



North Houston Highway Improvement Project (NHHIP): Segment 3 Design-Build Project

Industry Workshop

January 17, 2020

Safety: Mission

ZERO 

#EndTheStreakTX



Safety Never Stops!





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NHHIP OVERVIEW



- Project is divided into 3 segments:
 - **Segment 1:** I-45 from Beltway 8 to I-610 (9 mi)
 - **Segment 2:** I-45 from I-610 to I-10 (3 mi)
 - **Segment 3:** Downtown Loop System (12.3 mi)
- Need for proposed Project:
 - Existing congestion
 - Future increases in population and employment
 - Future traffic growth
 - Outdated design elements
 - Aging infrastructure
- Purpose of proposed Project:
 - Apply current design standards to enhance safety
 - Mitigate congestion by improving mobility and operational efficiency
 - Expand transit and carpool capacity with 2-way, 24/7 operations
 - Maintain effective evacuation routes
- NHHIP has 9 of the Top 40 Most Congested Roadways in Texas





Project objectives:

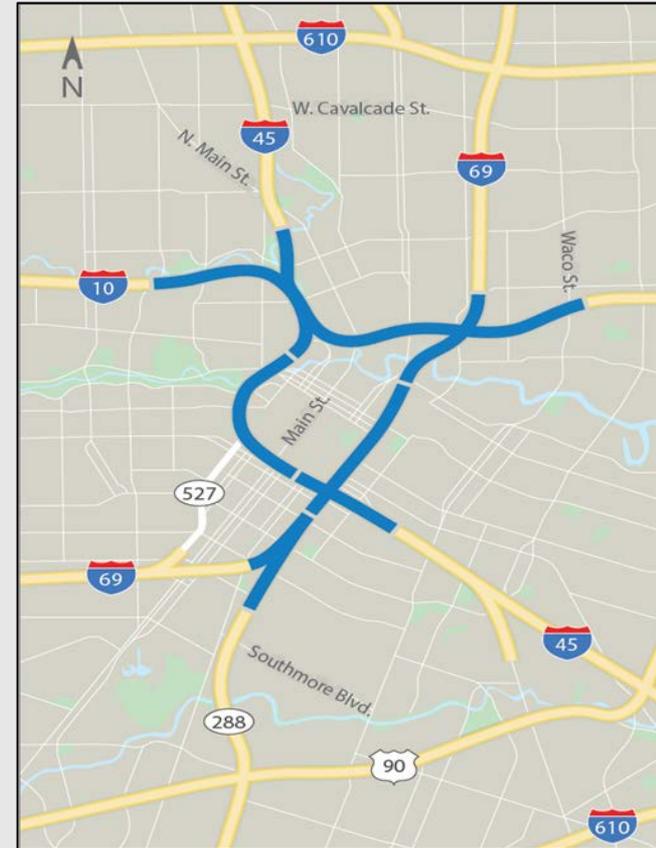
- Enhance emergency evacuation capabilities
- Enable economic opportunities
- Deliver Project on schedule and within budget
- Provide highest quality design & construction
- Maintain consistent communication & commitments to public & stakeholders
- Facilitate Disadvantaged Business Enterprise (DBE) participation
- Deliver Project in environmentally sensitive manner consistent with environmental approvals
- Increase operational efficiency
- Provide aesthetically pleasing Project



NHHIP Overview – Segment 3 Design-Build Project



- Total length: 12.3 miles
- Estimated design-build contract value: \$3.6 billion
- Project Scope – Design, construct, and maintain Segment 3 of the North Houston Highway Improvement Design-Build Project in downtown Houston as shown in the schematic design, including:
 - Realigning I-45 away from the Pierce Elevated to be parallel with I-10 and I-69 from the existing I-45 interchange with I-10 to the existing I-45 interchange with I-69;
 - Constructing a downtown connector providing access between I-45/I-10 and local downtown streets;
 - Depressing and widening I-69 from the SH 288 interchange to I-10;
 - Reconstructing the I-69 interchanges with I-45 and I-10;
 - Reconstructing I-10 to add non-tolled managed lanes from west of I-45 to east of I-69 through downtown Houston;
 - Reconstructing the I-10 interchange with I-45, reconstructing the SH 288 general purpose lanes from south of I-69 to the I-45 interchange; and
 - Reconstructing the SH 288 interchange with I-69.

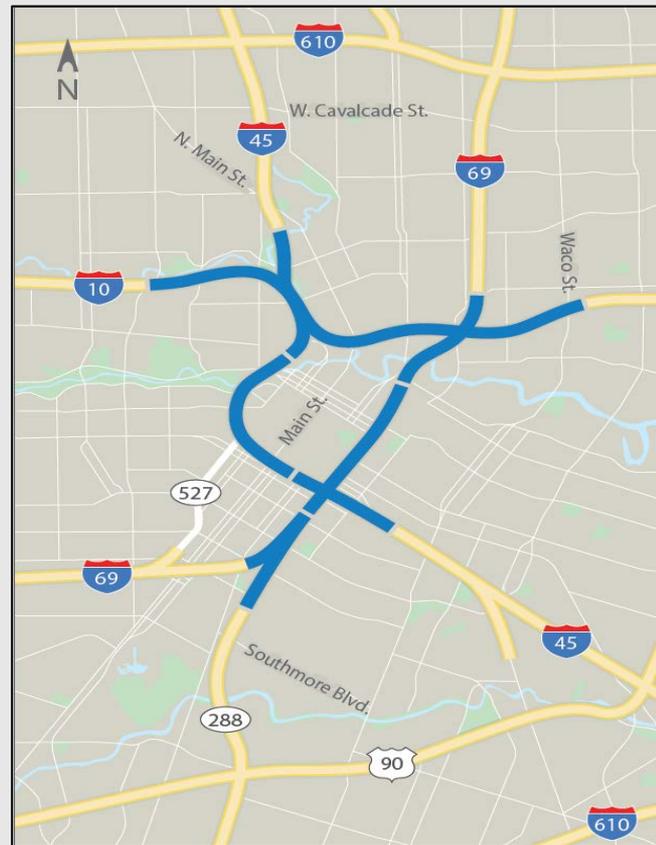


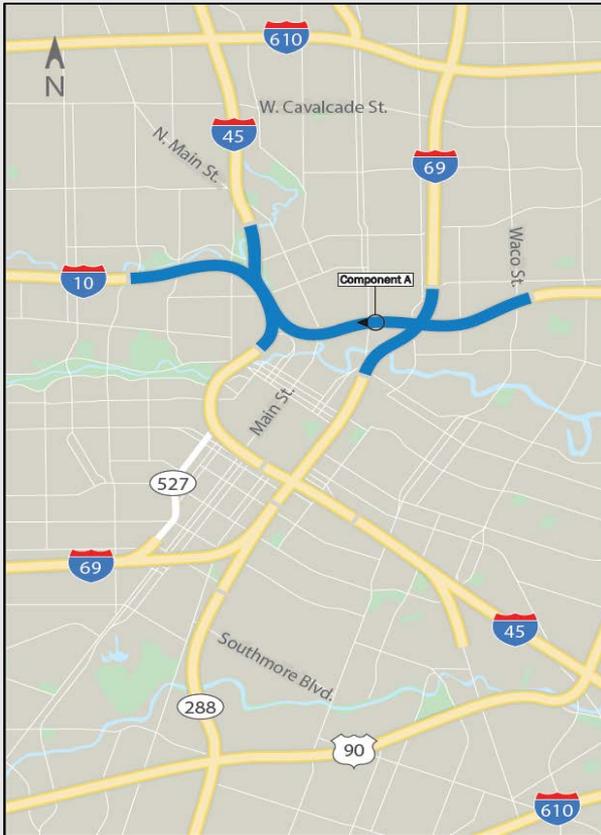
NHHIP Overview – Segment 3 Design-Build Project Construction Costs & Funding



Component A:	Reconstruction of I-10; construction of I-45; reconstruction of I-10/I-69 & I-10/I-45 interchanges	\$1.5 B
Component B:	Reconstruction of I-69 to include cut and cover depressed section; construction of I-45; reconstruction of I-69/I-45 interchange	\$1.1 B
Component C:	Reconstruction of I-69 & SH 288; Reconstruction of I-69/SH 288 interchange; construction of downtown connectors; shift I-45 traffic away from Pierce Elevated	<u>\$400 M</u>
Total Construction Costs (all Components)		= \$3.0 B

- All construction limits of the NHHIP Segment 3 Design-Build Project are identified and funded in the 2020 UTP.

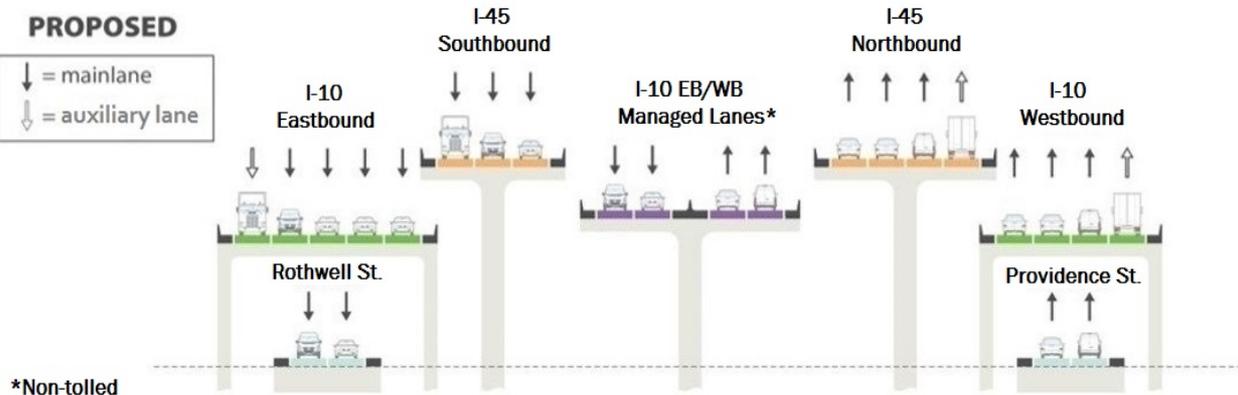
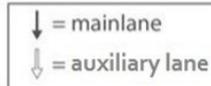




■ Component A:

- Construct I-45 to be parallel with I-10 while maintaining I-45 traffic on the Pierce Elevated.
- Construct new I-69 / I-45 / I-10 interchange.
- Reconstruct I-10 general purpose lanes.
- Construct I-10 non-tolled managed lanes.

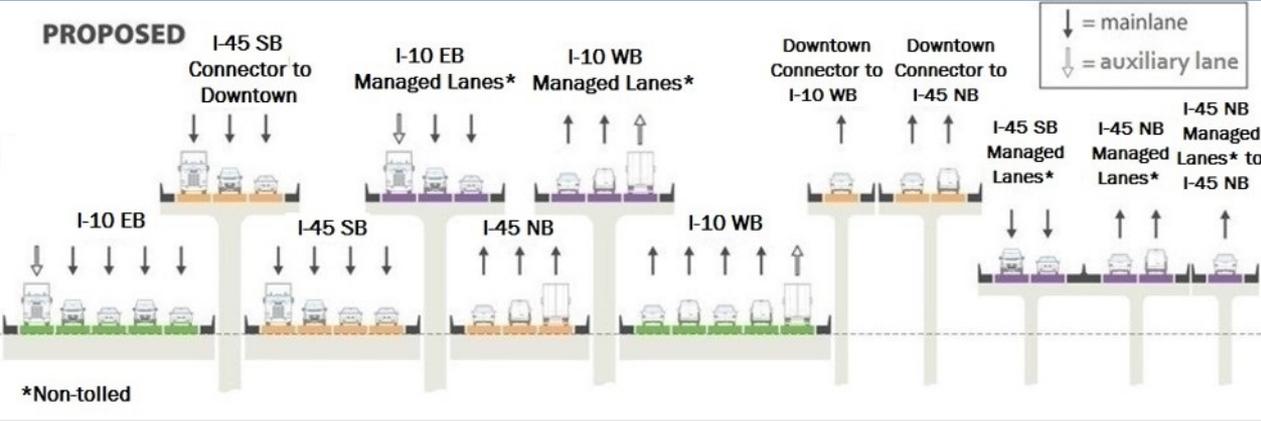
PROPOSED



NHHIP Overview – Segment 3 Design-Build Project Component A



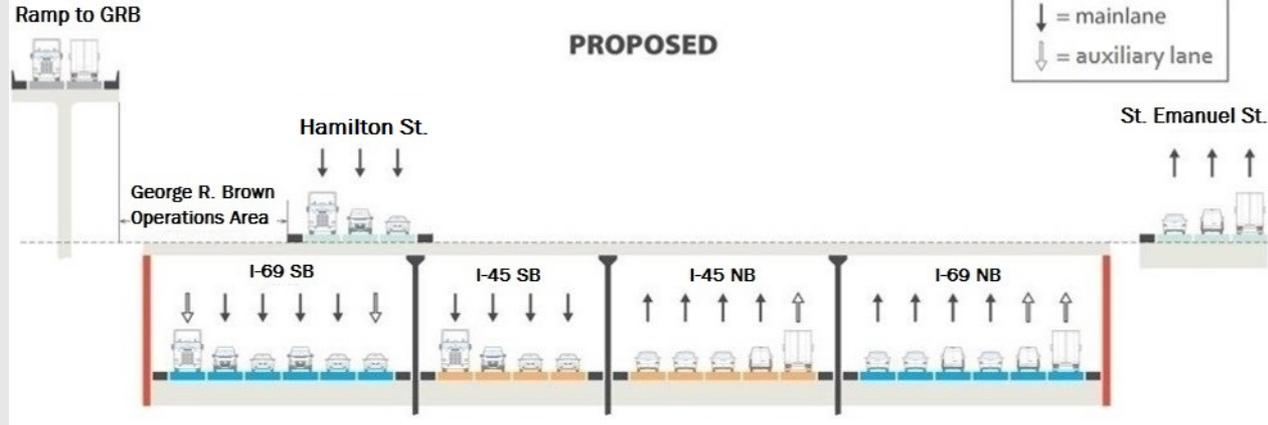
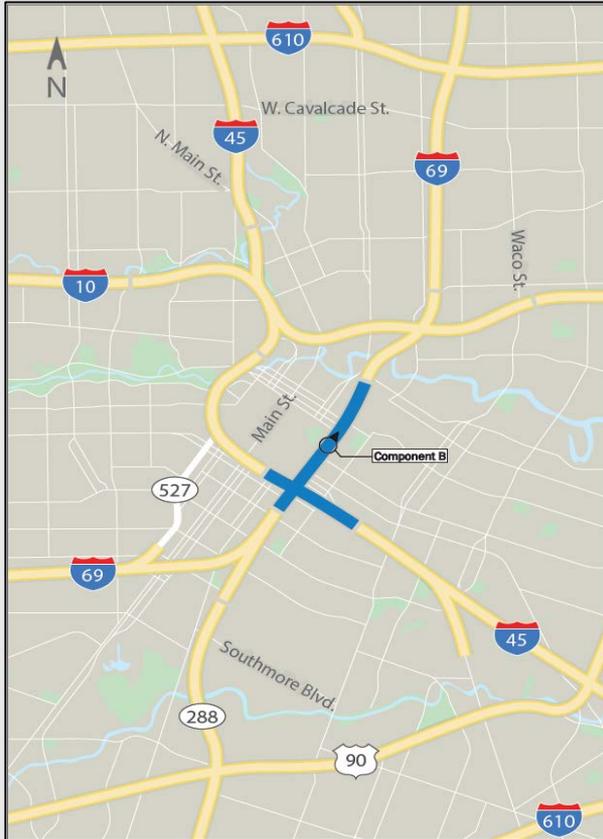
- **Component A (continued):**
 - Realign I-45 to be parallel with I-10.
 - Reconstruct I-45 / I-10 interchange and I-10 general purpose lanes.
 - Construct I-10 **non-tolled** managed lanes.
 - Construct I-45 **non-tolled** managed lane connectors.



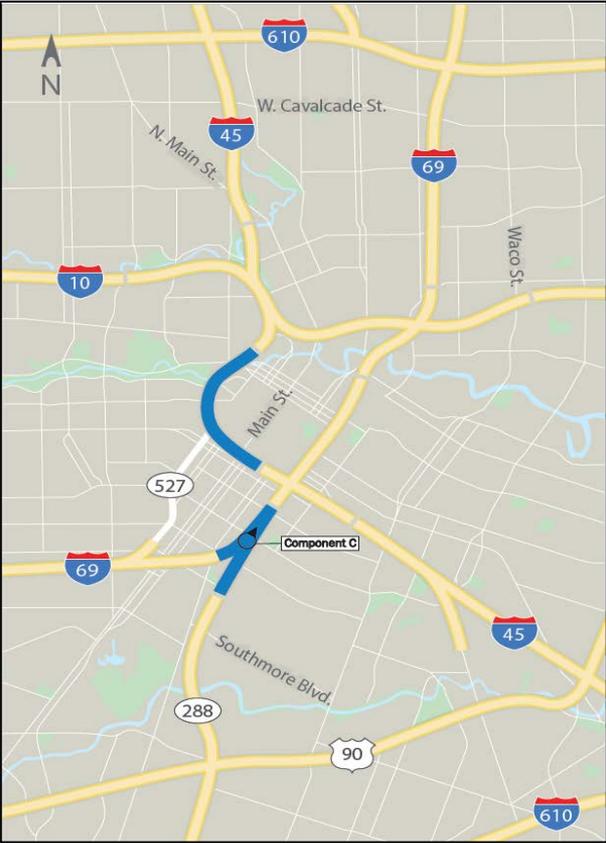


■ Component B:

- Construct I-45 on new alignment parallel with I-69 while maintaining existing I-45 traffic on Pierce Elevated.
- Reconstruct I-69 / I-45 interchange.
- Depress I-69 and I-45.
- Cap depressed roadway near George R. Brown Convention Center.

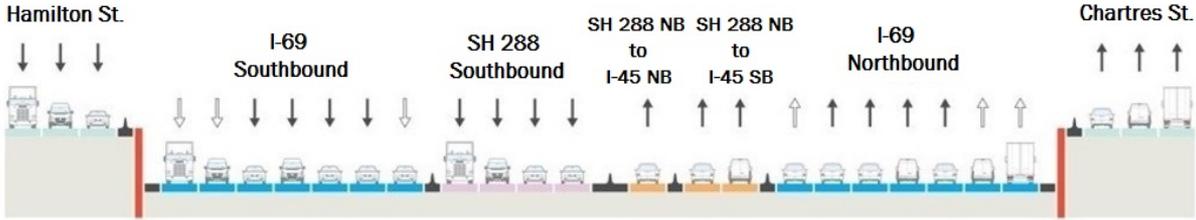


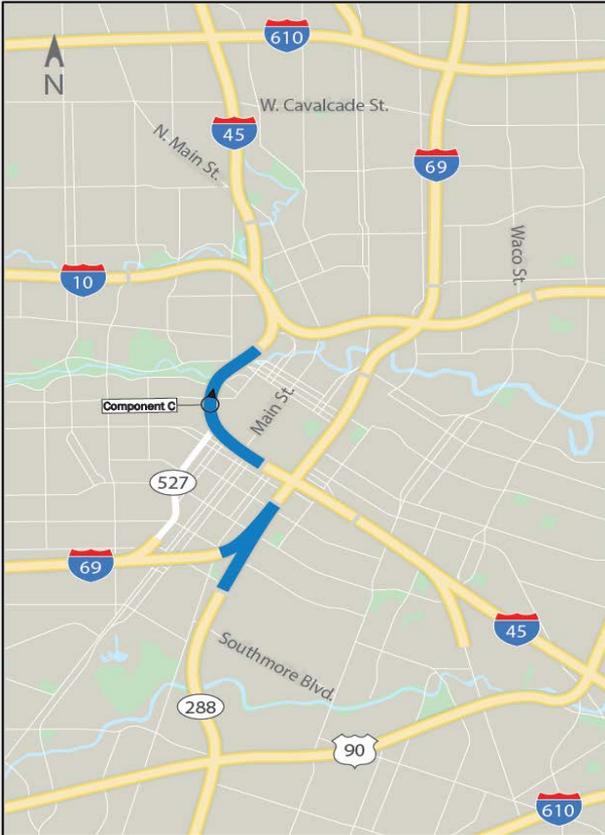
NHHIP Overview – Segment 3 Design-Build Project Component C



- **Component C:**
 - Reconstruct SH 288 and I-69 general purpose lanes.
 - Reconstruct SH 288 / I-69 interchange.

PROPOSED

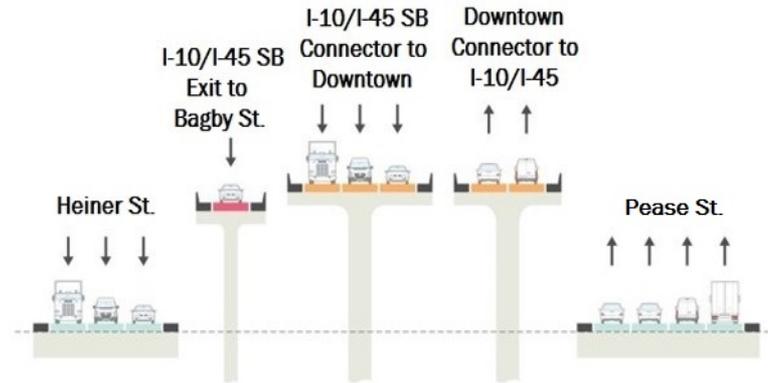




■ Component C (continued):

- Construct downtown connectors to and from I-45 and I-10 to provide connectivity to local downtown streets.
- Shift I-45 traffic from Pierce Elevated to be parallel with I-10 and I-69.

PROPOSED



NHHIP SEGMENT 3 DESIGN-BUILD PROJECT STATUS



▪ Contract Method

- Delivered as a single scope project with project Components (A, B, & C)
- DB Contractor will have ability to determine timing of Component construction notices to proceed
- Anticipated 15-year (three 5-year terms) Capital Maintenance Contract for each Component

▪ Project Cost Estimate

- Anticipated Design-Build Contract cost of \$3.6 billion
 - Design – \$246.0 M
 - Utilities – \$253.0 M
 - Inspection & Testing – \$93.0 M
 - Construction – \$3.0 B

▪ Schematic Design

- Environmental schematic is located on the NHHIP website – www.ih45northandmore.com
- Preliminary procurement schematics (Components A, B, & C) were provided at RFQ issuance
- Interstate Access Justification Report is under development



▪ METRO Facilities

- Extensive bus network within the Project limits
- Light rail network
 - Four crossings within Project limits (Red, Green & Purple lines)
- TxDOT has begun preliminary coordination with METRO
- DB Contractor will assume coordination responsibilities at Contract Execution
- Special Specification under development for release at Draft RFP

▪ Freight Rail (UPRR)

- Multiple crossings within Project limits as listed in the RFQ
- TxDOT has begun preliminary coordination with UPRR
- DB Contractor will assume coordination responsibilities at Contract Execution
- Special Specification under development for release at Draft RFP

▪ Geotechnical

- TxDOT provided geotechnical reports at RFQ issuance
- TxDOT anticipates providing additional geotechnical data during Request for Proposals (RFP) phase



■ Drainage

- TxDOT provided drainage reports at RFQ issuance
- TxDOT anticipates providing supplemental Segment 3 drainage data during RFP phase

■ Utilities

- TxDOT provided SUE level A, B, C, & D data at RFQ issuance
- TxDOT anticipates providing additional SUE data during RFP phase, including 3-D GIS model

■ Right of Way (ROW)

- Approximately 160 acres of new ROW within approximately 260 parcels
- TxDOT has developed mapping for schematic ROW that will be provided during RFP phase
- TxDOT has initiated advance acquisition of approximately 40+ parcels
- TxDOT will pursue additional acquisitions following receipt of Record of Decision
- DB Contractor will assume ROW acquisition responsibilities at Contract Execution



■ Environmental Clearance

- Draft Environmental Impact Statement (EIS) published April 2017 with Public Hearings in May 2017
- Final EIS is under development
- Draft and Final Technical Reports supporting FEIS have been published at www.ih45northandmore.com
- Record of Decision is anticipated by July 2020

■ Permitting Required

- US Army Corps of Engineers Permit (Section 404) – Jurisdictional Determination in progress
- US Coast Guard Permit (Section 9) – coordination in progress



NHHIP SEGMENT 3 DESIGN-BUILD PROJECT CHALLENGES

NHHIP Segment 3 Design-Build Project Challenges



- Maintenance of traffic during construction
- Utility relocations
- Railroad & light rail coordination
- Maintenance of drainage during construction
- Access in/out of downtown during construction
- Construction phasing
- Access accommodation of existing facilities
- Special events/sporting venues
- Public information & communications



DESIGN-BUILD SPECIAL SPECIFICATIONS

NHHIP Segment 3 Design-Build Project Special Specifications



- DB Special Specifications will be included with the RFP
- Anticipated DB Special Specifications include:
 - **Cut and Cover Depressed Roadway**
 - Fire / Life safety requirements
 - Future deck amenities
 - Constructed by others
 - DB Contractor design will accommodate potential future amenities
 - **Access Accommodations for George R. Brown Convention Center**
 - DB Contractor design will accommodate access
 - **Arch Bridges**
 - Elgin, Tuam, and McGowen



NHHIP Segment 3 Design-Build Project Special Specifications



- Anticipated DB Special Specifications include (continued):
 - UPRR Freight Rail
 - Preliminary coordination has begun
 - DB Contractor will complete coordination with UPRR
 - METRO Facilities (Bus and Rail)
 - Preliminary coordination has begun
 - DB Contractor will complete coordination with METRO



DESIGN-BUILD PROCUREMENT PROCESS



THE PROCUREMENT PROCESS



- Two step procurement process:
 - RFQ phase
 - RFP phase
- Qualification Statement (QS) Evaluations (Shortlisting) - How the QSs will be evaluated
 - Project Qualifications and Experience (47%)
 - Statement of Technical Approach (43%)
 - Safety Qualifications (10%)



Project Qualifications and Experience (47%)	Points
Experience with <u>designing</u> comparable major projects	6
Experience with <u>constructing</u> comparable major projects	6
Experience with performing <u>quality assurance</u> on comparable major projects	6
Experience with <u>maintaining</u> comparable major projects	4
Strength of the proposed <u>organization and management</u> structure	4
Experience of the proposed <u>Key Personnel</u> for the Project	17
Experience with <u>DBE</u> outreach and involvement and previous experience working with <u>DBEs</u>	4



Statement of Technical Approach (43%)	Points
Understanding of the Project’s scope and complexity	15
Understanding of the Project’s risks and potential solutions	15
Ability to plan, organize, and execute the independent quality assurance program	10
Ability to secure and integrate DBEs for a project of the size and complexity of this Project and provide potential solutions to address issues and challenges	3



Safety Qualifications (10%)	Points
Fatal injury rate per 100,000 full-time workers	3
Incidence rate of injury and illness cases per 100 full-time workers	4
National Council on Compensation Insurance (NCCI) experience modifier	3



■ Contractor Prequalification

- Valid letter required from Proposer entity indicating Adjusted Bidding Capacity with QSs (Vol.2, Section D)
- Required from each Proposer, any Equity Member(s), & Guarantor(s)
- TxDOT will consider Proposer's Aggregate Available Bidding Capacity when determining financial capability
 - **Aggregate Available Bidding Capacity** - the amount equal to the sum of the Available Bidding Capacity for each of the Proposer, Equity Member(s) and any Guarantor(s)
- TxDOT may require a plan from Proposer demonstrating how & when necessary Aggregate Available Bidding Capacity will be achieved



■ Contractor Prequalification

- Prequalification instructions are available at:
www.txdot.gov/business/contractors/contractor-prequalification.html
- To ensure expeditious analysis by TxDOT review staff:
 - Confidential Questionnaire must be filled out entirely
 - Financial data and audited financial statement should be organized within the document
 - Financial statements must be prepared for the qualifying entity
 - Financial statements, no older than one year, must be prepared by a CPA firm
 - If financial statements are prepared for the parent company, there must be a consolidating balance sheet reflecting the qualifying entity's numbers separately



■ DBE Information Forms

– Form J-1

- To be completed by each Proposer, Equity Member(s), Lead Contractor, Lead Engineering Firm, and any other entity providing engineering or construction experience in Forms D-1 & D-2
- To include information on **all** DBEs subcontracted within the last 3 years with a contract value over \$1 million

– Form J-2

- Part I to be completed by each Proposer, Equity Member(s), Lead Contractor, Lead Engineering Firm, or any other entity providing engineering or construction experience in Forms D-1 & D-2
- Part II to be completed by the DBE entity
- TxDOT will randomly select DBE references identified in Form J-1 to send Form J-2 to for completion
- Completed forms will be used as TxDOT deems fit to supplement evaluation of the QSs
- The number of Forms J-1 received and the number Forms J-2 completed, or lack thereof, **will not** be considered during evaluations



■ Tangible Net Worth

- Financial capability to carry out Project responsibilities is a Pass/Fail requirement of the QS evaluations
- While a number of factors are considered, Proposer must demonstrate a combined Tangible Net Worth of \$275 million in order to pass

■ Payment & Performance Bonds

- QS shall contain evidence Proposer can obtain Payment & Performance Bonds each totaling \$1.6 billion
 - Form letter located in RFQ, Exhibit E
- \$1.6 billion will secure DB Contractor's obligations for entire Project



■ Organizational Conflicts of Interest

- Firms that are providing preliminary engineering or architectural services for the Project or have provided such services will be prohibited unless TxDOT has issued a written determination that all work product prepared by the firm and other information and data provided to the firm in the performance of the services has been or will be made available to all Proposers prior to the issuance of the final RFP
- Firms that are providing or have provided environmental services for the Project will be prohibited unless TxDOT has issued a written determination that the firm is not prohibited
- Firms that are providing procurement services will be prohibited from proposing or joining a Proposer team

Design-Build Procurement Process – NHHIP Segment 3 Procurement Timeline



Milestone	Date*
RFQ Issued	December 16, 2019
RFQ Questions Due	January 22, 2020
Qualification Statements Due	April 29, 2020
Shortlist	June 25, 2020
Record of Decision	July 2020
Issue Draft RFP	July 2020
Issue Final RFP	January 2021
Proposals Due	June 2021
Conditional Award	August 2021

*Dates shown are subject to change



- Proposers are responsible for monitoring the Project Webpage for information:
www.txdot.gov/inside-txdot/division/debt/strategic-projects/alternative-delivery/nhhip-seg3/rfq.html
- TxDOT will post all addenda to the RFQ on the Project Webpage
- Proposers are advised that responses to questions posed at this workshop are considered to be on an informational basis only and are not binding on TxDOT.
- The process for official questions and answers is provided in the RFQ
 - Deadline for submitting questions is by 12:00 p.m. (Central Time) on Wednesday, January 22, 2020, and will be accepted via email at:
TxDOT-HOU-ALTD-I45SEG3@txdot.gov
- TxDOT may respond to those questions that TxDOT deems to be material and not adequately addressed. TxDOT will post any such responses and addenda to this RFQ on the Project Webpage.



- Proposers are responsible for ensuring QSs are delivered by hand or courier to “TxDOT’s Authorized Representative” at the following address:

**Varuna Singh, P.E.
Alternative Delivery Manager
Texas Department of Transportation
7600 Chevy Chase Drive, Building 2, Suite 400
Austin, Texas 78752**

- QSs will be accepted and must be received by TxDOT during normal business hours before 12:00 p.m. (Central Time) on April 29, 2020.
- QSs not received prior to such time on the QS Due Date will not be considered by TxDOT for evaluation or shortlisting.



QUESTIONS?

DBE PROGRAM REQUIREMENTS ON DESIGN-BUILD PROJECTS



Code of Federal Regulations (CFR)

Title 49 - Transportation

Subtitle A – Office of the Secretary of Transportation

Part 26—Participation By Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs

49 CFR Part 26



- **49 CFR Part 26.13**
All recipients and subrecipients must comply with the requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Includes sanctions for noncompliance.
- **49 CFR Part 26.37**
Ensure that work committed to DBEs is performed by DBEs. *Requires a written certification.*
- **49 CFR Part 26.53**
The DB Contractor must document that it has obtained enough DBE participation to meet the goal or document that it made adequate good faith efforts to meet the goal.
- **49 CFR Part 26.55**
The DBE must perform a Commercially Useful Function (CUF).

DBE Program Objectives



- Ensure non-discrimination in the award and administration of U.S. DOT-assisted contracts;
- Creating a level playing field on which DBEs can compete fairly for U.S. DOT-assisted contracts;
- Ensure that the DBE Program is tailored in accordance with applicable law;
- Ensure that only firms that fully meet 49 CFR Part 26 eligibility standards are permitted to participate as DBEs;
- Help remove barriers to the participation of DBEs in U.S. DOT-assisted contracts;
- Promote the use of DBEs in all federally-assisted contracts and procurements; and
- Assist the development of firms that can compete successfully in the marketplace outside the DBE Program.



- A for profit small business concern certified through the Texas Unified Certification Program, that is at least 51% owned by one or more individuals who are both socially and economically disadvantaged, and
- Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.



Texas Unified Certification Program (TUCP) certifying member entities:



- City of Austin
- City of Houston
- Corpus Christi Regional Transportation Authority (CCRTA)
- North Central Texas Regional Certification Authority (NCTRCA)
- South Central Texas Regional Certification Authority (SCTRCA)
- Texas Department of Transportation (TxDOT)



- A small business that is DBE certified by any one of the TUCP member entities is automatically DBE certified with TxDOT.
- Only those DBEs listed in the TUCP DBE Directory with the “DBE” designation are eligible to be used for DBE goal attainment.
 - DBE is a federal program and certification
 - HUB, SBE, MBE, WBE, etc., are local certifications that cannot substitute for DBE and do not count towards DBE goal attainment.
- The TUCP DBE Directory is located at: txdot.txdotcms.com



Race-conscious participation (RC)

Federally Funded Projects with Goals

Design Build Contractor

- Submit enough DBE participation on commitments/utilization plan to meet the goal
- NAICS codes specific
- Submit adequate Good Faith Efforts (GFEs) to meet the goal
- Report payments to DBEs
- DBE must be performing a CUF

Race-neutral participation

- *DBE participation beyond the goal*
- *DBEs on the contract, but not on the contractor's utilization plan.*

Race-neutral participation (RN)

Federally Funded Projects without Goals

Design Build Contractor

- DBEs not being counted toward contract goal
 - No commitment
 - Prime report payments to DBEs
- DBE Primes
- DBE must be performing a CUF

TxDOT Overall Annual Goal

FY 20-22 Overall Goal 14.4% (RC + RN)

- RC goal = 7.5%
- RN goal = 6.9%
- The goal represents a percentage of federal dollars.
- TxDOT must meet the goal or show GFEs.



- The RFQ was released on Monday, December 16, 2019.
- TxDOT currently anticipates a split DBE goal for construction and professional services.
 - 13.5% for construction; and
 - 22.0% for professional services.



- TxDOT is considering requiring Proposers to submit a Draft DBE Performance Plan with their Proposals.
- The DB Contractor will submit a Final DBE Performance Plan as a condition to contract execution.
- Commitments for DBEs identified in the Final DBE Performance Plan are required before contract execution.
 - Use DBE Commitment Form ADP 4901.
 - DBE must be certified in the NAICS code for the work or services it will perform.

DBE Forms: www.txdot.gov/business/partnerships/dbe-forms.html



- Written by DB Contractor and approved by TxDOT
- Includes the following information:
 - Good faith efforts DB Contractor will implement;
 - Work items available for subcontracting opportunities for DBEs;
 - Outreach efforts; and
 - Tracking and reporting DBE participation.



- DB Contractor is required to enter into a subcontract agreement or Purchase Order (PO) with the DBEs.
- Subcontract Agreement or PO must be \geq the committed dollars
 - Must contain the same items and estimated quantities of work as the commitment or more.
 - DBE must be certified when the Subcontract Agreement or PO is signed and dated.

Subcontract Agreements and Purchase Orders



- Termination / Substitution & Payment clauses do not override the language within the DBE Special Provision in the TxDOT contract.
- In all cases the most current version of 49 CFR Part 26 prevails.
- Subcontracts and POs without a commitment are viewed as race-neutral DBE participation.



- DBEs must self-perform 30% of the work with its own forces.
- Any work the DBE subcontracts to a non-DBE will not count toward the goal.
- DBEs must perform a Commercially Useful Function (CUF).
- Any materials the DBE receives from the DB Contractor or its affiliates will not count toward the goal.
- DBEs terminated without TxDOT's prior written approval will not count toward the goal.
- Any work committed to a DBE and performed by the DB Contractor, the DB Contractor's affiliates, or any other firm will not count toward the goal.



- DB Contractor will be required to use the Diversity Management System (DMS) online tracking system or a similar system.
- DBE commitments and prompt payment reporting are made through DMS.
- All primes must have registered accounts in DMS.
 - All DBEs have accounts in DMS.
 - All first-tiered non-DBEs using DBE participation must have accounts in DMS.
 - All second-tiered or other tiered non-DBEs performing work or services for DBEs must have registered accounts in DMS.



- Access the Diversity Management System Homepage: txdot.txdotcms.com
- Contact the Civil Rights Division at 512-416-4700 or the District DBE Coordinator to get log in credentials for DMS.



Houston District staff will monitor the project for compliance with all aspects of the DBE program including, but not limited to:

- Approving subcontractors prior to performing work on the project.
- Monitoring the DB Contractor's good faith efforts to achieve the project DBE goal.
- Monitoring the DB Contractor's efforts to offer opportunities to DBEs.
- Obtaining and reviewing subcontracts and purchase orders for DBEs.
- Monitoring prompt payment.
- Reviewing and/or conducting CUF reviews.



- Monitor and verify payments to DBEs
 - Prompt payment
 - Pay the subcontractor for work performed within 10 days after receiving monthly draw requests for the work performed by the subcontractor.
 - DB Contractor is encouraged to pay DBEs upon receipt of a proper invoice even if the DB Contractor has not been paid.
- Review and approve termination requests
 - No substitutions of DBEs without good cause and written TxDOT approval.
- Respond to any complaints from DBEs



Texas Department of Transportation
Civil Rights Division
(512) 416-4700
CIV_Compliance@txdot.gov



QUESTIONS?

THANK YOU

Key Milestone Dates



Milestone	Date
RFQ Issued	December 16, 2019
RFQ Questions Due	January 22, 2020
Qualification Statements Due	April 29, 2020
Shortlist	June 25, 2020