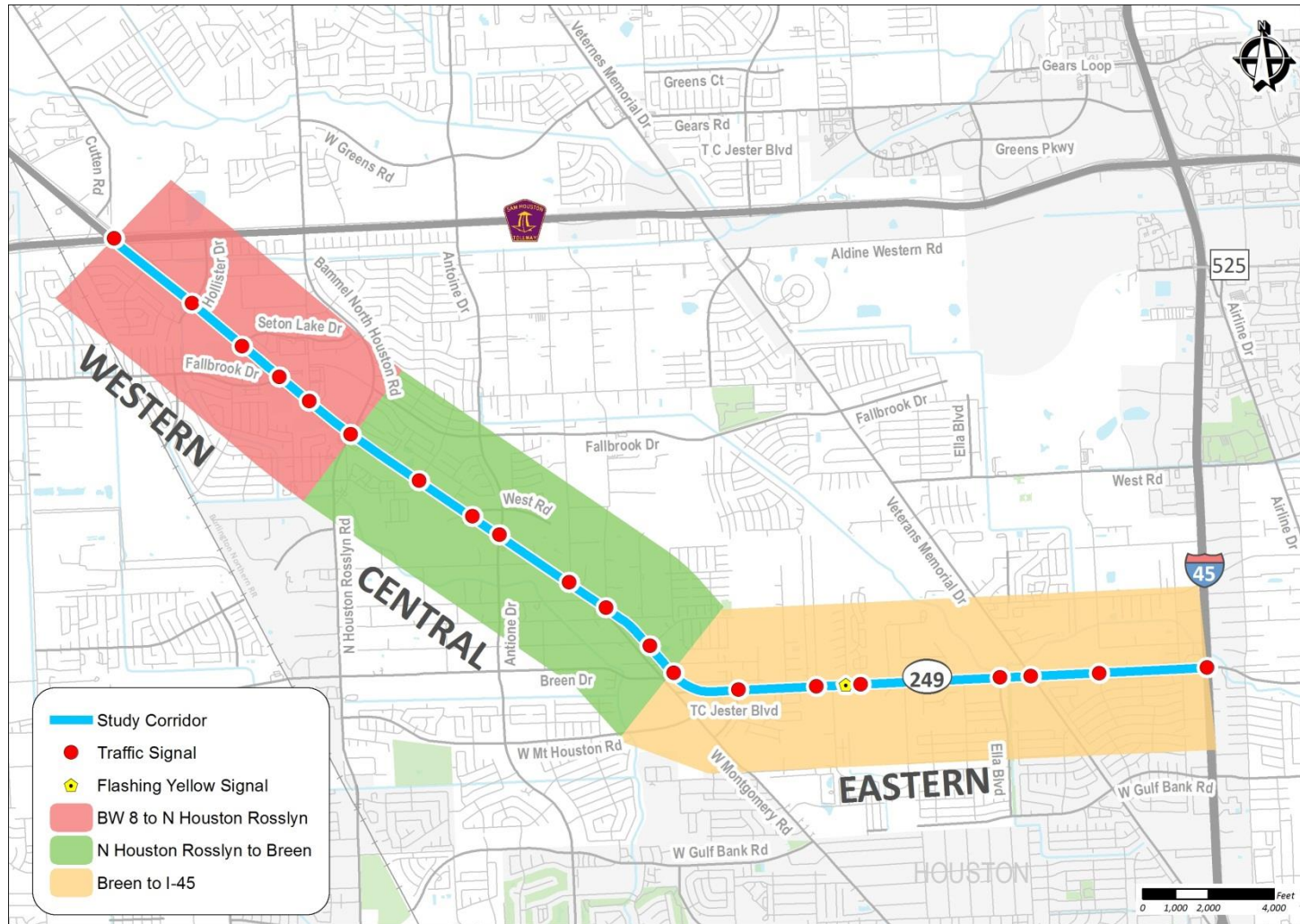




# Access Management Benefits

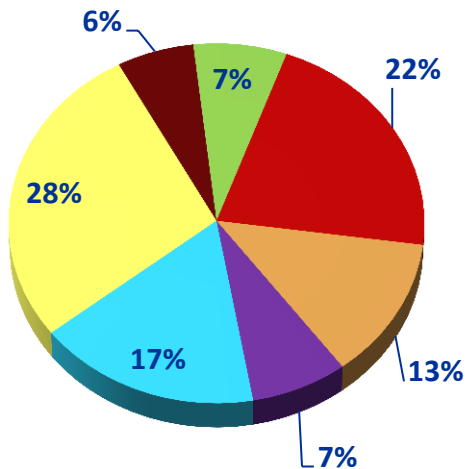


# Study Corridor



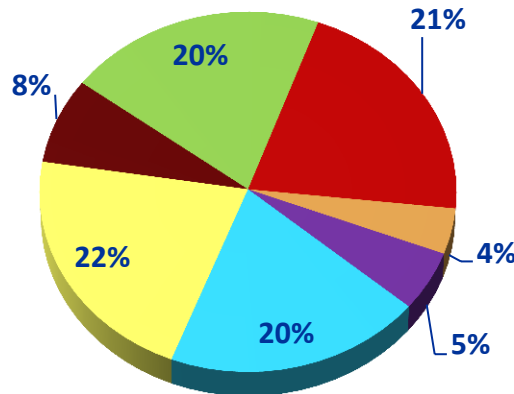
# Land Use By Section

## Western Section



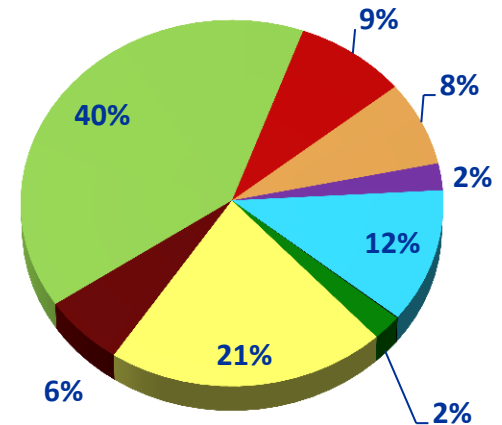
Mixed-Use/Developed

## Central Section



Mixed-Use/Vacant

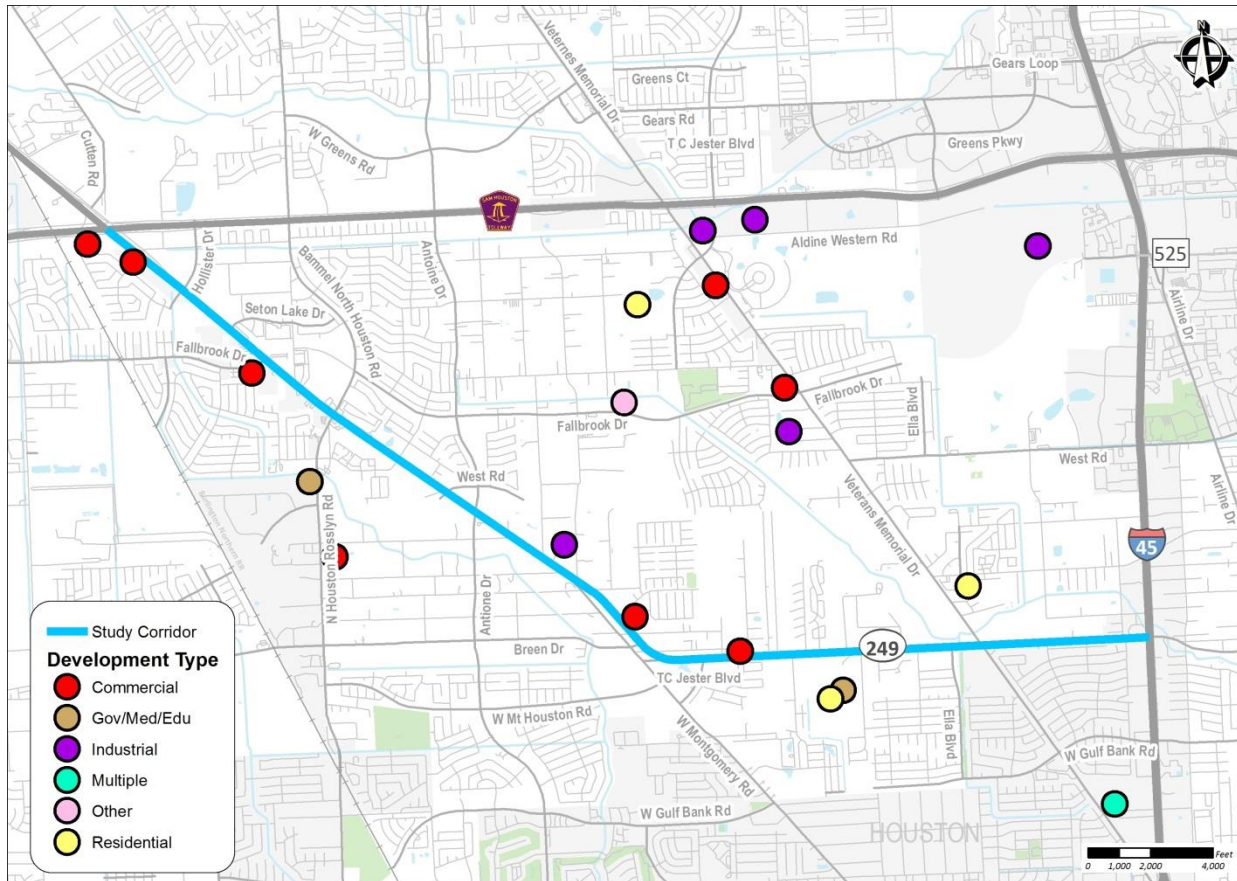
## Eastern Section



Vacant/Residential

■ Commercial   
 ■ Gov/Med/Edu   
 ■ Industrial   
 ■ Multiple   
 ■ Other   
 ■ Residential  
■ Undevelopable   
■ Park / Open Spaces   
■ Vacant Developable (includes Farming)

# Major Planned Developments



## Commercial – 68 Acres (10)

- Commercial Reserves at Blue Creek
- Four Seasons Business Park
- Tex Mex One Property

## Gov/Med/Educ – 61 Acres (4)

- Aldine ISD Drew Academy
- Pine Valley Development

## Industrial – 998 Acres (4)

- Pinto Business Park
- Future Pipe Industries

## Multiple – 11 Acres (1)

- DPS North

## Residential – 48 Acres (4)

- Blue Bell Place
- Maple Ridge Place

## Other – 25 Acres (1)


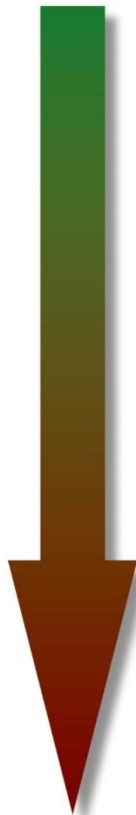


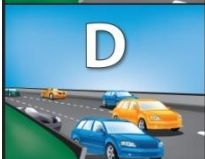


- Fallbrook RV Resort



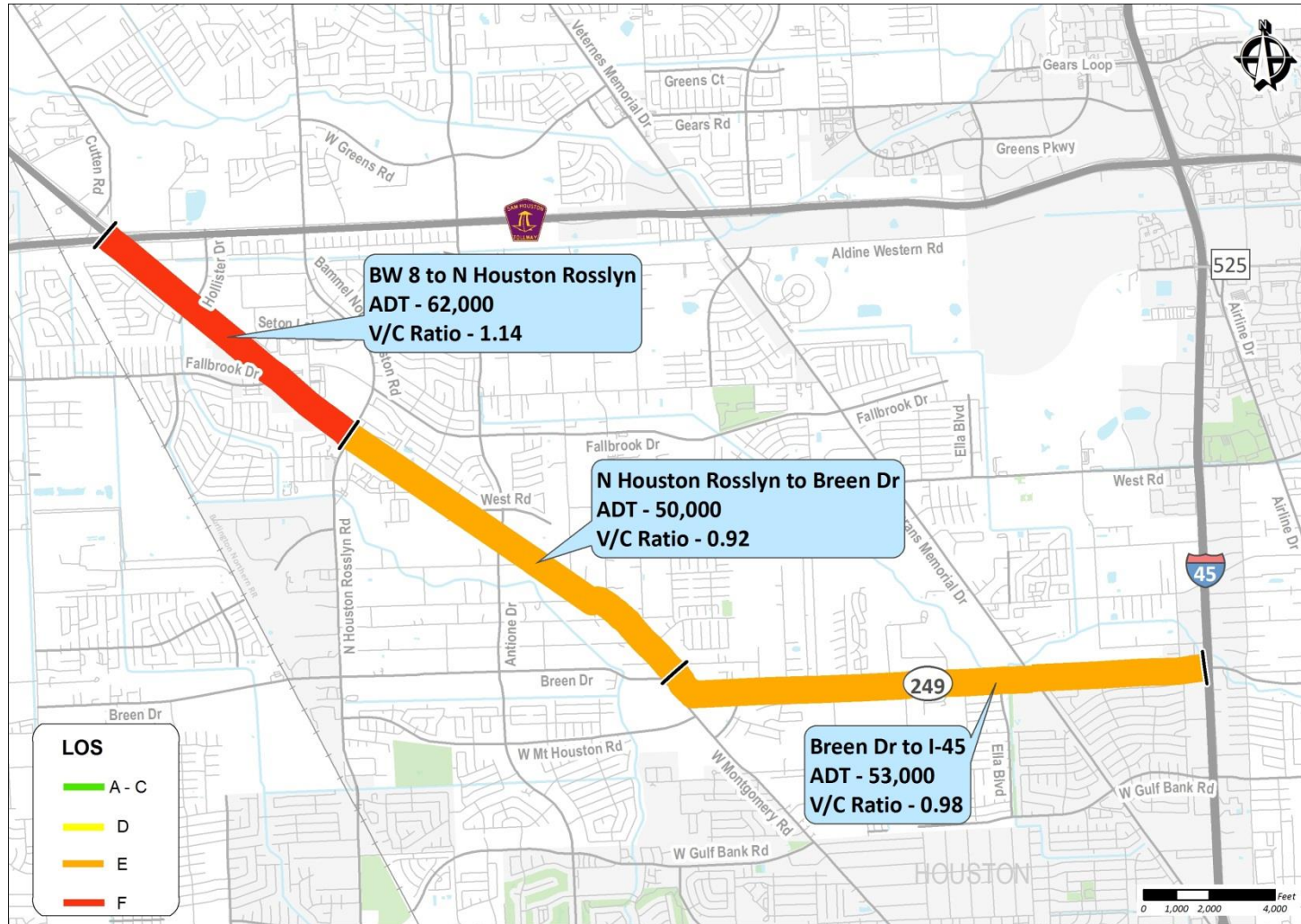
# Roadway Characteristics

Characteristics	Western Section BW 8 to N Houston Rosslyn Rd	Central Section N Houston Rosslyn Rd to Breen Dr	Eastern Section Breen Dr to I-45
Length (miles)	1.8	2.3	3.1
Number of Travel Lanes	6	6	6
Right-of-Way (feet)	180' – 290'	180'	130' – 180'
Speed Limit (mph)	50	50	45-50
Daily Traffic Volumes	62,000	50,000	53,000
Truck Percent	12%	12%	6%
Signalized Intersections	5	7	8
Unsignalized Intersections	2	5	9
Total Driveways	77	88	81
Driveway Density per Mile	44	38	26

# Level-of-Service

	<p><b>Excellent</b></p> <p>Very low vehicle delays, free traffic flow, signal progression extremely favorable, most vehicles arrive during given signal phase.</p>	<p><i>Free Flow</i></p>  <p><i>Severe Congestion</i></p>
	<p><b>Good</b></p> <p>Good traffic flow, good signal progression, more vehicles stop and experience higher delays than for LOS A.</p>	
	<p><b>Average</b></p> <p>Stable traffic flow, fair signal progression, significant number of vehicles stop at signals.</p>	
	<p><b>Acceptable</b></p> <p>Noticeable traffic congestion, longer delays and unfavorable signal progression, many vehicles stop at signals.</p>	
	<p><b>Congested</b></p> <p>Unstable traffic flow, poor signal progression, significant congestion, traffic near roadway capacity, frequent traffic signal cycle failures.</p>	
	<p><b>Severely Congested</b></p> <p>Unacceptable delay, extremely unstable flow, heavy congestion, traffic exceeds roadway capacity, stop-and-go conditions.</p>	

# Peak Period Level-of-Service



The map displays the proposed 29th Street corridor in Houston, Texas. The study corridor is highlighted in blue. The peak period Level of Service (LOS) is indicated by colored circles at various intersections along the corridor. The legend shows the following color coding for LOS:

- Green: A-C
- Yellow: D
- Orange: E
- Red: F

The map also shows major roads, including Veterans Memorial Dr, Greens Pkwy, Aldine Western Rd, West Rd, and W Gulf Bank Rd. The corridor starts near the intersection of Veterans Memorial Dr and Greens Pkwy and extends eastward towards W Gulf Bank Rd. The map includes a scale bar (0 to 4,000 feet) and a north arrow.



# Signalized Intersection Spacing

Study Sections	Distance Between Signalized Intersections
<b>Western Section</b> Beltway 8 to N Houston Rosslyn Road	1,200 feet to 3,100 feet
<b>Central Section</b> N Houston Rosslyn Road to Breen Drive	1,100 feet to 2,600 feet
<b>Eastern Section</b> Breen Drive to I-45	500 feet to 4,200 feet

*Note: 2,640 feet is the desirable spacing between signalized intersections.*

# Driveways/Sidewalks

Study Sections	Length (mi)	Eastbound Driveways	Percent Sidewalks	Westbound Driveways	Percent Sidewalks	Driveway Density
<b>Western Section</b> Beltway 8 to N Houston Rosslyn Road	1.8	55	0.3%	38	3%	52
<b>Central Section</b> N Houston Rosslyn Road to Breen Drive	2.3	50	1%	55	0.1%	46
<b>Eastern Section</b> Breen Drive to I-45	3.1	64	7%	74	0.7%	45

*Note: Desirable spacing is 22 driveways per mile.*

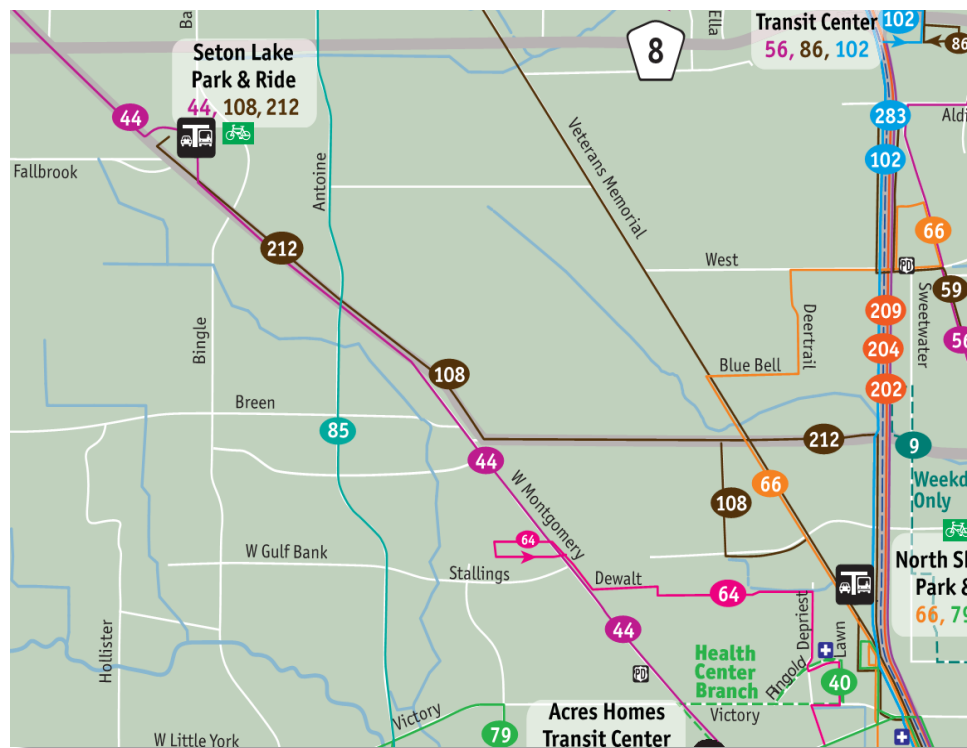
# Transit Characteristics

## Bus Routes – 6

- Route 44 – Acres Homes Limited
- Route 64 – Lincoln City Circulator
- Route 66 – Yale
- Route 85 – Antoine Limited
- Route 108 – Veterans Memorial
- Route 212 – Seton Lake

## Bus Stops – 32

- Western Section – 15
- Central Section – 14
- Eastern Section - 3



Transit Center / Park & Ride	Routes	Boardings	Alightings
Seton Lake Park & Ride	44, 108, 212	762	731
Acres Homes Transit Center	40, 44, 64, 79	408	325
North Shepherd Park & Ride	66, 79, 108	611	569

# Bus Stop Characteristics

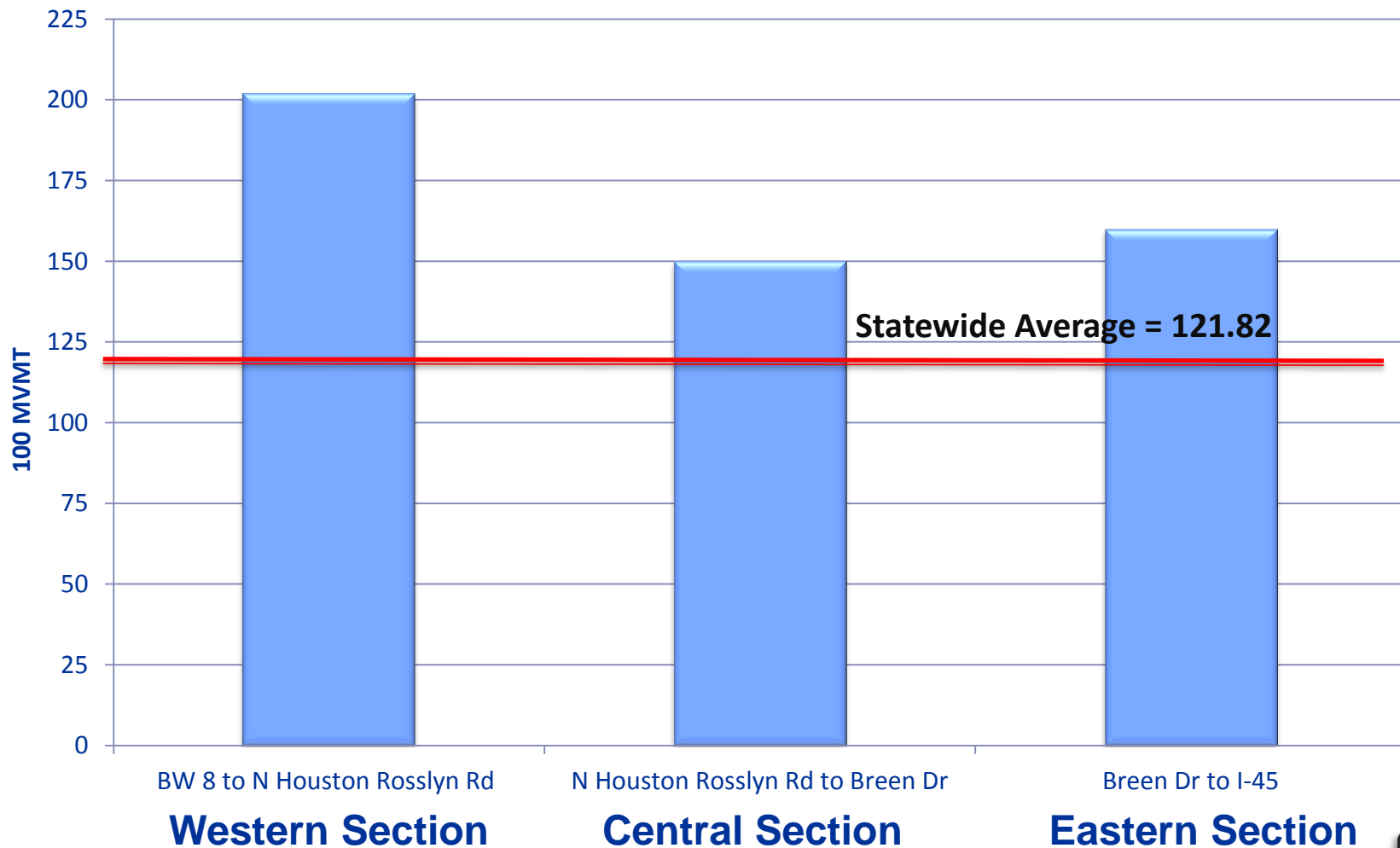




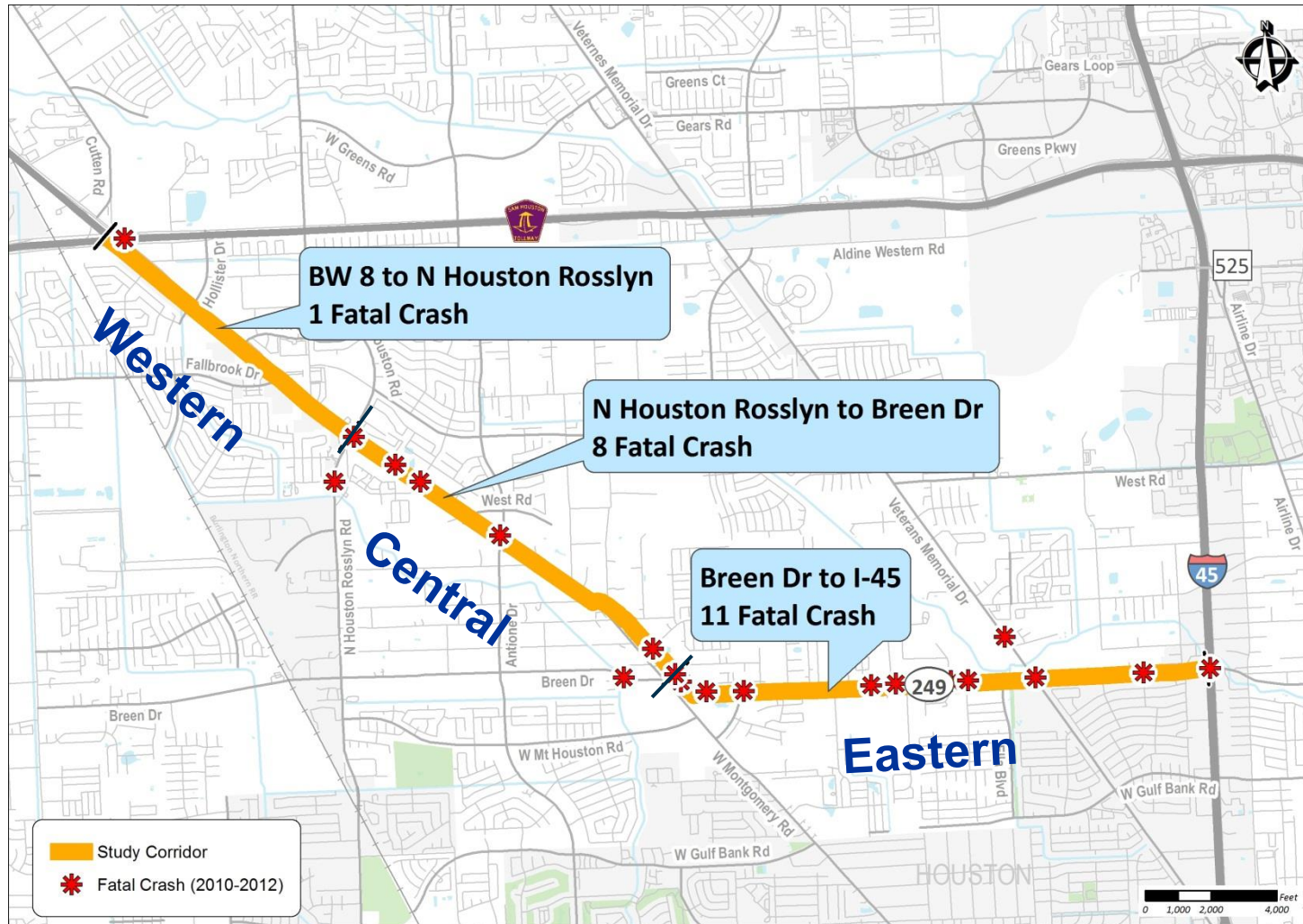
# Drainage Inventory

Section	Eastbound		Westbound	
	Open Ditch (ft)	Curb and Gutter (ft)	Open Ditch (ft)	Curb and Gutter (ft)
<b>Western Section</b> Beltway 8 to N Houston Rosslyn Road	8,200	1,200	6,900	2,500
<b>Central Section</b> N Houston Rosslyn Road to Breen Drive	12,300	0	12,300	0
<b>Eastern Section</b> Breen Drive to I-45	10,700	6,200	10,700	6,200

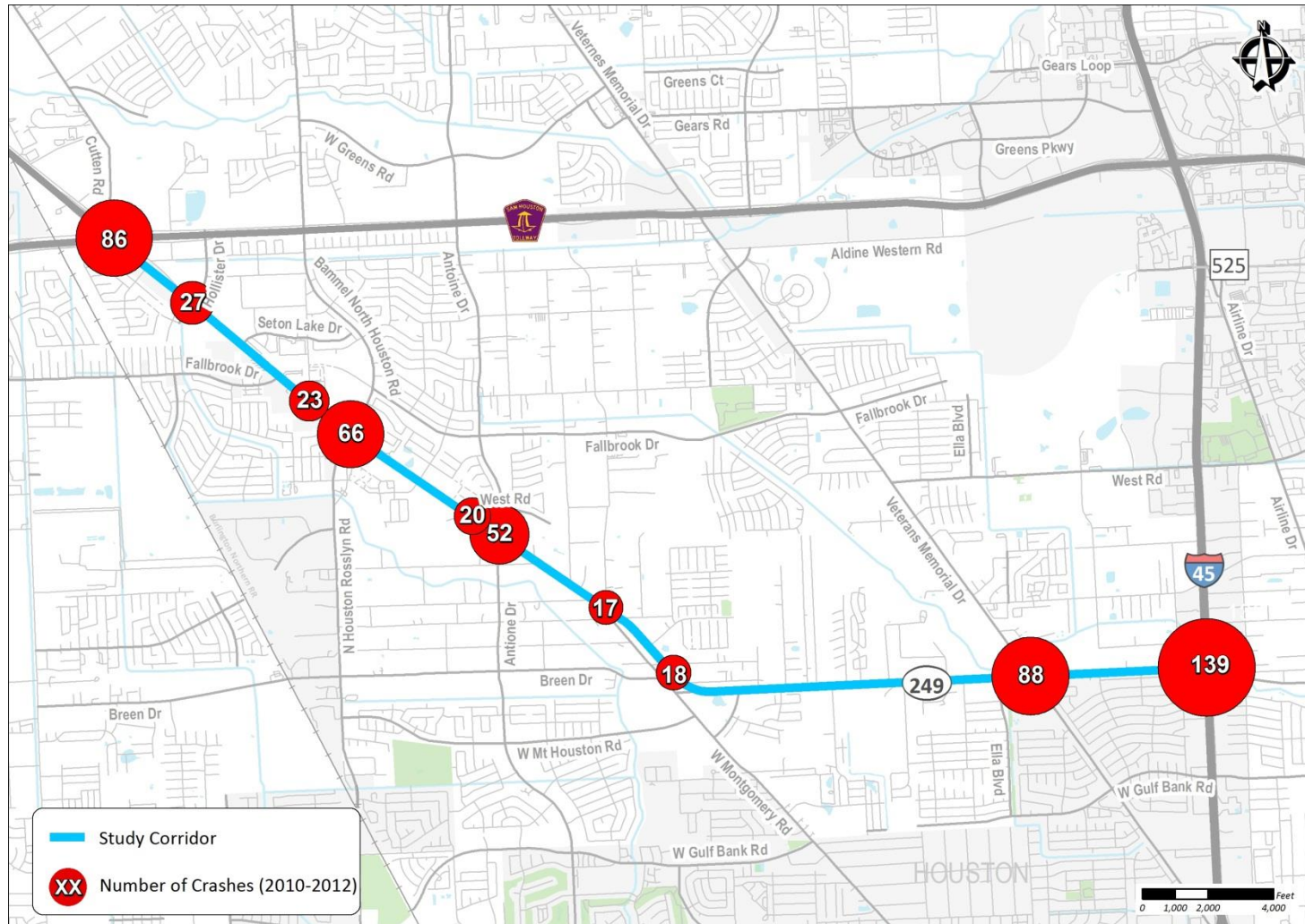
# Crash Rate (2010-2012)



# Fatal Crashes (2010-2012)



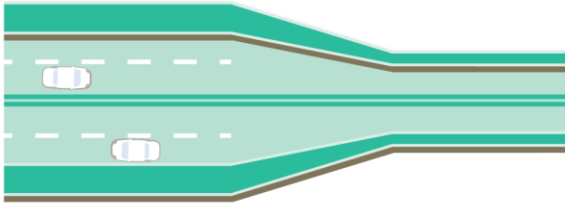
# Top 10 High Crash Intersections





# Access Management Toolbox

ROAD WIDENING



INTERSECTION IMPROVEMENTS

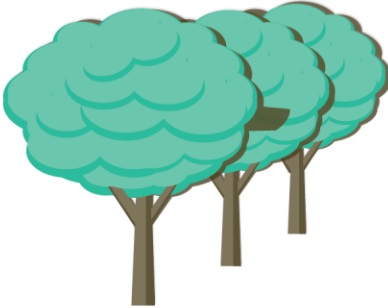


DECELERATION LANES

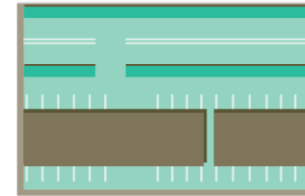
SLIP LANES



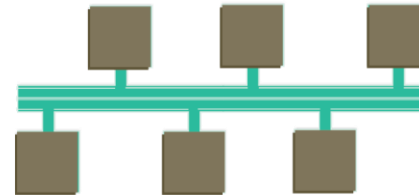
LANDSCAPING



BIKE LANES



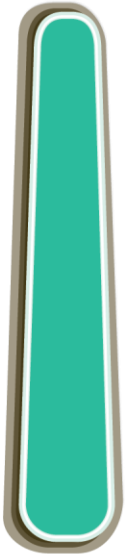
DRIVEWAY MODIFICATION



DRIVEWAY SPACING



CROSS WALKS



RAISED MEDIANS



TRANSIT



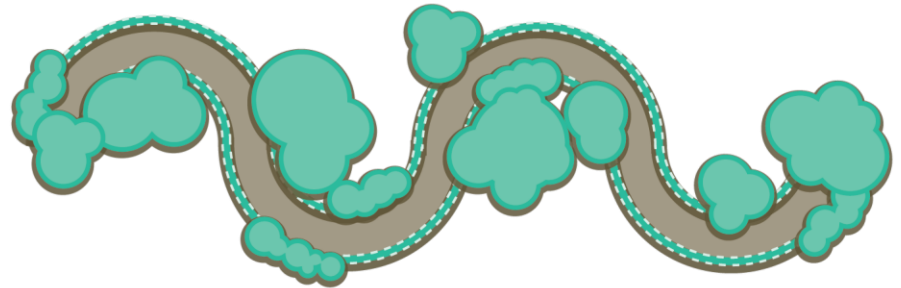
SIGNAL TIMING

# Bicycle/Pedestrian Tools

CROSS WALKS



CURB RAMPS



LANDSCAPING



BIKE PATHS



SIDEWALKS



TRANSIT AMENITIES



SHARROWS



SIGNS



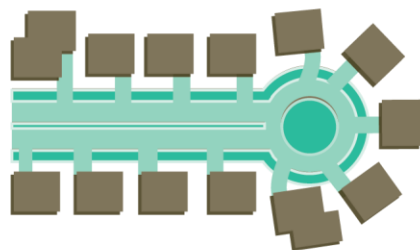
LIGHTING

# Planning Tools

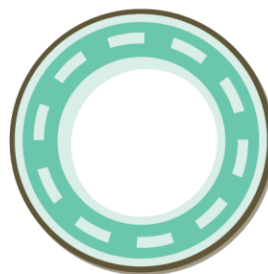
URBAN DESIGN



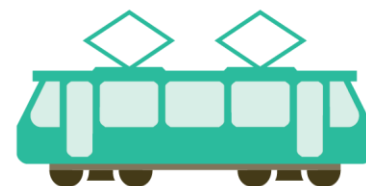
LAND USE DENSITY



COMPLETE STREETS



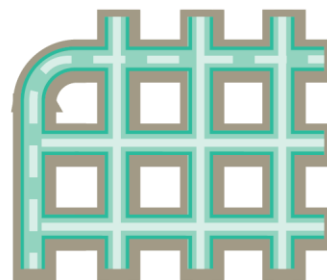
NEW TRANSIT



BIKE AVENUES



CAR POOL



STREET NETWORK

MULTI-USE PATHS



BIKE SHARING



PARKING  
POLICIES



LIVABLE CENTERS



PARK & RIDE

# Next Steps...

**Finalize Existing  
Conditions**

• *Early December 2014*

**Develop  
Recommendations**

• *Late March 2015*

**Public Meeting  
No. 2**

• *Early April 2015*



# Questions and Answers

