Appendix G: Meeting Exhibits

WELCOME TO THE MEETING!

Please Sign In

Pick Up Handouts

View Presentation

View Exhibits

Ask Questions

Share Your Thoughts

Leave Your Comments

BIENVENIDOS A LA REUNIÓN

Favor De Registrarse

Recoger Folletos

Ver Presentación

Ver Exhibiciones

Hacer Preguntas

Compartir Opiniones

Dejar Sus Comentarios

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT

Thank You For Your Support

Written Comments Accepted Until
May 14, 2015

- Leave in Drop Box Tonight or

- Mail to: Director of Project Development
  Texas Department of Transportation
  P.O. Box 1386
  Houston, TX 77251-1386

- Email: HOU-PIOWebMail@TxDOT.gov

Texas Department of Transportation

PROYECTO DE MEJORAS PROPUESTAS AL SISTEMA DE CARRETERAS AL NORTE DE HOUSTON

Gracias Por Su Apoyo

Comentarios Por
Escrito Seran Aceptados Hasta
El Jueves 14 De Mayo De 2015

- Puede Depositarlos En La Caja De Comentarios Esta Noche ó

- Los Puede Enviar Por Correo Posta a:
  Director of Project Development
  Texas Department of Transportation
  P.O. Box 1386
  Houston, TX 77251-1386

- Correo Electronico: HOU-PIOWebmail@TxDOT.gov

Texas Department of Transportation

Purpose of the 4th Public Meeting

1. Present and gather your input on the
   - Alternatives Evaluation Process
   - Proposed Recommended Alternative
2. Discuss project with you and answer questions
3. Present the project timeline, history, and background
4. Explain the next steps
5. Receive your comments on the project
6. Encourage your continued involvement

Propósito de la 4ta Reunión de Alcance Pública

1. Presentar y recopilar sus ideas sobre
   - Proceso de evaluación de alternativas
   - Alternativa Propuesta Recomendada
2. Discutir el proyecto con usted y contestar sus preguntas
3. Presentar la cronología, historia y antecedentes del proyecto
4. Explicar los próximos pasos a seguir
5. Recibir sus comentarios acerca del proyecto
6. Promover su envolvimiento continuo

Project Team

Texas Department of Transportation

Lead Agency

AECOM

Environmental

HNTB

Design Engineering

CDM Smith
cdmsmith.com

Traffic Engineering

klotz associates

EIS Support

CP&Y

EIS Support

RABA KISTNER

EIS Support

THE LENTZ GROUP

Public Involvement

North - Hardy Corridor Studies History

North - Hardy Planning Studies - METRO, TxDOT, H-GAC

2003 North - Hardy Corridor Alternatives Analysis Report

- Examined transit and highway alternatives
- Recommended that transit alternatives be examined prior to detailed evaluation of highway alternatives

2004 North - Hardy Corridor Planning Studies Alternatives Analysis Report (Transit Component)

- Findings used to develop a regional transit system plan that combines an aggressive bus service program with Advanced High Capacity Transit (light rail)

2005 North - Hardy Planning Studies Alternatives Analysis Report (Highway Component)

- Recommended highway alternative from downtown Houston to Beltway 8 North is to add four managed lanes to the IH 45 / Hardy Toll Road Corridor

2011 TxDOT / FHWA Begin Environmental Document Preparation (Environmental Impact Statement) for North-Hardy Corridor Highway Component

Study Area includes:

- IH 45 (N) from US 59 to BW 8 North
- Hardy Toll Road Corridor from downtown to BW 8 North
- Portions of IH 10, IH 610 & US 59 near the downtown Houston area

What is an EIS?

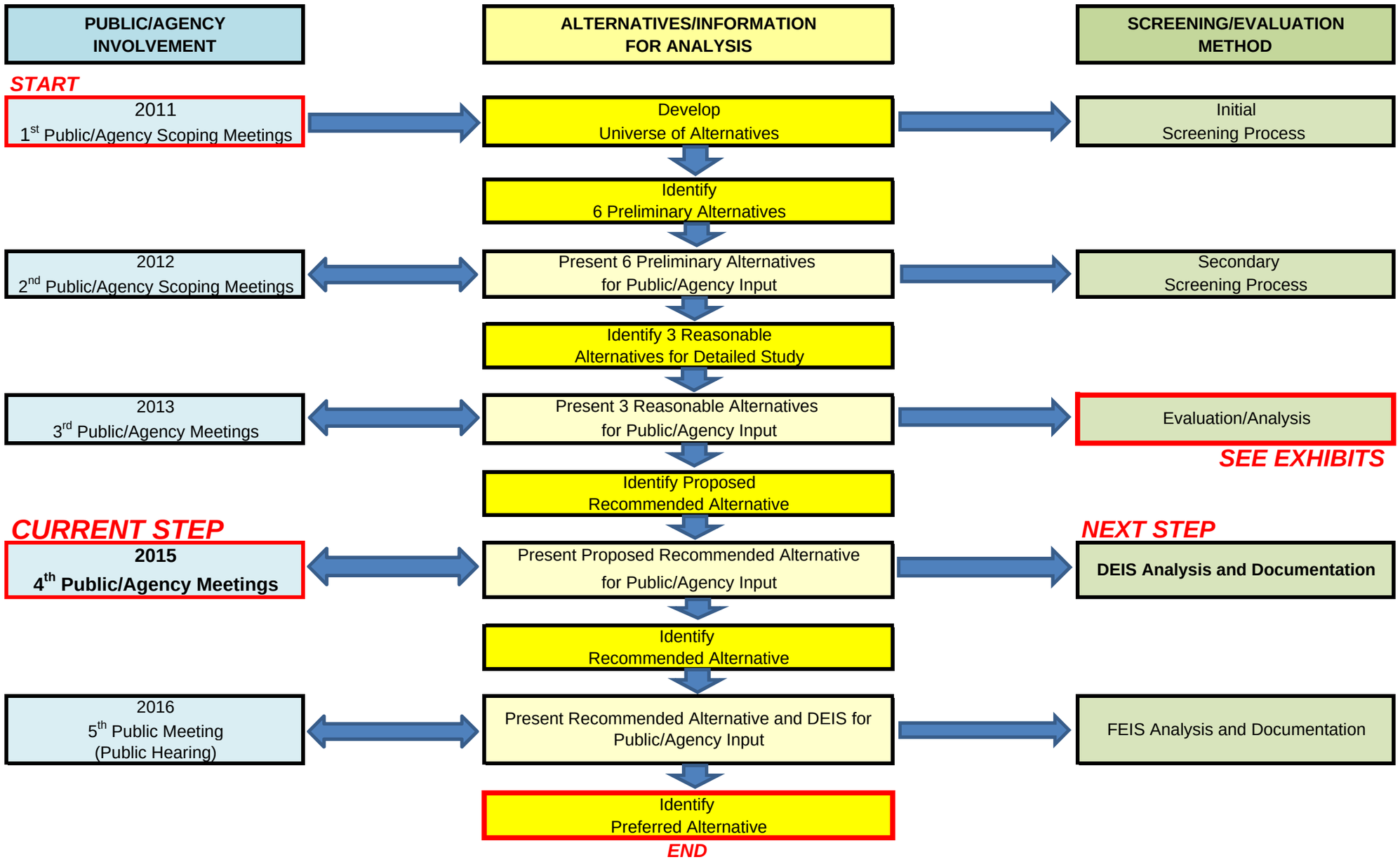
What is an Environmental Impact Statement (EIS)?

- A full disclosure document detailing the environmental review process through which the transportation project was developed
- Includes the consideration of a range of reasonable alternatives
- Analyzes the potential impacts resulting from the alternatives
- Demonstrates compliance with other applicable environmental laws and executive orders
- The EIS process is completed in the following ordered steps
  - Notice of Intent (NOI)
  - Draft EIS document (DEIS)
  - Final EIS document (FEIS)
  - Record of Decision (ROD)
- The National Environmental Policy Act of 1969, as amended, requires Federal agencies to prepare Environmental Impact Statements (EISs) for major Federal actions that will significantly affect the quality of the human environment

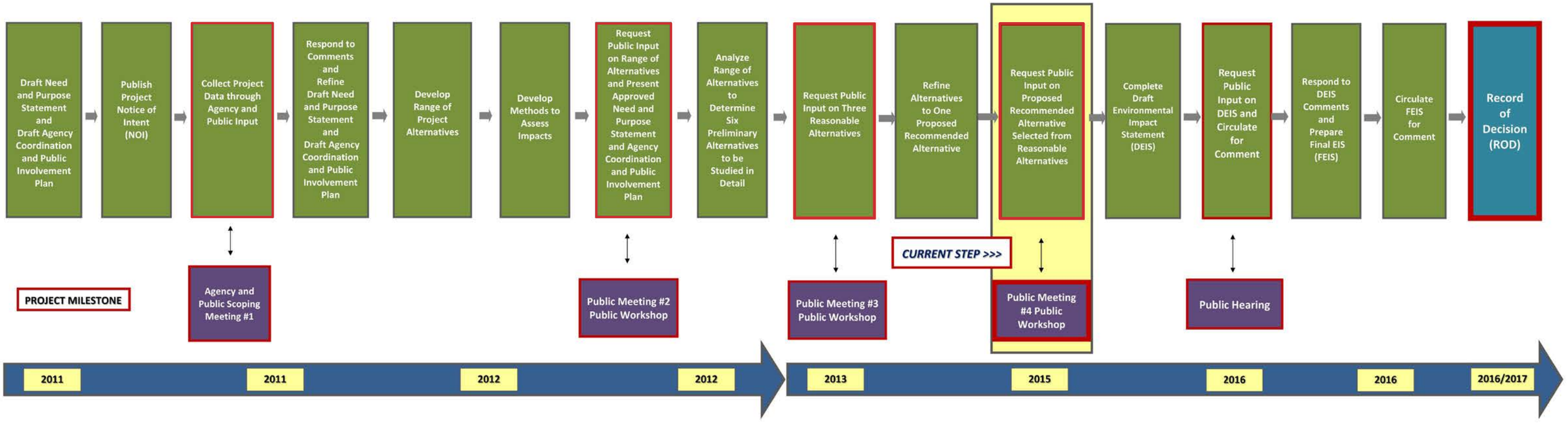
What is the National Environmental Policy Act (NEPA)?

- An environmental review process that considers multiple alternatives as possible ways to complete a project
- Includes alternative alignments and variations of multi-modal configurations, such as railway and roadway combinations
- Considers the no-build or no-action alternative, which would be to do nothing
  - Provides a baseline to which we can compare the build alternatives
  - Analyzes what would occur if nothing was done to address the needs of the project area
- Alternatives are identified, analyzed, evaluated, and documented, with regard to the impact each would have on the natural, built and social environment.
- Potential impact information, along with engineering schematic design, is used to determine the best possible alternative for the community and those who use the facility

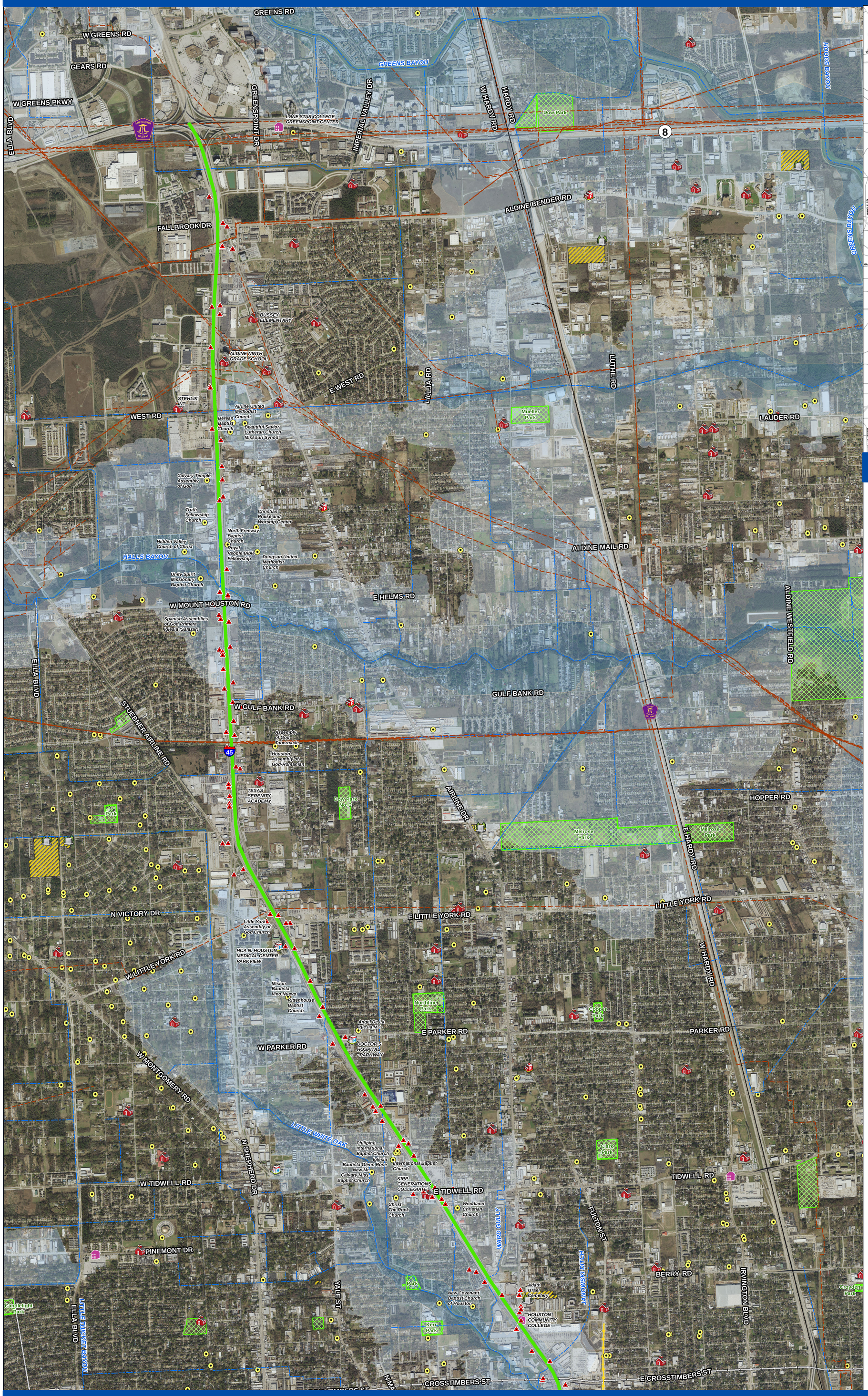
ALTERNATIVES SCREENING PROCESS

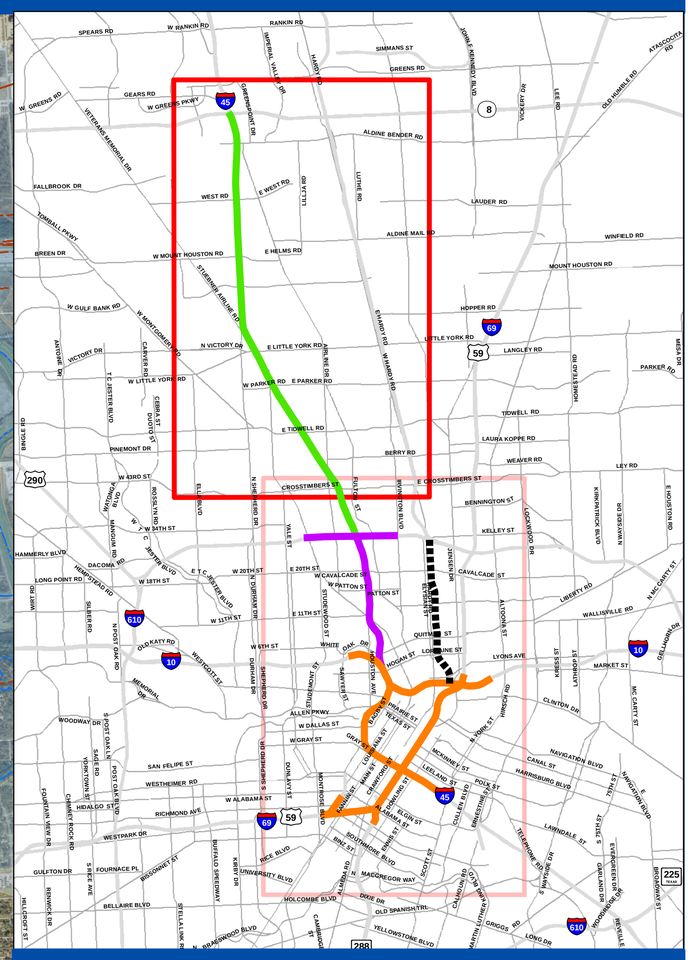


Environmental Impact Statement (EIS) Process and Timeline

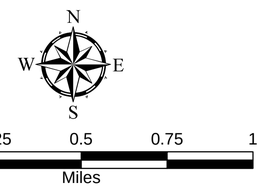


Environmental Constraints Map
From Beltway 8 to Crosstimbers Street





Vicinity



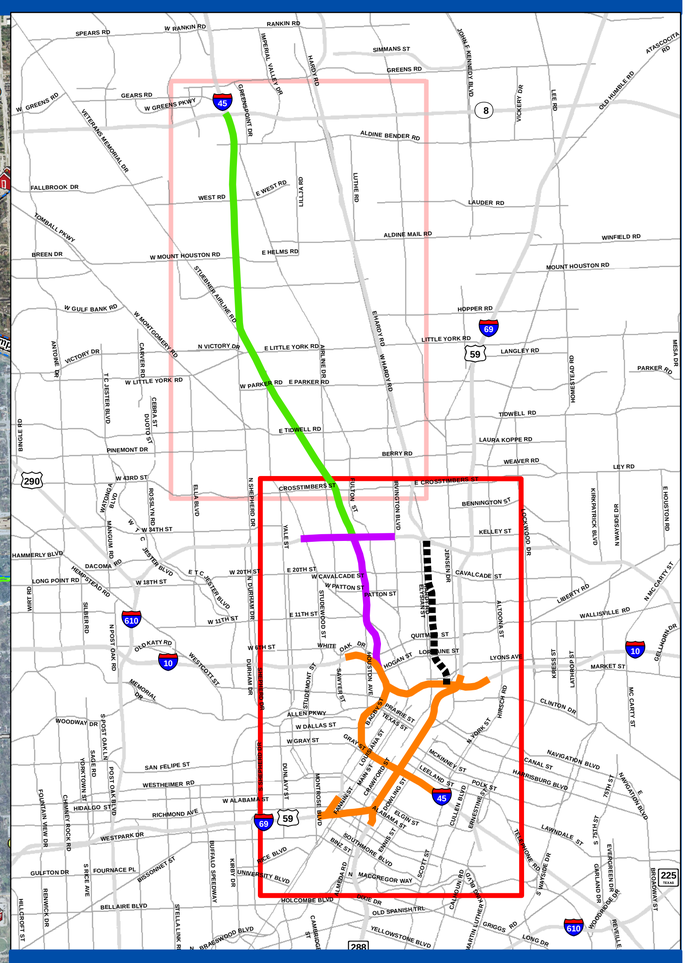
Legend

- Segment 1
- Channels / Streams
- Railroads
- Pipelines
- University / College
- Schools
- Police Station
- Hospital
- Fire Station
- Cemeteries
- Place of Worship
- Historical Markers
- Hazardous Materials Sites
- Cemeteries
- Parks
- Metro Light Rail (Operational)
- Existing Bikeways
- Floodway
- 100-Year Floodplain
- 500-Year Floodplain

Texas Department of Transportation

Environmental Constraints Map
From Crosstimbers Street to South of Downtown

Vicinity



Legend

- Segment 1
- Segment 2
- Segment 3
- Future Hardy Connector
- Channels / Streams
- Railroads
- Pipelines
- University / College
- Schools
- Police Station
- Hospital
- Fire Station
- Cemeteries
- Place of Worship
- Historical Markers
- Hazardous Materials Sites
- Houston Housing Authority
- Cemeteries
- Parks
- Metro Light Rail (Construction)
- Metro Light Rail (Operational)
- Existing Bikeways
- Floodway
- 100-Year Floodplain
- 500-Year Floodplain

Texas Department of Transportation

SEGMENT 1: BELTWAY 8 TO I-610

PRELIMINARY SUBJECT TO CHANGE

EVALUATION CRITERIA																																			
Evaluation of Reasonable Alternatives																																			
			Engineering / Traffic			Environmental																															
						Cultural Resources			Natural Resources								Noise	Social and Economic Resources											Hazardous Materials							
									Floodplains		Wildlife	Wetlands	Streams																								
Improvements Common to Segment 1 Alternatives: Complete reconstruction of I-45 to provide: ● Addition of one (1) frontage road lane in each direction ● Addition of full-width shoulders ● Addition of bike/pedestrian features along frontage roads		Meets Need and Purpose and Project Goals (Yes/No)	Signature Project Potential (Yes/No)	Reduction in Systemwide Delay (D=Desirable, N=Neutral, U=Undesirable)	Increase in Systemwide Travel Speed (D=Desirable, N=Neutral, U=Undesirable)	Improvement to Freeway Ramping/Access (D=Desirable, N=Neutral, U=Undesirable)	Listed in or Eligible for National Register of Historic Places (number in Area of Potential Effect)	National Register of Historic Places (number potentially eligible in Area of Potential Effect)	Potential for Archeological Deposits (Yes or No)	Floodplain Fill (L=Low, M=Medium, H=High; comparison of Segment 1 alternatives)	Potential Detention Needs (L=Low, M=Medium, H=High)	Threatened & Endangered Species Habitat (Yes/No) (State only, No Federal)	Wetlands (acres)	Streams (linear feet)	Noise Impacts (number of impacted representative receivers)	Residential Displacements (number of single-family units)	Residential Displacements (number of multi-family units)	Business Displacements (number)	Religious/Fraternal Facility and Center Displacements	Parks (acres within proposed right-of-way)	School Displacements (number)	Potential Changes in Community Cohesion (Parks, Schools, Churches - Yes/No)	Visual Impacts (D=Desirable, N=Neutral, U=Undesirable)	Environmental Justice (Yes/No)	Regulatory Database Sites (number of regulated sites within proposed right-of-way)	Regulatory Database Sites (number of regulated sites within proposed right-of-way evaluated as moderate and high risk sites)	Former Gas Stations and Dry Cleaners Sites (number plotted within proposed right-of-way)
Additional Improvements/Needs per Alternative:																																			
Alternative 4	● Addition of four (4) at-grade managed lanes ● New Right-of-Way required mostly along the west side of I-45	Yes	No	N	D	N	0	1	Yes	H	H	Yes	0.71	9,490	26	63	90	241	3	0	2	Yes	N	Yes	10	6	12
Alternative 5	● Addition of four (4) at-grade managed lanes ● New Right-of-Way required mostly along the east side of I-45	Yes	No	N	D	N	0	1	Yes	L	M	Yes	0.19	9,793	15	72	97	353	5	0	3	Yes	N	Yes	23	19	28
Alternative 7	● Addition of four (4) elevated managed lanes (on a single structure) ● New Right-of-Way required on both sides of I-45	Yes	No	N	D	U	0	1	No	M	L	Yes	0.22	9,023	20	37	40	260	4	0	1	Yes	U	Yes	8	6	8

Proposed Recommended Alternative

Version: 4/22/2015

SEGMENT 2: I-610 TO I-10

PRELIMINARY SUBJECT TO CHANGE

EVALUATION CRITERIA																											
Evaluation of Reasonable Alternatives																											
				Engineering / Traffic			Environmental																				
							Cultural Resources			Natural Resources					Noise	Social and Economic Resources									Hazardous Materials		
										Floodplains		Wildlife	Wetlands	Streams													
	Improvements Common to Segment 2 Alternatives: Complete reconstruction of I-45 to provide: ● Addition of full-width shoulders ● Addition of bike/pedestrian features along frontage roads ● New Right-of-Way required on both sides of I-45 from I-610 to Cavalcade St. **Additional Improvements/Needs per Alternative:**	Meets Need and Purpose and Project Goals (Yes/No)	Signature Project Potential (Yes/No)	Reduction in Systemwide Delay (D=Desirable, N=Neutral, U=Undesirable)	Increase in Systemwide Travel Speed (D=Desirable, N=Neutral, U=Undesirable)	Improvement to Freeway Ramping/Access (D=Desirable, N=Neutral, U=Undesirable)	Listed in or Eligible for National Register of Historic Places (number in Area of Potential Effect)	National Register of Historic Places (number potentially eligible in Area of Potential Effect)	Potential for Archeological Deposits (Yes or No)	Floodplain Fill (L=Low, M=Medium, H=High; comparison of Segment 2 alternatives)	Potential Detention Needs (L=Low, M=Medium, H=High)	Threatened & Endangered Species Habitat (Yes/No) (State only, No Federal)	Wetlands (acres)	Streams (linear feet)	Noise Impacts (number of impacted representative receivers)	Residential Displacements (number of single-family units)	Residential Displacements (number of multi-family units)	Business Displacements (number)	Religious/Fraternal Facility and Center Displacements	Parks (acres within proposed right-of-way)	School Displacements (number)	Potential Changes in Community Cohesion (Parks, Schools, Churches - Yes/No)	Visual Impacts (D=Desirable, N=Neutral, U=Undesirable)	Environmental Justice (Yes/No)	Regulatory Database Sites (number of regulated sites within proposed right-of-way)	Regulatory Database Sites (number of regulated sites within proposed right-of-way evaluated as moderate and high risk sites)	Former Gas Stations and Dry Cleaners Sites (number plotted within proposed right-of-way)
Alternative 10	● Addition of four (4) depressed managed lanes	Yes	Yes	N	N	N	0	4	No	H	M	Yes	0	4,676	11	27	18	17	0	0	0	No	D	Yes	0	0	1
Alternative 11	● Addition of four (4) elevated managed lanes (on a single structure)	Yes	No	N	N	N	0	4	No	M	M	Yes	0	4,603	11	26	18	12	0	0	0	No	U	Yes	0	0	1
Alternative 12	● Addition of four (4) elevated managed lanes (on a double-decked structure)	Yes	No	N	N	N	0	4	No	M	M	Yes	0	4,694	11	26	18	11	0	0	0	No	U	Yes	0	0	1

Proposed Recommended Alternative

SEGMENT 3: DOWNTOWN LOOP

PRELIMINARY SUBJECT TO CHANGE

EVALUATION CRITERIA																											
Evaluation of Reasonable Alternatives																											
				Engineering / Traffic			Environmental																				
							Cultural Resources			Natural Resources					Noise	Social and Economic Resources									Hazardous Materials		
										Floodplains		Wildlife	Wetlands	Streams													
	Improvements Common to Segment 3 Alternatives: Complete reconstruction of I-45, I-10 and US 59/I-69 to provide: ● Addition of four (4) at-grade managed lane connections into Downtown ● Addition of full-width shoulders ● Addition of bike/pedestrian features along frontage roads ● Addition of I-10 express lanes from I-45 to US 59/I-69 ● New Right-of-Way required in various areas along the Downtown loop	Meets Need and Purpose and Project Goals (Yes/No)	Signature Project Potential (Yes/No)	Reduction in Systemwide Delay (D=Desirable, N=Neutral, U=Undesirable)	Increase in Systemwide Travel Speed (D=Desirable, N=Neutral, U=Undesirable)	Improvement to Freeway Ramping/Access (D=Desirable, N=Neutral, U=Undesirable)	Listed in or Eligible for National Register of Historic Places (number in Area of Potential Effect)	National Register of Historic Places (number potentially eligible in Area of Potential Effect)	Potential for Archeological Deposits (Yes or No)	Floodplain Fill (L=Low, M=Medium, H=High; comparison of Segment 3 alternatives)	Potential Detention Needs (L=Low, M=Medium, H=High)	Threatened & Endangered Species Habitat (Yes/No) (State only, No Federal)	Wetlands (acres)	Streams (linear feet)	Noise Impacts (number of impacted representative receivers)	Residential Displacements (number of single-family units)	Residential Displacements (number of multi-family units)	Business Displacements (number)	Religious/Fraternal Facility and Center Displacements	Parks (acres within proposed right-of-way)	School Displacements (number)	Potential Changes in Community Cohesion (Parks, Schools, Churches - Yes/No)	Visual Impacts (D=Desirable, N=Neutral, U=Undesirable)	Environmental Justice (Yes/No)	Regulatory Database Sites (number of regulated sites within proposed right-of-way)	Regulatory Database Sites (number of regulated sites within proposed right-of-way evaluated as moderate and high risk sites)	Former Gas Stations and Dry Cleaners Sites (number plotted within proposed right-of-way)
	Additional Improvements/Needs per Alternative:																										
Alternative 10	● Addition of one (1) I-45 mainlane in each direction	Yes	No	N	N	U	10	1	Yes	L	M	Yes	0	9,393	7	33	247	26	1	3.4	2	Yes	U	Yes	4	3	4
Alternative 11	● Realign I-45 NB and SB lanes to be parallel with I-10 and US 59/I-69 ● US 59/I-69 would be below grade from Spur 527 to Downtown ● Remove existing I-45 Pierce Elevated structure	Yes	Yes	D	D	D	10	1	Yes	H	H	Yes	0	8,741	7	31	869	49	1	0.5	1	Yes	D	Yes	13	8	21
Alternative 12	● Realign I-45 NB lanes to be parallel with I-10 and US 59/I-69	Yes	No	N	U	U	10	1	Yes	M	M	Yes	0	10,109	7	36	873	41	2	3.4	0	Yes	U	Yes	8	5	19

Proposed Recommended Alternative

The Section 106 Process

PUBLIC INVOLVEMENT AND CONSULTATION

Initiate Section 106 Process

Identify Historic Properties

- Evaluate historic significance

Historic properties may be affected

Assess Adverse Effects

- Apply criteria of adverse effect

Historic properties are adversely affected

Consult with Texas State Historic Preservation Officer to resolve adverse effects

Texas Department of Transportation

NORTH HOUSTON HIGHWAY IMPROVEMENT PROJECT

I-45 NORTH

PRELIMINARY SUBJECT TO CHANGE

ROADWAY: I-45 NORTH
COUNTY: HARRIS
LIMITS FROM: BELTWAY 8
LIMITS TO: US 59

CONCEPTUAL LAYOUT

I-45 NORTH

COUNTY: HARRIS
LIMITS FROM: BELTWAY 8
LIMITS TO: US 59
CSJ: 0500-03-554
DATE: 4/17/2015
APPROVED: / /

NOT A BIDDING DOCUMENT
______________ P.E.
TBPE NO. ______________
____

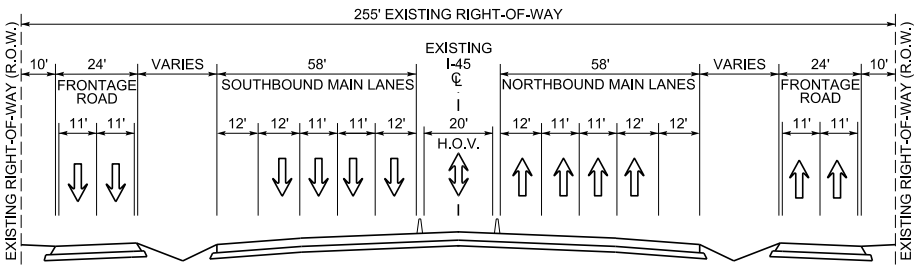
LEGEND

🟨	I-45 MAINLANES	➡	PROPOSED LANE
🟩	LOCAL STREET & FRONTAGE RD	▬ ╎ ▬	PROPOSED RIGHT-OF-WAY
🟦	ENTRANCE/ EXIT RAMPS	⇨	EXISTING LANE
🟧	DIRECT CONNECTORS	— — -	EXISTING RIGHT-OF-WAY
🟪	MANAGED LANES	—	EXISTING ROADWAY/ ROADWAY UNDER CONSTRUCTION
🟥	BRIDGES		
▨	ROAD REMOVALS		

SCALE

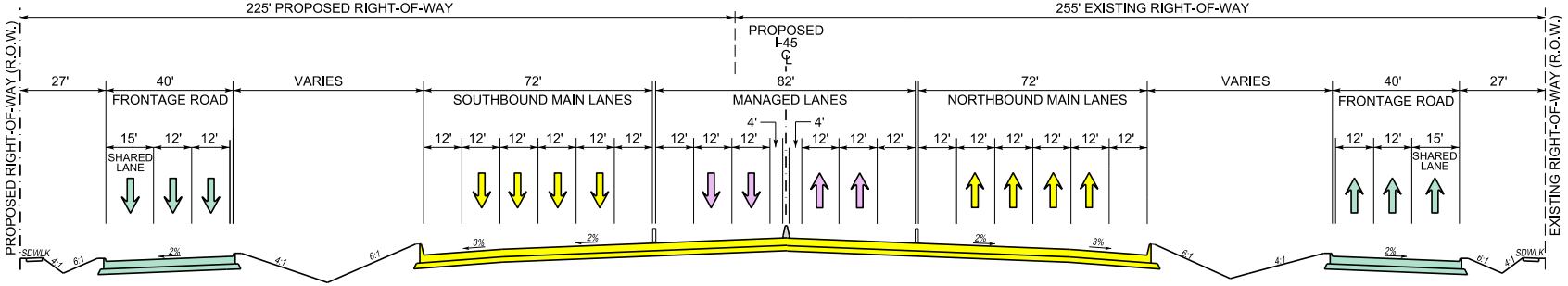
0 100 200 300 400

INTERSECTION GEOMETRY AND THE PROPOSED NUMBER OF LANES IS SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENT OF THE PROPOSED RECOMMENDED ALTERNATIVE.


255' EXISTING RIGHT-OF-WAY
EXISTING RIGHT-OF-WAY (R.O.W.)
10'
24'
FRONTAGE ROAD
11'
11'
VARIES
58'
SOUTHBOUND MAIN LANES
12'
12'
11'
11'
12'
EXISTING
I-45
℄
20'
H.O.V.
58'
NORTHBOUND MAIN LANES
12'
11'
11'
12'
12'
VARIES
24'
FRONTAGE ROAD
11'
11'
10'
EXISTING RIGHT-OF-WAY (R.O.W.)

EXISTING TYPICAL SECTION
AIRLINE DRIVE TO SHEPHERD DRIVE

NOT TO SCALE

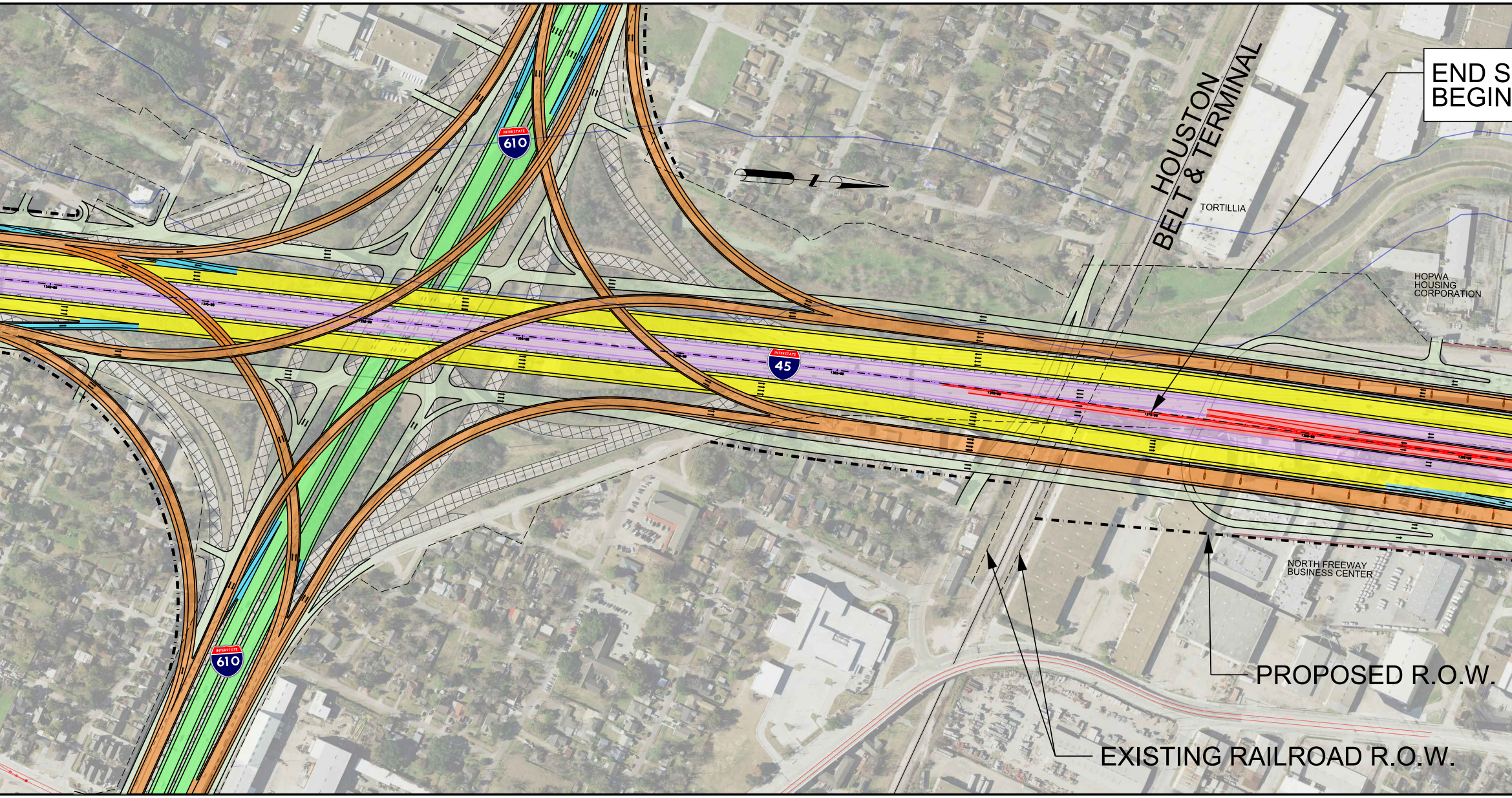

225' PROPOSED RIGHT-OF-WAY
255' EXISTING RIGHT-OF-WAY
PROPOSED RIGHT-OF-WAY (R.O.W.)
27'
40'
FRONTAGE ROAD
15'
12'
12'
SHARED LANE
VARIES
72'
SOUTHBOUND MAIN LANES
12'
12'
12'
12'
12'
12'
PROPOSED
I-45
℄
82'
MANAGED LANES
12'
12'
12'
4'
4'
12'
12'
12'
72'
NORTHBOUND MAIN LANES
12'
12'
12'
12'
12'
12'
VARIES
40'
FRONTAGE ROAD
12'
12'
15'
SHARED LANE
27'
EXISTING RIGHT-OF-WAY (R.O.W.)
SDWLK
4:1
6:1
2%
4:1
6:1
3%
2%
2%
3%
6:1
4:1
2%
6:1
4:1
SDWLK

PROPOSED TYPICAL SECTION
AIRLINE DRIVE TO SHEPHERD DRIVE

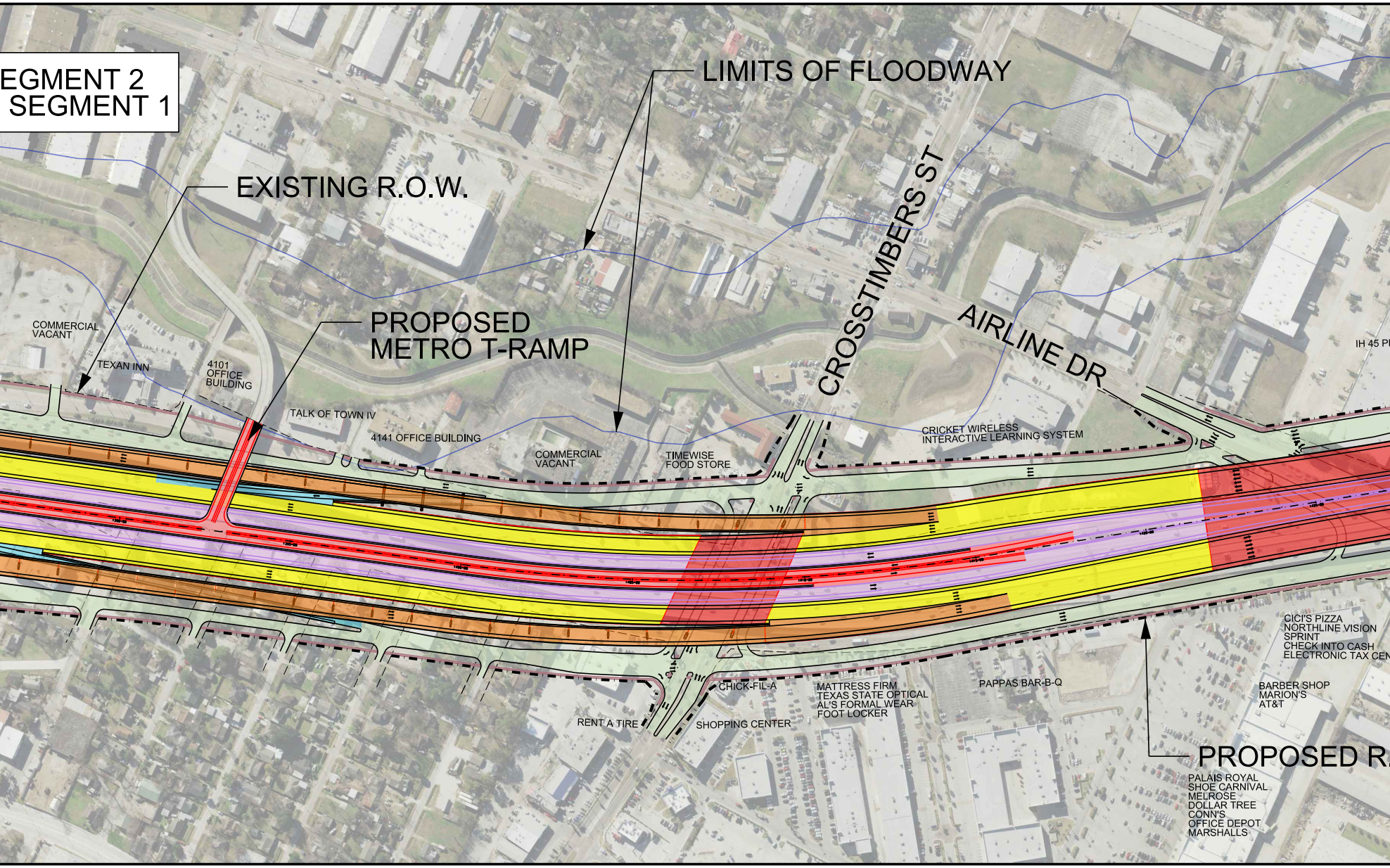
NOT TO SCALE

PRELIMINARY SUBJECT TO CHANGE

I-45 SEGMENT 1 PROPOSE

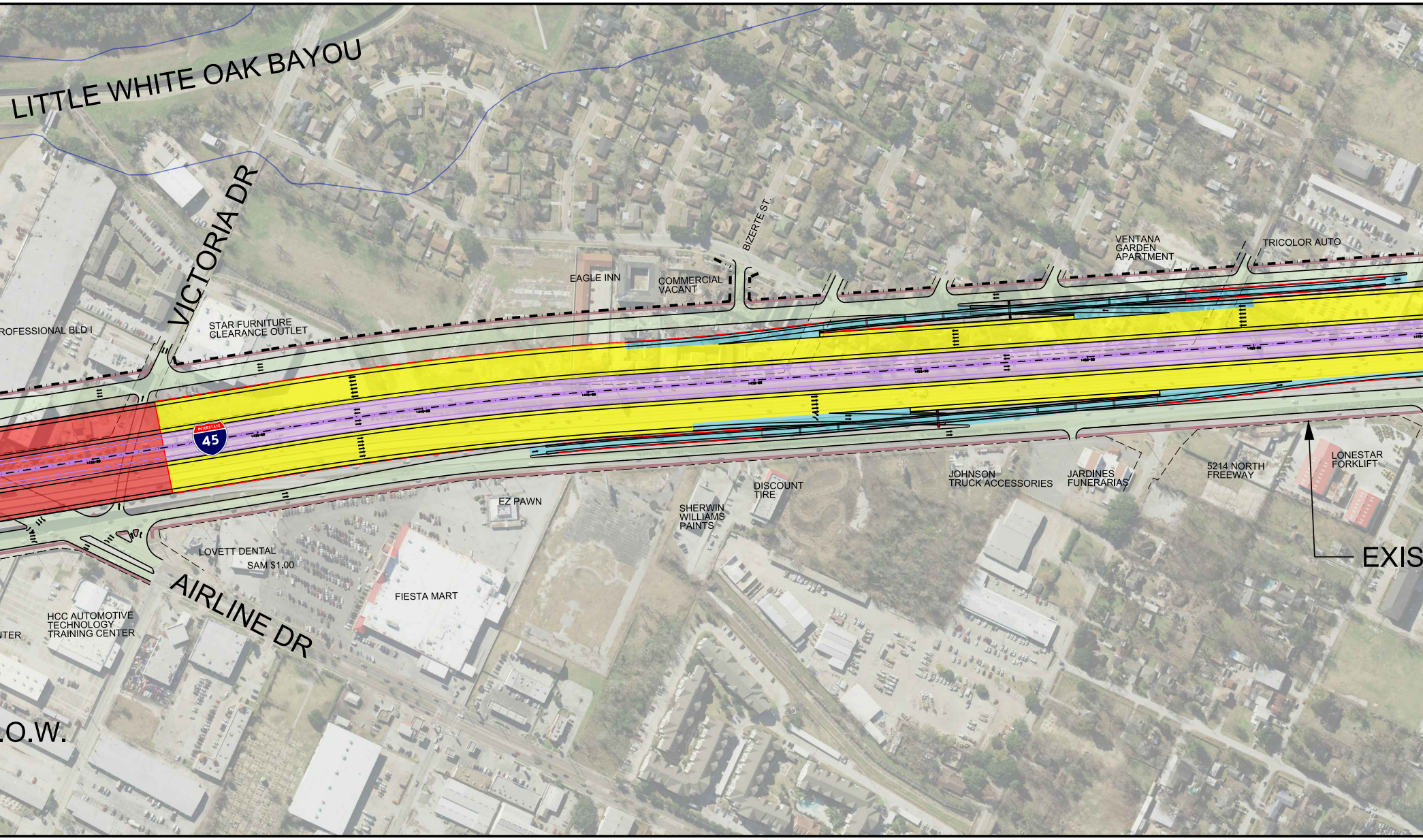

INTERSTATE
610
HOUSTON
BELT & TERMINAL
TORTILLIA
END S
BEGIN
HOPWA
HOUSING
CORPORATION
INTERSTATE
45
NORTH FREEWAY
BUSINESS CENTER
INTERSTATE
610
PROPOSED R.O.W.
EXISTING RAILROAD R.O.W.

ED RECOMMENDED ALTERN


EGMENT 2
SEGMENT 1
EXISTING R.O.W.
LIMITS OF FLOODWAY
PROPOSED
METRO T-RAMP
CROSSTIMBERS ST
AIRLINE DR
IH 45 P
COMMERCIAL
VACANT
TEXAN INN
4101
OFFICE
BUILDING
TALK OF TOWN IV
4141 OFFICE BUILDING
COMMERCIAL
VACANT
TIMEWISE
FOOD STORE
CRICKET WIRELESS
INTERACTIVE LEARNING SYSTEM
CICI'S PIZZA
NORTHLINE VISION
SPRINT
CHECK INTO CASH
ELECTRONIC TAX CEN
BARBER SHOP
MARION'S
AT&T
PAPPAS BAR-B-Q
MATTRESS FIRM
TEXAS STATE OPTICAL
AL'S FORMAL WEAR
FOOT LOCKER
CHICK-FIL-A
SHOPPING CENTER
RENT A TIRE
PROPOSED R
PALAIS ROYAL
SHOE CARNIVAL
MELROSE
DOLLAR TREE
CONN'S
OFFICE DEPOT
MARSHALLS

PRELIMINARY SUBJECT TO CHANGE

ATIVE: I-610 TO TIDWELL SEC


LITTLE WHITE OAK BAYOU
VICTORIA DR
BIZERTE ST
EAGLE INN
COMMERCIAL VACANT
STAR FURNITURE CLEARANCE OUTLET
ROFESSIONAL BLD I
VENTANA GARDEN APARTMENT
TRICOLOR AUTO
45
EZ PAWN
DISCOUNT TIRE
SHERWIN WILLIAMS PAINTS
JOHNSON TRUCK ACCESSORIES
JARDINES FUNERARIAS
5214 NORTH FREEWAY
LONESTAR FORKLIFT
EXIS
LOVETT DENTAL
SAM $1.00
AIRLINE DR
FIESTA MART
HCC AUTOMOTIVE TECHNOLOGY TRAINING CENTER
NTER
.O.W.

PRELIMINARY SUBJECT T

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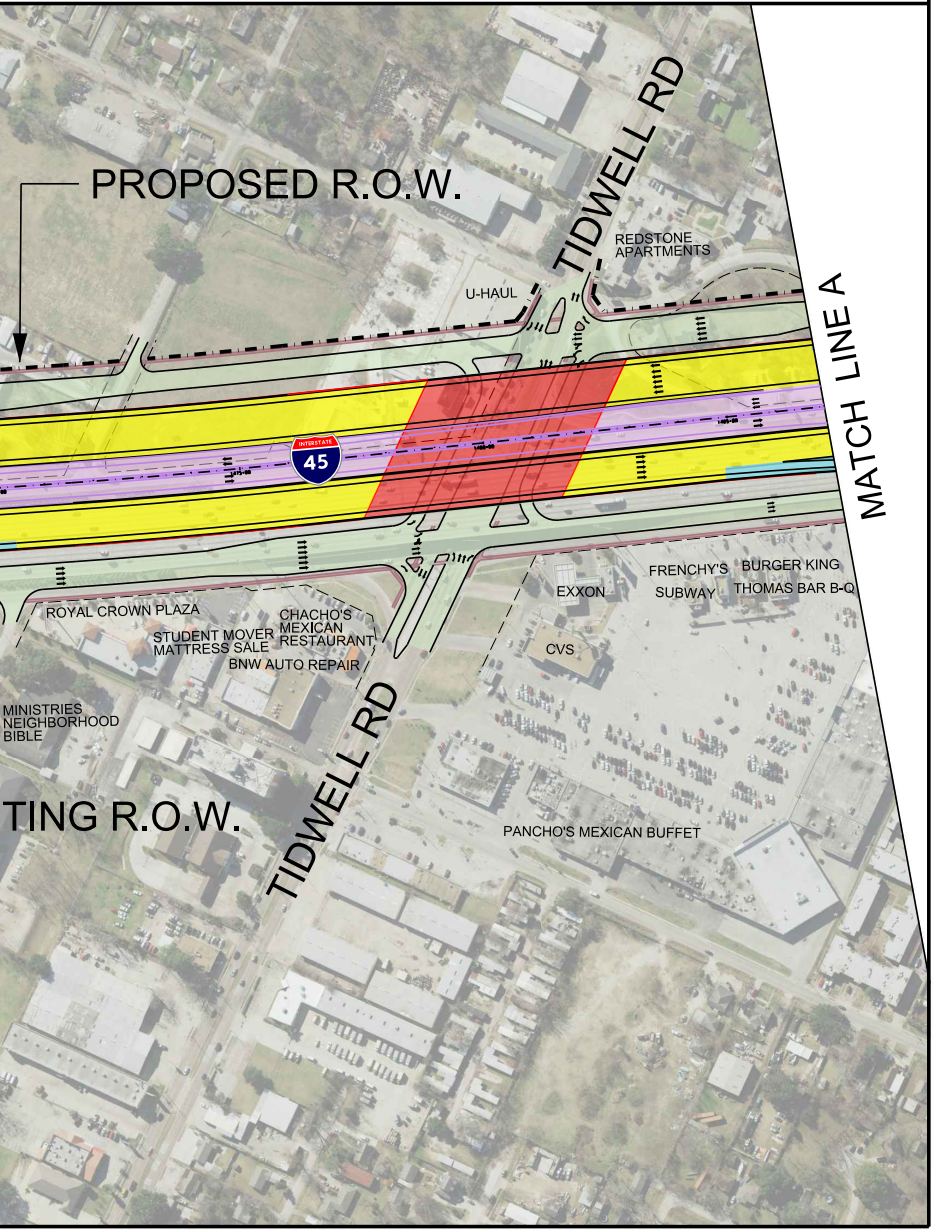

PROPOSED R.O.W.
TIDWELL RD
REDSTONE
APARTMENTS
U-HAUL
45
MATCH LINE A
FRENCHY'S
BURGER KING
SUBWAY
THOMAS BAR B-Q
EXXON
CVS
ROYAL CROWN PLAZA
CHACHO'S
MEXICAN
RESTAURANT
STUDENT MOVER
MATTRESS SALE
BNW AUTO REPAIR
MINISTRIES
NEIGHBORHOOD
BIBLE
TIDWELL RD
TING R.O.W.
PANCHO'S MEXICAN BUFFET

TO CHANGE

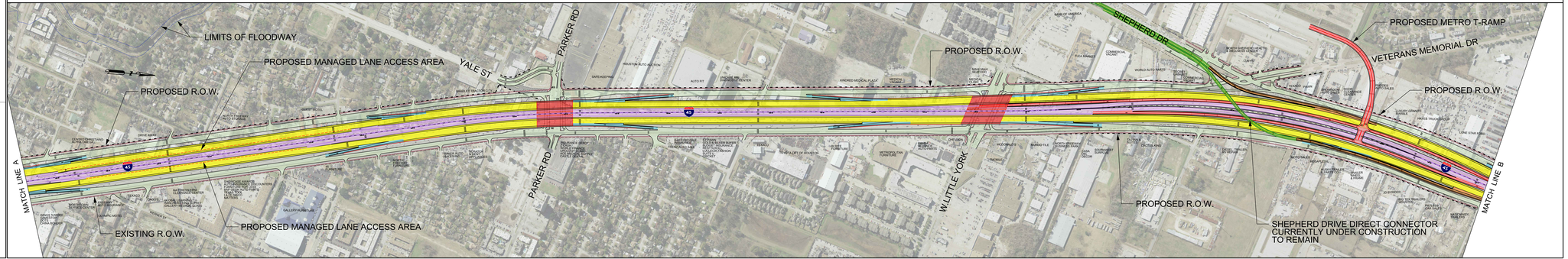
NORTH HOUSTON HIGHWAY
IMPROVEMENT PROJECT

I-45 NORTH

PRELIMINARY
SUBJECT TO CHANGE

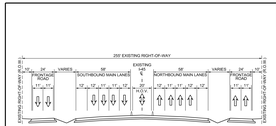
ROADWAY: I-45 NORTH
COUNTY: HARRIS
LIMITS FROM: BELTWAY 8
LIMITS TO: US 59

I-45 SEGMENT 1 PROPOSED RECOMMENDED ALTERNATIVE: TIDWELL TO SHEPHERD DR. SECTION



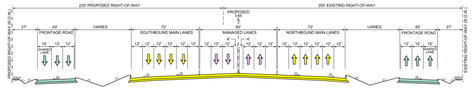


INTERSECTION GEOMETRY AND THE PROPOSED NUMBER OF LANES IS SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENT OF THE PROPOSED RECOMMENDED ALTERNATIVE.



EXISTING TYPICAL SECTION
AIRLINE DRIVE TO SHEPHERD DRIVE

NOT TO SCALE



PROPOSED TYPICAL SECTION
AIRLINE DRIVE TO SHEPHERD DRIVE

NOT TO SCALE

PRELIMINARY SUBJECT TO CHANGE

PRELIMINARY SUBJECT TO CHANGE

PRELIMINARY SUBJECT TO CHANGE

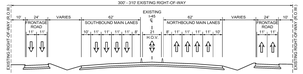
I-45 SEGMENT 1 PROPOSED RECOMMENDED ALTERNATIVE: SHEPHERD DR. TO WEST RD SECTION

CONDITION LAYOUT
I-45 NORTH

LEGEND

SCALE

INTERSECTION GEOMETRY AND THE PROPOSED NUMBER OF LANES IS SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENT OF THE PROPOSED RECOMMENDED ALTERNATIVE.



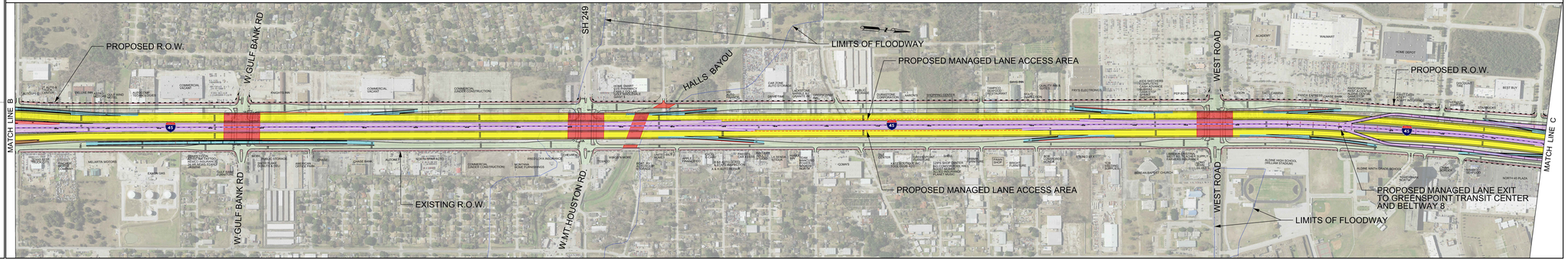
EXISTING TYPICAL SECTION
SHEPHERD DRIVE TO WEST ROAD

NOT TO SCALE



PROPOSED TYPICAL SECTION
SHEPHERD DRIVE TO WEST ROAD

NOT TO SCALE



PRELIMINARY SUBJECT TO CHANGE

PRELIMINARY SUBJECT TO CHANGE

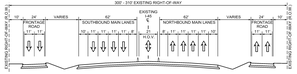
PRELIMINARY SUBJECT TO CHANGE

I-45 SEGMENT 1 PROPOSED RECOMMENDED ALTERNATIVE: WEST RD TO BELTWAY 8 SECTION

I-45 NORTH

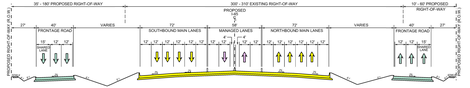
LEGEND

INTERSECTION GEOMETRY AND THE PROPOSED NUMBER OF LANES IS SUBJECT TO CHANGE BASED ON FUTURE REFINEMENT OF THE PROPOSED RECOMMENDED ALTERNATIVE.



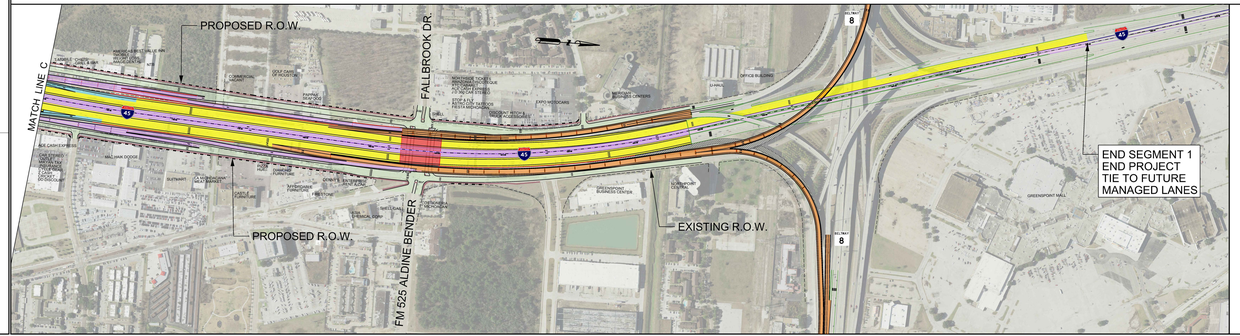
EXISTING TYPICAL SECTION
WEST ROAD TO FM 525/ALDINE BENDER

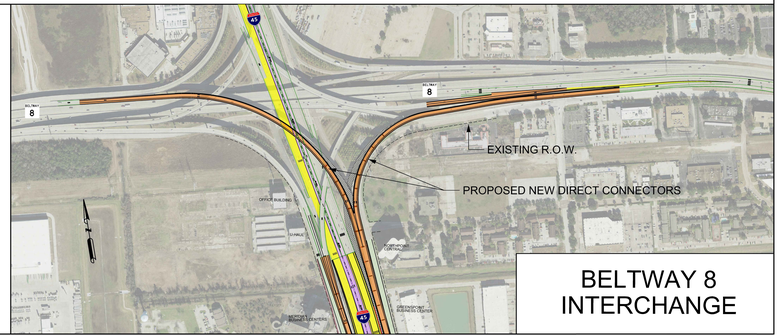
NOT TO SCALE



PROPOSED TYPICAL SECTION
WEST ROAD TO FM 525/ALDINE BENDER

NOT TO SCALE





PRELIMINARY SUBJECT TO CHANGE

PRELIMINARY SUBJECT TO CHANGE

PRELIMINARY SUBJECT TO CHANGE

HOUSTON DISTRICT
PROJECT DEVELOPMENT

I-45 NORTH - SEGMENT 2

PRELIMINARY
SUBJECT TO CHANGE

HNTB

CONCEPTUAL LAYOUT

I-45 NORTH

COUNTY: HARRIS
LIMITS FROM: BW8
LIMITS TO: US 59

CSJ: 0000-03-654
DATE: 17-APR-2015
APPROVED: / /

NOT A BIDDING DOCUMENT

LEGEND

- I-45 MAINLANES
- LOCAL ST & FRONTAGE RD
- ENTI/EXIT RAMPS
- DIRECT CONNECTORS
- I-69/US 59 MAINLANES
- MANAGED LANES
- I-10 MAINLANES
- SH 288 MAINLANES
- I-10 EXPRESS LANES
- I-610 MAINLANES
- ROAD REMOVALS
- METRO RAIL (RED (MAIN STREET LINE))
- METRO RAIL (EAST END LINE)
- METRO RAIL (SOUTHEAST LINE)
- RAILROAD
- BRIDGE RECONSTRUCTION
- POTENTIAL GREENSPACE
- EXISTING RIGHT-OF-WAY
- PROP. RIGHT-OF-WAY
- LIMITS OF FLOODWAY

SCALE

0 200 400 600 800

INTERSECTION GEOMETRY AND THE PROPOSED NUMBER OF LANES IS SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENT OF THE PROPOSED RECOMMENDED ALTERNATIVE.

PRELIMINARY
SUBJECT TO CHANGE

PRELIMINARY
SUBJECT TO CHANGE

PRELIMINARY
SUBJECT TO CHANGE

PRELIMINARY
SUBJECT TO CHANGE

PROPOSED I-610
TYPICAL SECTION

PROPOSED I-610
TYPICAL SECTION

LITTLE WHITE OAK BAYOU

LITTLE WHITE OAK BAYOU

BNSF RR

N LOOP W

N LOOP FWY

NORTH LOOP E

HOUSTON DISTRICT
PROJECT DEVELOPMENT

I-45 NORTH - SEGMENT 2

PRELIMINARY
SUBJECT TO CHANGE

HNTB

CONCEPTUAL LAYOUT

I-45 NORTH

COUNTY: HARRIS
LIMITS FROM: BW8
LIMITS TO: US 59

CSJ: 0000-03-654
DATE: 17-APR-2015
APPROVED: / /

NOT A BIDDING DOCUMENT

LEGEND

- I-45 MAINLANES
- LOCAL ST & FRONTAGE RD
- ENTR/EXIT RAMPS
- DIRECT CONNECTORS
- I-69/US 59 MAINLANES
- MANAGED LANES
- I-10 MAINLANES
- SH 288 MAINLANES
- I-10 EXPRESS LANES
- I-610 MAINLANES
- ROAD REMOVALS
- METRO RAIL RED (MAIN STREET LINE)
- METRO RAIL (EAST END LINE)
- METRO RAIL (SOUTHEAST LINE)
- RAILROAD
- BRIDGE RECONSTRUCTION
- POTENTIAL GREENSPACE
- EXISTING RIGHT-OF-WAY
- PROP. RIGHT-OF-WAY
- LIMITS OF FLOODWAY

SCALE

0 200 400 600 800

INTERSECTION GEOMETRY AND THE PROPOSED NUMBER OF LANES IS SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENT OF THE PROPOSED RECOMMENDED ALTERNATIVE.

PRELIMINARY SUBJECT TO CHANGE

PROPOSED I-45 TYPICAL SECTION

PROPOSED I-610 TYPICAL SECTION

HOUSTON DISTRICT PROJECT DEVELOPMENT

I-45 NORTH - SEGMENT 2

HNTB

CONCEPTUAL LAYOUT

I-45 NORTH

COUNTY: HARRIS
LIMITS FROM: BW8
LIMITS TO: US 59

CSJ: 0500-03-554
DATE: 17-APR-2015
APPROVED: / /

NOT A BIDDING DOCUMENT

LEGEND

- I-45 MAINLANES
- LOCAL ST & FRONTAGE RD
- ENTI/EXT RAMPS
- DIRECT CONNECTORS
- I-69/US 59 MAINLANES
- MANAGED LANES
- I-10 MAINLANES
- SH 288 MAINLANES
- I-10 EXPRESS LANES
- I-610 MAINLANES
- ROAD REMOVALS
- METRO RAIL RED (MAIN STREET LINE)
- METRO RAIL (EAST END LINE)
- METRO RAIL (SOUTHEAST LINE)
- RAILROAD
- BRIDGE RECONSTRUCTION
- POTENTIAL GREENSPACE
- EXISTING RIGHT-OF-WAY
- PROP. RIGHT-OF-WAY
- LIMITS OF FLOODWAY

SCALE

0 400 800 1200 1600

INTERSECTION GEOMETRY AND THE PROPOSED NUMBER OF LANES IS SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENT OF THE PROPOSED RECOMMENDED ALTERNATIVE.

PRELIMINARY SUBJECT TO CHANGE

PROPOSED TXDOT IMPROVEMENTS BY SIP 288 PROGRAM

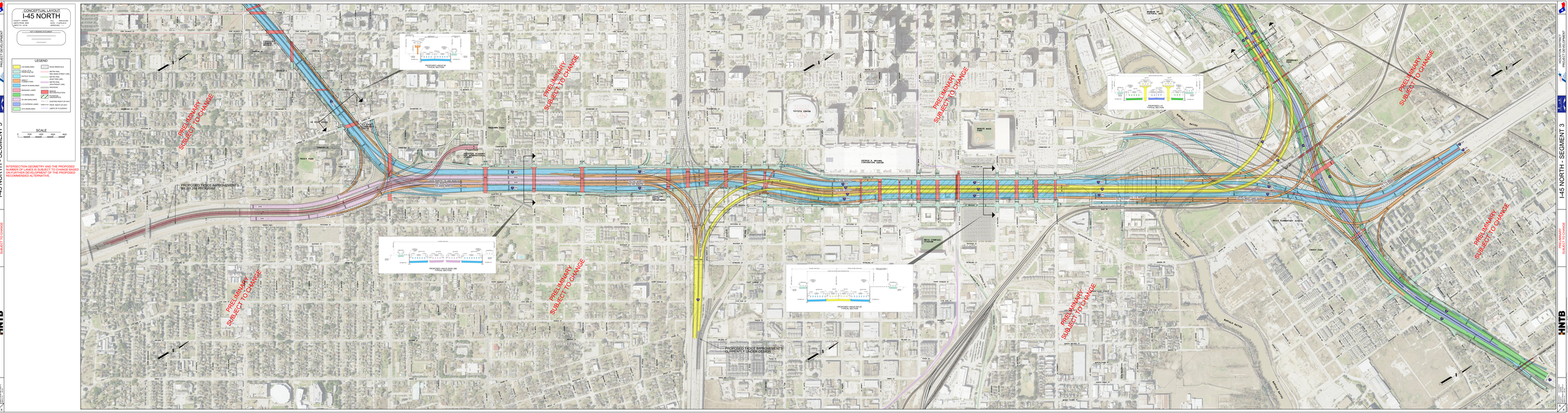
PROPOSED TXDOT IMPROVEMENTS CURRENTLY UNDER DESIGN

HOUSTON DISTRICT
PROJECT DEVELOPMENT

I-45 NORTH

HNTB

I-45 HOUSTON
DOWNTOWN
FROM: BW8
LIMITS TO: US 59


CONCEPTUAL LAYOUT
I-45 NORTH
LEGEND
SCALE
INTERSECTION GEOMETRY AND THE PROPOSED NUMBER OF LANES IS SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENT OF THE PROPOSED RECOMMENDED ALTERNATIVE.
PRELIMINARY SUBJECT TO CHANGE
PROPOSED TROOT IMPROVEMENTS IN SH 288 PROGRAM
PROPOSED TROOT IMPROVEMENTS CURRENTLY UNDER DESIGN
I-45 NORTH - SEGMENT 3
HNTB

CONCEPTUAL LAYOUT

I-45 NORTH

COUNTY: HARRIS
LIMITS FROM: FM 1960
LIMITS TO: I-10

DATE: 11/08/2019
APPROVED:

NOT A SIGNING DOCUMENT

LEGEND

- HOV/HOV LANES
- LOCAL LANES
- ENTRANCE RAMPS
- EXIT RAMPS
- CROSS STREETS
- GRASS OR MANICURED
- MANAGED LANES
- I-10 MANAGED
- SH 288 MANAGED
- I-10 EXPRESS LANES
- NHS MANAGED
- PUBLIC REMOVALS
- METRO RAIL
- METRO RAIL RED LINE EXTENSION
- METRO RAIL SOUTH EAST LINE
- METRO RAIL SOUTH EAST LINE EXTENSION
- BRIDGE REMOVAL
- PROPOSED STRUCTURES
- EXISTING RIGHT-OF-WAY
- PROP. RIGHT-OF-WAY
- LIMITS OF FLOODING

SCALE

0 400 800 1600 2400

INTERSECTION GEOMETRY AND THE PROPOSED NUMBER OF LANES IS SUBJECT TO CHANGE BASED ON FURTHER DEVELOPMENT OF THE PROPOSED RECOMMENDED ALTERNATIVE

PRELIMINARY SUBJECT TO CHANGE

PROPOSED DOWNTOWN CONNECTORS TYPICAL SECTION

PROPOSED I-45 TYPICAL SECTION

PROPOSED I-45 TYPICAL SECTION

HOUSTON DISTRICT PROJECT DEVELOPMENT

I-45 NORTH - SEGMENT 3

PRELIMINARY SUBJECT TO CHANGE

HNTB

17-APR-2019