



PUBLIC MEETING

I-20/I-30 OPERATIONAL IMPROVEMENTS PROJECT

I-20: From FM 1187/FM 3325 to Markum Ranch Road

I-30: From I-20 to Linkcrest Drive

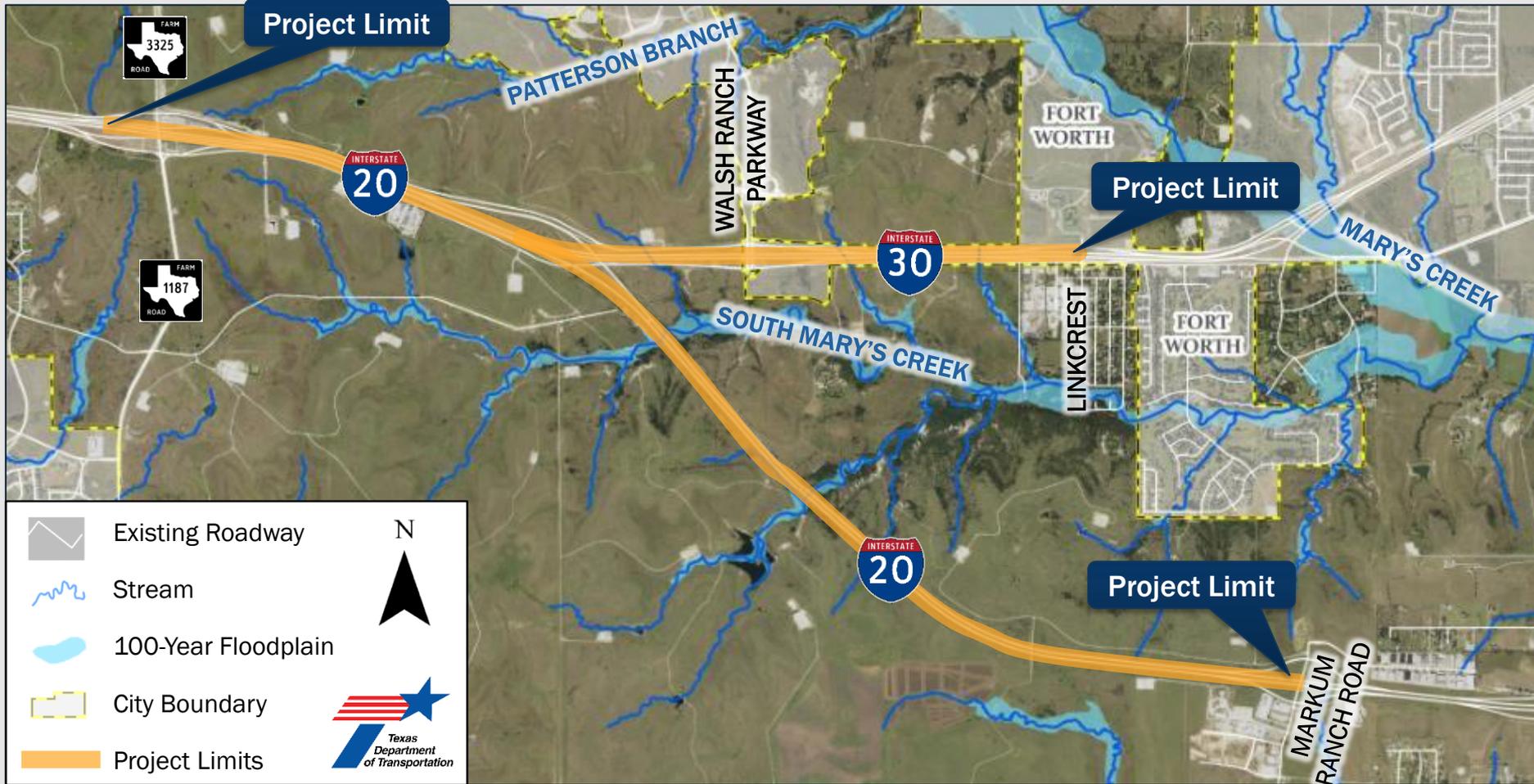
Parker and Tarrant Counties, Texas



Presentation Topics

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Project Limits



From FM 1187/FM 3325 to Markum Ranch Road



From I-20 to Linkcrest Drive

Project Scope

- Data collection
- Alternatives analysis
- Preliminary design (schematic) of preferred alternative
 - Drainage study
 - Traffic projections and operational analysis
 - Report documenting the proposed ramp changes (Interstate Access Justification Report)
- Site investigations (geotechnical studies) of the subsurface soil, rock, and water conditions
- Right of way mapping
- Environmental assessment



Project Purpose and Objectives

Purpose

- Improve mobility
- Enhance access
- Reduce congestion
- Improve safety

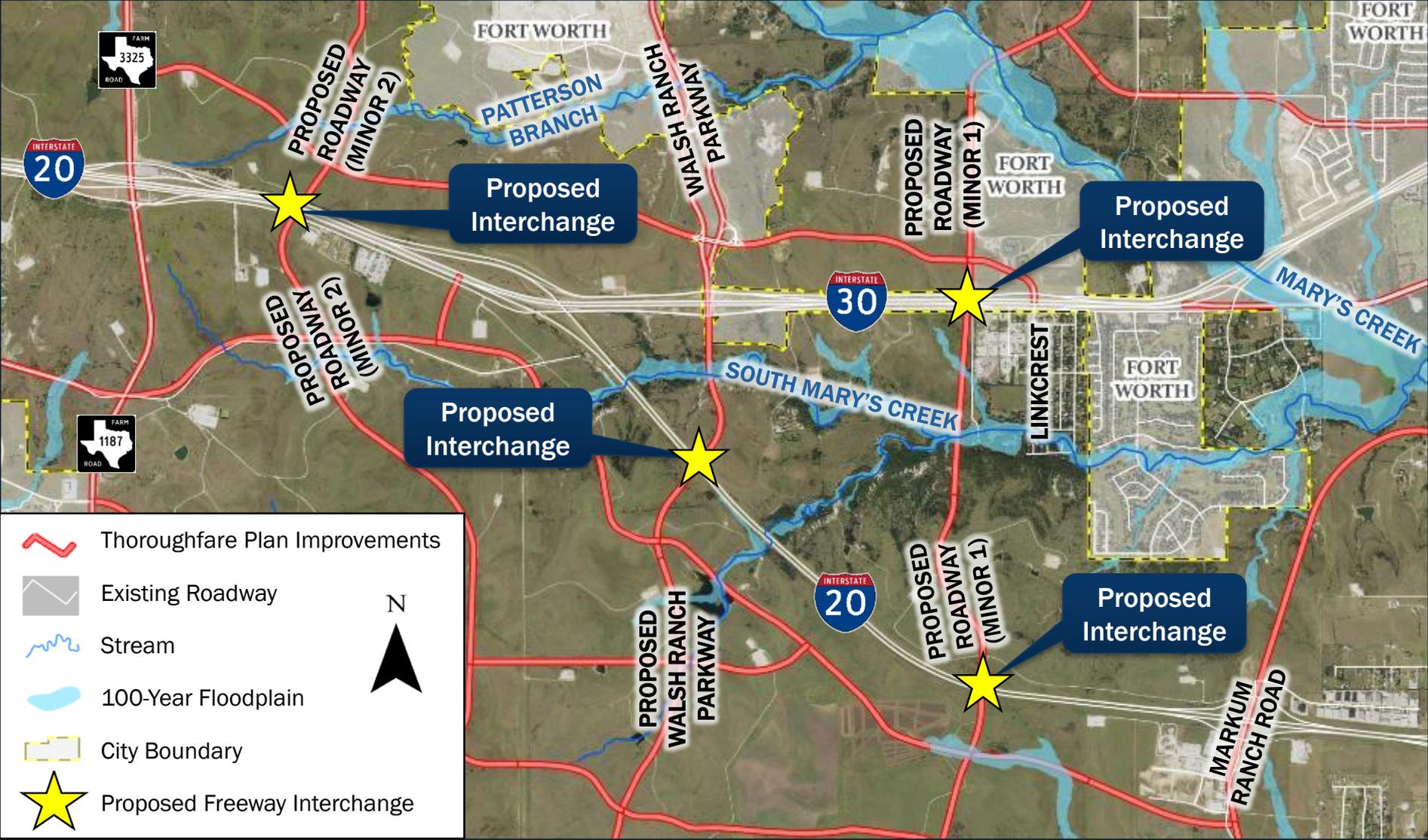
Objectives

- Improve to current design criteria
- Accommodate Metropolitan and Fort Worth Thoroughfare Plans
- Operational improvements
- Reconstruct rural frontage roads to urban section
- Provide pedestrian and bicycle accommodations
- Identify necessary drainage improvements

Major Improvements to the Project Corridor

- Between 1973 and 1986, I-20 and I-30 (within the project limits) was constructed
- In 2012, TxDOT & FHWA approved a schematic and Interstate Access Justification Report (IAJR) for the proposed Walsh Ranch Parkway interchange at I-30 (and other related improvements)
- In 2016, the I-30/Walsh Ranch Parkway interchange construction was completed
 - Walsh Ranch Parkway Bridge over I-30
 - Included construction of ramp and frontage road improvements from the I-20/I-30 interchange to near the Parker/Tarrant County line
- In 2018, construction completed to widen the FM 1187/FM 3325 Bridge over I-20
 - Bridge widened to a five-lane section with sidewalks
 - Included frontage road intersection improvements

Considerations – City of Fort Worth Thoroughfare Plan



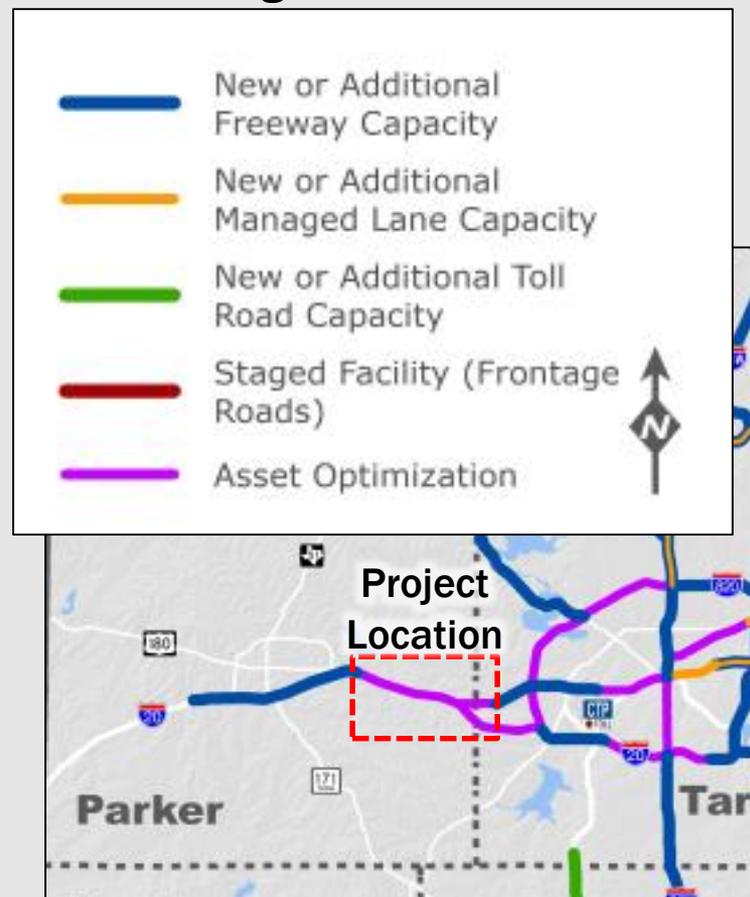
	Thoroughfare Plan Improvements
	Existing Roadway
	Stream
	100-Year Floodplain
	City Boundary
	Proposed Freeway Interchange

N


Considerations – DFW Metropolitan Transportation Plan

North Central Texas Council of Governments Metropolitan Transportation Plan – Mobility 2045

- Identifies I-20/I-30 Project limits as Asset Optimization, including:
 - Maintain existing infrastructure (where feasible)
 - New interchanges with proposed roadways
 - Ramp reversals/relocations & auxiliary lanes
 - Bottleneck relief between FM 1187 & I-20/I-30 interchange
 - Frontage road improvements
- For the project, *Mobility 2045* does not include:
 - additional main lane through capacity
 - new location I-20 frontage roads southeast of I-30



Source: NCTCOG Mobility 2045 Major Roadway Recommendations

Considerations – Adjacent TxDOT Projects

I-20 from US 180 to FM 1187/FM 3325

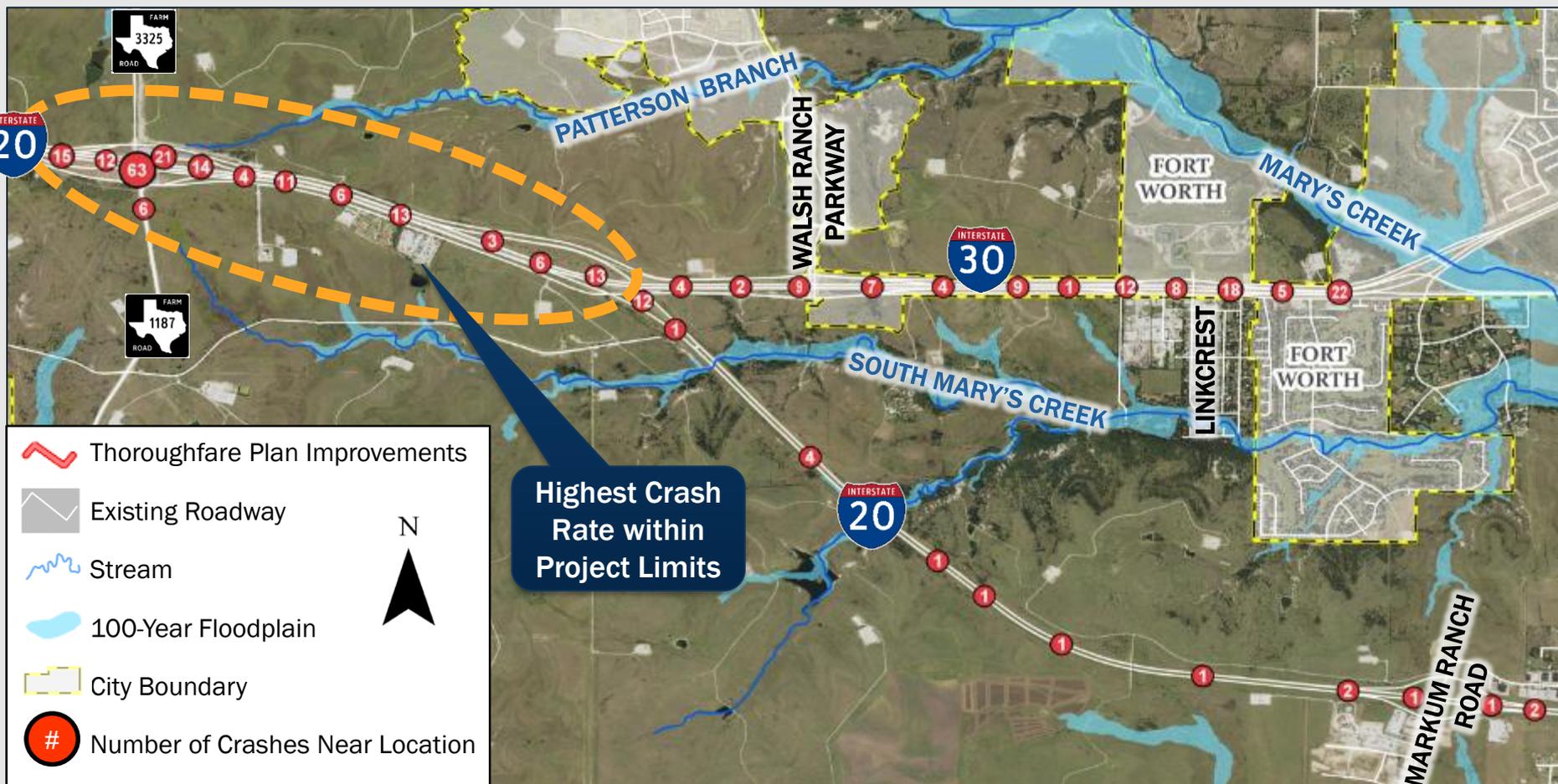
- Adjacent TxDOT project to the west
- Proposed Improvements:
 - Operational improvements (ramp relocations, auxiliary lanes, etc.)
 - Frontage road improvements
 - Add pedestrian and bicycle accommodations
- Project has not yet started
- Construction cost estimate and letting date to be determined

Considerations – Adjacent TxDOT Projects

I-30 from Linkcrest Drive to I-820

- Adjacent TxDOT project to the east
- Proposed Improvements:
 - Widen I-30 from a four-lane to a six-lane freeway east of Spur 580
 - Improve the I-30 and Spur 580 interchange to reduce congestion and enhance safety
 - Construct continuous two-lane, one-way frontage roads throughout the project limits
 - Add pedestrian and bicycle accommodations
- Public Meeting held in December 2018
- Project Website:
<https://www.txdot.gov/inside-txdot/projects/studies/fort-worth/i-30-linkcrest-820.html>
- Ongoing coordination between projects
- Construction cost estimate: \$86 million
- Estimated construction let date: January 2023

Considerations – Historical Crash Data



- Crashes analyzed from 2015 to 2017 (data from Crash Records Information Systems)
- Majority of crashes are single vehicle (~40%) followed by sideswipes (~30%)
- Crash rate is lower than the statewide average for interstates

Considerations – Current Design Criteria

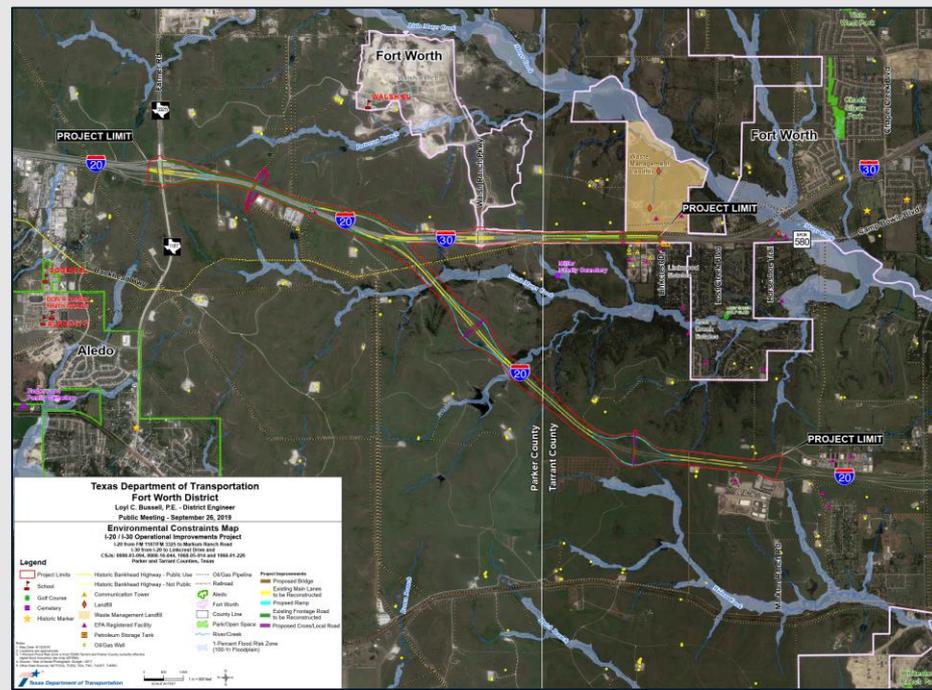
The current study identified opportunities to improve the existing roadway geometry to meet current design criteria including:

- Minimum vertical clearance over roadways
 - Provide a minimum 18.5 feet of vertical clearance over the main lanes of Freight Networks (I-20 and I-30 are designated freight networks) – *New TxDOT criteria applicable to projects let after September 1, 2020*
 - I-20 underpass at FM 1187/FM 3325
 - I-20 underpass at existing Bentley Road (proposed Minor 1)
 - Westbound I-30 underpass at westbound I-20
 - I-30 underpass at Walsh Ranch Parkway
 - Provide a minimum 16.5 feet of vertical clearance over all other roadways
 - Eastbound I-20 overpass at the eastbound I-30 frontage road
- Vertical alignment of roadways
 - Improve the I-30 frontage roads' vertical profile from the county line to Linkcrest Drive

Considerations – Project Constraints

Major Adjacent Constraints

- Variety of adjacent land uses
 - Existing land use includes residential, commercial, industrial, landfill, and agricultural
 - Proposed developments (Walsh Ranch, Cook Children’s Hospital, etc.)
- Waters of the U.S. including wetlands
- Floodplains
- Hazardous materials sites
- Oil and gas wells
- Utilities



Source: I-20/I-30 Environmental Constraints Map

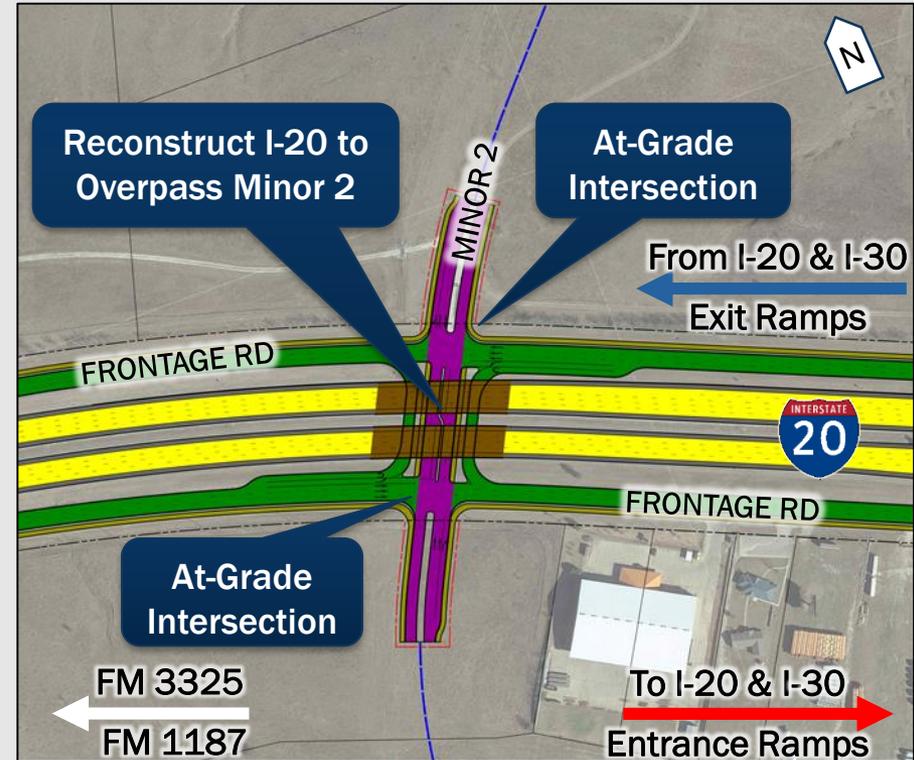
Proposed Options – Proposed City Roadway (Minor 2) at I-20

Recommended Concept Underpass Minor 2



- **Operations:** Frontage roads travel under Minor 2
- **Construction:** Potential short-term closures during bridge construction
- **Requires Bridge over Main Lanes:** Yes
- **Construction Costs:** \$9 million

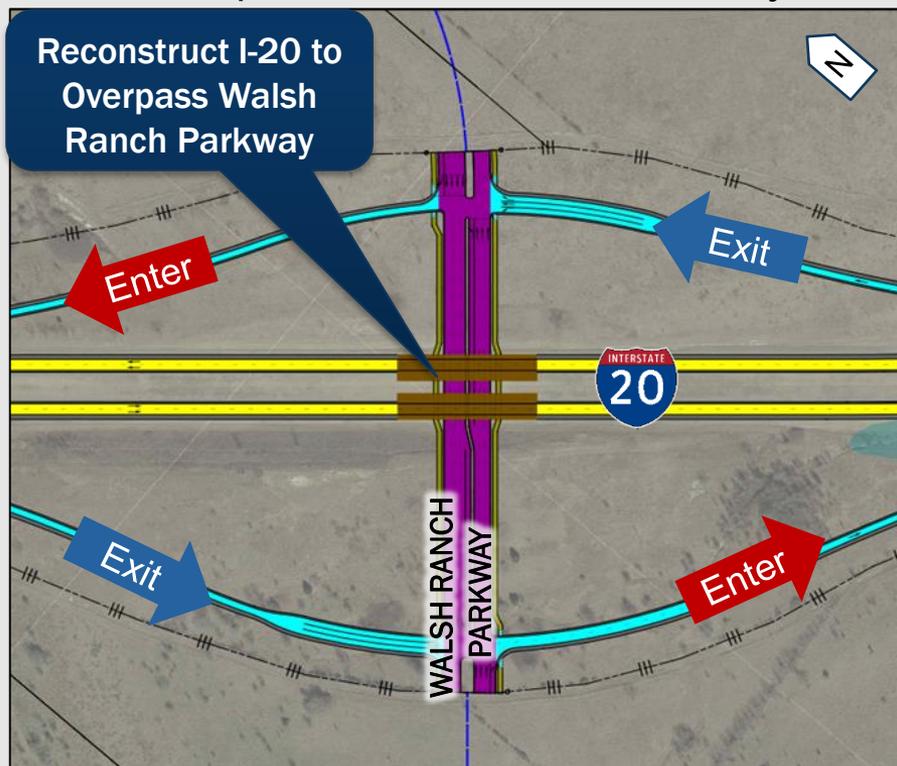
Alternative Concept Overpass Minor 2



- **Operations:** Frontage roads travel thru at-grade intersections
- **Construction:** Temporary traffic shifts
- **Requires Bridge over Main Lanes:** No
- **Right of Way:** Minimizes right of way impacts
- **Construction Costs:** \$17 million

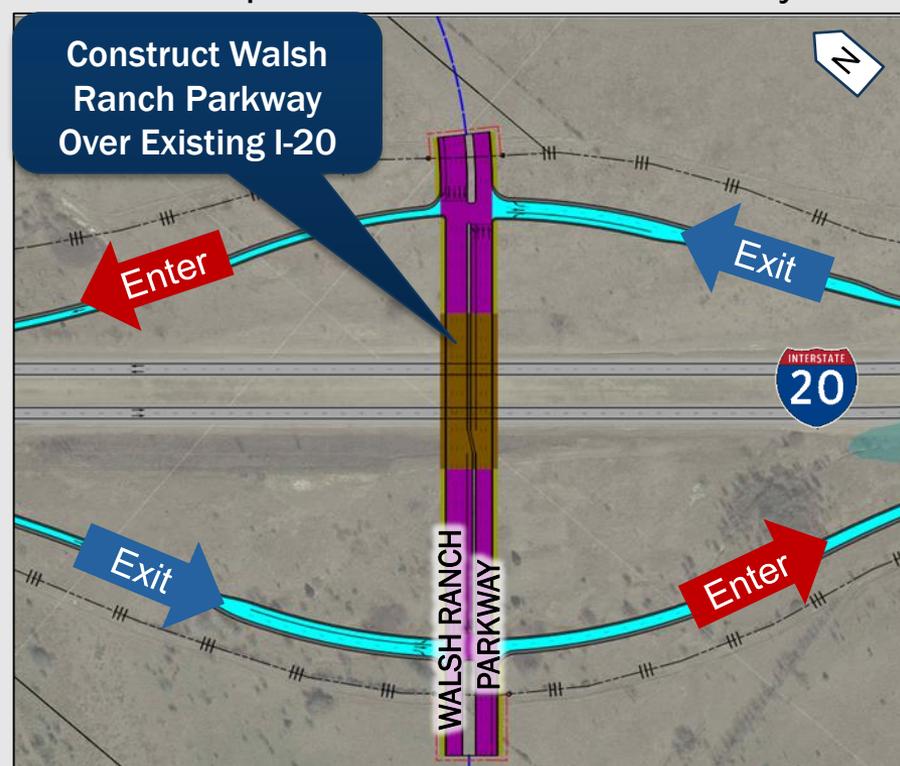
Proposed Options – Walsh Ranch Parkway at I-20

Recommended Concept Overpass Walsh Ranch Parkway



- **Operations:** Proposed ramps intersect cross street
- **Construction:** Temporary traffic shifts
- **Requires Bridge over Main Lanes:** No
- **Construction Costs:** \$22 million

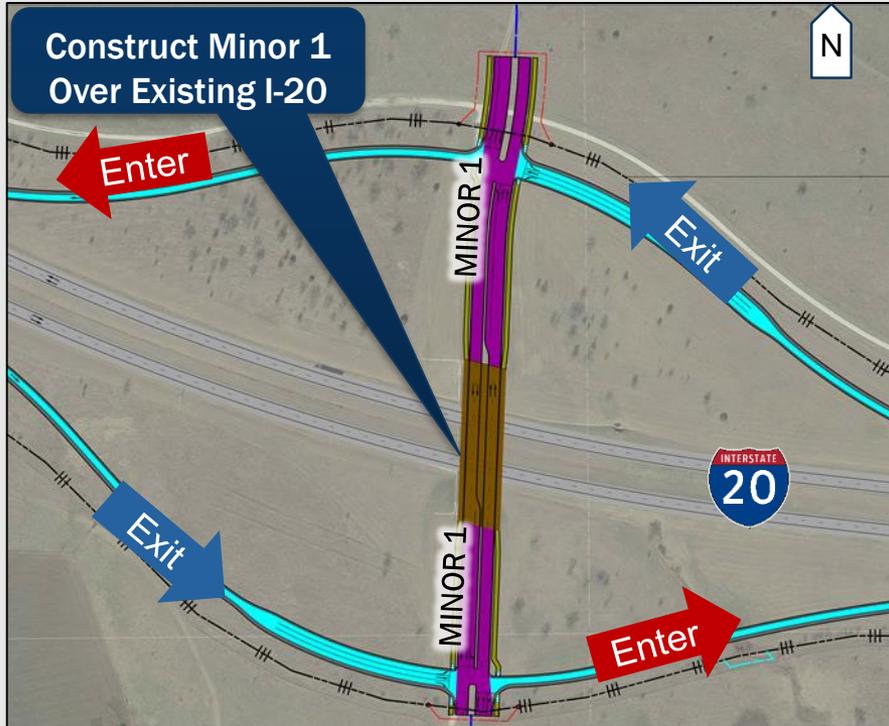
Alternative Concept Underpass Walsh Ranch Parkway



- **Operations:** Proposed ramps intersect cross street
- **Construction:** Potential short-term closures during bridge construction
- **Requires Bridge over Main Lanes:** Yes
- **Construction Costs:** \$11 million

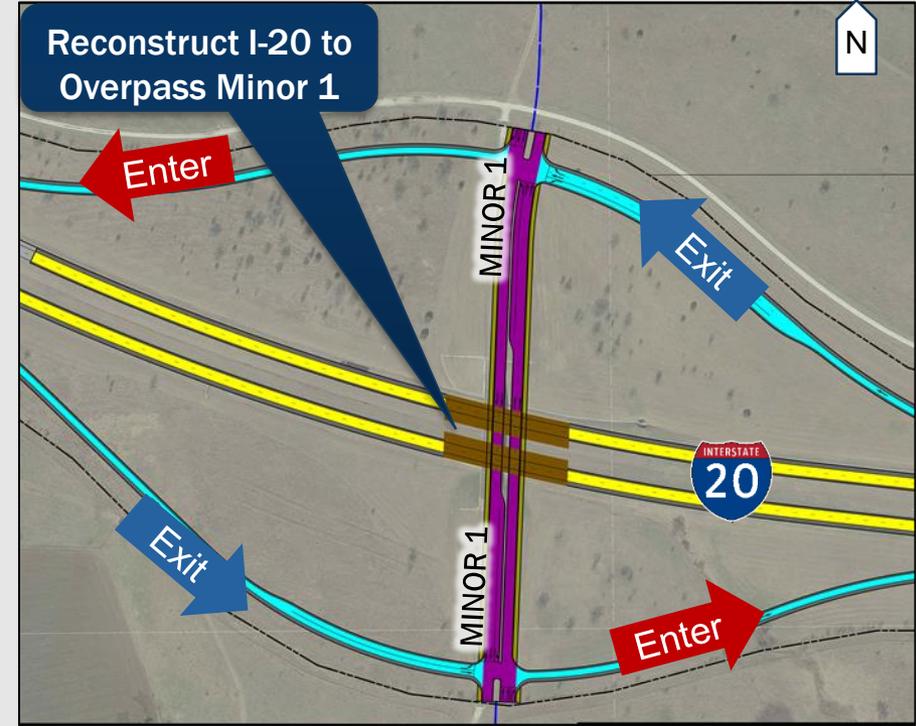
Proposed Options – Proposed City Roadway (Minor 1) at I-20

Recommended Concept Underpass Minor 1



- **Operations:** Proposed ramps intersect cross street
 - **Construction:** Potential short-term closures bridge construction
 - **Requires Bridge over Main Lanes:** Yes
 - **Construction Costs:** \$9 million
- Existing Bentley Bridge provides flexibility for interim use*

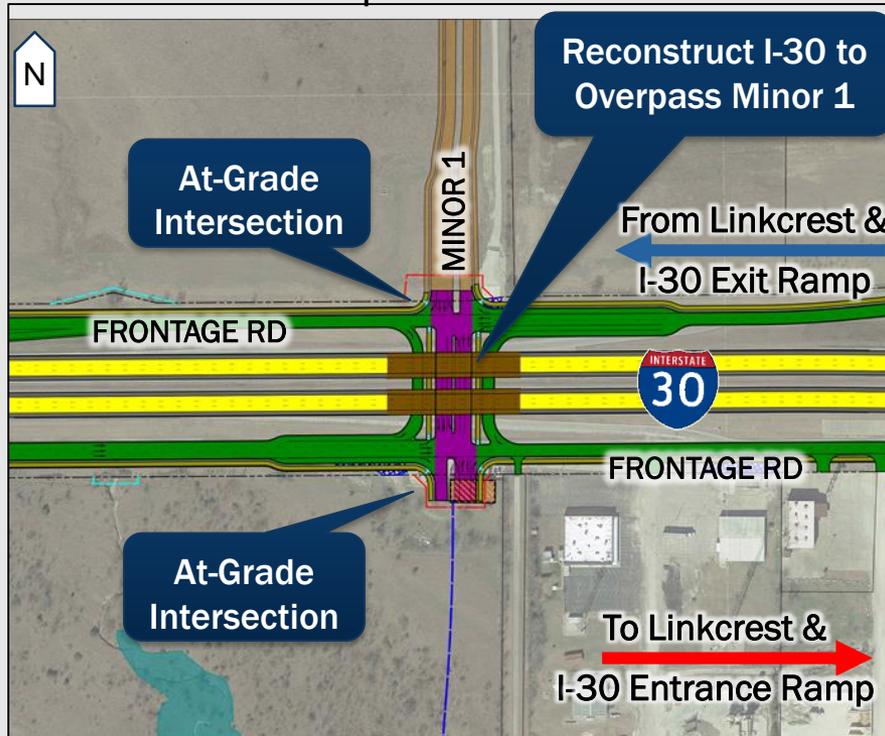
Alternative Concept Overpass Minor 1



- **Operations:** Proposed ramps intersect cross street
- **Construction:** Temporary traffic shifts
- **Requires Bridge over Main Lanes:** No
- **Construction Costs:** \$17 million

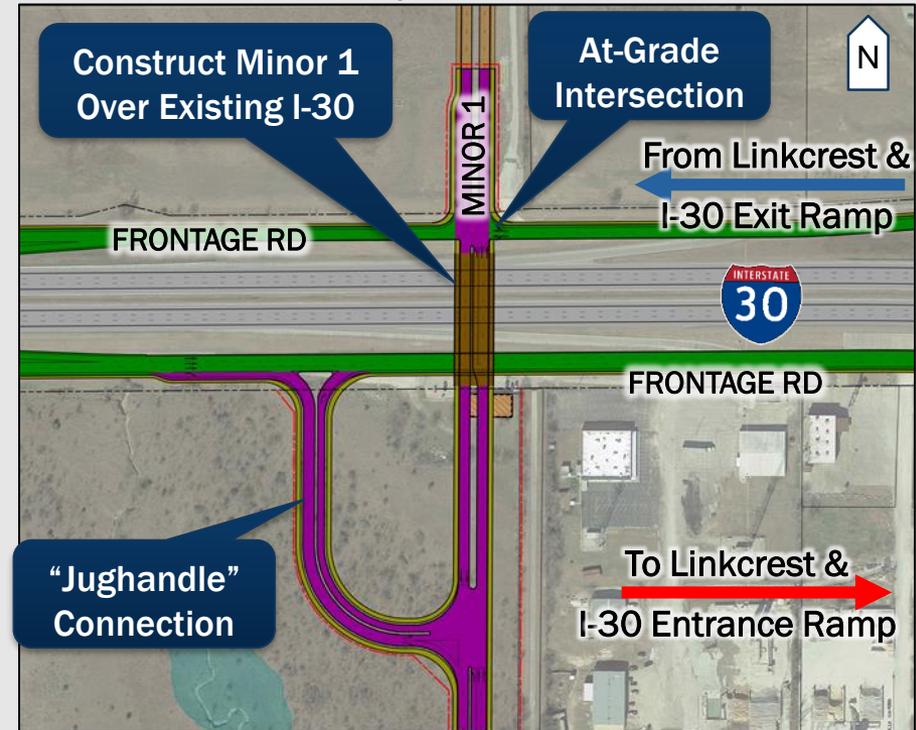
Proposed Options – Proposed City Roadway (Minor 1) at I-30

Recommended Concept Overpass Minor 1



- **Operations:** Frontage road travels thru at-grade intersections
- **Construction:** Temporary traffic shifts during construction
- **Requires Bridge over Main Lanes :** No
- **Right of Way:** Minimizes right of way impacts
- **Construction Costs:** \$14 million

Alternative Concept Underpass Minor 1



- **Operations:** EB frontage road travels under Minor 1, WB frontage roads travels thru at-grade intersection
- **Construction:** Potential short-term closures during bridge construction
- **Requires Bridge over Main Lanes :** Yes
- **Access Impacts:** Raises WB frontage road 13 feet
- **Construction Costs:** \$9 million

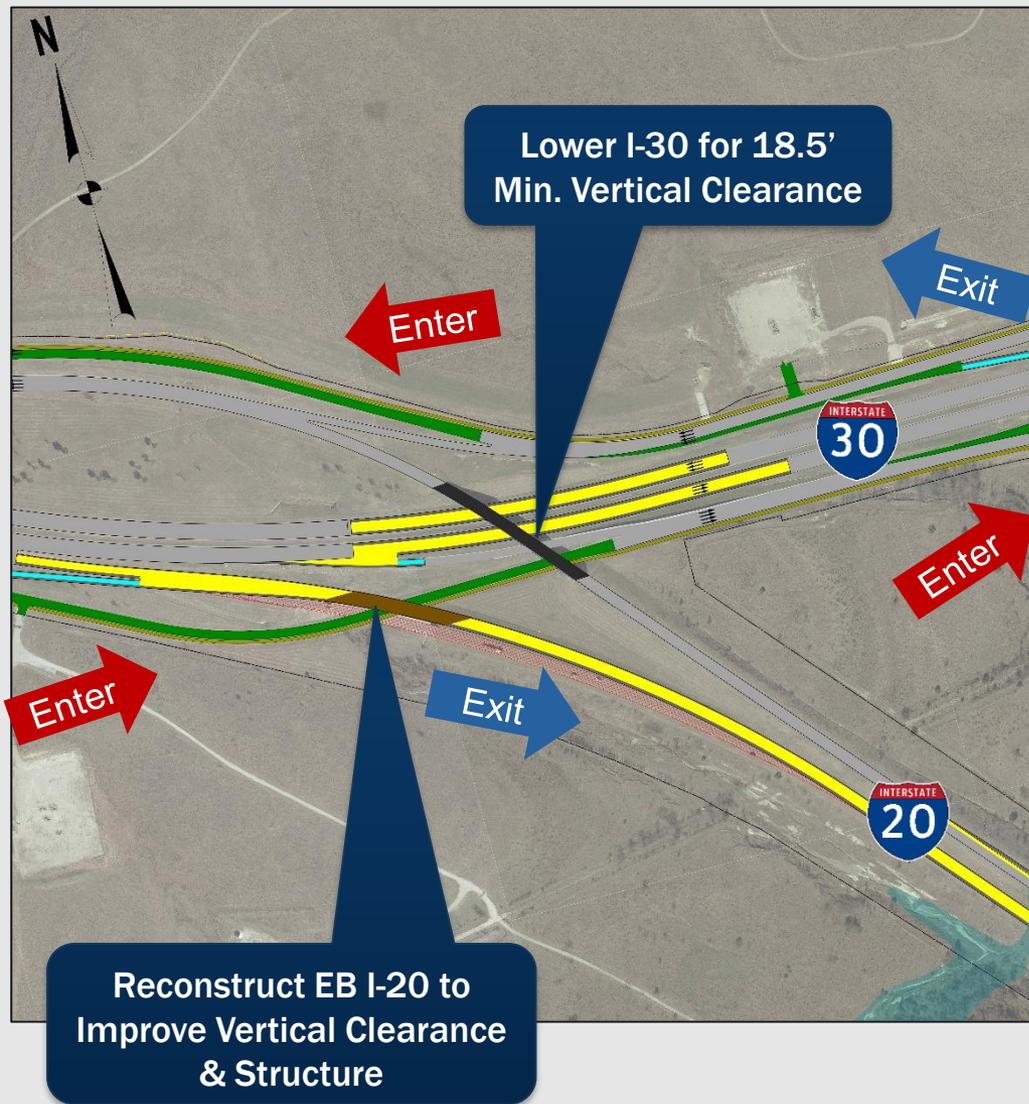
I-20 Recommended Improvements – FM 1187 to I-30



- Coordinate with TxDOT project west of FM 1187/FM 3325
- Construct frontage roads, ramps and auxiliary lanes
- Remove weave between FM 1187 ramps and I-30 Interchange
- Construct frontage road u-turns at FM 1187/FM 3325
- Proposed jug-handle connections at Minor 2
- Construct 10-foot wide shared-use path (bike/pedestrians) along Minor 2 and frontage roads

	Proposed Main Lanes
	Proposed Ramp
	Proposed Frontage Road
	Proposed Local Street
	Proposed Bridge
	100 Year Flood
	City of Fort Worth Thoroughfare Plan Potential Alignment

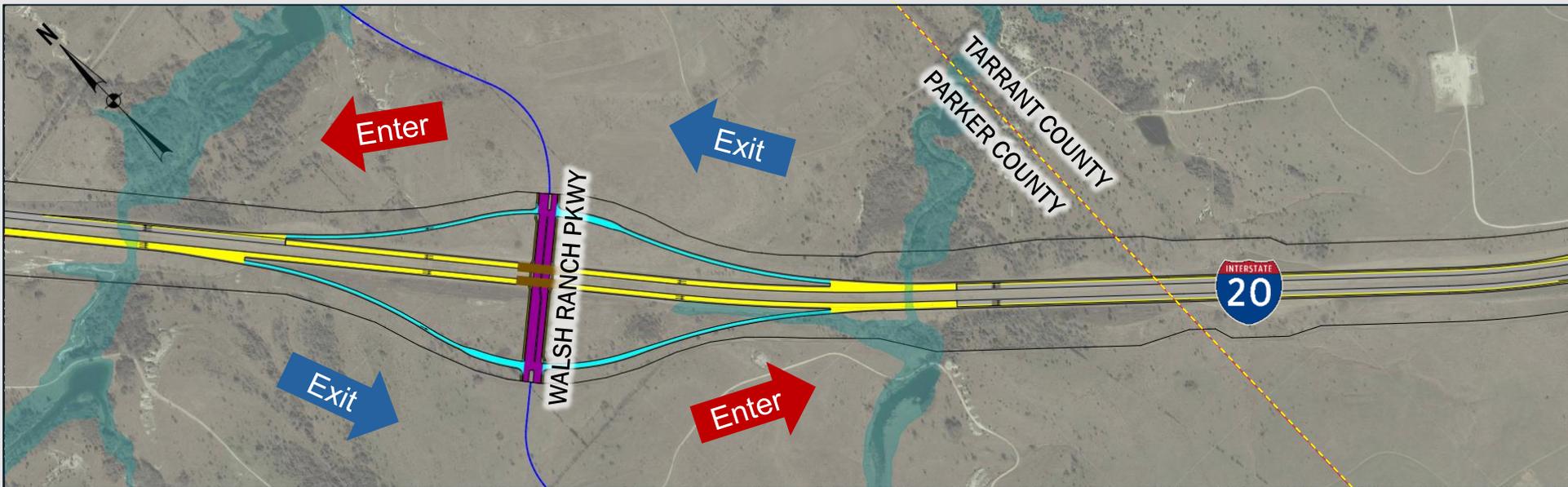
Recommended Improvements – I-20/I-30 Interchange



- Frontage road reconstruction to end at I-30 frontage roads (recently reconstructed with Walsh Ranch Parkway)
- Construct ramps and auxiliary lanes
- Construct continuous 10-foot wide shared-use path (bike/pedestrians) along frontage roads
- Maintain existing WB entrance ramp from Walsh Ranch Parkway
- Maintain existing EB exit ramp to Walsh Ranch Parkway



I-20 Recommended Improvements – East of I-30 to County Line



- Construct ramps and auxiliary lanes
- Construct I-20 overpass at Walsh Ranch Parkway
- Construct 10-foot wide shared-use path (bike/pedestrians) along Walsh Ranch Parkway

	Proposed Main Lanes
	Proposed Ramp
	Proposed Frontage Road
	Proposed Local Street
	Proposed Bridge
	100 Year Flood
	City of Fort Worth Thoroughfare Plan Potential Alignment

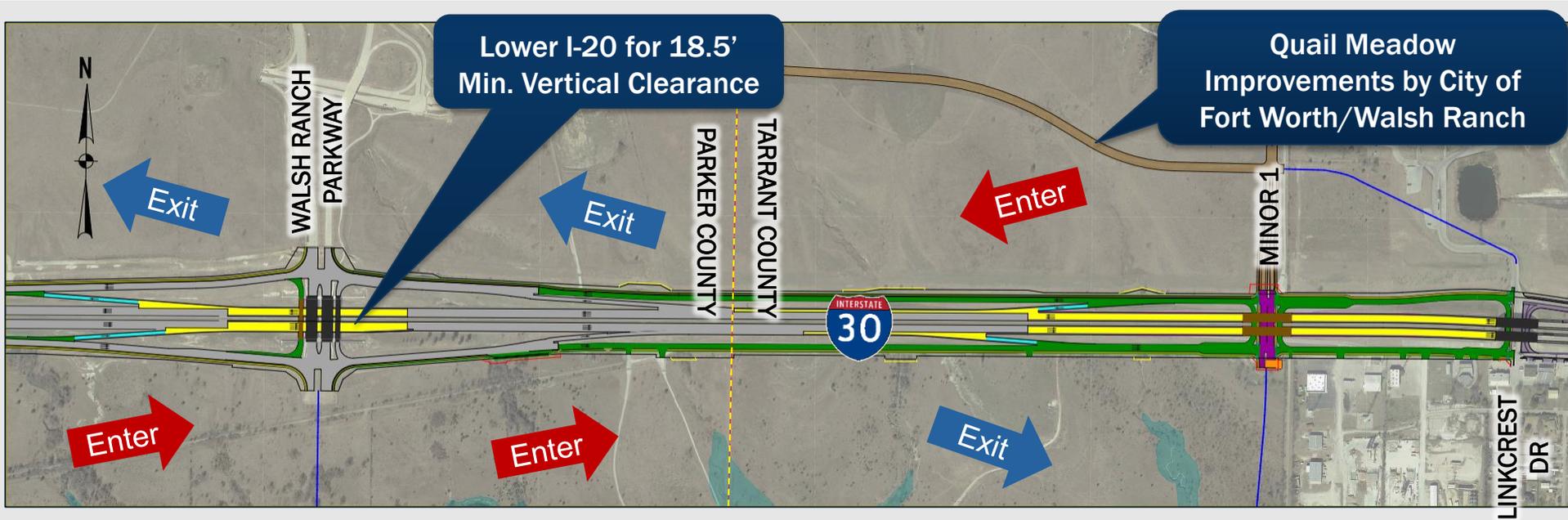
I-20 Recommended Improvements – County Line to Markum Ranch



- Construct ramps and auxiliary lanes
- Construct I-20 underpass at Minor 1
- Construct 10-foot wide shared-use path (bike/pedestrians) along Minor 1
- No improvements proposed to Markum Ranch Road

	Proposed Main Lanes
	Proposed Ramp
	Proposed Frontage Road
	Proposed Local Street
	Proposed Bridge
	100 Year Flood
	City of Fort Worth Thoroughfare Plan Potential Alignment

I-30 Recommended Improvements – East of I-20 to Linkcrest Dr.



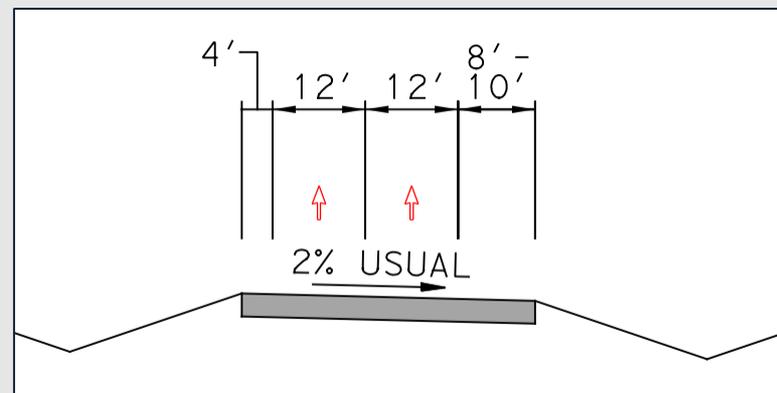
- Begin I-30 frontage road reconstruction east of Walsh Ranch Parkway
- Construct continuous 10-foot wide shared-use path (bike/pedestrians) along Minor 1 & frontage roads
- Construct ramps and auxiliary lanes
- Maintain existing Walsh Ranch Parkway EB entrance ramp and WB exit ramp on I-30
- Construct frontage road U-turns west of Linkcrest, west of Walsh Ranch Parkway, and at Minor 1

	Proposed Main Lanes
	Proposed Ramp
	Proposed Frontage Road
	Proposed Local Street
	Proposed Bridge
	100 Year Flood
	Improvements by City Project
	Improvements by TxDOT
	City of Fort Worth Thoroughfare Plan Potential Alignment

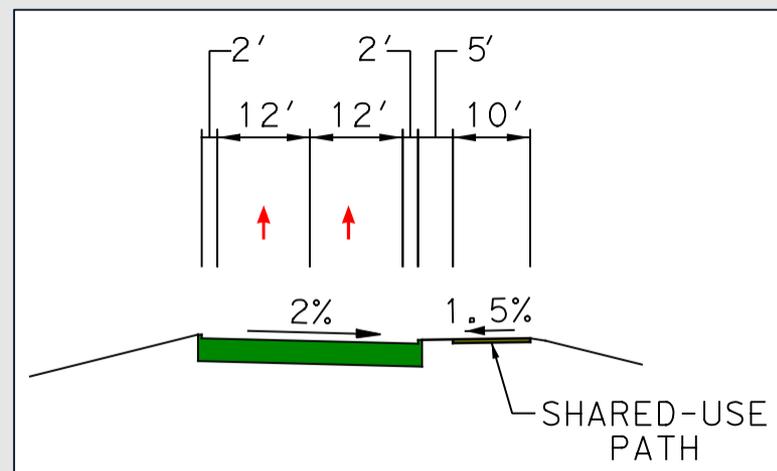
Proposed Bicycle and Pedestrian Accommodations

Proposed frontage roads and cross streets will provide continuous bicycle and pedestrian accommodations including:

- 10-foot wide shared-use path for bicyclists and pedestrians
 - Where practical, provide a five-foot buffer between the shared-use path and adjacent roadway



**Existing Typical Section
Rural Frontage Road**



**Proposed Typical Section
Urban Frontage Road**

Estimated Project Costs and Funding Status

- Estimated construction costs (recommended alternative): \$150 million
- Current Funding Status:
 - 2019-2022 Statewide Transportation Improvement Program (STIP)
\$21.8 million for construction and \$1.18 million for engineering
(assigned to I-20 segment from FM 1187/FM 3325 to Tarrant/Parker County Line)
 - Construction is not fully funded; TxDOT will continue to work with NCTCOG and regional partners to secure full funding for the project

Anticipated Schedule

Timeline	Activity
Sept. 26, 2019	Open House Public Meeting
Fall 2019	Value Engineering Study (process of evaluating options to improve the value and quality of the project)
Spring 2020	Draft Interstate Access Justification Report and Design Schematic to Federal Highway Administration
Fall 2020	Public Hearing
Spring 2021	Environmental and Schematic Approval

Thank You!

Contact Information:

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Written comments accepted by postmark due date of

Oct. 11, 2019

<https://www.txdot.gov/inside-txdot/get-involved/about/hearings-meetings.html>