PROJECT SUMMARY

The North Houston Highway Improvement Project (NHHIP) is the result of fifteen years of planning and design. The project was formally started by the Texas Department of Transportation (TxDOT) in January 2002, with the first round of design alternatives presented in November 2006. The Environmental Impact Statement was relaunched in 2011. As a “Participating Agency,” the Houston Downtown Management District (HDMD) engaged with TxDOT early in the planning process to ensure Downtown Houston’s interests were represented in the final highway alignments. HDMD focused the initial effort with the review of TxDOT’s ten design alternatives, subsequently refined to three alternatives in 2013 following stakeholder engagement and transportation committee planning work. The current status is the preferred highway alignment presented in the Draft Environmental Impact Statement (DEIS) during Public Hearings held by TxDOT in May 2017. The Downtown highway system is approximately 12 miles of the total 24-mile, 3-segment project that extends to Beltway 8, with a total project cost currently estimated at $7 billion.

The planning work undertaken by HDMD not only addresses the infrastructure of the highway system, but also envision a network of surface streets to reconnect neighborhoods and create a framework for new development. Further, the vision plan suggests opportunities for creating an open space network that encircles Downtown, and extends deep into the surrounding neighborhoods. The result is a central city that embraces its natural resources, provides pedestrian and bicycle access to surrounding neighborhoods, and is attractive to new types of residential and commercial development.

Over the course of the NHHIP planning process, HDMD has engaged with governmental entities that include TxDOT, the City of Houston, Harris County Flood Control, Houston First, Harris County METRO, adjacent management districts surrounding Downtown, and other municipal entities. HDMD also worked closely with major stakeholders that will be affected by the NHHIP, including University of Houston Downtown, the George R. Brown Convention Center, Buffalo Bayou Partnership, Houston Astros, Houston Dynamo, Houston Rockets, the Harris County Houston Sports Authority, and a variety of specific local-area interests.

The resulting highway plan dramatically changes how Downtown Houston is approached by automobiles both at the highway level and at the neighborhood level. It also addresses how bicycles and pedestrians will embrace the city in new ways. The plan moves Interstate 45 from the west side of Downtown and relocates it to the north and east side, sharing rights-of-way with Interstate 10 and Interstate 69 respectively. This dramatic change allows for significant improvements to all edges of Downtown Houston and a streamlined flow for more efficient highway movements. Primary among the changes on the west side of Downtown are the opportunities to have Buffalo Bayou Park embraced by the city in a more direct way, and to replace the Pierce Elevated with a linear park system reconnecting Downtown and Midtown. The new highway alignment creates broad opportunities for the development of Downtown’s north side including significant trade with bayou frontage. On Downtown’s east side, the combined Interstate 69 and 45 will be constructed below grade and capped with a new park that serves the community needs of Downtown, EADO, the Greater East Side, as well as the regional and civic assembly needs of the city.

Vision and Opportunities | NHHIP
VISION AND OPPORTUNITIES

As a once in a lifetime opportunity, the North Houston Highway Improvement Project will change the face of the central city, with its catalytic effects informing the core neighborhoods and Downtown’s image, indeed the very “brand” of Houston. Long known for its expansive highway system and congested knot of pavement encircling Downtown, Houston is now in the forefront of American cities that are planning to tear down highways and reimagine the spaces that are left behind. The intent of this document is to illustrate potential civic projects positioned as new opportunity sites that take advantage of the highway relocation and build upon the new vision being established for Downtown Houston and its surrounding neighborhoods.

Houston’s new highway system is envisioned as much more than infrastructure that efficiently moves automobiles. The goal of the vision and planning process is to optimize highway alignments so that neighborhoods can be reconnected, and Houston’s natural systems can be emphasized and extended into the fabric of the city. The plan also envisions the highway system as part of the public space of the city with parks, trails, bikeways, public art, water features, urban forests, waterway detention/retention lakes, and iconic gateway elements built into the fabric of the highway system. Examples include extending the open space system of Buffalo Bayou Park into Downtown, Fourth Ward and Midtown; creating a regional event park perched above the highway, between Downtown and EaDo; wetland parks and trail connections that extend Bayou Greenways; and large scale redevelopment opportunities for the City of Houston’s Governmental Center, the University of Houston Downtown and the Warehouse District as waterfront developed green districts more fully connected to Downtown.

Downtown Houston is the subject of a variety of ongoing and recent urban planning and design studies. Released in November 2017, Plan Downtown: Converging Culture, Lifestyle & Commerce establishes the 20-year vision for Downtown’s future. With more than 140 development recommendations, the Plan asserts Downtown as Houston’s Greatest Place To Be, The Premiere Business and Government Location, The Standard for Urban Livability and The Innovative Leader in Connectivity. Key recommendations on placemaking and livability address the civic opportunities associated with the NHHIP, in particular the “Big Idea of Houston’s Green Loop,” Downtown’s northwest corner that continues to mature as Houston’s world class Theater District. A 2015 master plan for this area emphasizes a stronger public realm and reinvention of underutilized properties and open spaces.

The south side of Downtown is currently porous and riddled with surface parking. A 2014 planning study envisions a mix of residential development informed by urban parks and greenways. The historic Warehouse District in northern Downtown is being planned with an eye toward education, art, and bayou-focused housing. This document builds on the findings of these previous studies, and will be used to inform the continued highway planning effort, both specific to the NHHIP infrastructure and the array of civic opportunities proximate to the future highway.
* Opportunity vetted with the public through the Museum Park Liveable Centers Study
* Preliminary Midtown C-area Alternatives prepared for the City of Houston Planning Department; reviewed with Key Stakeholders and TxDOT
The existing Interstate 69 and Highway 288 will be widened and reconstructed with a trench similar to the existing highway to the south. By placing the new highway into a trench, cross streets can be emphasized and designed as gateways for travelers on the highway below, and for residents crossing between the Third Ward and Midtown neighborhoods. Iconic double-arched bridges with an integral lighting design are envisioned at this opportunity site.
PROJECT OPPORTUNITIES

- Iconic double-arched bridges serving as a gateway into Downtown Houston.
- Pedestrian lighting along infrastructure surfaces.
- Bridges designed to create visual alignment and connectivity between Midtown and Downtown.
- Frontage roads with elevated pedestrian spaces.

* Lighting design similar to the existing Interstate 69 bridges in Montrose.
SITE 03
EADO GREENWAY

Land areas below the Interstate 45 interchange at Interstate 69 offer potential open space and pedestrian connectivity opportunities between the Pierce Lineer Park, the EaDo Cap and potential EaDo Greenway Connections along the Bastrop Street right-of-way to the BBVA Compass Stadium and community neighborhoods. The required redevelopment of local frontage streets and highway crossings, in conjunction with potential dedicated pedestrian connectors, can facilitate enhanced pedestrian and bike connectivity between Downtown and EaDo. Highway forestation and greenway opportunities within EaDo can further leverage both existing and future development within the corridor to establish a green trail connection for existing communities and visitors to the vibrant sports and convention district just north of this opportunity site.
PROJECT OPPORTUNITIES

Capture and utilize open space below highway structure to enhance character and connectivity with EaDo and Third Ward neighborhoods.

Reinforce identity of sports and convention district for both EaDo and Downtown.

Leverage proposed improvements at EaDo Gap and Prince Street to enhance EaDo economic development.

Reinforce connectivity between Downtown, Midtown, and EaDo.
SITE 04
EADO CAP

The existing Interstate 69 will be widened, reconstructed, and combined with a re-aligned Interstate 45, requiring a right-of-way expansion between Charity and St. Emanuel in East Downtown. This new highway will be truncated in a below-grade section, allowing the highway to be capped with a 10-block urban park between Lamar and Commerce Streets. This new configuration will reduce both sound and visual impacts associated with the current highway’s above-grade structure, while allowing Downtown and East Downtown or East End neighborhoods to be reconnected physically and visually. The park is envisioned as serving dual roles: a regional park to showcase Houston to visitors while accommodating city-wide events; and a neighborhood park as an amenity for the growing residential and commercial zones of EADO and Downtown’s east side. In the spirit of showcasing Houston to visitors from around the world, emphasis will be placed on telling the story of Houston’s unique natural, cultural and industrial history. The park is also envisioned as an urban trailhead for Buffalo Bayou Park and the 300 miles of Bayou Greenways trails beyond.
SITE 05
BUFFALO BAYOU
WETLAND PARK

The segment of Interstate 69 and the re-aligned Interstate 45 that crosses Buffalo Bayou will be widened and rebuilt to provide a straighter alignment. This new configuration will open up land adjacent to Buffalo Bayou that could be converted to an open space that provides ecological and open space services to Downtown Houston. The park is envisioned as a “mixed use” park that offers urban nature and sporting opportunities, while reducing flooding with storm water detention ponds, a requirement of the TCO21 project. The park is envisioned to connect southward to the EaDo Cap Park providing a seamless trail connectivity between Downtown/EaDo and the Bayou Greenway trails beyond.
SITE 06
WAREHOUSE DISTRICT

The segment of Interstate 10 that defines the northern edge of Downtown Houston will be rebuilt and realigned to be adjacent to the existing Union Pacific railroad tracks near Hardy Yards. As part of the re-alignment, Interstate 45 is rebuilt within this new right-of-way. The new alignment will allow for the historic Warehouse District to be physically and visually reconnected. Lands that are currently occupied by the highway are envisioned as a combination of urban open space, university expansion, and new development. The urban open space will provide an art-focused plaza that serves the Warehouse District and connects to the historic open spaces of Allen’s Landing and the Buffalo Bayou and White Oak Bayou trail networks. As a separate infrastructure project, the implementation of the North Canal (or White Oak Bayou by-pass) will allow for additional waterfront redevelopment opportunities in the Warehouse District. The extension of North San Jacinto from I-10 frontage streets northbound below the Union Pacific freight rail and through Hardy Yards to Fulton Street is proposed as greatly needed neighborhood connection.
SITE 07
UH DOWNTOWN CAMPUS / WHITE OAK BAYOU PARK

The new alignment of Interstates 10 and 45 on the northern edge of Downtown allows for existing and planned University of Houston Downtown facilities to be stitched together as a university campus on a waterfront setting. Lends that are currently occupied by the highway are envisioned as a combination of urban open space, university expansion, and new development. As views to White Oak Bayou are enhanced with the removal of the existing highway, a new park space along the banks of the bayou is envisioned.
1. Improved campus setting for University of Houston Downtown
2. Campus streetscape improvements
3. Flood Control Bypass Channel with open space edges
4. Catalytic bayou park associated with University of Houston Downtown and artists' district
5. Improved access to existing bayou trail network
6. Gateway feature to Downtown
7. Relocated Union Pacific Rail Line
8. Ecological services including urban forest and stormwater detention within freeway interchange
SITE 08
POST OFFICE AND CITY CAMPUS

The Historic Post Office facilities are currently in planning for a mixed-use redevelopment that retains much of the existing building fabric. The plan calls for a connection to Buffalo Bayou and quasi-public open spaces along the Bayou and within the new development. Also under consideration is the realignment of Union Pacific Railroad infrastructure that would remove at-grade crossings in northern Downtown and in the First Ward; with a re-aligned freight and passenger main, the existing Amtrak station could also be relocated in proximity to the Burnett Street light rail station.

The existing Municipal Courts and City of Houston Police facilities have been studied for redevelopment through a variety of planning efforts over the past decade. The current alignment of Interstate 45 along the west side of Downtown will be re-routed to the east side of Downtown and a new “Spur” or Downtown Connector built in its place. This new alignment for Interstate 45 will create development opportunities along the west side of Downtown Houston. For the purposes of this study the results of the Washington Avenue Livable Center’s study has been used as a redevelopment guide. The plan envisions a mixed-use development with light rail and pedestrian connectivity to Downtown Houston.
PROJECT OPPORTUNITIES

- Relocated Union Pacific Rail Line
- Refined street grid to serve future development
- Re-aligned Houston Avenue to connect to Walker and McKinney Streets.
- Improved streetscape and public plazas for better connectivity and urban identity
- Existing municipal facilities incorporated into a new mixed-use development
- Re-developed surface parking lots to incorporate new mixed-use development
- Urban forest

NEAR NORTH SIDE

HARDY YARDS

FIRST WARD

HOUSTON AVE

COWTOWN

POST OFFICE
SITE 09
BUFFALO BAYOU GATEWAY

Interstate 45 is proposed to be rebuilt on the northern and eastern sides of Downtown and a new "spur" or Downtown Connector to be built in its place. This new alignment will create opportunities along the west side of Downtown Houston for an iconic gateway bridge over the Bayou, and for improvements to Buffalo Bayou and Sam Houston Parks, with enhanced connectivity to Downtown Houston. The plan envisions an iconic cable-stayed bridge that welcomes visitors to Downtown Houston. The bridge would be visible from Buffalo Bayou Park, and would be a monumental gateway addition to the Houston skyline. At ground level, the new highway alignment provides opportunities to connect existing open spaces with Downtown bike routes while adding visibility to the Bayou from key areas. Sam Houston Park would significantly benefit from the new highway alignment as it will have direct frontage to Buffalo Bayou.
SITE 10
FOURTH WARD CONNECTION

With the realignment of Interstate 45, the new west side elevated “spur” comes to grace between Dallas, Pease, and Jefferson Streets. This new alignment creates opportunities along the west side of Downtown Houston for improving east-west connectivity between the Fourth Ward and Downtown, and for pedestrian and bike north-south connectivity between Midtown and Buffalo Bayou Park. This plan seeks to reconnect the Fourth Ward to Downtown, perhaps via Andrews Street with a grade-separated structure or civic gateway across the new “spur” road.
PROJECT OPPORTUNITIES

Catalytic mixed use development resulting from the removal of Interstate 45

Linear park connections via Heiner Street between Buffalo Bayou Park, Fourth Ward, and Midtown

Improved open space at the end of Downtown Connector

Improved bike and pedestrian connections between Buffalo Bayou Park and Midtown

BUFFALO BAYOU PARK

FOURTH WARD

ANDERSON STREET

BUFFALO BAYOU PARK

BABBY STREET

BABBY PARK

FIFTH STREET

ALLEN CENTER
SITE 11
PIERCE STREET
REDEVELOPMENT / LINEAR PARK

The current alignment of Interstate 45 along the south and west sides of Downtown is planned to be moved to the east side of Downtown. This realignment will allow for the construction of a “spur” road built in the highway’s place, and the removal or partial repurposing of the Pierce Elevated. A new Pierce Street will create opportunities along the south side of Downtown Houston for improving connectivity between Midtown and Downtown, and for the development of a linear open space system that uses a portion of the Elevated’s footprint. This plan envisions a linear open space system punctuated by pocket parks that will inform the creation of a mixed-use residential district. The linear open space system converts Pierce Street into a Great Green Street that is lined with multiple rows of shade trees creating ample areas for biking, walking, and seating in well-appointed urban plaza spaces.
SITE 12
NORTH MAIN
CAP

The TxDOT plan calls for the widening of Interstate 45 as it approaches Downtown Houston, and placing the new highway into a below grade trench at a property-constrained area near North Main Street. By placing the new highway into a trench, a portion of the highway can be capped with a community park serving the adjacent mixed-income neighborhoods. The proposed “cap park” would provide a neighborhood amenity, but will also serve as a catalyst for improved mixed-use development projects to take advantage of the new open space.
The TxDOT plan calls for the widening of Interstate 45 as it approaches Downtown Houston. The new highway will cross Little White Oak Bayou adjacent to Woodland Park providing an opportunity to daylight a section of the Bayou. This plan envisions a trail and open space connection between Moody Park and Woodland Park that uses Little White Oak Bayou to make the connection. This new trail would bring Near Northside residents connectivity to the White Oak Bayou and Buffalo Bayou trail networks as well as a connection to Downtown Houston. This trail system can be extended northward across the rebuilt Interstate 610 interchange, as far north as Acres Homes; this trail would serve an estimated 85,000 residents.
PROJECT OPPORTUNITIES

- Improved ecological and hydrological condition at Little White Oak Bayou
- Daylighted Bayou via removal of the existing culvert crossing under Interstate 45
- Pedestrian trail connectivity between The Heights, Near Northside, and Downtown

WOODLAND HEIGHTS NEIGHBORHOOD

WHITE OAK BAYOU

NEAR NORTHSIDE NEIGHBORHOOD
PROGRAM DIAGRAM

LEGEND

Program Elements:
- Proposed Highway-Related Signature Trail
- Art Opportunity
- Realigned Freight and Passenger Rail
- Light Rail
- Future Light Rail
- Light Rail Station

- Potential Development
- Green Space, Existing
- Passive Green Space, Proposed
- Active Green Space, Proposed
- Bayou

Houston Bike Plan:
- Existing Off-Street High Comfort
- Existing Dedicated in Street ROW
- Existing Shared On-Street
- Programmed Off-Street High Comfort
- Programmed Dedicated in Street ROW
- Programmed Shared On-Street

Civic Opportunities Bike Recommendations:
- Proposed Off-Street High Comfort
- Proposed Dedicated in Street ROW
- Proposed Shared On-Street

TO DOWNTOWN
Little White Oak Trail Connections

TxDOT’s proposed widening of Interstate 45 north of downtown parallels over 2.5 miles of Little White Oak Bayou. This plan proposes the creation of a linear greenway corridor between Cross Timbers Street and Moody Park. In conjunction with TxDOT’s highway infrastructure plan, the proposed hike and bike trail system would establish links to neighborhoods throughout the corridor while offering connectivity solutions at key crossings of busy roadways. Additionally, the two proposed TxDOT detention facilities would be designed to offer both ecological benefits and recreational amenities. The proposed greenway would provide much-needed open space to under-served communities adjacent to the highway project, re-establishing connectivity between neighborhoods and offering access to the greater White Oak Bayou trail system, Buffalo Bayou and Downtown.