

North Houston Highway Improvement Project and Bike Plan Presentation

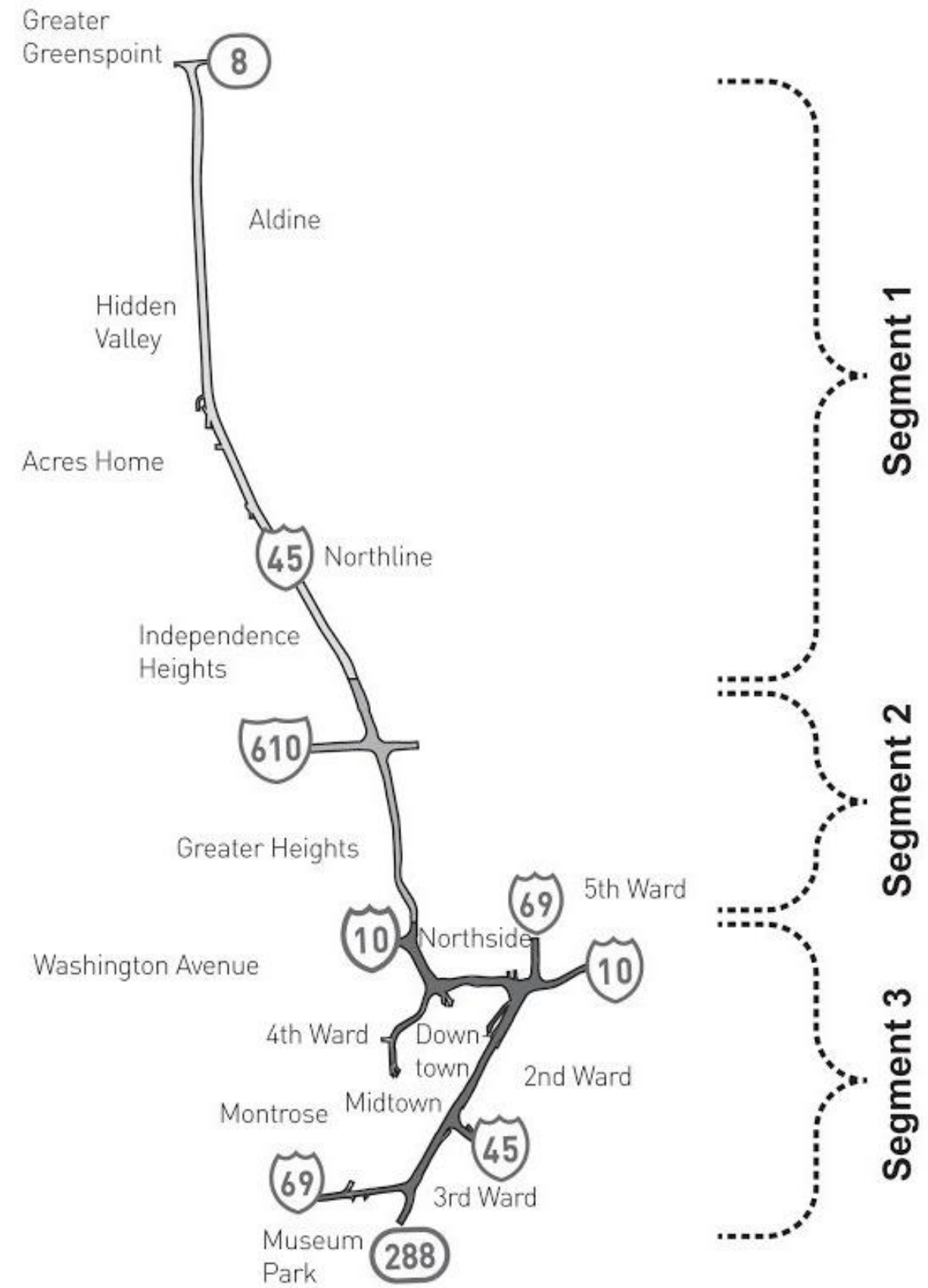
Peter Eccles

Planning & Development



PLANNING &
DEVELOPMENT
DEPARTMENT

\$7 billion +
23 miles of highway
Sections of 3 different interstates



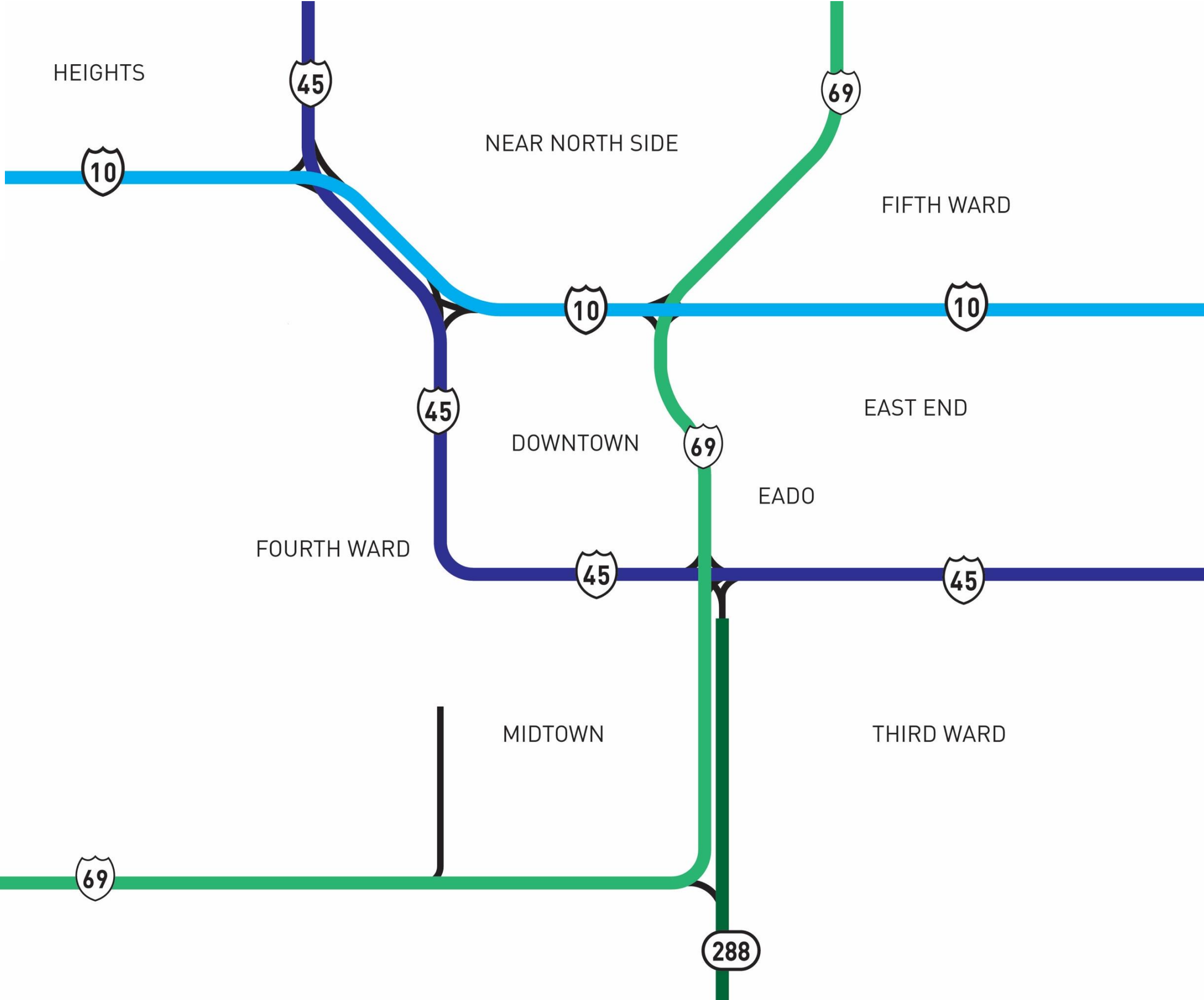
PROJECT NEED

This project is doing 3 different things.

1. Realign the freeways around Downtown (Segment 3 only)
2. Bring the freeway up to current design standards (all segments)
3. Add capacity (all segments)

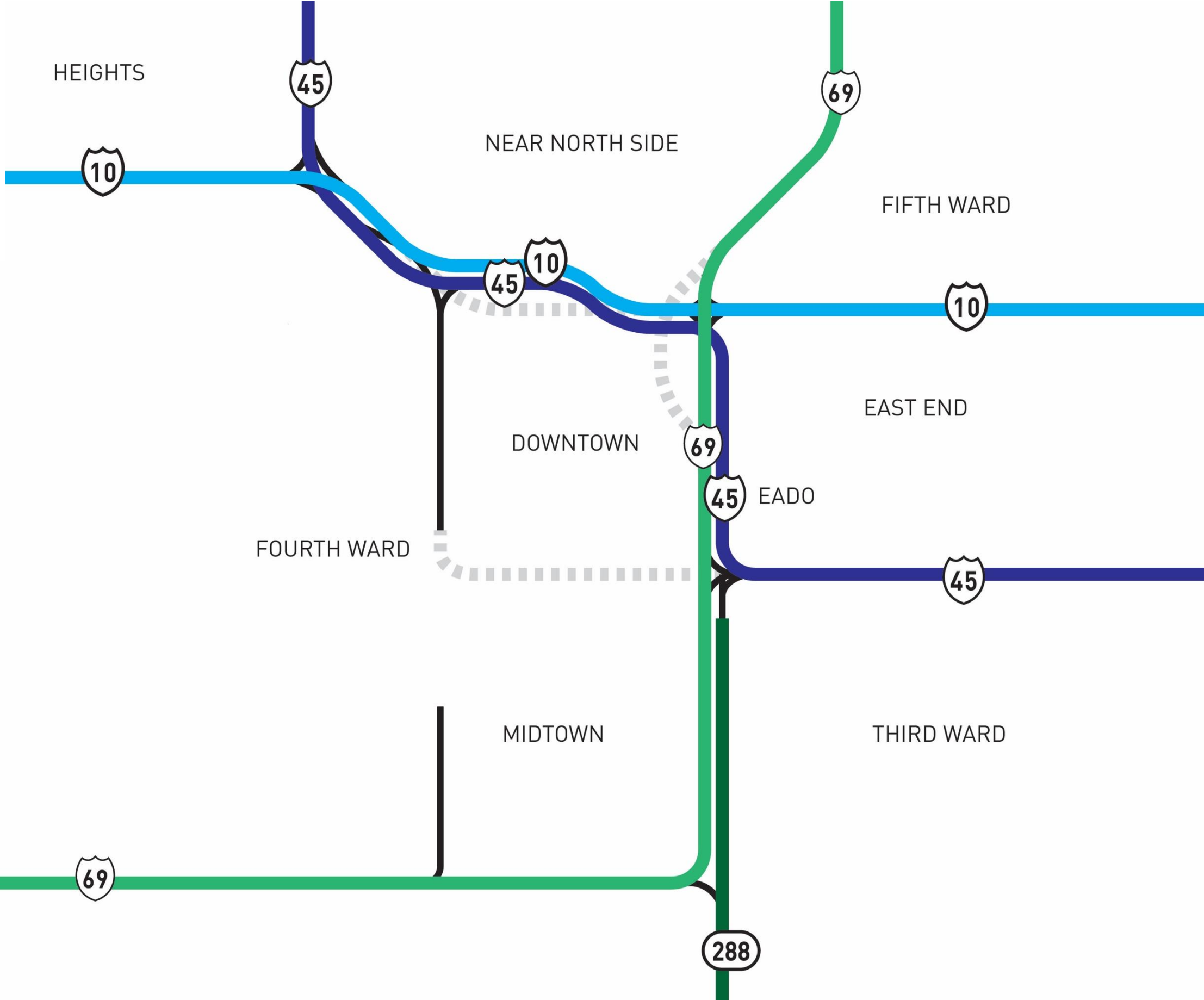
realign

Today



realign

proposed



DESIGN STANDARDS

The freeway doesn't meet modern standards

Left hand exit

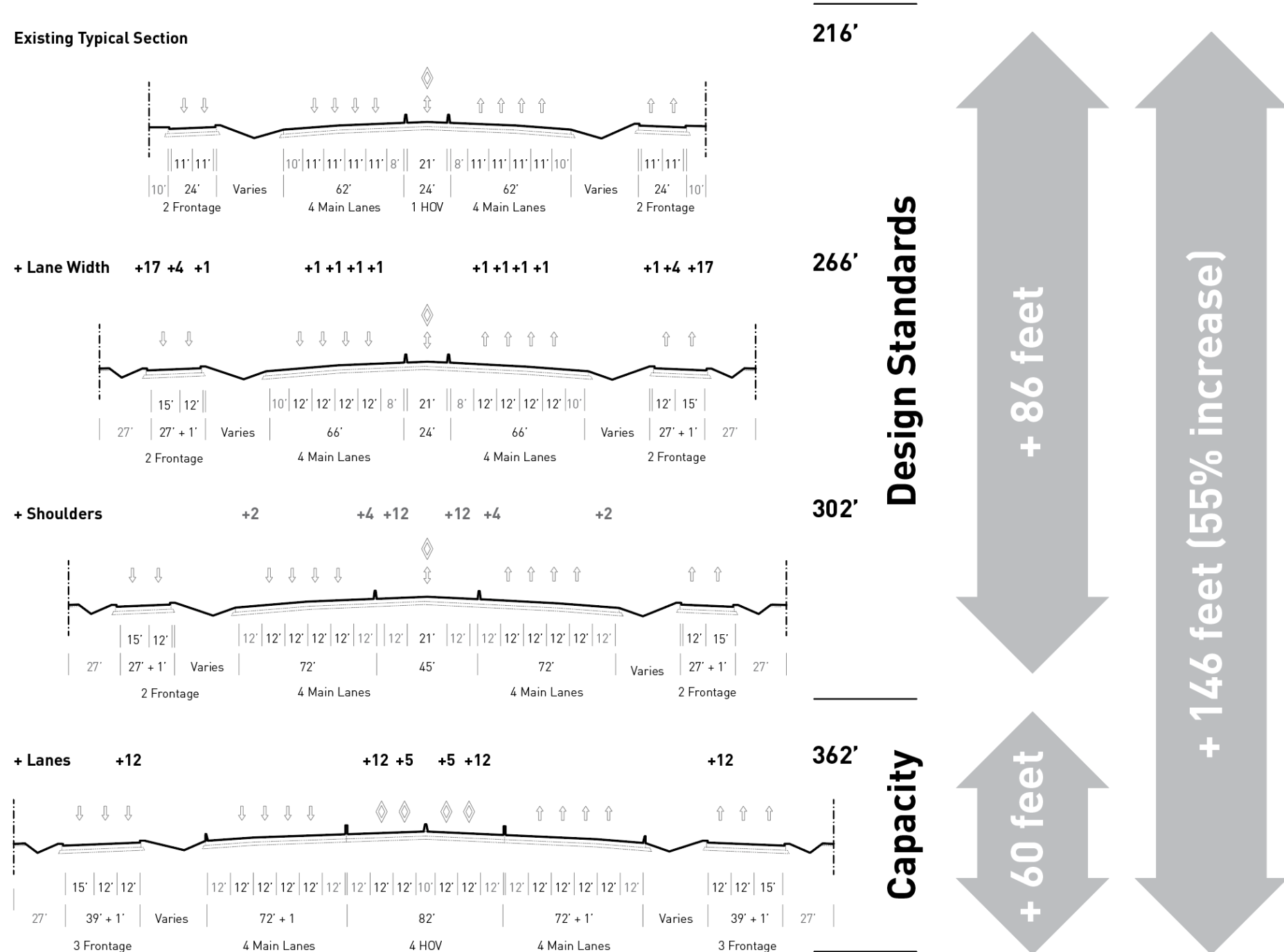
No merge lane at onramp

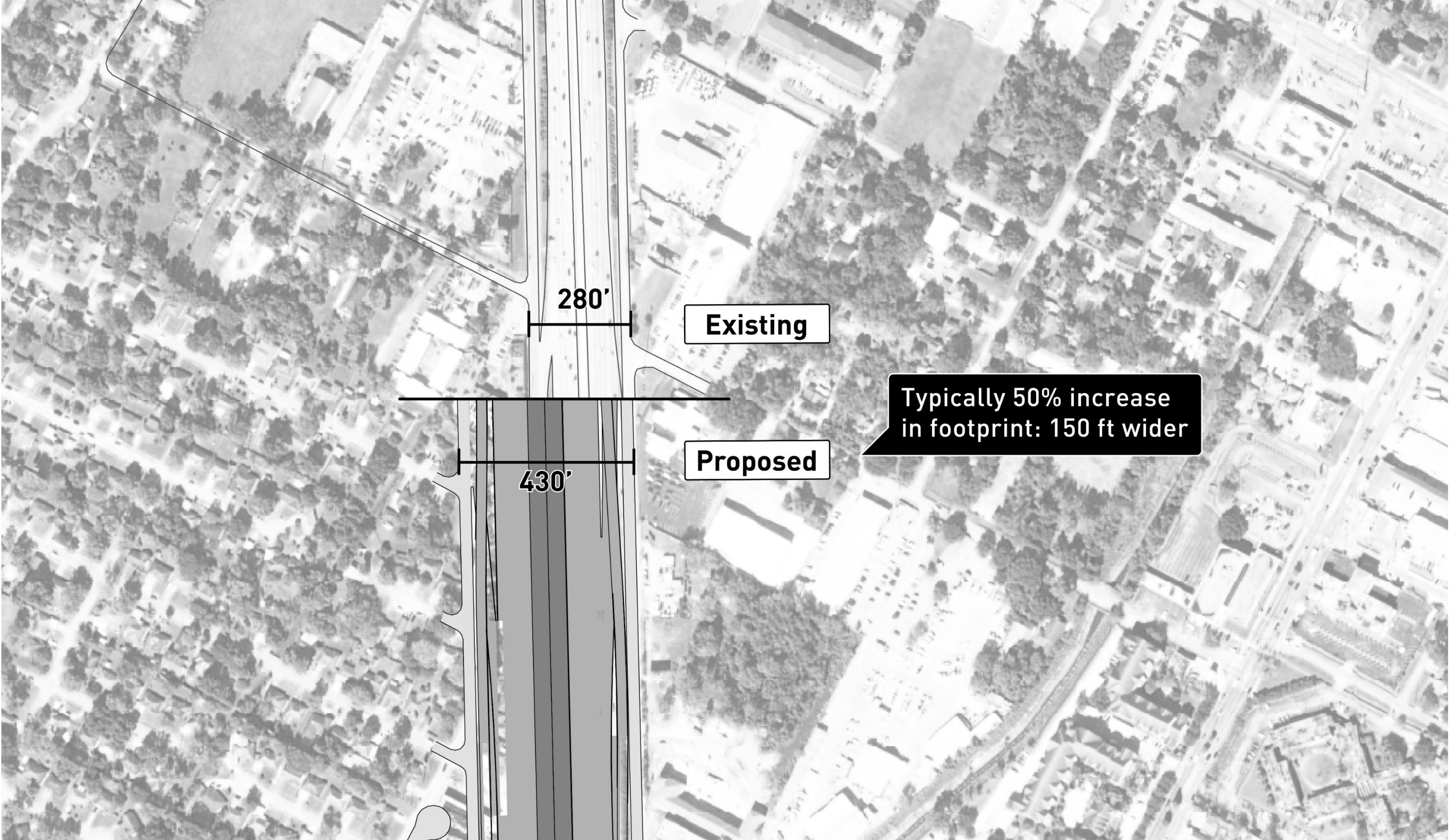
40 mph curve

No inside shoulder

DESIGN STANDARDS

Bringing the freeway up to standards takes space.





280'

Existing

Typically 50% increase
in footprint: 150 ft wider

Proposed

430'

DESIGN STANDARDS

IH45 is flood-prone



John Dawson @JohnDawsonFox26

FLOODED ROAD: law enforcement reports flash flood at Noon, I-45 at North Main due to water on the road. Road closed in both directions.

FOX RAD 12:24 PM YOUR GULF COAST WEATHER AUTHORITY

Flash Flood Warning

Type: Flash Flood Warning
Until: Tuesday 12:30 PM CDT

Type: Flash Flood Warning
Until: Tuesday 12:45 PM CDT

City's Facilitation Process







3 Workshops

+

I-45 Virtual Community Workshop

Message from Mayor Sylvester Turner

Virtual Workshop

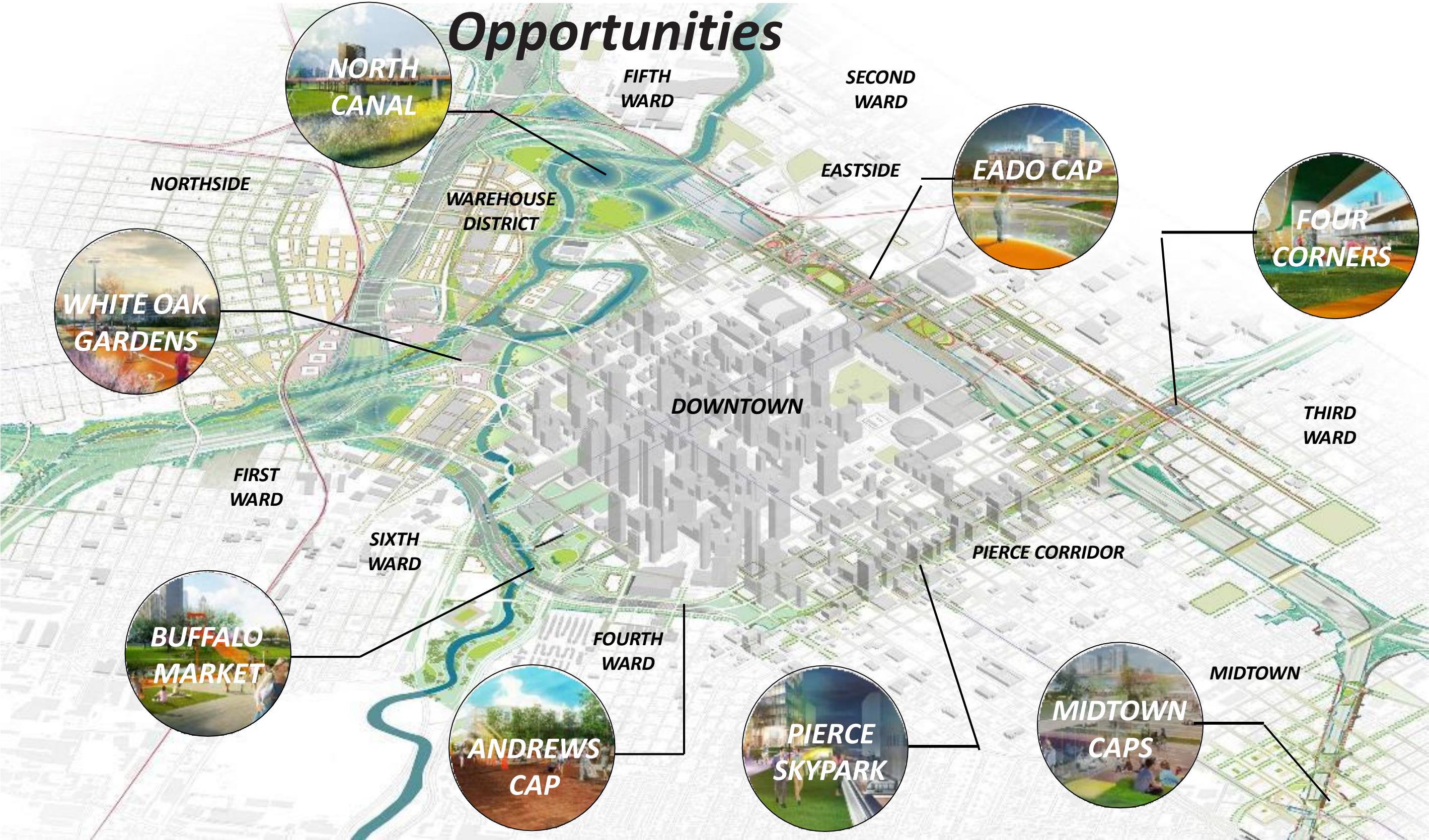
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NHHIP Round 2 Workshops - Community Feedback - Meetings + Online Survey

Alt #	Title	TxDOT				
		Proposal	Alt XX.1	Alt XX.2	Alt XX.3	Alt XX.4
01	Capacity	11%	8%	9%	62%	10%
02	Managed/Transit Lane Counts	10%	5%	18%	29%	39%
03	Managed Lane Operations		23%	23%	36%	17%
04	Bus Rapid Transit Alternatives	9%	18%	29%	44%	
05	Bus Rapid Transit at Greenspoint	12%	78%	10%		
06	Bus Rapid Transit at North Main	15%	41%	45%		
07	Bus Rapid Transit at Crosstimbers	12%	36%	9%	42%	
08	Bus Rapid Transit Station at Tidwell	14%	86%			
09	Transit Center at North Shepherd/Little York	8%	24%	68%		
10	Katy Freeway HOV connection	10%	48%	43%		
11	Frontage Road Intersections	12%	88%			
12	Frontage Road Cross Section	8%	21%	70%		
13	Frontage Lane Count	14%	86%			
14	North Main Street Off-Ramp	21%	79%			
15	Ramps in NE corner of Downtown	11%	89%			
16	Ramps in SW corner of Downtown	28%	22%	26%	24%	
Traffic						
17	Frontage Roads at Hall's Bayou	8%	92%			
18	Little White Oak Bayou Greenway	7%	93%			
Flooding						
20	Narrow Cross Section Through Design Exceptions	20%	80%			
21	I-610 Ramp Radius	12%	88%			
22	Cross Section at White Oak Bayou	24%	76%			
Property						
23	East Downtown Trench	21%	14%	65%		
24	Assistance for Displaced Residents	8%	92%			
25	Affordable Housing	12%	88%			
Connections						
26	Crosstimbers Complete Street	7%	13%	47%	33%	
27	Mitigating Increased Neighborhood Traffic	14%	86%			
28	Independence Heights Frontage Roads	24%	76%			
29	North Main Pedestrian Connectivity and Parks	5%	25%	52%	17%	
30	North Street Connection	7%	42%	50%		
31	Fifth Ward/Lyons Ave Connectivity to Downtown	10%	23%	28%	39%	
32	San Jacinto Connection	17%	83%			
33	Rail Relocation	14%	86%			

Community Preferences

NHHIP – Segment 3: Masterplan of Civic Opportunities



The Mayor's letter

Sent May 12, 2020



CITY OF HOUSTON
Office of the Mayor

Sylvester Turner
Mayor
P.O. Box 1562
Houston, Texas 77251-1562
Telephone – Dial 311
www.houstontx.gov

May 12, 2020

The Mayor's letter

Sent May 12, 2020

Response from Laura Ryan May 20, 2020



May 12, 2020

J. Bruce Bugg, Jr.
Chairman

Laura Ryan
Commissioner

The Honorable Sylvester Turner
Mayor, City of Houston
PO Box 1562
Houston, TX 77251-1562



TEXAS TRANSPORTATION COMMISSION

May 20, 2020

The Mayor's letter

Sent May 12, 2020

Response from Laura Ryan May 20, 2020

County resolution June 9, 2020



May 12, 2020

J. Bruce Bugg, Jr.
Chairman

Laura Ryan
Commissioner

TEX



Resolution

WHEREAS, the Texas Department of Transportation (TxDOT) is undertaking the North Houston Highway Improvement Project (NHHIP); and

WHEREAS, the NHHIP is a regionally significant transportation project within Harris County; and

WHEREAS, this major infrastructure project using taxpayer dollars should improve the region's multi-modal transportation capacity while preserving and improving quality of life in the surrounding neighborhoods; and

...resolution on August 13, 2019 regarding the realignment ... transportation

What is in the letter?

General

Segment 3

-Specific Improvements

Segment 1 and 2

-Request to study alternate lane configuration and narrower footprint

-Specific Improvements

Bike/Ped Improvements

Bridges and crossings

Frontage roads and intersections

Trail connections

Civic Opportunities – Existing Highways



NORTHSIDE

**FIFTH
WARD**

EADO

BUFFALO BAYOU

**FOURTH
WARD**

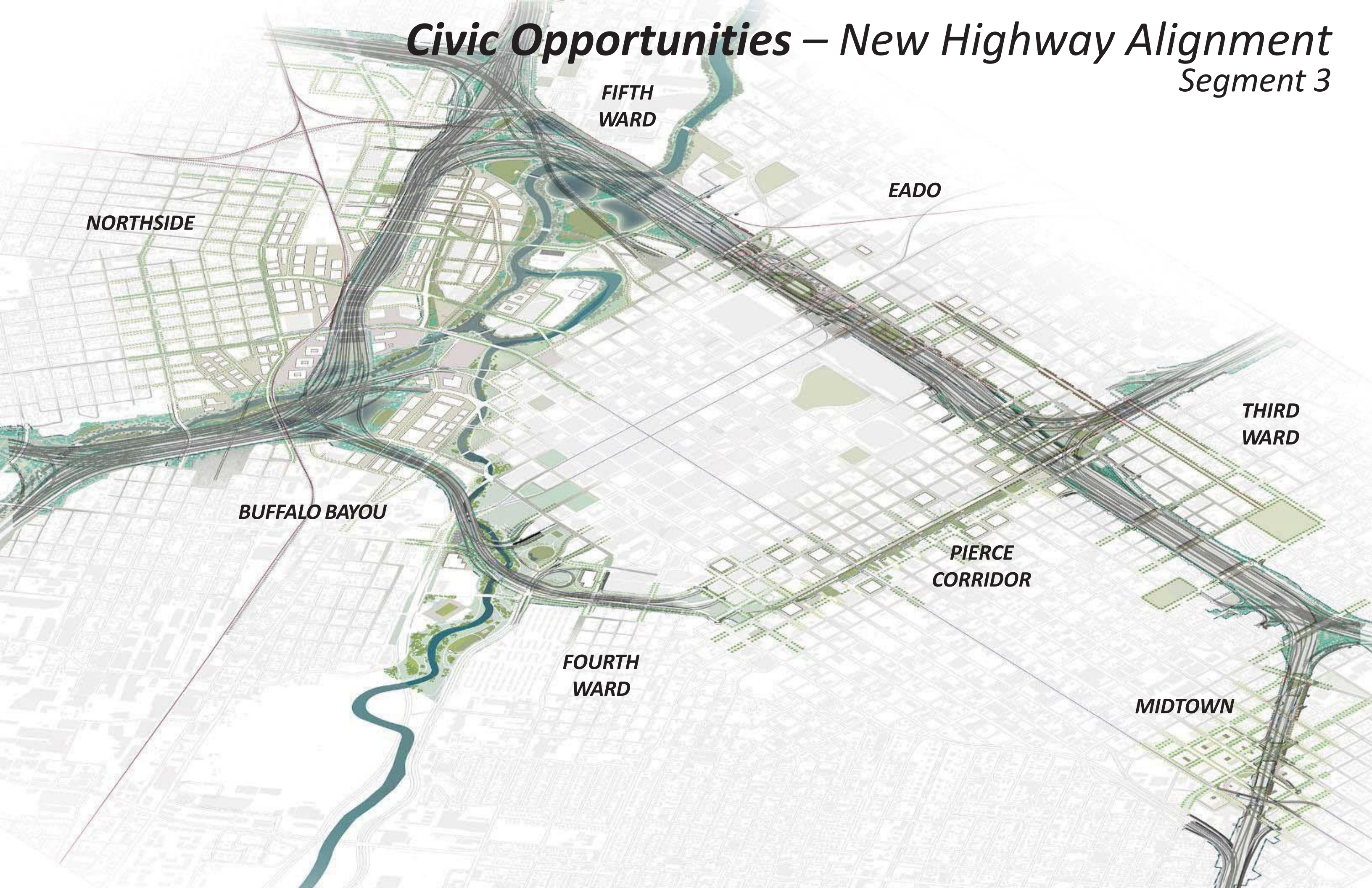
**PIERCE
CORRIDOR**

**THIRD
WARD**

MIDTOWN

Civic Opportunities – New Highway Alignment

Segment 3



NORTHSIDE

**FIFTH
WARD**

EADO

**THIRD
WARD**

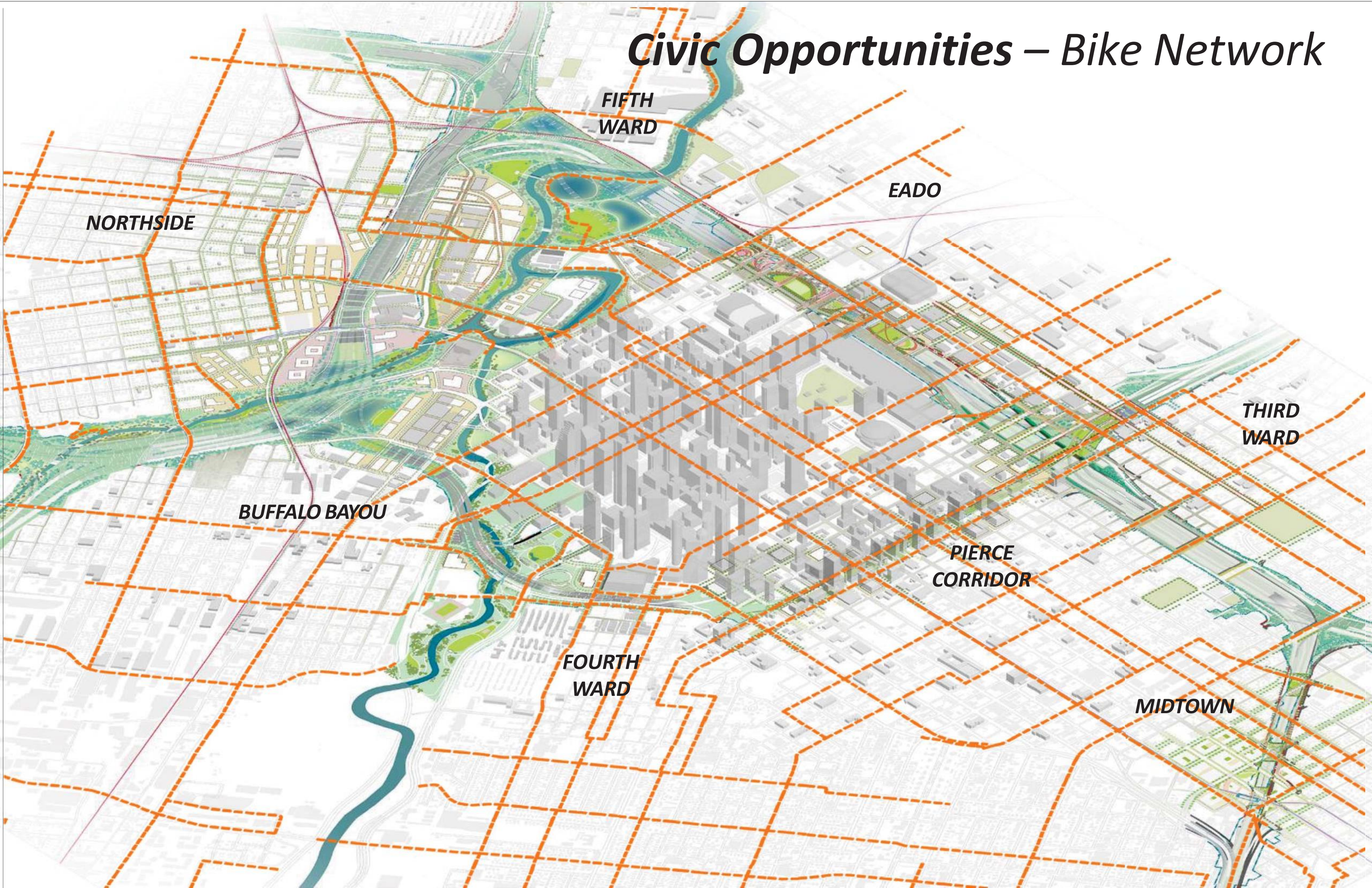
BUFFALO BAYOU

**PIERCE
CORRIDOR**

MIDTOWN

**FOURTH
WARD**

Civic Opportunities – Bike Network



FIFTH WARD

EADO

NORTHSIDE

THIRD WARD

BUFFALO BAYOU

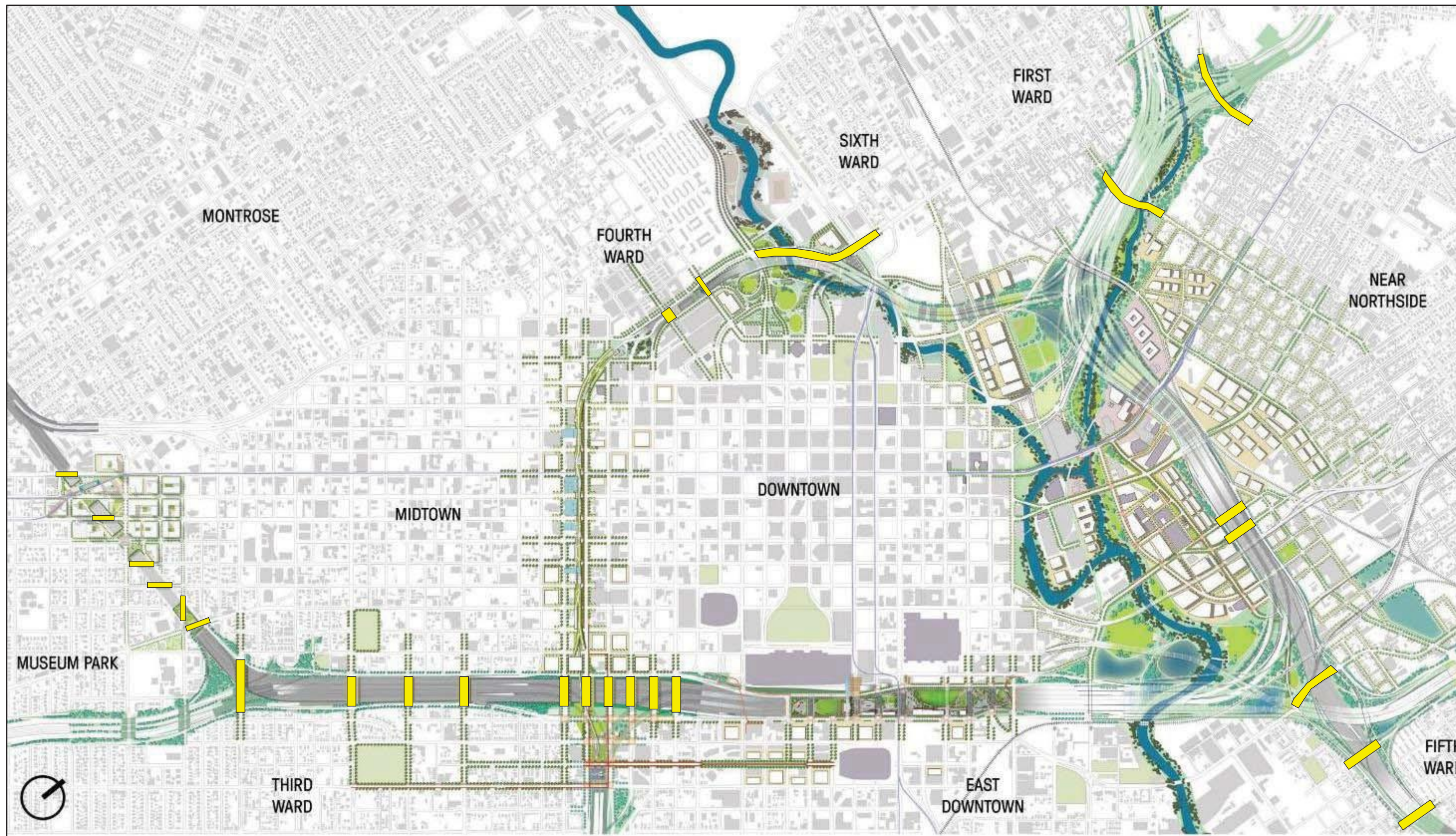
PIERCE CORRIDOR

FOURTH WARD

MIDTOWN

Civic Opportunities – NHHIP Segment 3 Crossings

44 Street Crossings / 26 Bridges Rebuilt Across the Project



Civic Opportunities – City Street Crossings

TxDOT & City of Houston Collaboration

44 City Street Crossings / 26 Bridges

Proposed Bike Lanes

Proposed Pedestrian Realm Width



STREET NAME	ELEVATION REL. TO FREEWAY (OVER/UNDER)	ON CAP (YES/NO)	# OF THROUGH LANES	TURN LANES	WIDTH PER LANE (FT)	COH BIKE PLAN DESIGNATION	BIKE LANE PROPOSED (YES/NO)	NORTH OR EAST PED REALM				SOUTH OR WEST PED REALM			
								TOTAL PED REALM WIDTH NORTH OR EAST SIDE (FT)	PED REALM: SIDEWALK NORTH OR EAST SIDE (FT)	BIKE LANE NORTH OR EAST SIDE (FT)	TREE/FURNITURE ZONE NORTH OR EAST SIDE (FT)	TOTAL PED REALM WIDTH SOUTH OR WEST SIDE (FT)2	PED REALM: SIDEWALK SOUTH OR WEST SIDE (FT)	PED REALM: BIKE LANE SOUTH OR WEST SIDE (FT)	PED REALM: TREE/FURNITURE ZONE SOUTH OR WEST SIDE (FT)
MAIN (I-69)	OVER	NO	4		11	SHARED	YES	17	7	5	5	17	7	5	5
FANNIN	OVER	YES	3		11	NONE	NO	15	10	0	5	15	10	0	5
SAN JACINTO (I-69)	OVER	NO	4		11	NONE	NO	15	10	0	5	15	10	0	5
CAROLINE	OVER	YES	2		11	NONE	NO	10	5	0	5	10	5	0	5
WHEELER	OVER	YES	4		11	NONE	NO	15	10	0	5	15	10	0	5
AUSTIN	OVER	NO	2		11	DEDICATED	YES	17	7	5	5	17	7	5	5
LA BRANCH	OVER	NO	2		11	DEDICATED	YES	17	7	5	5	17	7	5	5
CLEBURNE (I-69)	OVER	NO	2		11	DEDICATED	YES	17	7	5	5	17	7	5	5
ALMEDA	OVER	NO	4	1 left turn	11	DEDICATED	YES	17	7	5	5	17	7	5	5
ALABAMA	OVER	NO	4		11	DEDICATED	YES	17	7	5	5	10	5	5	0
CLEBURNE (SH 288)	UNDER	NO	2		11	NONE	YES	17	7	5	5	17	7	5	5
ELGIN	OVER	NO	5		11	NONE	YES	17	7	5	5	17	7	5	5
TUAM	OVER	NO	3		11	SHARED	YES	17	7	5	5	17	7	5	5
MCGOWEN	OVER	NO	5		11	DEDICATED	YES	17	7	5	5	17	7	5	5
GRAY	OVER	NO	3		11	DEDICATED	YES	17	7	5	5	12	7	0	5
PIERCE	OVER	NO	3		11	DEDICATED	YES	12*	7	0	5	17	7	5	5
ST. JOSEPH	OVER	NO	3		11	NONE	NO	12	7	0	5	12	7	0	5
JEFFERSON	OVER	NO	4		11	NONE	NO	12	7	0	5	12	7	0	5
PEASE	OVER	NO	4		11	NONE	NO	12	7	5	5	12	7	0	5
LEELAND	OVER	NO	5	1 left turn	11	DEDICATED	YES	17	7	5	5	17	7	5	5
LAMAR	OVER	YES	1	1 u-turn	11	NONE	NO	10*	5	0	5	0	0	0	0
MCKINNEY	OVER	YES	4		11	NONE	NO	10	5	0	5	10	5	0	5
WALKER	OVER	YES	N/A		N/A	DEDICATED	YES	17	7	5	5	17	7	5	5
RUSK	OVER	YES	3		11	DEDICATED	YES	12*	7	0	5	17	7	5	5
CAPITOL	OVER	YES	3		11	DEDICATED	YES	17*	7	0	5	12*	7	0	5
TEXAS	OVER	YES	5	2 left turn*	11	NONE	NO	15	10	0	5	15	10	0	5
PRESTON	OVER	YES	3	1 left turn	11	NONE	NO	15	10	0	5	15	10	0	5
CONGRESS	OVER	YES	3		11	NONE	NO	15	10	0	5	15	10	0	5
FRANKLIN	OVER	YES	4		11	NONE	NO	10	5	0	5	10	5	0	5
COMMERCE	OVER	YES	3		11	DEDICATED	YES	17	7	5	5	12*	7	0	5
GREGG	UNDER	NO	5		11	DEDICATED	YES	17	7	5	5	17	7	5	5
MEADOW	OVER	NO	2		11	NONE	NO	10	5	5	5	10	5	0	5
JENSEN	UNDER	NO	5		11	DEDICATED	YES	17	7	5	5	17	7	5	5
HARDY	OVER	NO	2		11	DEDICATED	YES	17	7	5	5	17	7	5	5
MCKEE	OVER	NO	2		11	DEDICATED	YES	12	7	0	5	17	7	5	5
SAN JACINTO (I-10) (FUT)	UNDER	NO	4		11	N/A	YES	17	7	5	5	17	7	5	5
RUNNELS (FUTURE)	UNDER	NO	4		11	N/A	YES	17	7	5	5	17	7	5	5
MAIN (I-10)	UNDER	NO	N/A		N/A	NONE	NO	N/A		5	N/A	N/A			N/A
HOGAN	OVER	NO	4		11	DEDICATED	YES	17	7	5	5	17	7	5	5
HOUSTON	OVER	NO	4		11	DEDICATED	YES	17	7	5	5	17	7	5	5
QUITMAN	UNDER	NO	4		11	DEDICATED	YES	17	7	0	5	17	7	5	5
ALLEN PWKY	UNDER	NO	7		11	DEDICATED	YES	10	5	5	5	10	5	0	5
WEST DALLAS	OVER	NO	4		11	DEDICATED	YES	17	7	5	5	17	7	5	5
ANDREWS	OVER	NO	N/A		N/A	DEDICATED	YES	17	7			17	7	5	5

Civic Opportunities – City Street Crossings

Montrose Bridge Lessons Learned



Civic Opportunities – City Street Crossings

Bridge Width & Pedestrian Realm



Civic Opportunities – City Street Crossings

Third Ward Arched Bridges

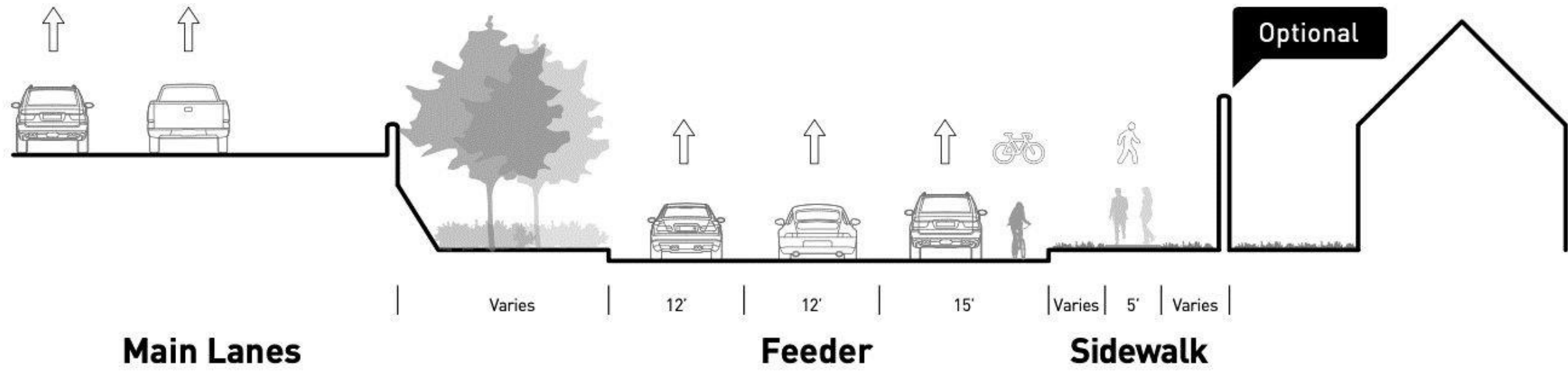


Civic Opportunities – City Street Crossings

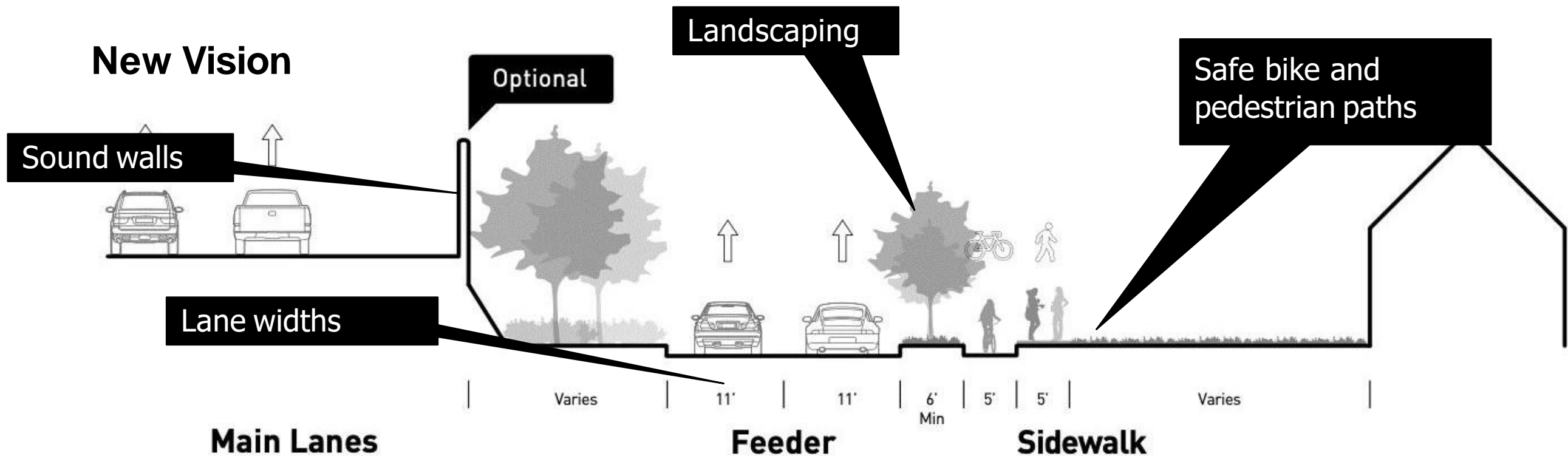
Fourth Ward: Andrews Street



TxDOT



New Vision

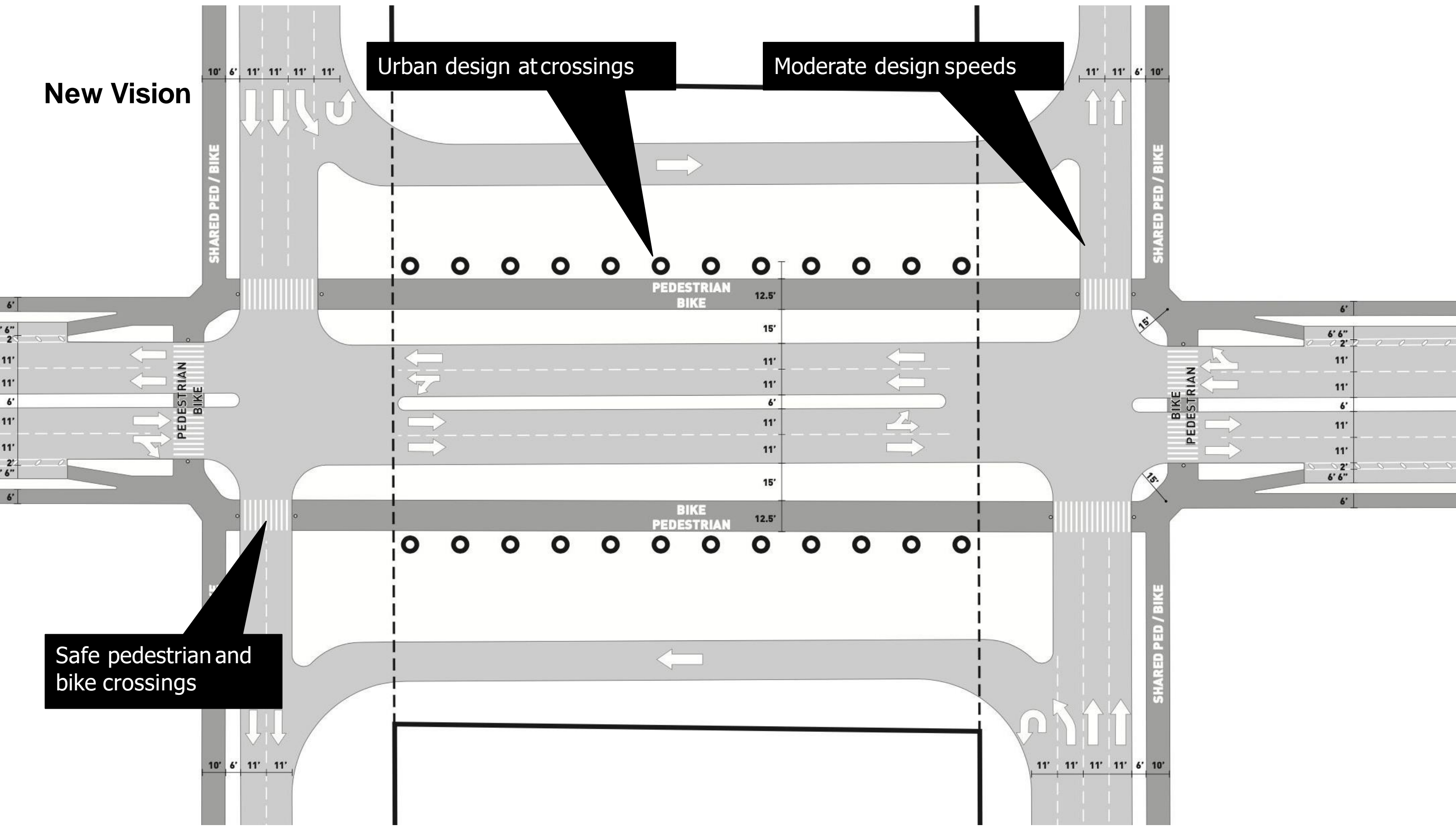


New Vision

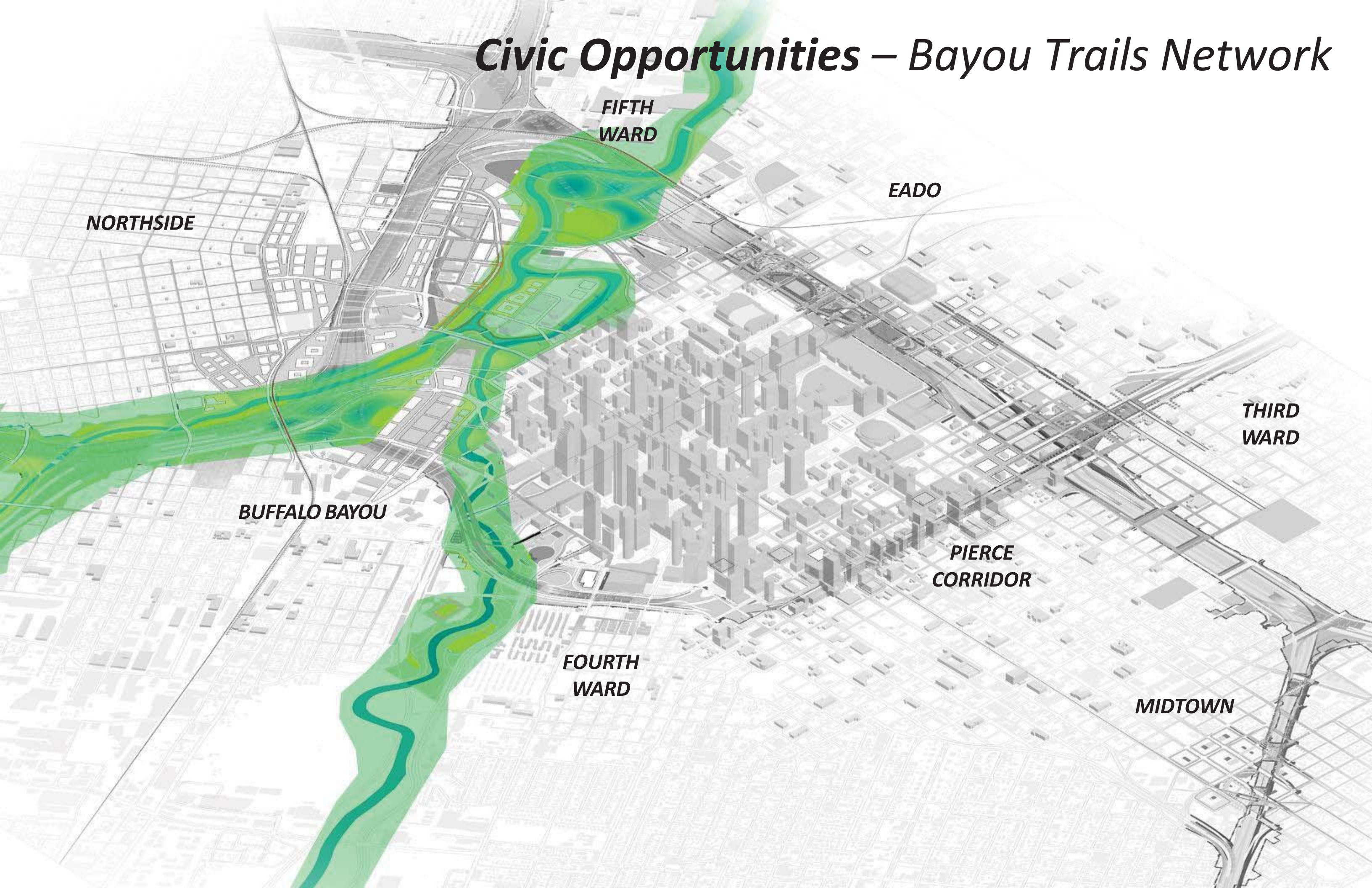
Urban design at crossings

Moderate design speeds

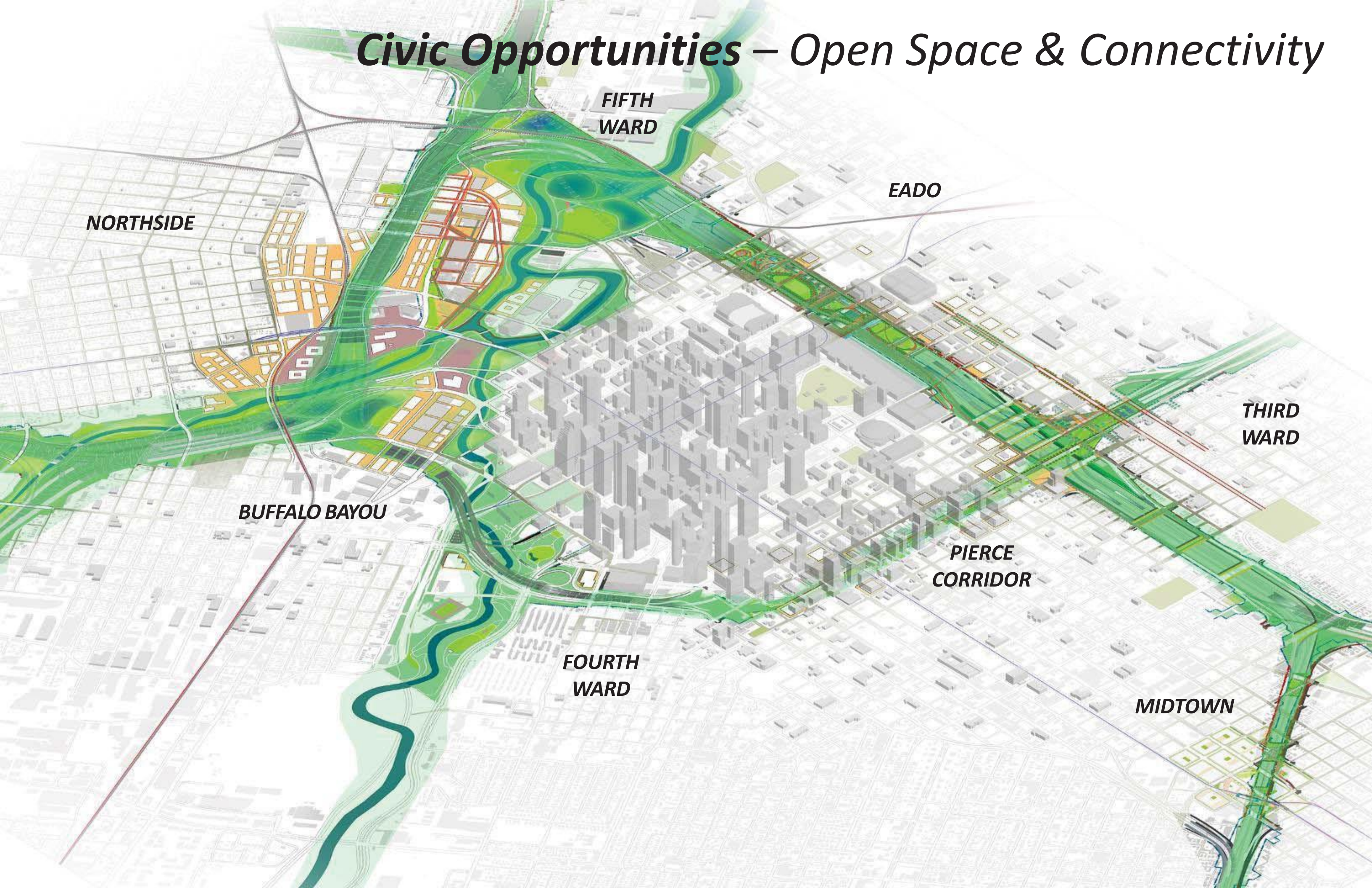
Safe pedestrian and bike crossings



Civic Opportunities – Bayou Trails Network



Civic Opportunities – Open Space & Connectivity



**FIFTH
WARD**

EADO

NORTHSIDE

**THIRD
WARD**

BUFFALO BAYOU

**PIERCE
CORRIDOR**

**FOURTH
WARD**

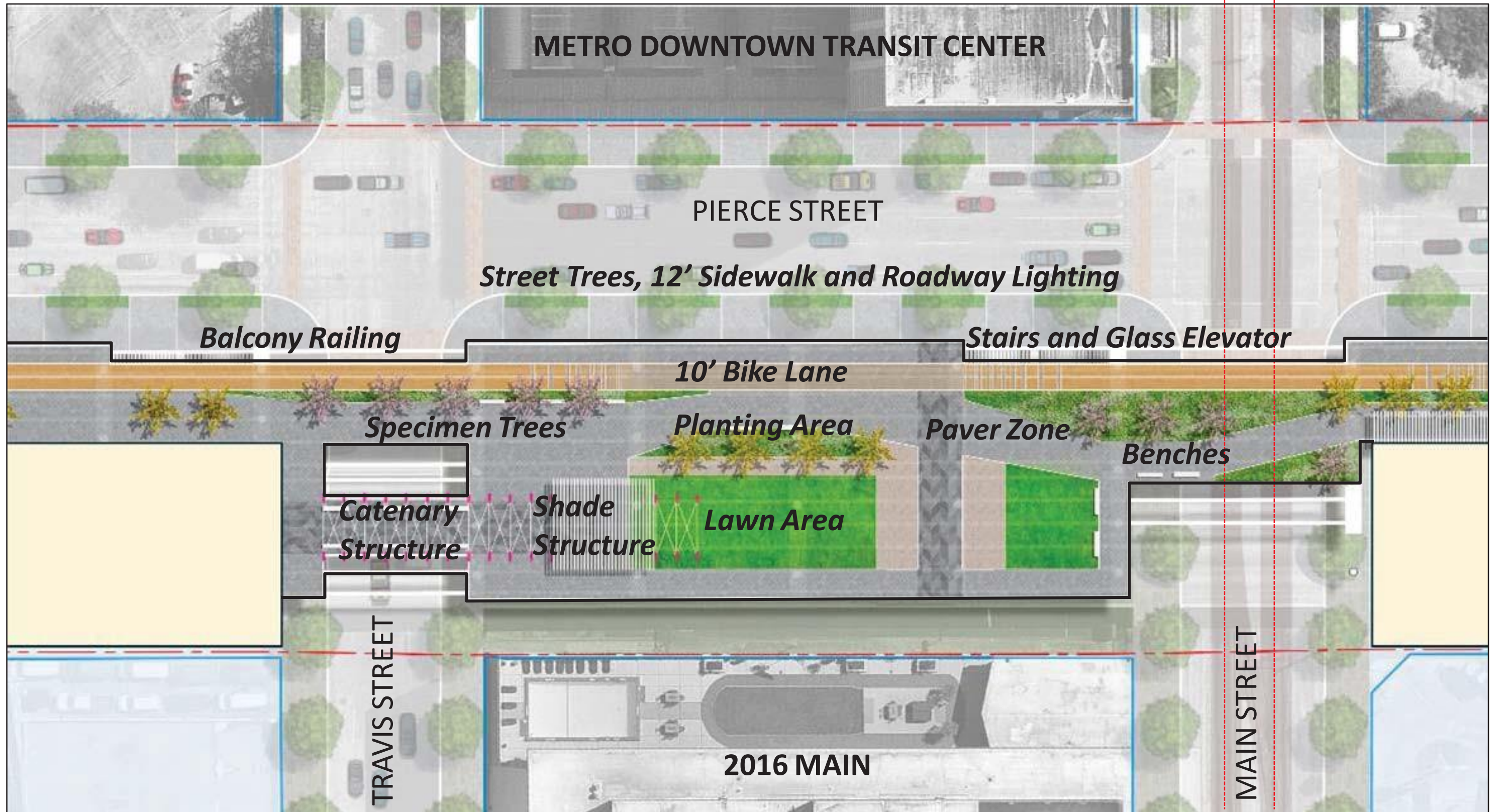
MIDTOWN

Civic Opportunities – Pierce Corridor: Pierce Skypark



Civic Opportunities – Pierce Corridor Detail

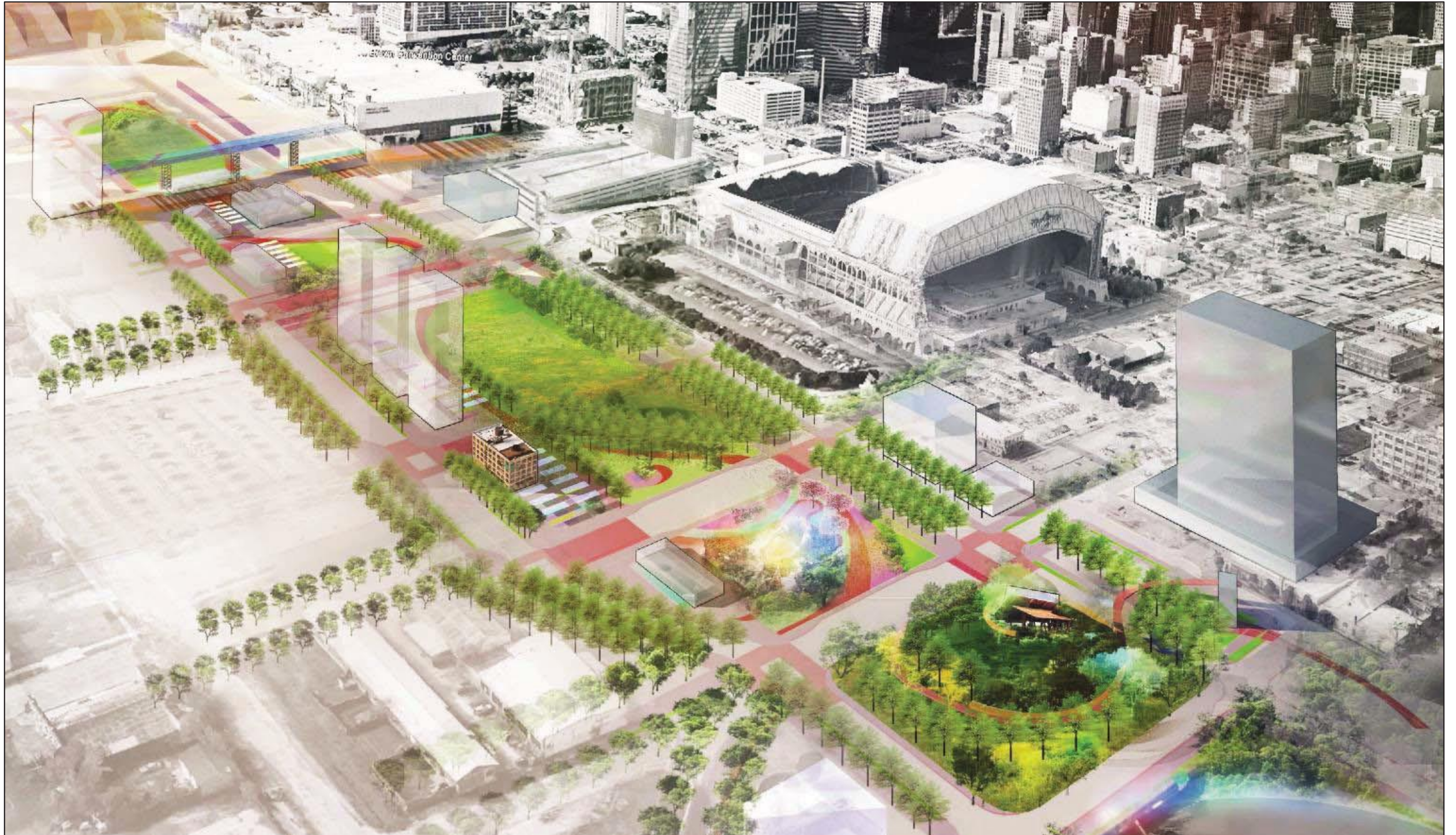
Skypark Plaza Plan



Civic Opportunities – Third Ward: Four Corners Understory Park



Civic Opportunities – EaDo Cap Park



Civic Opportunities – Fifth Ward: Frostown Crossing



Civic Opportunities – Northside: White Oak Trails



Civic Opportunities – Northside: White Oak/ UHD

NEW ELEVATED FREEWAY



Civic Opportunities – Northside: North Canal



Civic Opportunities – North Canal



Concept: Little White Oak Bayou Greenway

North Houston Highway Improvement Project Segment 1a & 2

Circulation	Alternative Park	Acquisitions
Feeder Traffic Lanes	Park Lands	NHHIP Affected Parcels
Main Traffic Lanes	Water Features	Potential Park Acquisitions
Managed Traffic Lanes	Hike & Bike Trail	

throughout project

Potential further Buy-out Areas

Opportunities to provide safe routes to schools

Key Connections to Northline Commons

Safe crossing through I-610 Interchange

convert culvert to open channel

Safe / Signalized Crossing at I-45 and Patton St

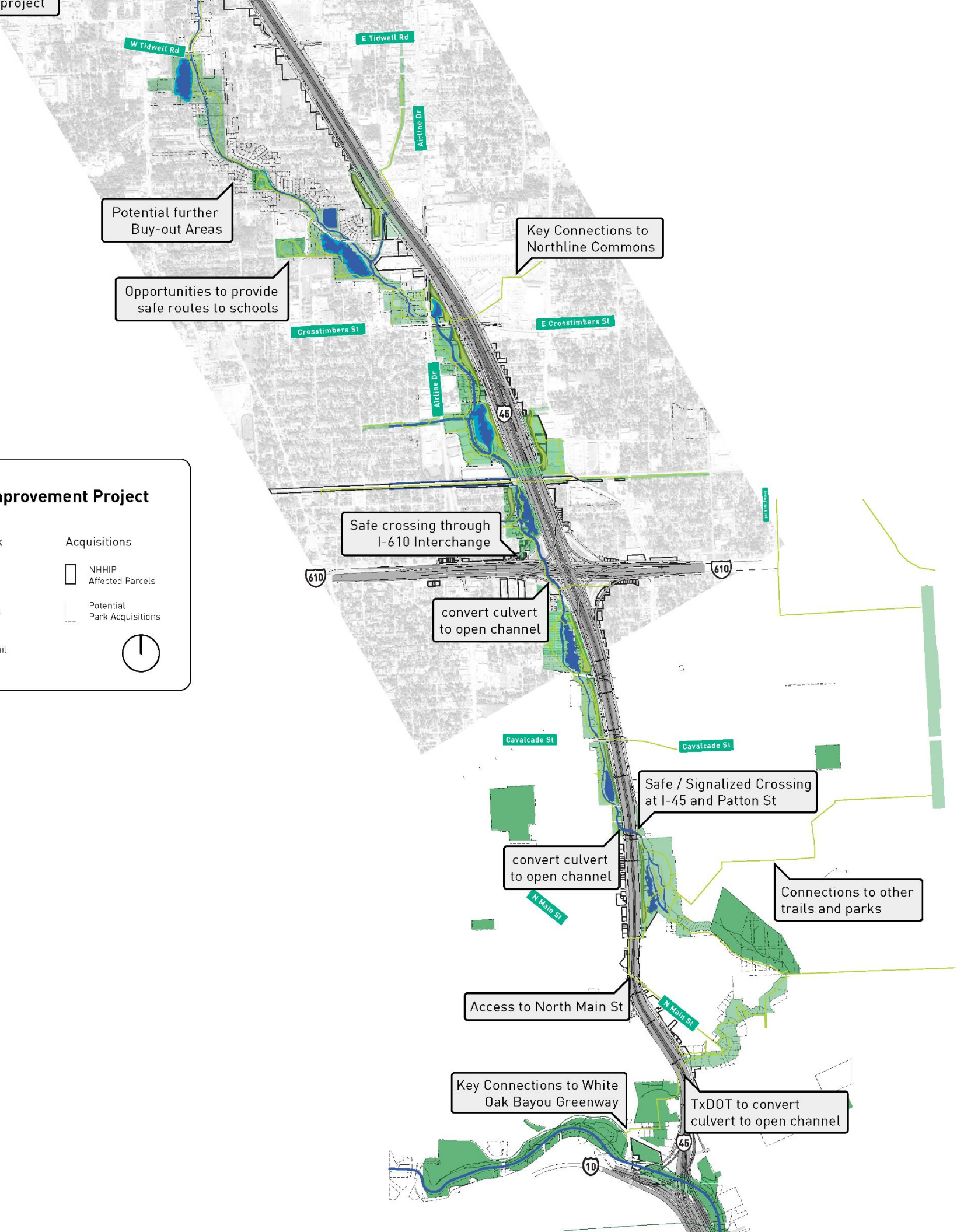
convert culvert to open channel

Connections to other trails and parks

Access to North Main St

Key Connections to White Oak Bayou Greenway

TxDOT to convert culvert to open channel



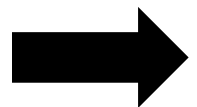


Final Environmental Impact Statement
North Houston Highway Improvement Project,
Houston District

From US 59/I-69 at Spur 527 to I-45 at Beltway 8 North
 CSJ: 0912-00-146
 Harris County, Texas
 August 2020

TxDOT is issuing the Final Environmental Impact Statement prior to issuing a Record of Decision document. TxDOT is not issuing a combined document pursuant to Pub. L. 112-141, 126 Stat. 405, Section 1319(b) due to project design changes after the Draft Environmental Impact Statement and new information relevant to environmental concerns and impacts of the project. TxDOT will issue the Record of Decision document no sooner than 30 days after publication of the Final Environmental Impact Statement.

- Alternatives
- Impacts



Record of Decision

Early 2021

Contract

Facilitation Group

Environmental

Potential Reevaluation

Design

Property Acquisition

Procurement

Construction