



**City of Dallas**

# Discussion of Major Downtown Transportation Initiatives: Eddie Bernice Johnson Union Station, High-Speed Rail, and Streetcar Expansion

**City Council Briefing  
March 6, 2024**

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# Purpose



- Following briefings with the Transportation and Infrastructure Committee on January 16, 2024, and the Economic Development Committee on February 5, 2024, this presentation will discuss:
  - Eddie Bernice Johnson Union Station Redevelopment
  - Streetcar Expansion
  - Dallas to Houston High-Speed Rail (AMTRAK)
  - Dallas to Fort Worth High-Speed Rail (NCTCOG)
  - Next Steps



# Eddie Bernice Johnson Union Station



- Consistent with the KBHCC Master Plan, EBJ Union Station presents opportunities to:
  - Serve as Dallas' downtown multi-modal transportation hub (AMTRAK, DART Light Rail, streetcar, DART bus)
  - Be redeveloped as a mixed-use transportation hub



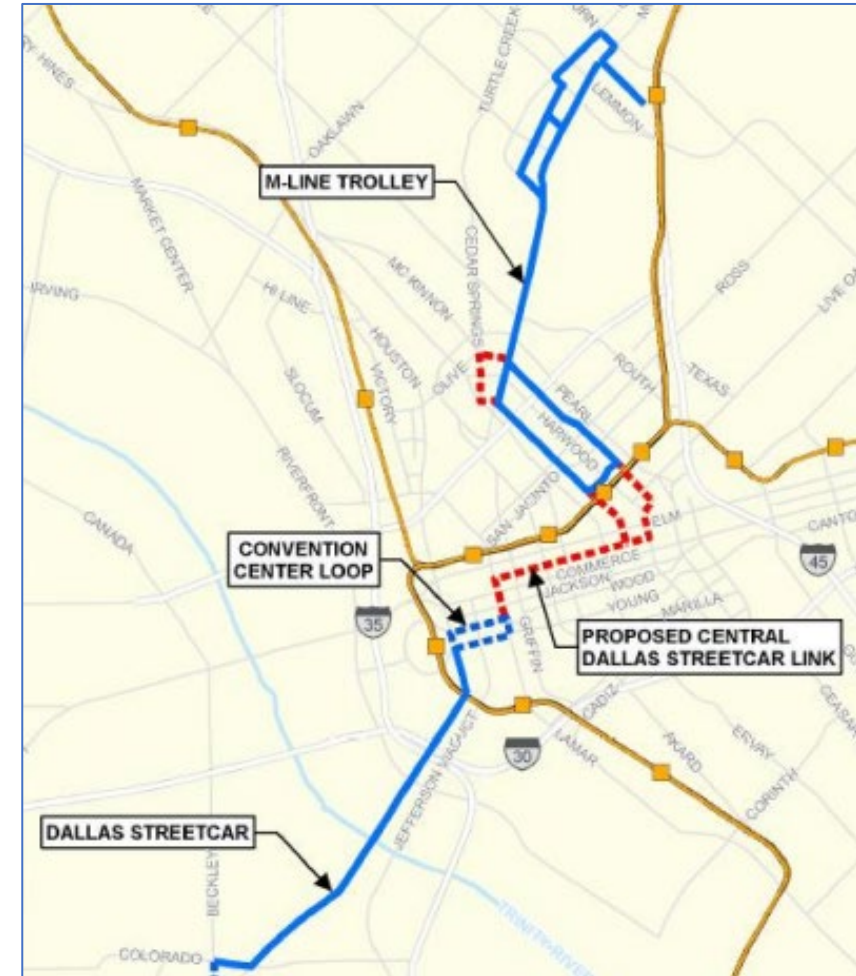
Denver Union Station



# Dallas Streetcar Expansion



- Streetcar Central Link being evaluated to connect the M-Line Trolley and Dallas Streetcar
- Expansion being considered based upon City Council input (Including Fair Park, Dallas Zoo, Deep Ellum, Trinity Groves, Lower Greenville)
- Projects being designed to accommodate future streetcar expansion (I-345, MLK, Ross Ave.)
- Funding/RFP strategy for study includes a combination components of the Downtown Parking Study (DART Excess Sales Tax Revenues) and Reimagining Downtown Grant



# High-Speed Rail Initiatives



- **Dallas to Houston**

- City Council Resolution ([Ordinance #210421](#); February 24, 2021) to adopt the City of Dallas' Federal Legislative Program for the 117<sup>th</sup> Session of the United States Congress:
  - “The City of Dallas supports the development of high-speed rail between Houston and the North Texas Region” (pg. 4)

- **Dallas to Fort Worth**

- City Council Resolution ([Ordinance #150375](#); February 25, 2015) adopting the City's Federal Legislative Agenda for the 114<sup>th</sup> Session of the United States Congress:
  - “The City of Dallas supports the development of high-speed rail between Houston and the North Texas Region. The City fully supports a “one-seat ride” between Houston and stations in Downtown Dallas, central Arlington and Downtown Fort Worth” (pg. 4)

- **HSR station south of I-30 in the Cedars**

- **Working with the NCTCOG on a vision for an elevated walkway/people mover over I-30 to connect:**

- HSR Station
- KBHCC
- EBJ Union Station
- Other properties and development





# High-Speed Rail – Dallas to Houston

## AMTRAK



# Why High-Speed Rail (and Why Amtrak)?

- HSR is a real opportunity to **produce outsized economic, social and environmental benefits** – aligning with IIJA and Federal priorities and bringing the US to par with Europe and East Asia
- HSR will play an important role in **delivering Amtrak's broader objectives**: grow our ridership and form the national backbone of a more integrated transportation network (including transit, commuter rail, and TOD)
- **Now is the time** to set Amtrak's long-term HSR strategy *and* pursue **opportunistic investments/partnerships** that can deliver projects on an accelerated timeline

# The Amtrak Approach

- High-Speed Rail Office established April 2023
- Headed up by Andy Byford, SVP High-Speed Rail Development Programs
- Mandate is to:
  - Develop Amtrak's HSR strategy
  - Promote the case for sustained investment in HSR and build political support
  - Identify suitable corridors
  - Program manage specific projects
  - Centre of expertise for Amtrak on all HSR related issues





# High-Speed Rail in the United States

- Amtrak operates the US' only true HSR corridor in the US
- The Acela is Amtrak's flagship service, running at speeds of up to 150mph on sections of the North-East Corridor
- New, higher speed, higher capacity Acela trains will enter service in 2024
- Amtrak is actively exploring potential for a Dallas to Houston HSR corridor



# High-Speed Rail in the United States (cont.)

- Other HSR initiatives in the US include:
  - California HSR. Los Angeles to San Francisco (under construction)
  - Brightline West. Los Angeles to Las Vegas (“shovel ready”, funding awarded)
  - Virginia HSR. Richmond to Raleigh (“shovel ready”, funding awarded)
  - North Carolina HSR. (“shovel ready, funding awarded)
  - Cascadia HSR. Vancouver to Eugene via Seattle and Portland (in planning)





# Texas Central

## Dallas – Houston HSR

# Is Dallas – Houston a Good HSR Opportunity?

*From our due diligence thus far, we think YES, and we are continuing to explore paths forward*



**High travel demand between city-pairs**



Connections to Amtrak, DART, TRE, METRORail



City pairs at the right distance to support limited stops

**Growing**

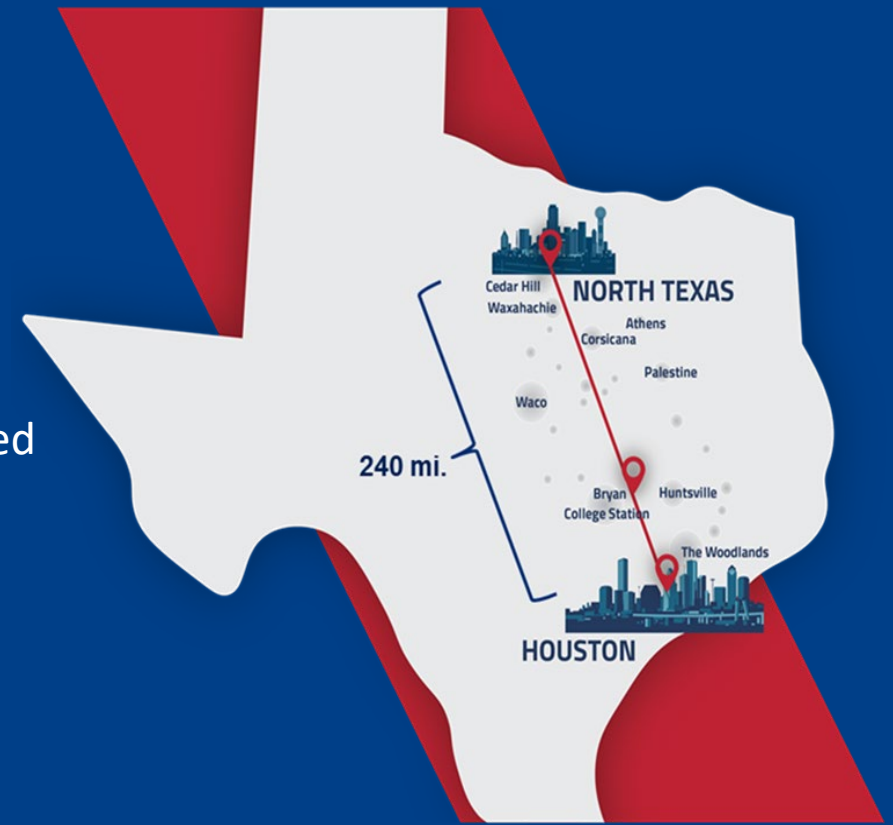
Strong political, labor and public support

**Not yet**

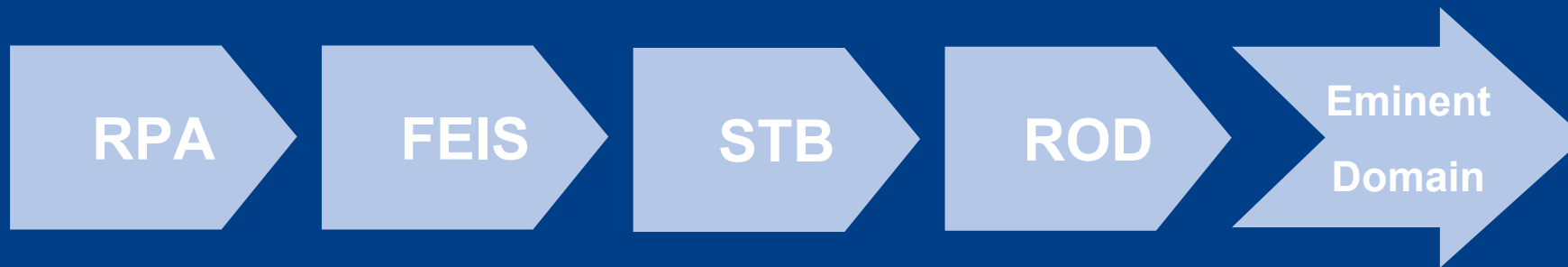
Secured right of way

**Not yet**

Funding package



# Key Decisions to Date



**May 4-5, 2020:** FRA conducted "public hearings" on the Rule of Particular Applicability (RPA), a USDOT regulation that will govern the project

**May 29, 2020:** FRA published the Final Environmental Impact Statement (FEIS), the final version of the environmental impact statement

**July 16, 2020:** STB deemed Texas Central to be under its jurisdiction (i.e. interstate) as part of the national rail network.

**Nov. 2, 2020:** the Federal Register published the Code of Federal Regulations 49 CFR, Part 299, i.e., the Rule of Particular Applicability for Texas Central. This Final Rule incorporates the FEIS through the Record of Decision as a single federal action

**June 24, 2022:** Texas Supreme Court ruled that Texas Central qualifies for eminent domain authority as an interurban electric railway.

# Conclusion: Dallas to Houston Looks Viable

- Amtrak's due diligence work to date confirms that **the project continues to have a strong case** in terms of economic benefit, market size and feasibility
- **COVID-19** and associated changes in working patterns have had **no adverse impact on future ridership projections**
- The project is predicated on use of Shinkansen technology and the 2020 RPA ruling and this is now critical path
- Careful stakeholder management has resulted in **continued Japanese support** for a potential partnership
- Amtrak was successful in its bid for federal funding and is working through the FRA Corridor Identification Program
- Further grant applications will follow, in parallel with development of funding package
- Financial close is still possible by 2025



# High-Speed Rail – Dallas to Fort Worth

## NCTCOG





# Federal Transit Administration Process

NCTCOG Focus:  
Public Private Partnerships

FRA sign-off as  
"cooperating agency"

Alternatives  
Analysis  
(2 years)

Pre-NEPA  
Refinement  
(2 years)

NEPA  
(12 mo.)

Explore opportunities for Funding and  
Operations by Public Private Partnership or  
Amtrak for Implementation

2020

2022

2024

2026

2021

2023

2025

2027

Step 1

Step 2

Step 3:

## Federal Railroad Administration Process

### Corridor ID Program

NCTCOG Focus:  
Federal Funding through Federal State  
Partnership Program

Scoping  
(6 mo.)

Service  
Development  
Plan (SDP)  
(12 – 18 mo.)

Preliminary Engineering  
/ NEPA  
(If Applicable)

Potential FRA NEPA Review

\*NEPA: National Environmental Policy Act



# Dallas High-Speed Rail (HSR) Questions (Alternative Alignments)

Were the Following Alignments Reviewed?

Yes

## Alignments Previously Rejected; Requested to Review

**3. Elevated** – Use of Existing Rail Corridor East of Hotel Street

**4. Subway** – Coterminous with Approved Dallas HSR Station

**5A. Elevated/5B. Subway** – Different Station Location

**6. At-Grade** – Upgraded Trinity Railway Express (TRE)

**7. Elevated** – Trinity Railway Express (TRE) Corridor

## Alignments Previously Recommended for NEPA

**1. Elevated** – West of Hyatt Regency Hotel

**2A. Elevated** – East of Hyatt Regency Hotel

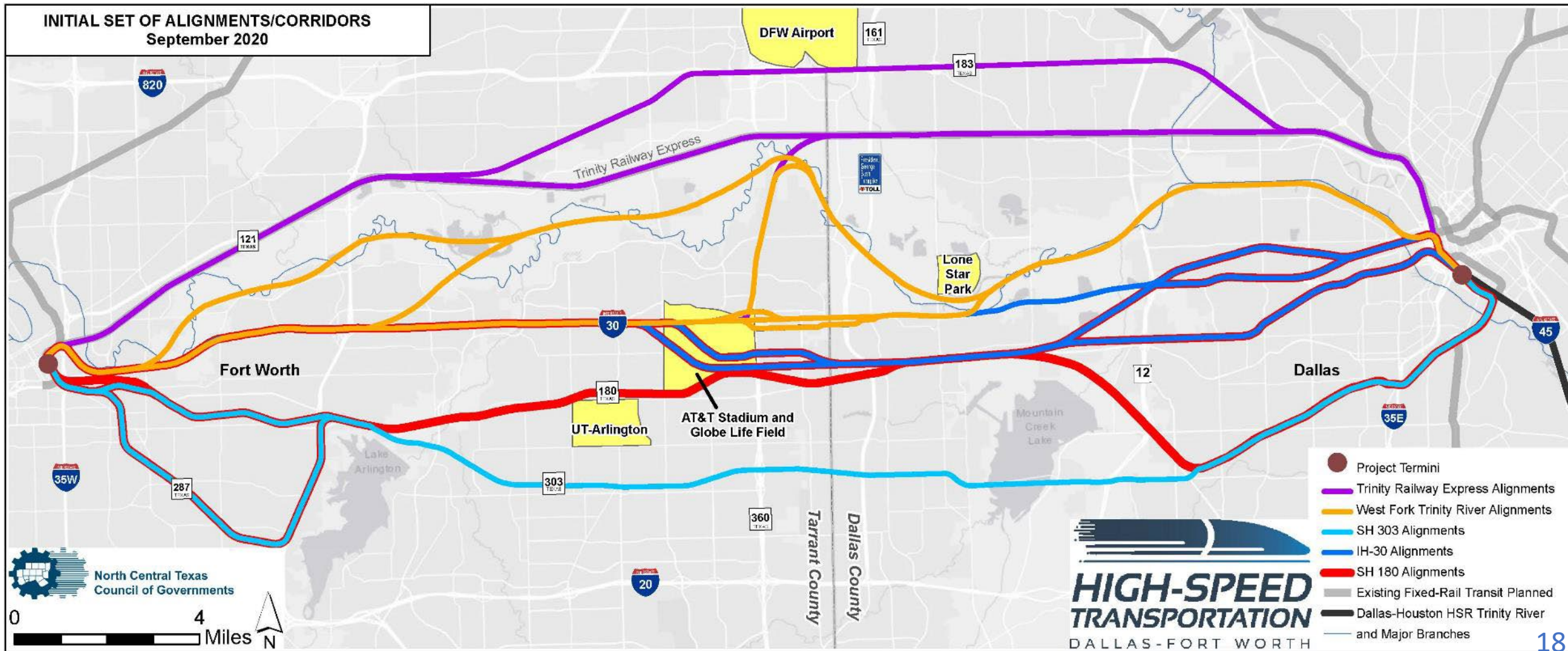
## New Alignments Recommended to Review

**2B. Elevated** – East of Hyatt Regency Hotel with Pedestrian Lobby

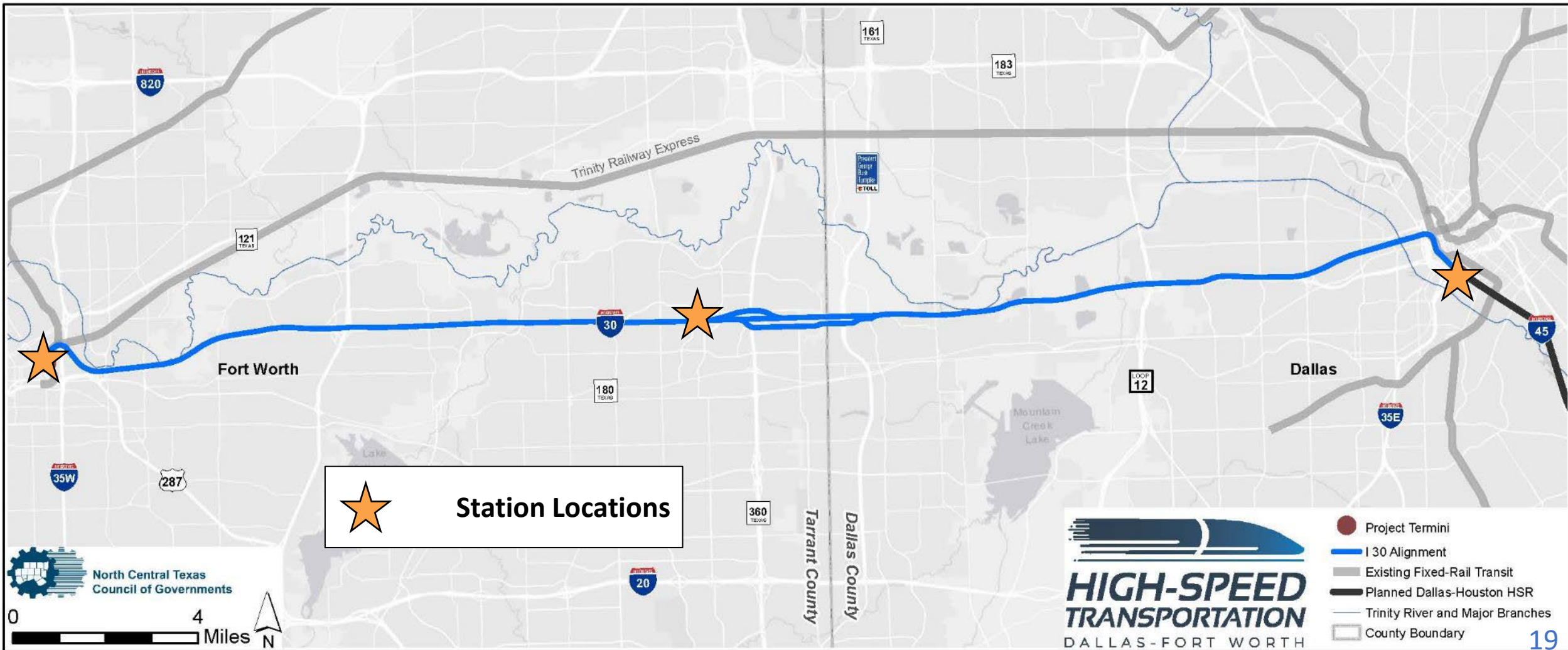
**2C. Elevated** – East of Hyatt Regency Hotel with Pedestrian Lobby and Pedestrian Cap

\*Alignments recommended for advancement into NEPA

# Initial Set of Alignments/ Corridors (Fall 2020)

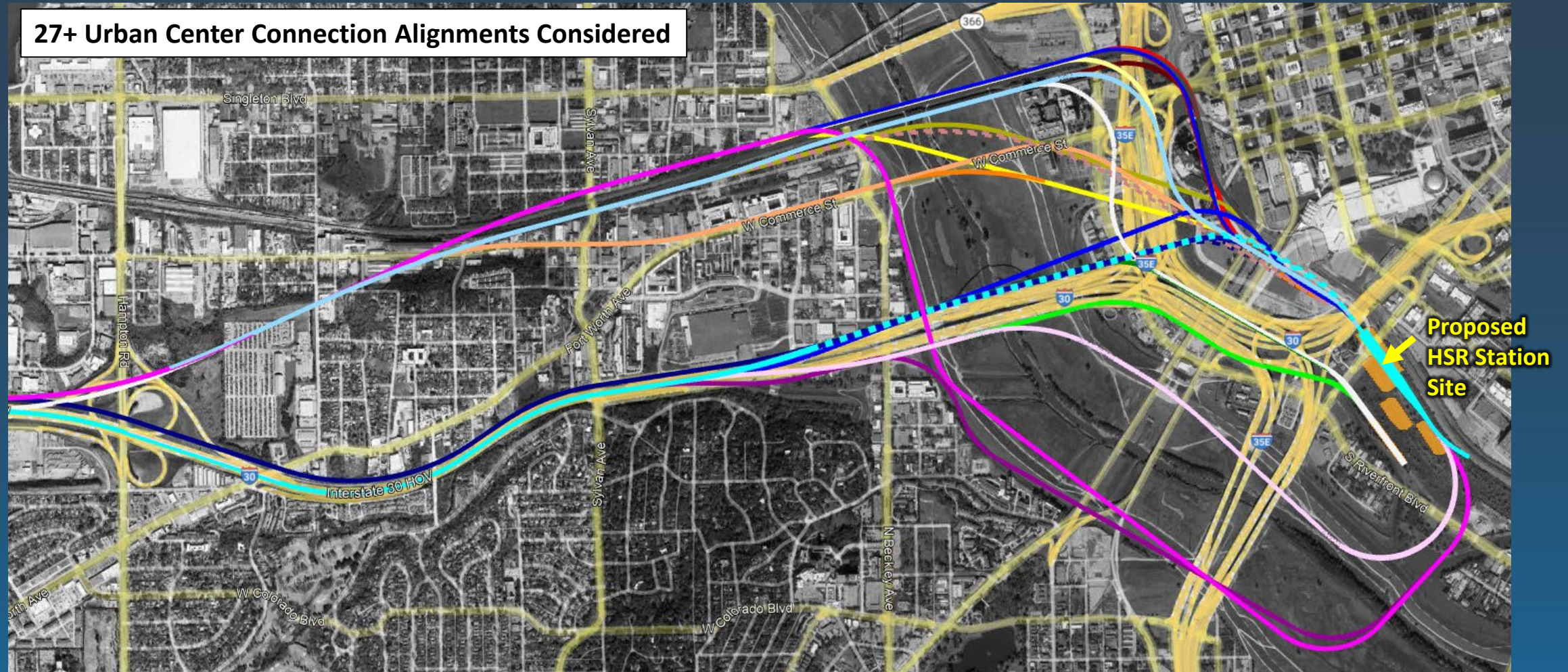


# Phase 1 Results – Alignments (Summer 2021)



# Dallas Urban Center Connections (Summer 2022)

27+ Urban Center Connection Alignments Considered



# Alignments Previously Recommended for NEPA

## 1. Elevated – West of Hyatt Regency

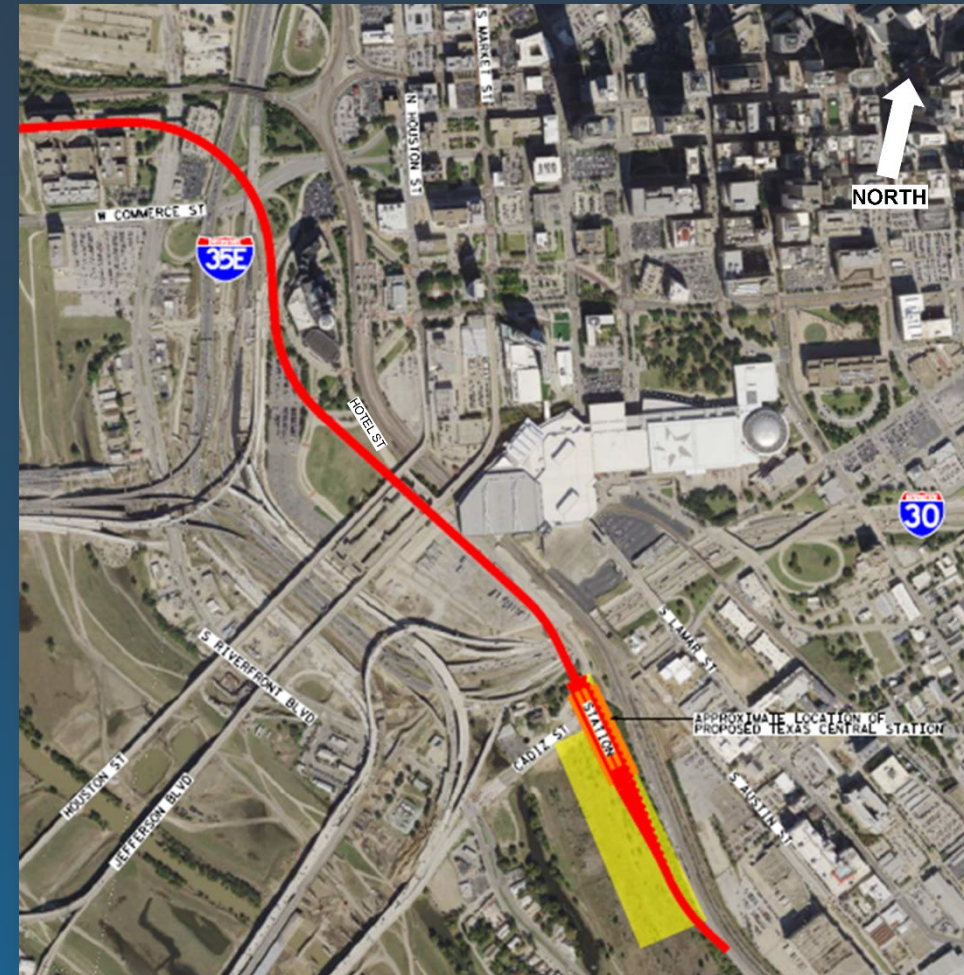
**NO FATAL FLAW**

Alignment recommended for advancement into NEPA

Originally recommended for further study (Fall 2022)

Requires no changes to approved Dallas HSR Station location

Less favored than new eastern alternatives

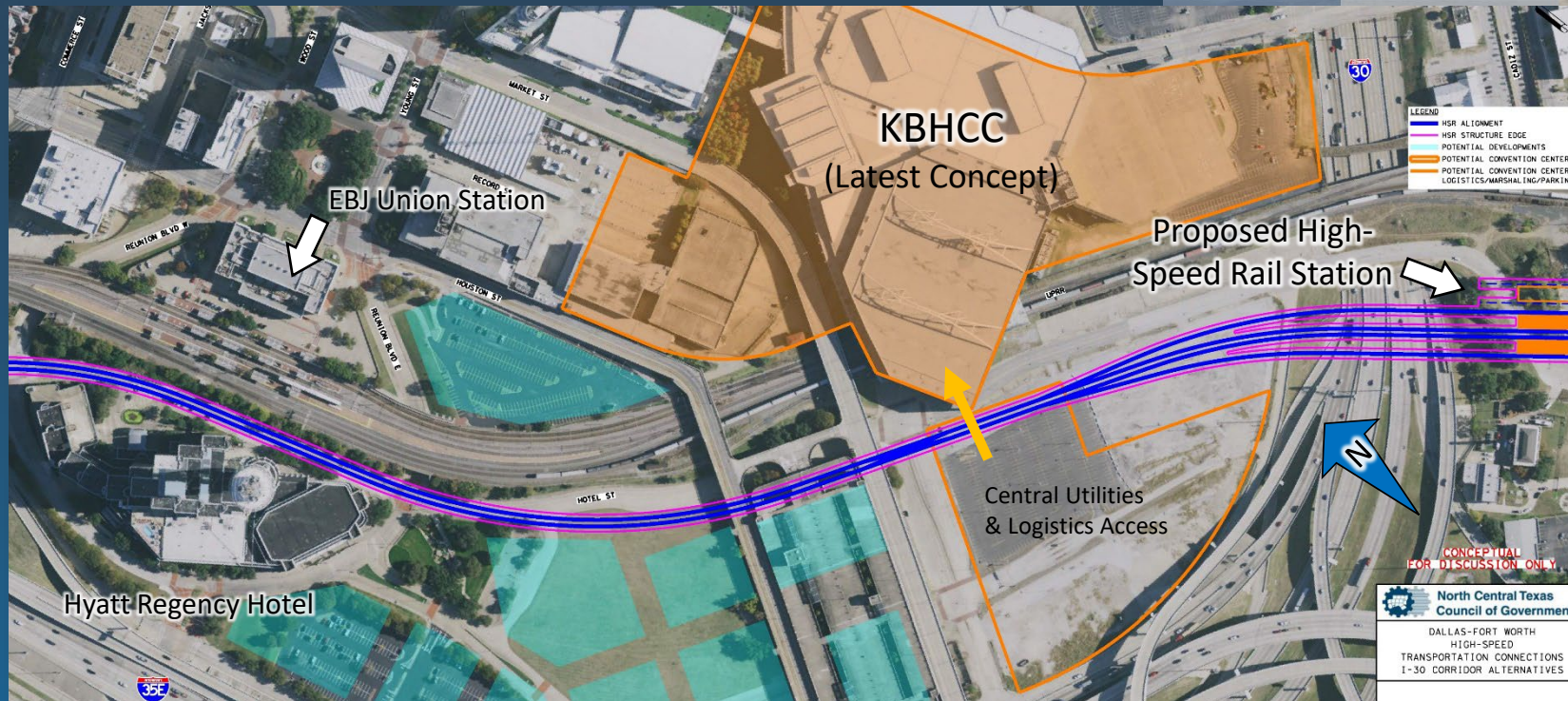
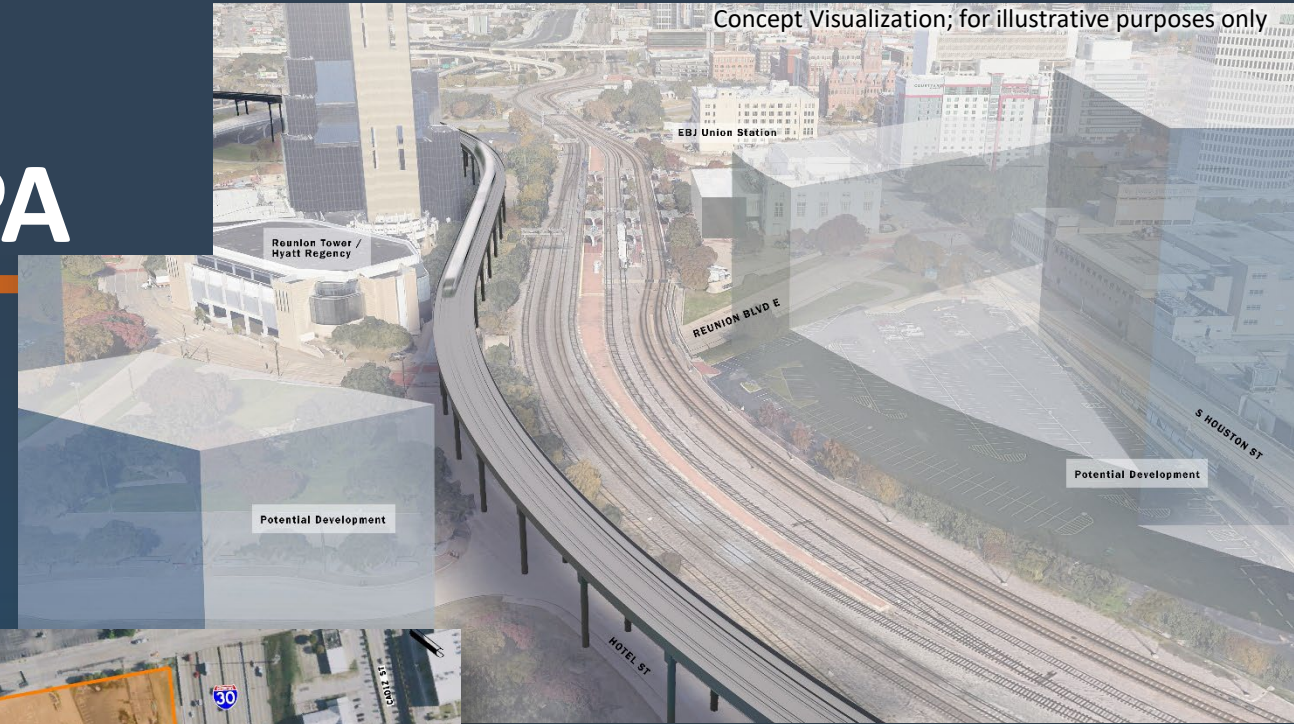


# Alignments Previously Recommended for NEPA

2A. Elevated – East of Hyatt Regency

**NO FATAL FLAW**

Alignment recommended for advancement into NEPA



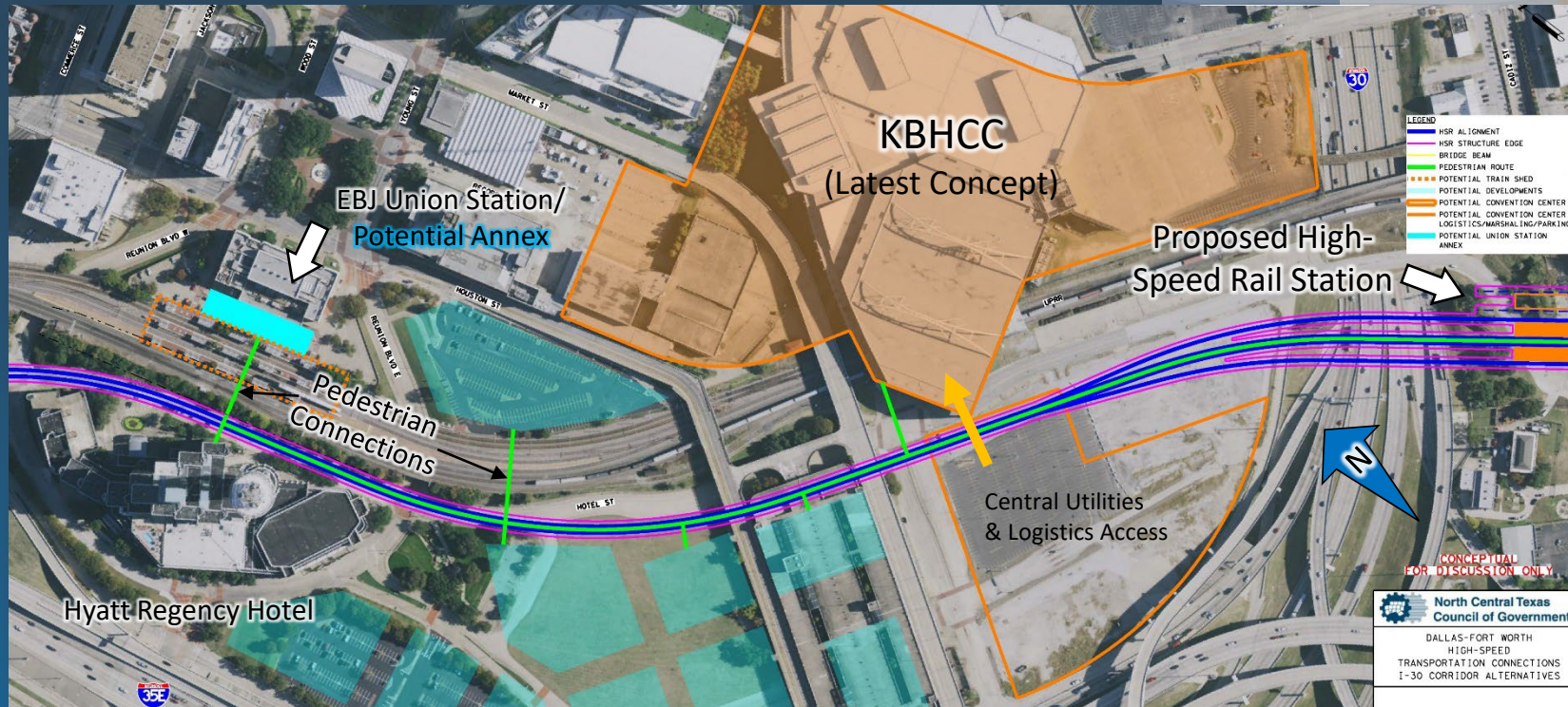
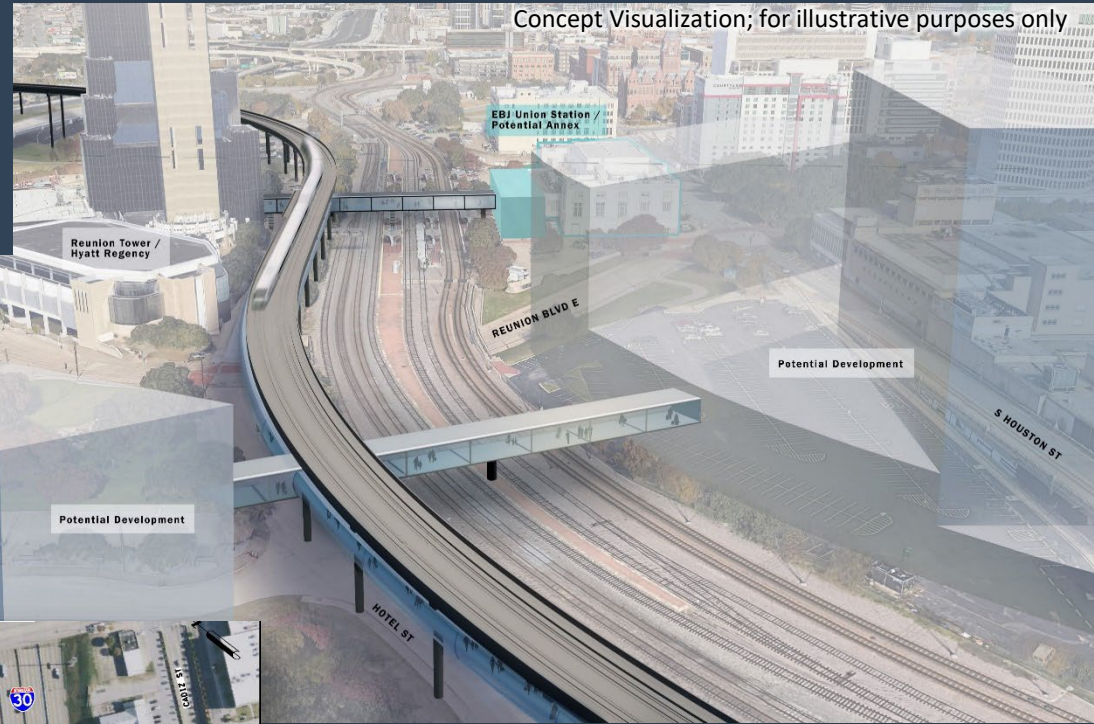
Requires no changes to approved Dallas HSR Station location  
Aligns along Hotel St. and adjacent to existing rail corridor  
Similar alignment to 2B and 2C alternatives

# Alignments Previously Recommended for NEPA

2B. Elevated – East of Hyatt Regency with Pedestrian Lobby

Alignment recommended for advancement into NEPA

**NO FATAL FLAW; FAVORED OPTION**



Aligns along Hotel St. and adjacent to existing rail corridor  
 Provides direct pedestrian connectivity opportunity between approved HSR station, EBJ Union Station, KBHCC, and other developments

# Favored Option 2B for NEPA Advancement

Proposed High-Speed Rail Station

Proposed Kay Bailey Hutchison Convention Center Dallas

Omni Dallas

Potential Development

Reunion Tower / Hyatt Regency

EBJ Union Station / Potential Annex

Dealy Plaza

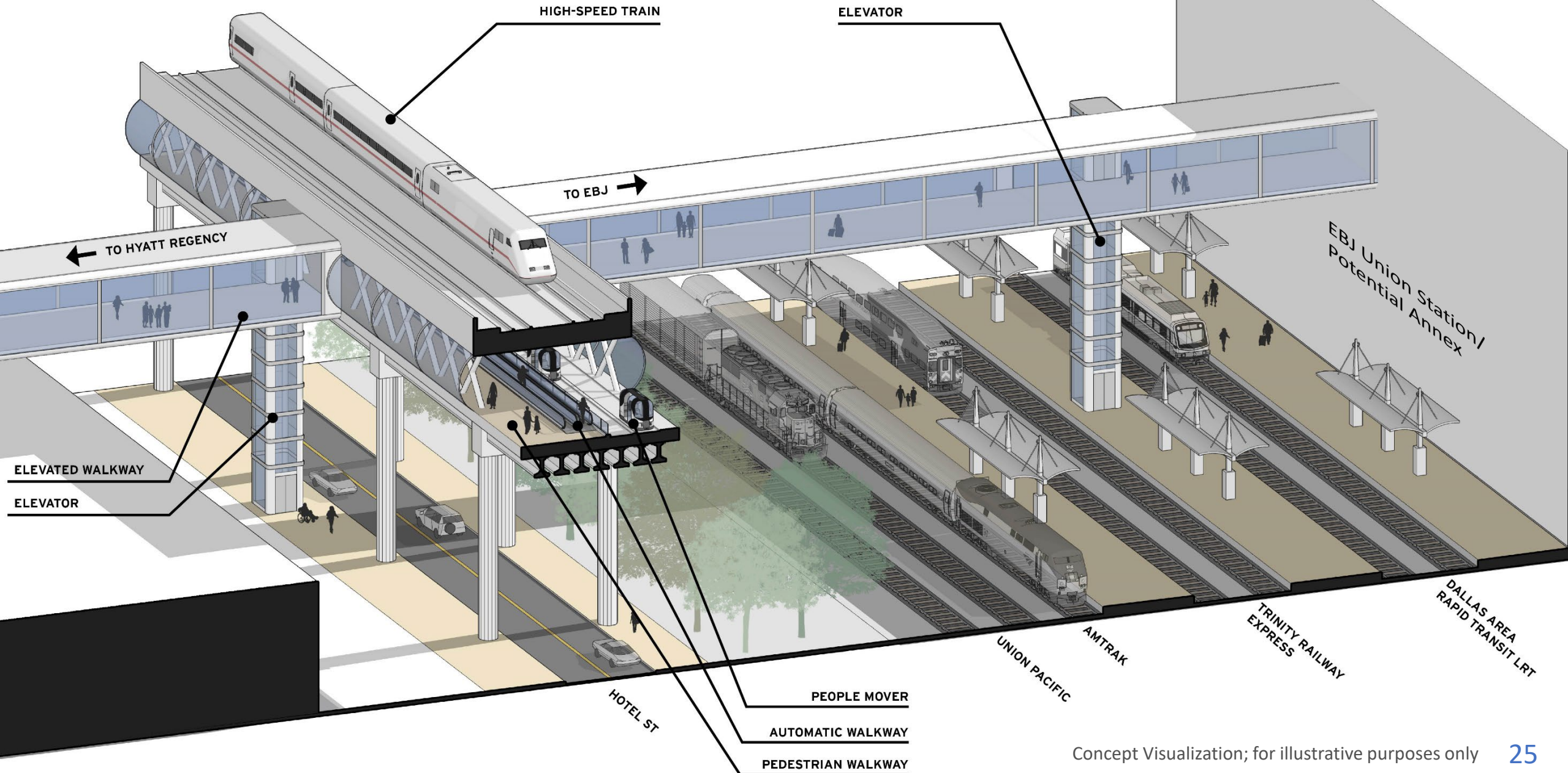
Margaret McDermott Bridge

Martyrs Park

Concept Visualization; for illustrative purposes only



# Favored Option 2B for NEPA Advancement

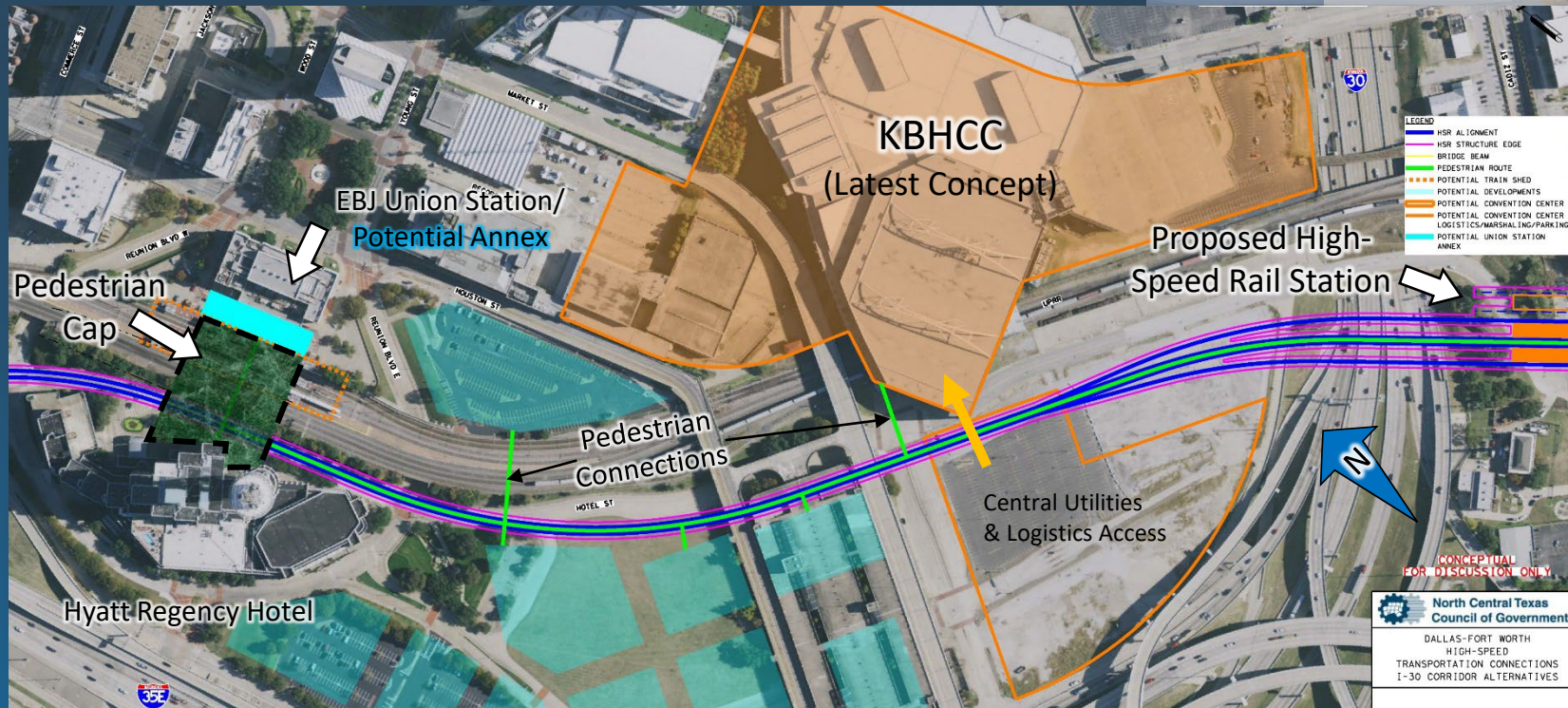
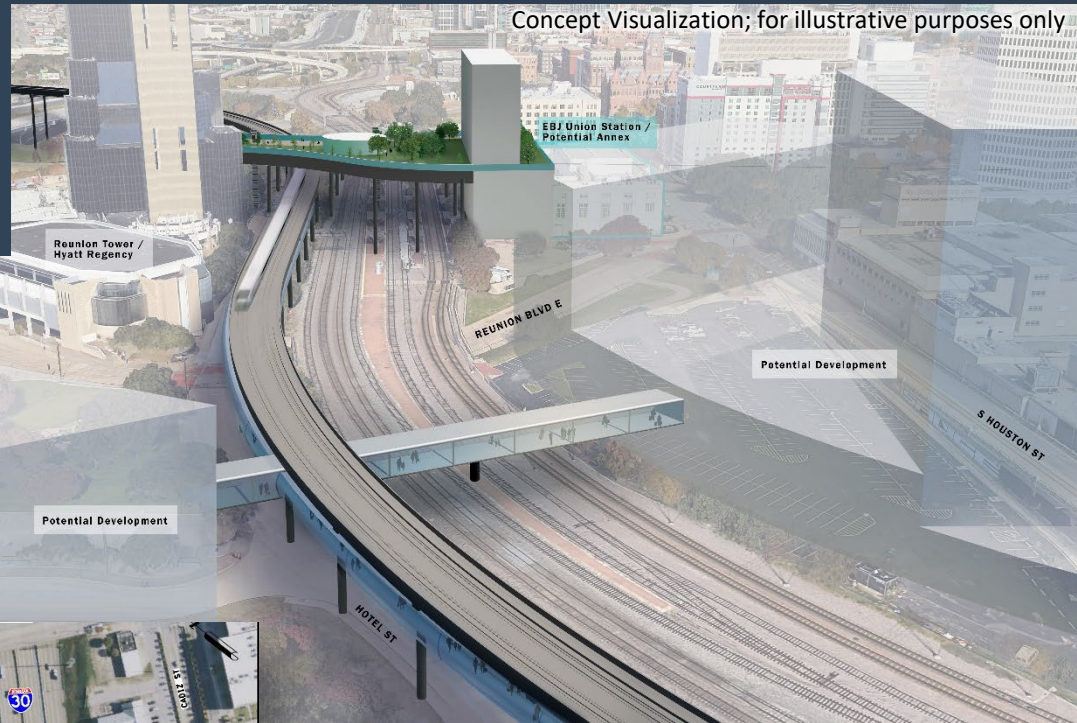


# Alignments Previously Recommended for NEPA

**2C. Elevated – East of Hyatt Regency with Pedestrian Lobby and Pedestrian Cap**

Alignment recommended for advancement into NEPA

**NO FATAL FLAW; FAVORED OPTION**



Aligns along Hotel St. and adjacent to existing rail corridor

Provides direct pedestrian connectivity opportunity between approved HSR station, EBJ Union Station, KBHCC, and other developments

Provides Pedestrian Cap/Deck Plaza over HSR to improve viewshed

# Favored Option 2C for NEPA Advancement



Proposed High-Speed Rail Station

Proposed Kay Bailey Hutchison Convention Center Dallas

Omni Dallas

Potential Development

Reunion Tower / Hyatt Regency

EBJ Union Station / Potential Annex

Dealy Plaza

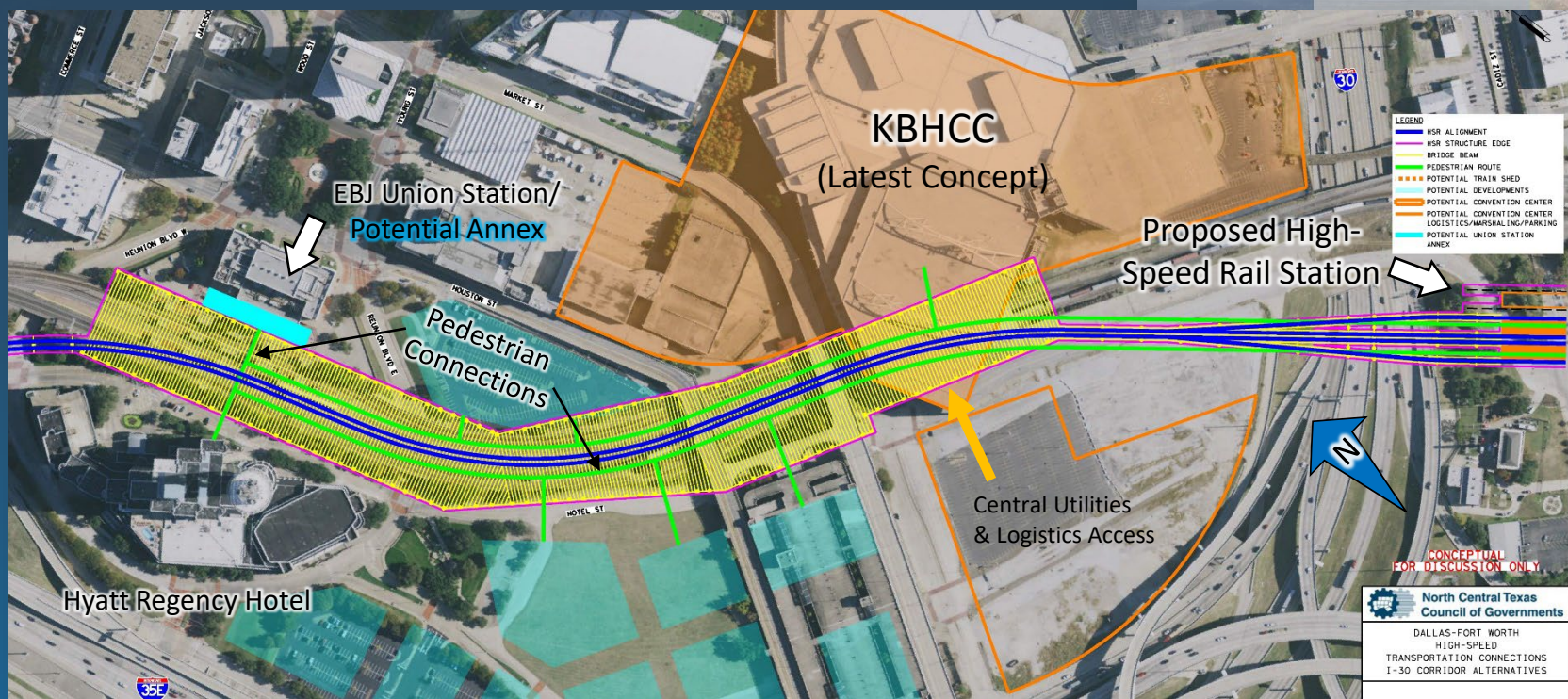
Margaret McDermott Bridge

Martyrs Park

# Alignments Previously Rejected; Requested to Review

## 3. Elevated – Use of Existing Railroad Corridor East of Hotel Street

**FATAL FLAW**



Corridor actively used for passenger and freight rail service

Requires massive pergola structure overshadowing streetscape

Significant engineering challenges; loses seamless lobby extension

# Alignments

## Previously Rejected; Requested to Review

### 4. Subway – Coterminous with Approved Dallas High-Speed Rail Station

#### **FATAL FLAW**

Approx. 185' (17 stories) vertical transfer  
adds 20+ minute delay

Delay equivalent to 40-minute travel time  
penalty (waiting time vs. time-in-transit  
perceived differently)

Violates Regional Transportation Council  
Policy – not a “one-seat” ride\*

\* “One-seat” ride references a direct trip provided by a single transit service that requires no transfers for passengers to reach their final destination; potential ridership drops precipitously with service requiring a transfer(s)

Approved Dallas High-Speed Rail Station with platform at 70'+ above existing ground  
Image Credit: Texas Central



### 5A. Elevated/5B. Subway – Different Station Location

#### **FATAL FLAW**

Amtrak proceeding with environmentally-cleared  
station location for Dallas to Houston HSR

Transfer penalty worse than Alternative 4

Violates Regional Transportation Council Policy –  
not a “one-seat” ride\*

# Alignments Previously Rejected; Requested to Review

## 6. At-Grade – Upgraded TRE

### **FATAL FLAW**

Competes for capacity in active corridor and likely fatal flaw in sharing infrastructure

“At-grade” service sets highest speed of corridor at 125 mph and cannot meet HSR standards of safety and reliability

Cannot meet travel time goal of approximately 20 minutes due to geometry of corridor

Violates Regional Transportation Council Policy – not a “one-seat” ride\*

## 7. Elevated – TRE Corridor

### **FATAL FLAW**

Grade-separated tracks would require new right-of-way next to existing tracks/right-of-way

Significant number of displacements expected

Creates similar issue in downtown Dallas as Alternative 3 (use of existing rail corridor)

Significant public opposition

Violates Regional Transportation Council Policy – not a “one-seat” ride\*

*\* “One-seat” ride references a direct trip provided by a single transit service that requires no transfers for passengers to reach their final destination; potential ridership drops precipitously with service requiring a transfer(s)*

# Dallas to Fort Worth High-Speed Rail Corridor Characteristics

What are expected travel times along corridor? Can it really get to “high” speed?

Yes – “high” speed is defined as over 125 mph

## Fort Worth to Dallas

Express Run: Max Speed = 160 mph, 21-minute travel time

Arlington Stop: Max Speed = 160 mph, 25-minute travel time

## Dallas to Houston

Max Speed = 200+ mph, 90-minute travel time

## Fort Worth to Houston\*

Max Speed = 200+ mph, approximately 2-hour travel time

*\*With stop in Arlington and Grimes County*

A high-speed train (TGV) is shown at a station platform. The train is white with a red stripe and the DB logo. In the background, there is a modern glass building and a large, arched structure, possibly a tunnel entrance. The title "Benefits of High-Speed Rail to Land Development" is overlaid on the right side of the image in blue text.

# Benefits of High-Speed Rail to Land Development

Questions:

What density of development does a high-speed rail station attract and what is the effect on land values?

What markets will it serve?



# Density Increase Near High-Speed Rail

- Greater Density
- Higher Towers
- More Buildings
- Integrated Mixed Use
- Skywalks (e.g., Dubai, Toronto, Chicago)
- Higher Employment Growth
- Faster Population Growth
- GDP 1-3% Nationwide in China



Source: Transbay Program  
media gallery, 2023



**San Francisco Salesforce  
Transit Center**

# Property Value Increase in High-Speed Rail Markets

Greatest Value Near Station (50%-100%)

Citywide Property Value Increase (6%-14%)

Extent of Value Capture

20-minute walking distance plus regional rail plus light rail plus bike commuters (up to 18 miles)

Dallas HUB/Convention Center Adds to Market Segmentation



# High “Speed” Rail by Country

HSR Systems Commonly Studied by Literature and their Top Speeds

Country	Train Name	Top Speed (mph)
China	Shanghai Maglev	286
China	CR Harmony and CR Fuxing	217
Germany	DB ICE	217
France	SCNCF TGV	199
Japan	JR Shinkansen	199
Spain	Renfe AVE 103	193
South Korea	Korail KTX-Sancheon	190
Italy	Trenitalia Frecciarossa 1000	190
Taiwan	Taiwan HSR	185

Source: [The 10 fastest high-speed trains in the world - Railway Technology \(railway-technology.com\)](http://railway-technology.com)

# Travel Demand Markets for High-Speed Rail Dallas-Arlington-Fort Worth (Business, Recreational, Entertainment)

1. HSR to Houston, Austin, and San Antonio (reduced/inefficient parking in downtown Dallas)
2. Egress/Access to Dallas Fort Worth International Airport (no second transfer)
3. Fast Travel within Region of 12.4 M in 2050 (currently 8.2M)
4. Better Connection to HUB (at-grade AMTRAK, Streetcar, Light Rail, and Regional Rail)
5. Better Access for Conventions
6. Better Access for Special Events including Fair Park

# Next Steps



- Continue working with stakeholders/partners on visions for:
  - EBJ Union Station Redevelopment
  - Streetcar Expansion
    - Feedback to be incorporated in future RFP
  - High-Speed Rail Initiatives
- Continue researching economic impacts of high-speed rail and incorporate those findings in future City Council briefings
- Work towards City Council consensus or potential resolutions of support for the high-speed rail initiatives





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