



**SH 114 FRONTAGE ROAD, RAMP AND  
INTERSECTION IMPROVEMENTS  
FROM FM 1938 (DAVIS BOULEVARD)  
TO DOVE ROAD**

Public Meeting

Oct. 23, 2018

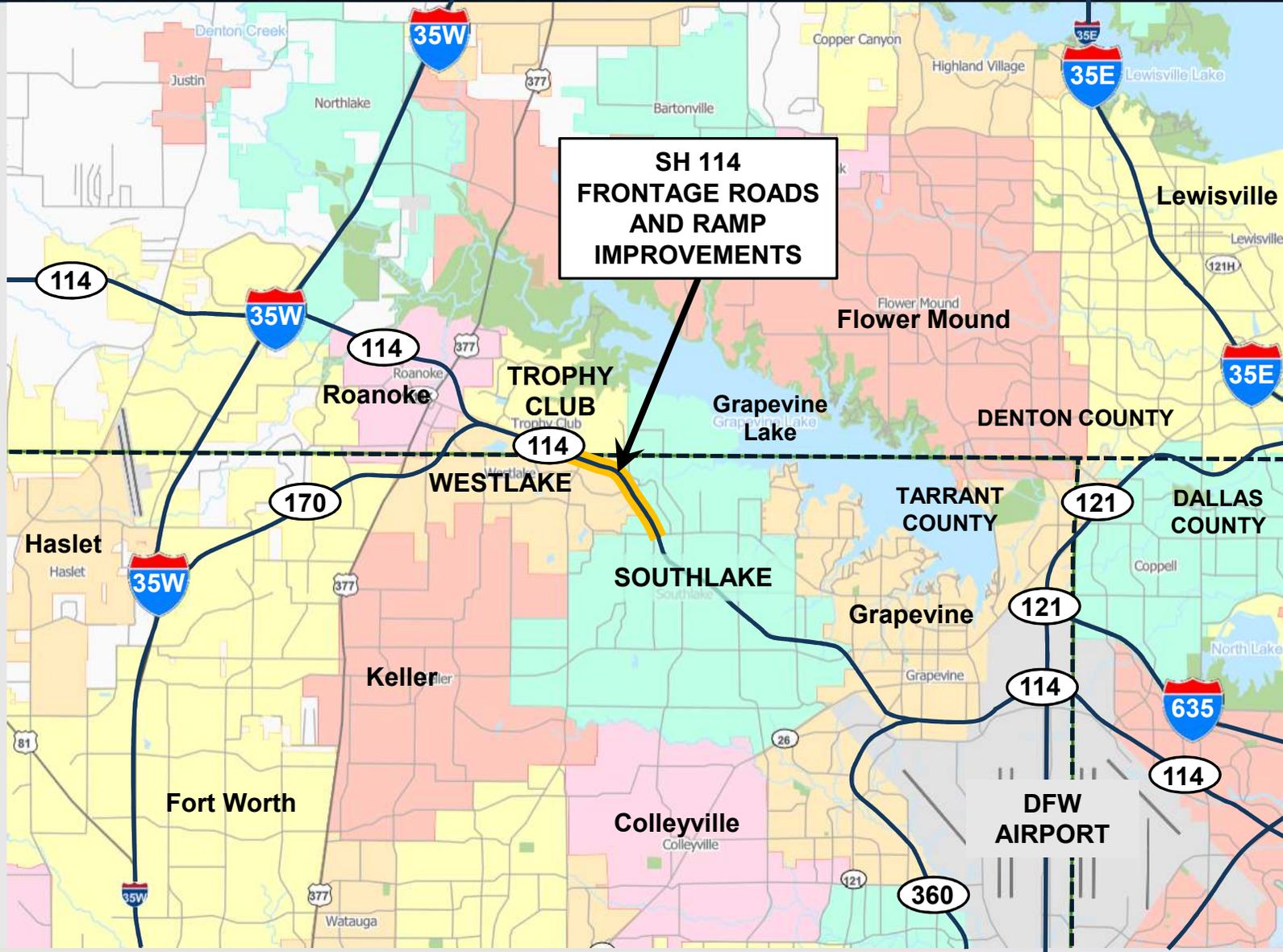
CSJ: 0353-03-100



## Purpose of Today's Meeting

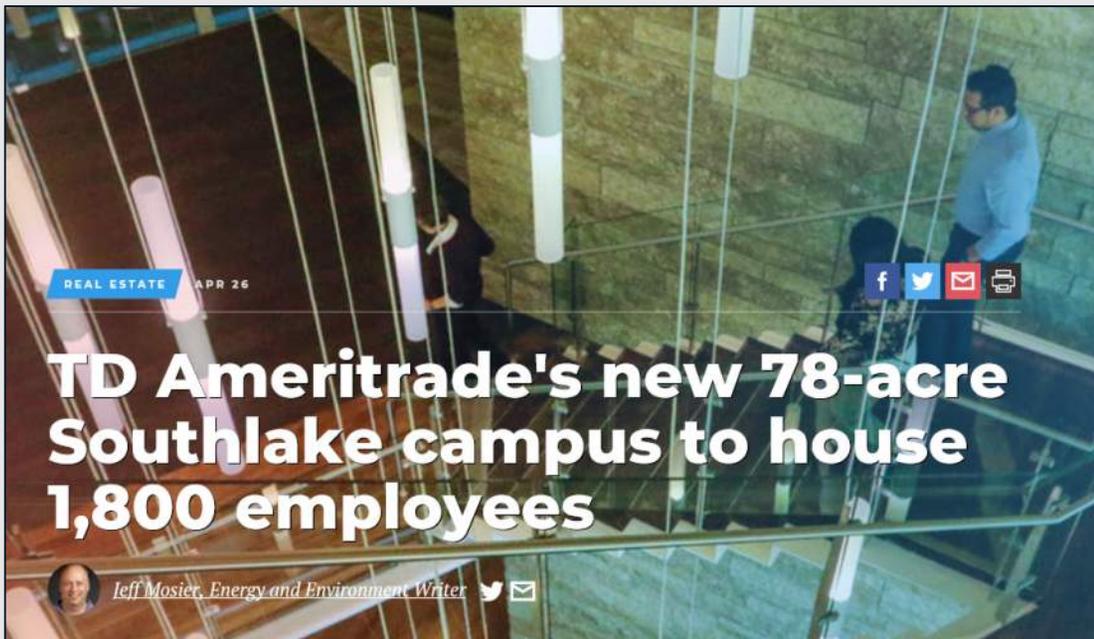
- Present the preliminary project layout
- Present the environmental constraints
- Receive public input
- Respond to questions

# SH 114 Project Location



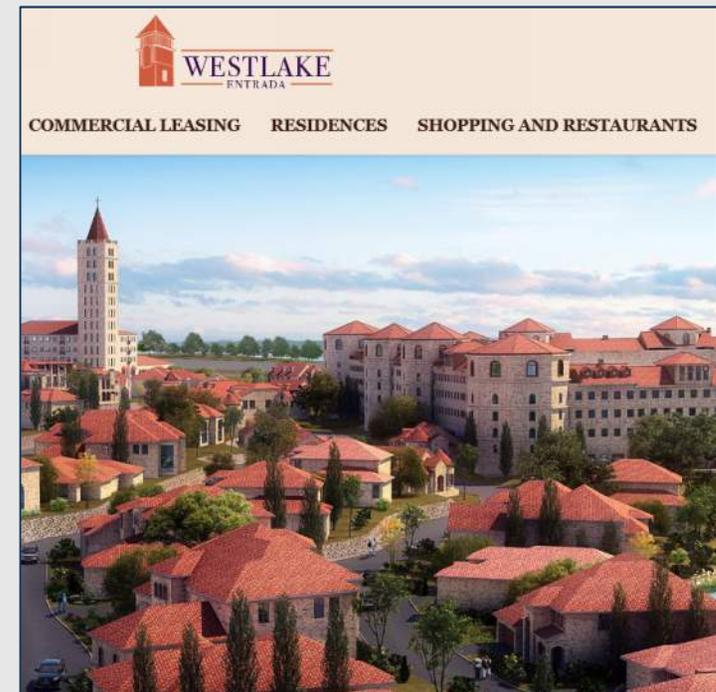
# Goals & Objectives of the SH 114 Project

- Address the expected increased traffic associated with new corporate and commercial developments adjacent to SH 114



*Dallas Morning News Article highlighting 1800 employees to work in TD Ameritrade's new 78 acre campus*

Westlake Entrada website touts new development:

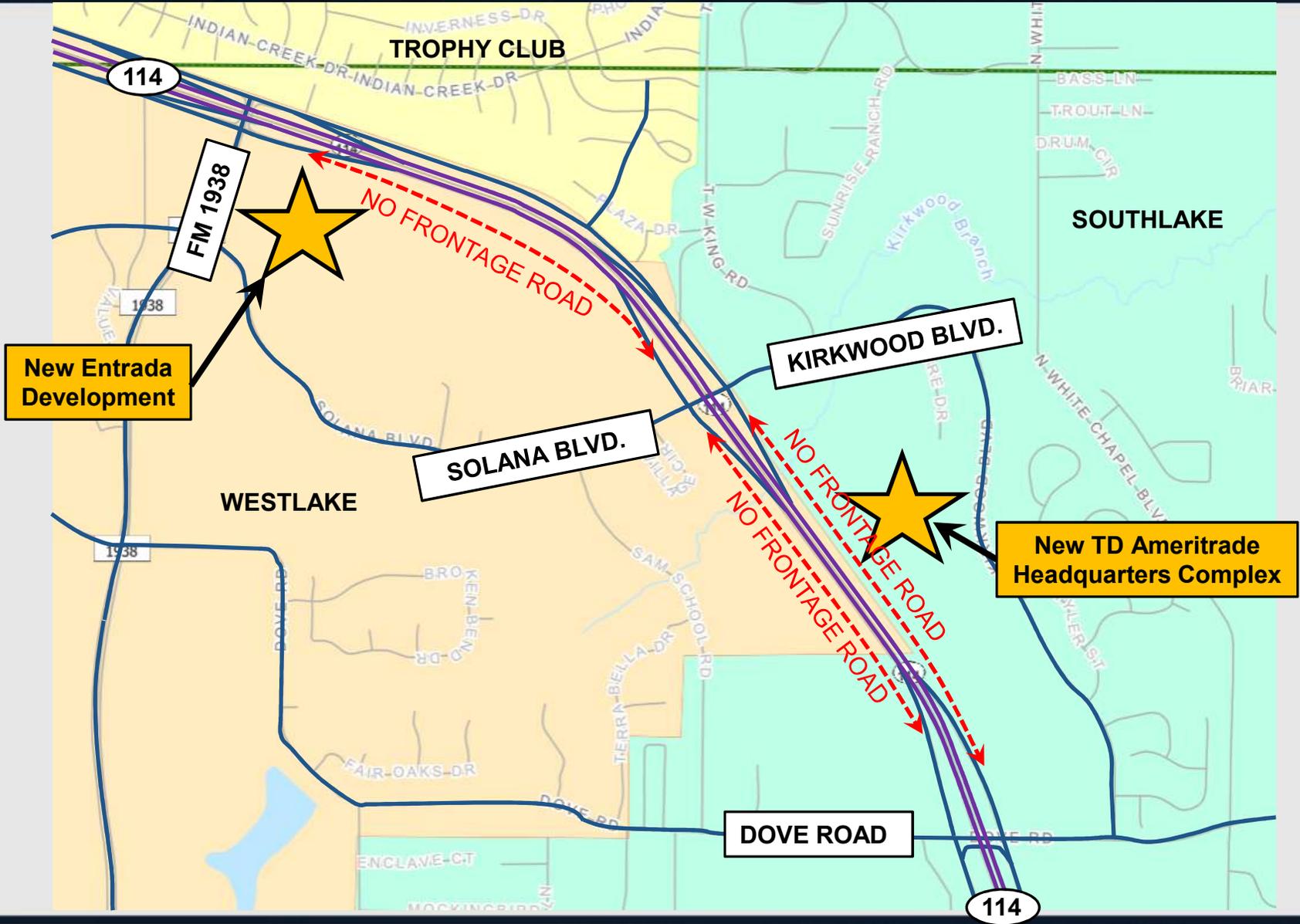


## Goals & Objectives of the SH 114 Project

- SH 114 has a gap in its Frontage Road System between FM 1938 (Davis Boulevard) and Dove Road.
- With this gap in the SH 114 Frontage Road System, all traffic accessing destinations in Southlake, Westlake, or Trophy Club must exit to:
  - FM 1938 (Davis Boulevard); or,
  - Kirkwood/Solana Boulevard; or,
  - Dove Road

Then use local streets to reach their destination

# Goals & Objectives of the SH 114 Project



## Goals & Objectives of the SH 114 Project

- This project aims to alleviate congestion & improve mobility within the project area by completing the frontage road system along SH 114.
- Filling the gap in the Frontage Road System will improve emergency vehicle response and provide alternate routing for traffic on the main lanes during incidents.

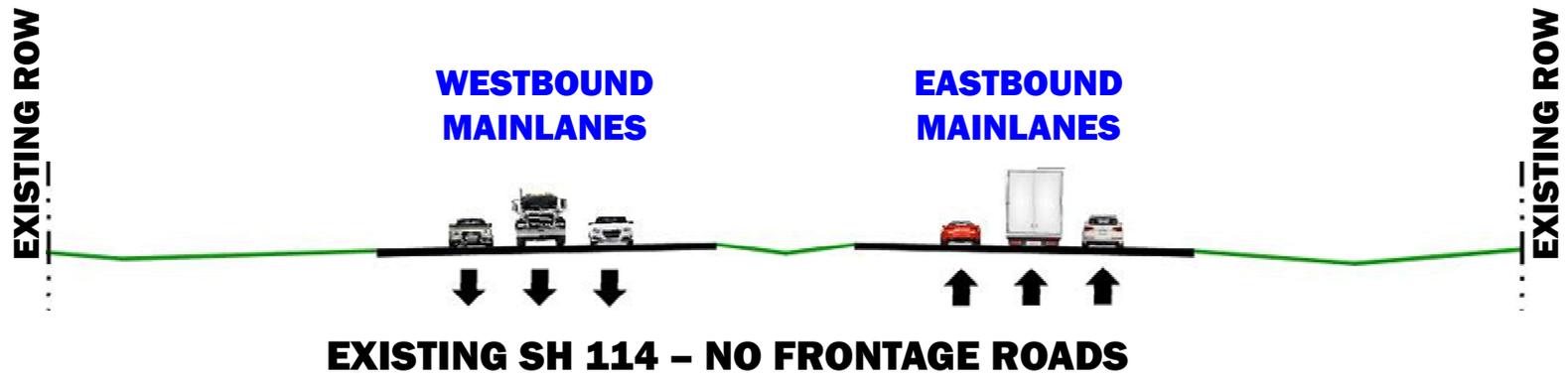
# Goals & Objectives of the SH 114 Project

- Objectives:
  - Gain approval of the proposed geometric layout (Preliminary Design)
  - Obtain environmental clearance for the Preferred Alternative
  - Construct Frontage Road, Ramp and Intersection Improvements

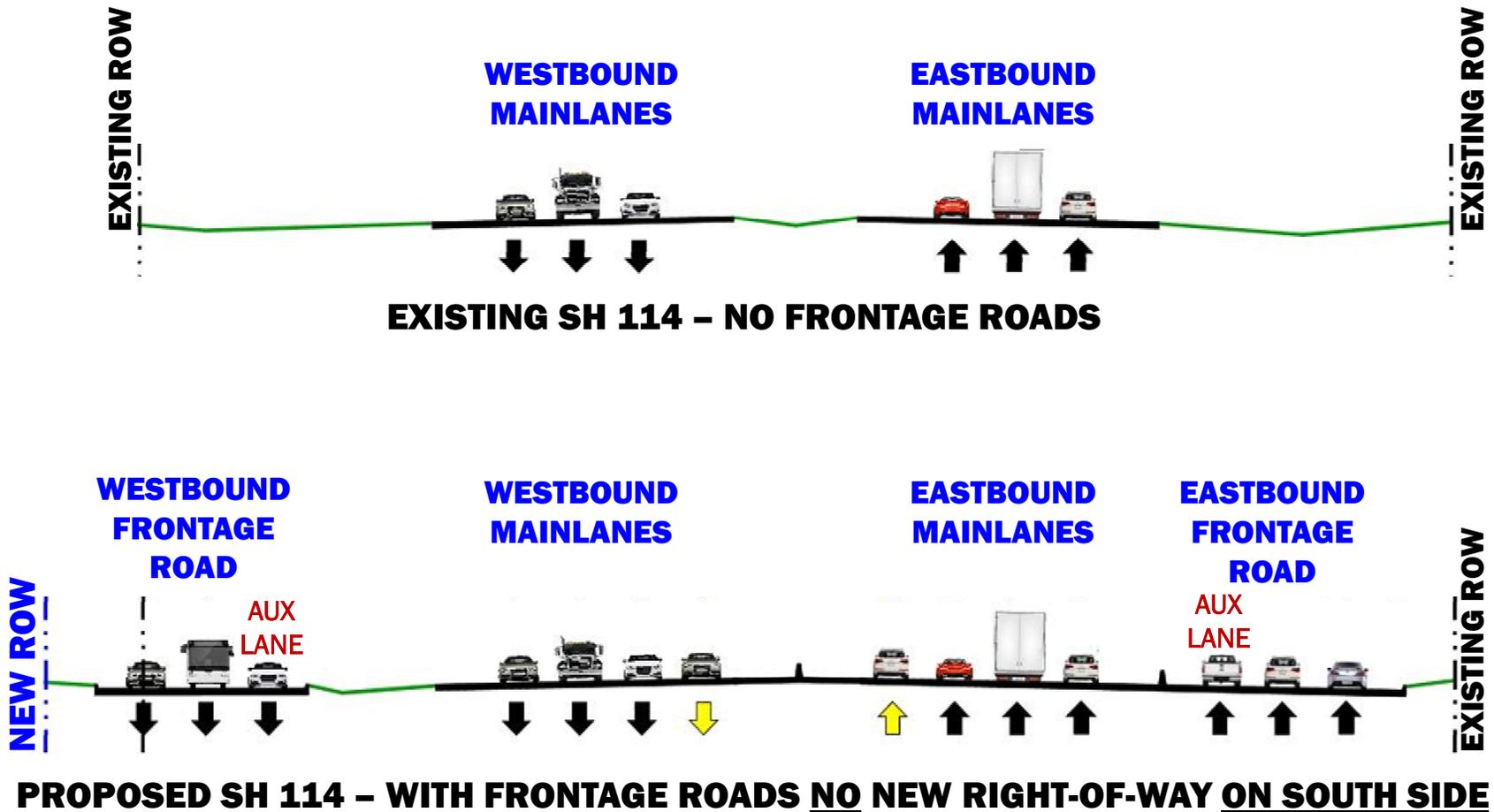
## Frontage Road Alternatives Evaluated

- The Preliminary Design has evaluated the following Frontage Road alternatives:
  - Construct Frontage Roads **WITH** additional Right of Way (ROW) on North and South sides of SH 114.
  - Construct Frontage Roads **WITHOUT** additional ROW on South side of SH 114.

# Frontage Road Alternatives Evaluated

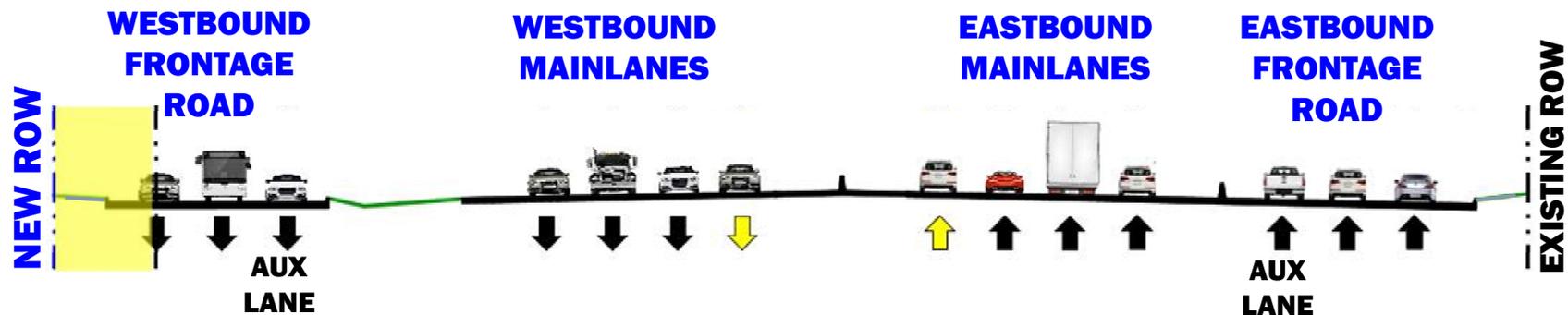


# Frontage Road Alternatives Evaluated



Yellow Arrows (↑↓) depict FUTURE mainlane widening to be developed under FUTURE separate contract.

# Frontage Road Alternatives Evaluated

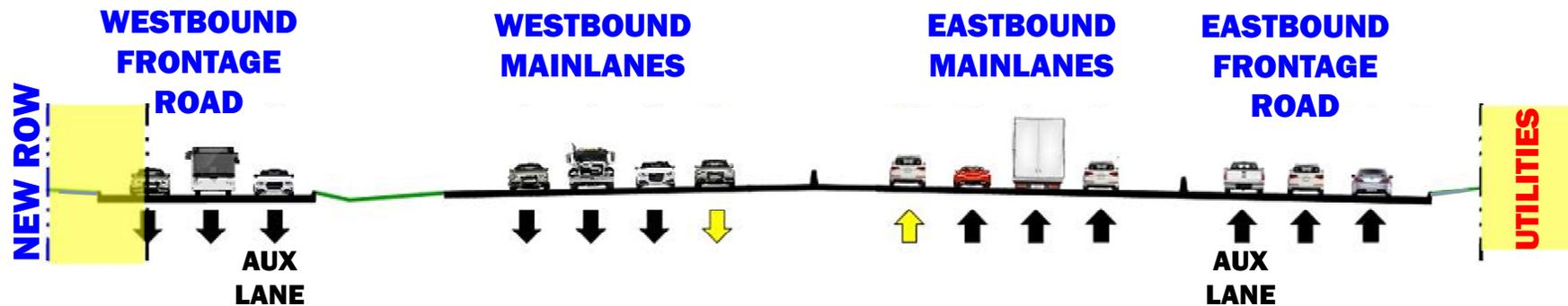


## **PROPOSED SH 114 – WITH FRONTAGE ROADS - NO NEW RIGHT-OF-WAY ON SOUTH SIDE**

Yellow Arrows (↑↓) depict FUTURE mainlane widening to be developed under FUTURE separate contract.

- The Preferred Alternative requires new right of way on the north side of SH 114 between Kirkwood Boulevard and Dove Road.
- The majority of the new right of way needed on the north side is located within the TD Ameritrade campus. TD Ameritrade is donating the land needed from their property.
- Between FM 1938 (Davis Boulevard) and Kirkwood Boulevard, no new right of way is needed on the north side of SH 114.

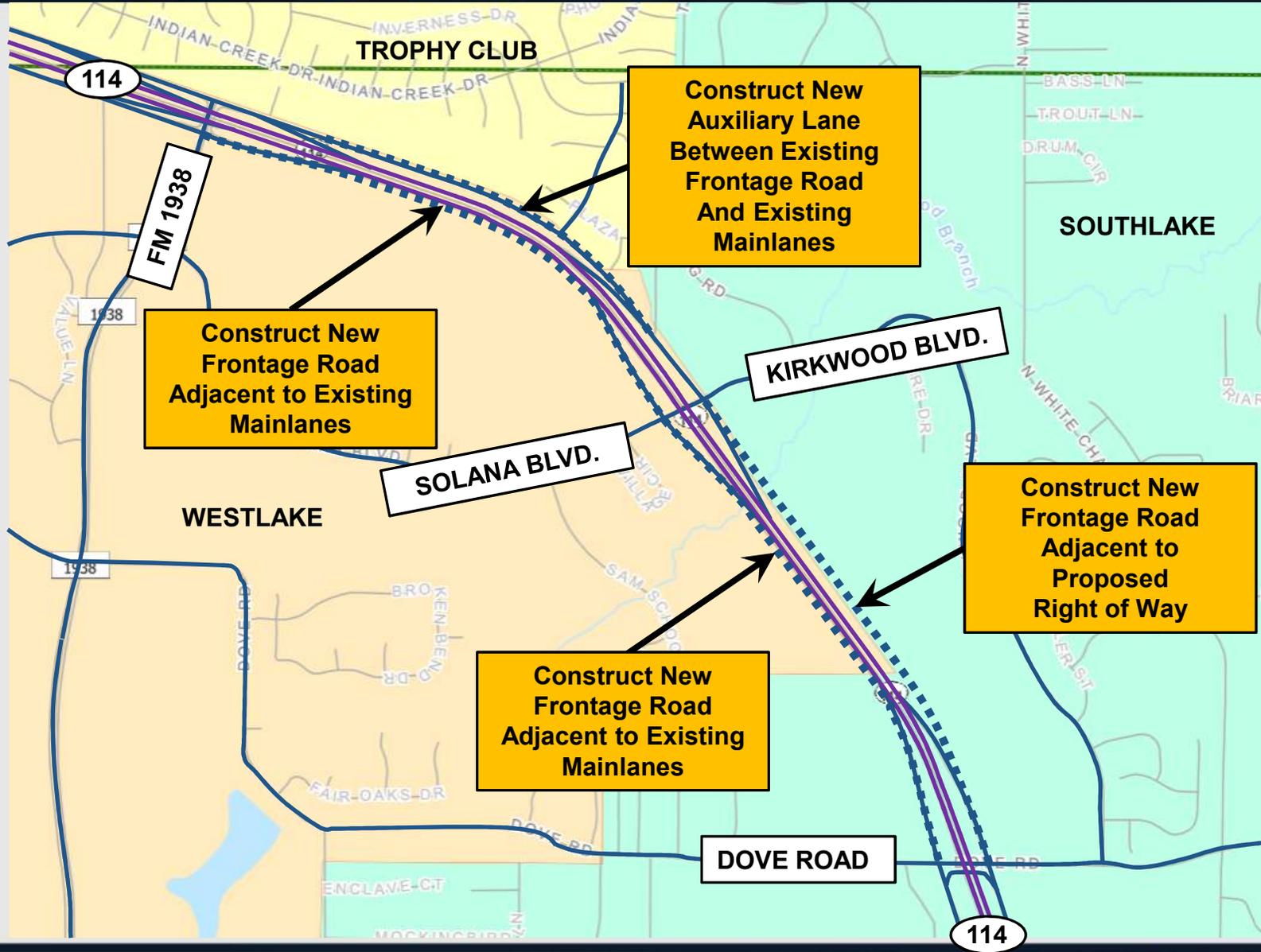
# Frontage Road Alternatives Evaluated



Yellow Arrows (↑↓) depict FUTURE mainlane widening to be developed under FUTURE separate contract.

- No new right of way will be taken from the south side of SH 114 due to the presence of a **Utility Easement** containing large water and sewer mains, which would be very costly to relocate.
- The proposed EASTBOUND Frontage Road will be constructed within existing right-of-way through the use of parallel ramps and by designing the frontage road to hug the existing EASTBOUND Mainlanes.

# Preferred Frontage Road Alternative



## Ramp Alternatives Evaluated

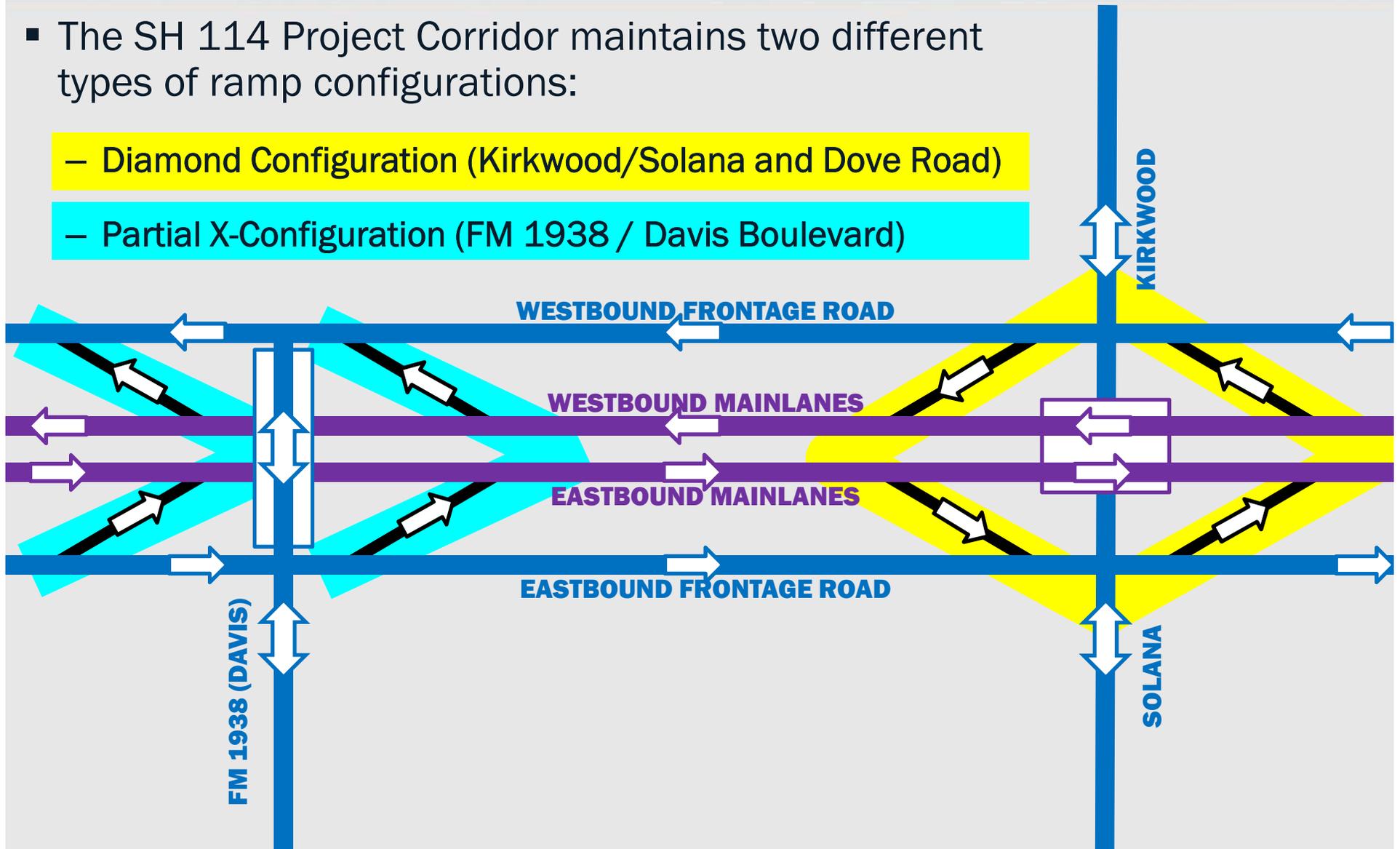
- The SH 114 Project Corridor maintains two different types of ramp configurations:
  - Diamond Configuration (Kirkwood/Solana and Dove Road)
  - Partial X-Configuration (FM 1938 / Davis Boulevard)

# Ramp Alternatives Evaluated

- The SH 114 Project Corridor maintains two different types of ramp configurations:

- Diamond Configuration (Kirkwood/Solana and Dove Road)

- Partial X-Configuration (FM 1938 / Davis Boulevard)



## Ramp Alternatives Evaluated

- Converting from Diamond to X-Ramps offers the following advantages:
  - Improves safety by moving the weaving area between an entrance ramp and exit ramp from the mainlanes to the frontage road, where speeds and volumes are lower
  - Increases development access possibilities along frontage road
  - Reduces through demand on the frontage road approach to the cross-street intersection
  - Provides increased storage area for vehicles queueing from the cross-street intersection
  - Offers an opportunity to use the frontage road as an alternate route for incident management

## Ramp Alternatives Evaluated

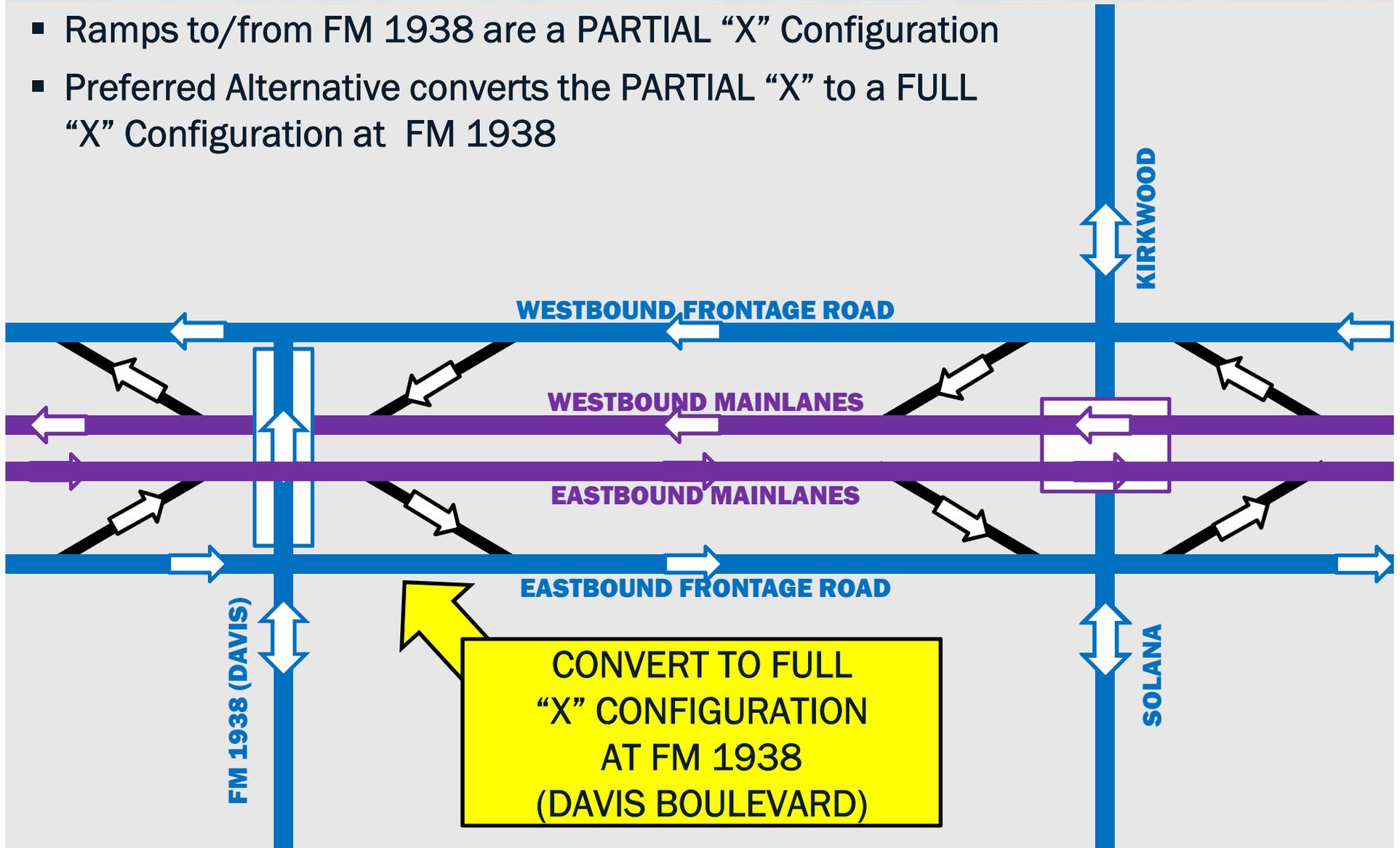
- Converting from Diamond to X-Ramps offers the following disadvantages:
  - Costly to reconstruct existing ramps
  - Invites “sling-shot” maneuvers allowing motorists to bypass cross-street signals, which could create safety and capacity problems on the frontage road and will likely increase short trips on the freeway
  - May require the construction of auxiliary lanes between cross streets and along the freeway mainlanes
  - Constructing auxiliary lanes along an existing freeway may require reconstruction of bridges and/or retaining walls.

## Ramp Alternatives Evaluated

- A comprehensive traffic analysis has determined that converting the existing Diamond Ramp configurations to X-Ramps within the SH 114 Project Area will offer an improved Level-of-Service for drivers.
- The X-Ramp configuration will allow employees and visitors of TD Ameritrade to bypass existing city streets.

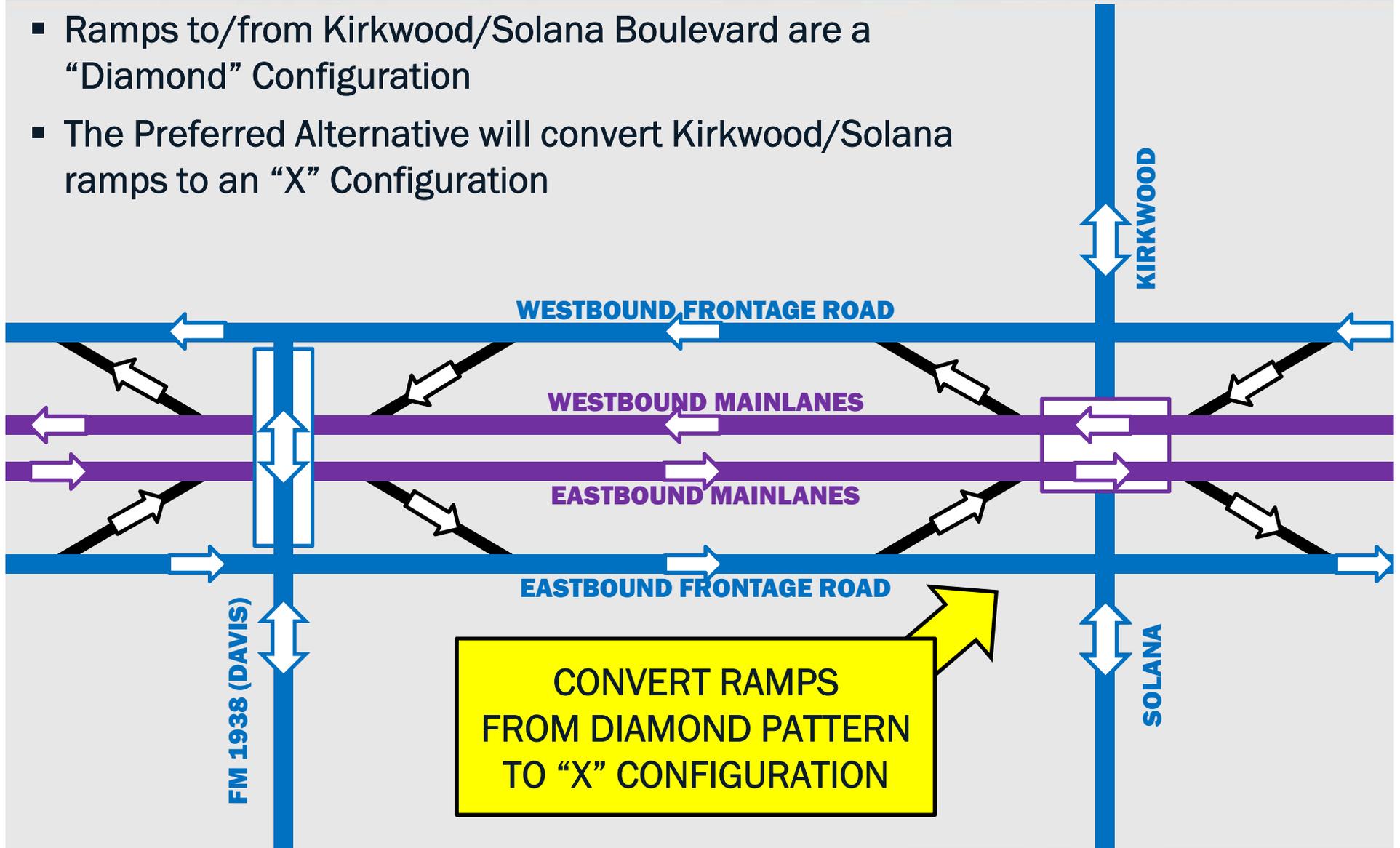
# Proposed Ramp Changes at FM 1938 (Davis Boulevard)

- Ramps to/from FM 1938 are a PARTIAL “X” Configuration
- Preferred Alternative converts the PARTIAL “X” to a FULL “X” Configuration at FM 1938



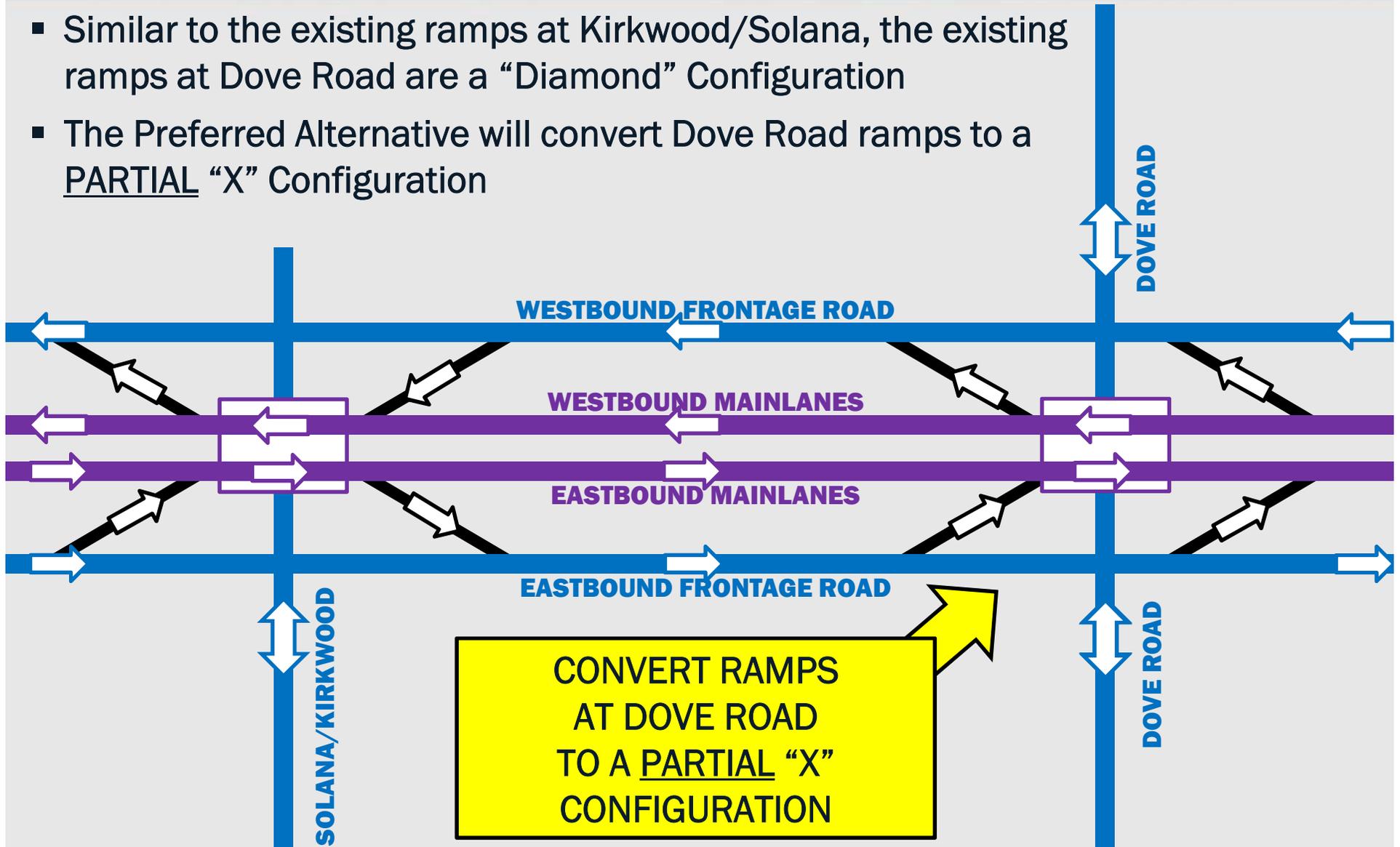
# Proposed Ramp Changes at Kirkwood/Solana Boulevard

- Ramps to/from Kirkwood/Solana Boulevard are a “Diamond” Configuration
- The Preferred Alternative will convert Kirkwood/Solana ramps to an “X” Configuration

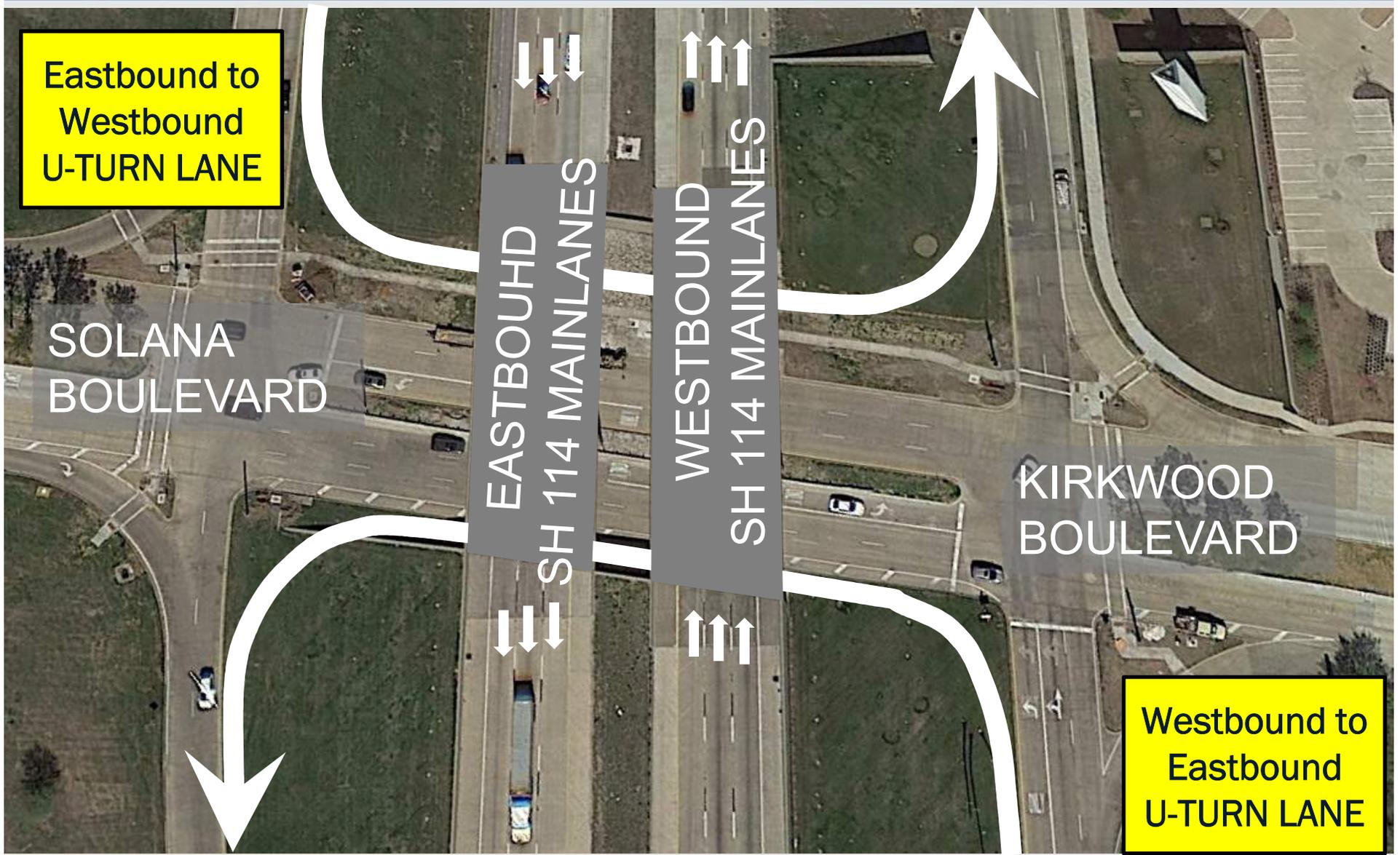


# Proposed Ramp Changes at Dove Road

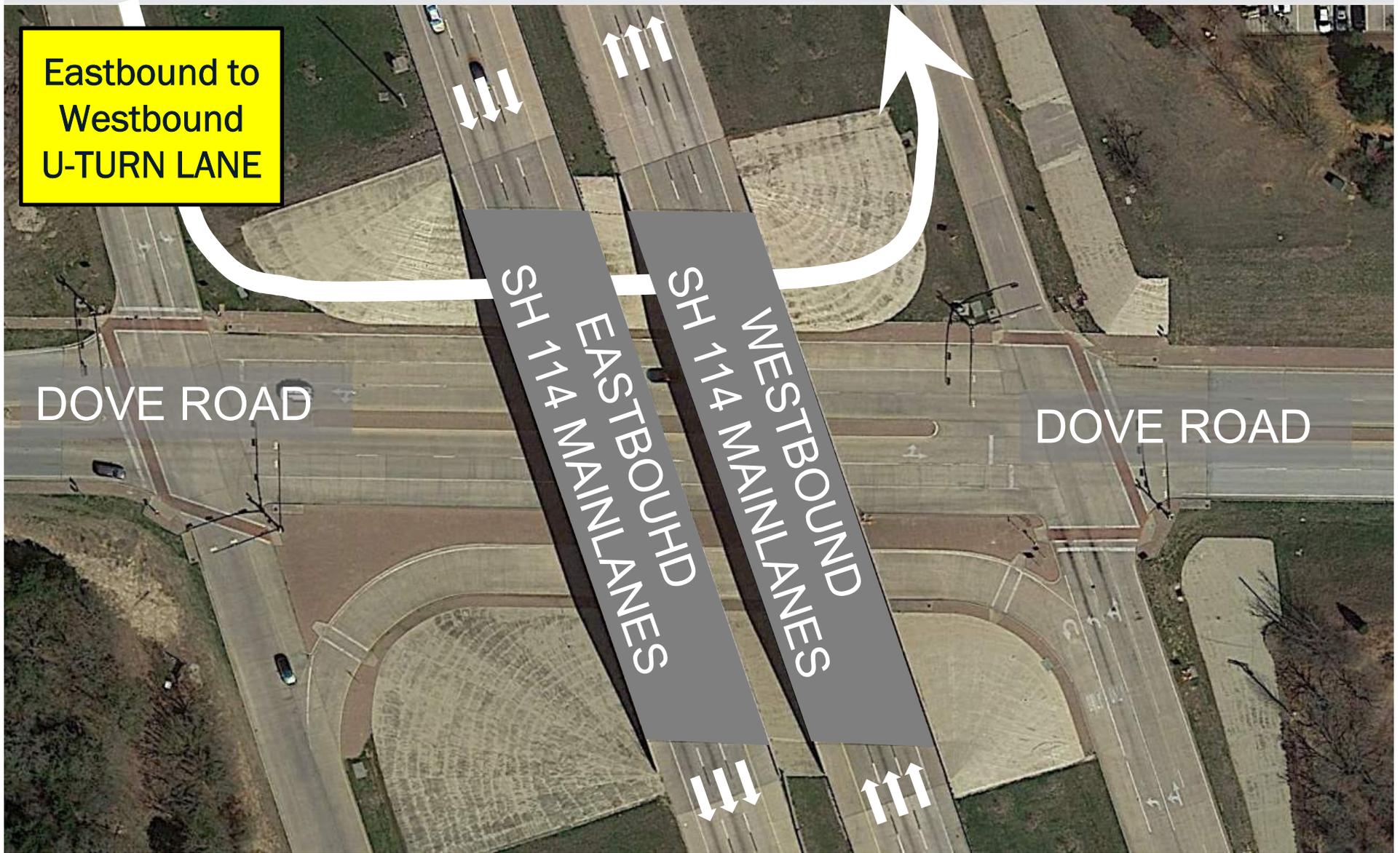
- Similar to the existing ramps at Kirkwood/Solana, the existing ramps at Dove Road are a “Diamond” Configuration
- The Preferred Alternative will convert Dove Road ramps to a PARTIAL “X” Configuration



# Other Proposed Improvements



# Other Proposed Improvements



## Other Proposed Improvements

- Bridge widening will be required along the outside lanes of SH 114 Westbound Bridges over Dove Road and Kirkwood/Solana Boulevard.
- The FM 1938 Bridge over SH 114 will require lengthening on the north end to accommodate an auxiliary lane along Westbound SH 114.

## Other Proposed Improvements

- Retaining Walls will be constructed at Kirkwood/Solana and at Dove Road to accommodate the proposed U-Turn Lanes.
- Auxiliary lanes will be constructed at select locations - between ramps along the SH 114 mainlanes and between ramps along the existing and proposed frontage roads.

## Other Proposed Improvements

- Sidewalks will be constructed along the frontage roads throughout the limits of the project.
- A wide shared lane will be constructed along the outside lane of the proposed frontage roads. This lane is wide enough to accommodate a bicycle and a vehicle in a single lane.

## Other Proposed Improvements

- A noise analysis will be conducted as part of the environmental evaluation. This analysis will determine the warrants for sound walls within the project limits.
- If the analysis determines that sound walls are warranted, feasible, and cost effective, a Noise Wall Workshop will be held with adjacent property owners to obtain input.

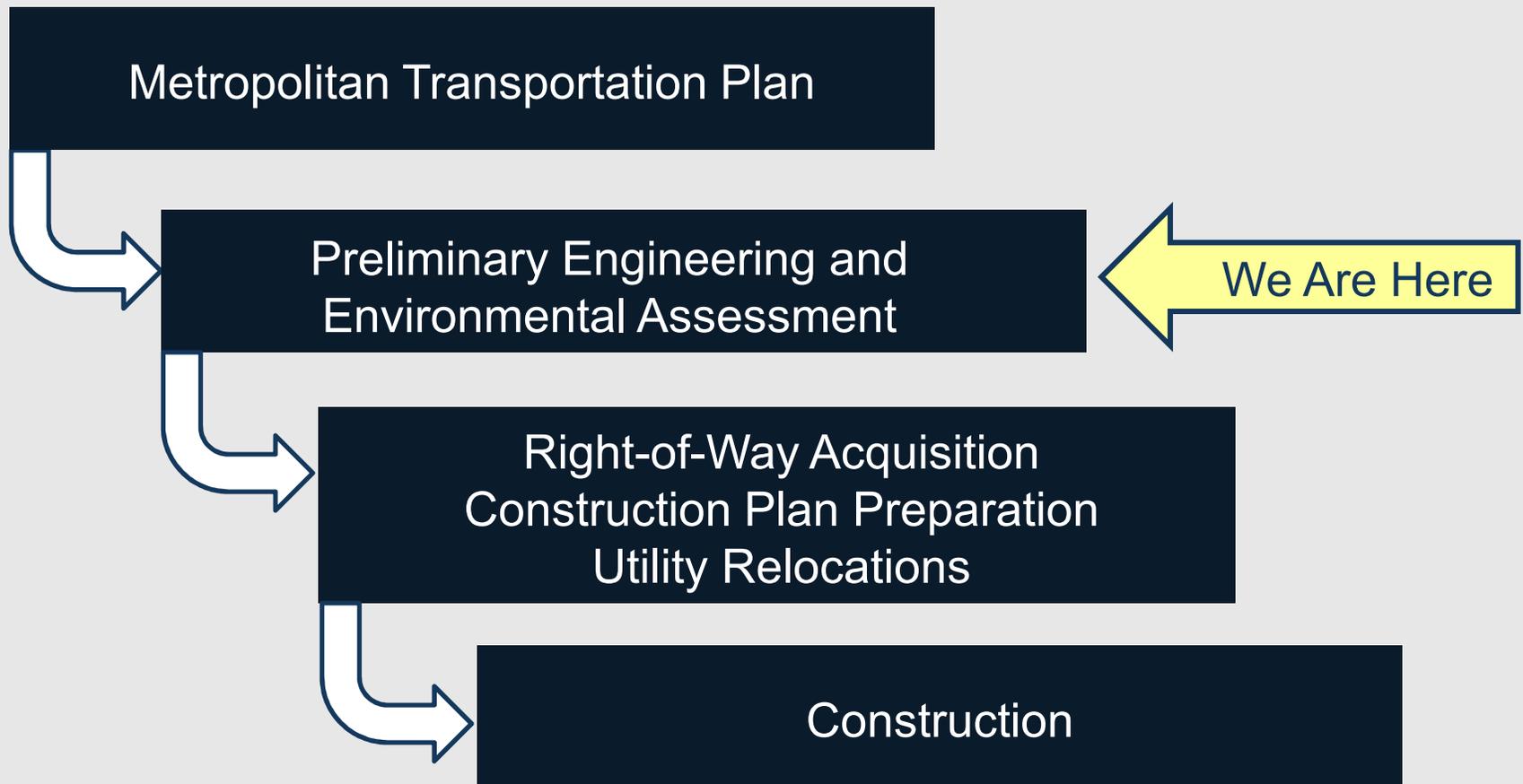
## Current Project Development Status

- Project estimated to be constructed beginning in 2020 and completed by 2021
- The UTP authority for this project is “DEVELOP” for fiscal year 2019 under Category 2M (Metro Corridor) funding
- Project is currently included in the 2019-2022 Transportation Improvement Program (TIP), which became effective on September 28, 2018.

## Current Project Development Status

- The proposed action is consistent with the area's financially constrained Metropolitan Transportation Plan (MTP) – Mobility 2045 Plan – which was adopted on June 14, 2018.
- The air quality conformity determination process regarding both the 2019-2022 TIP and the Mobility 2045 Plan is ongoing between the North Central Texas Council of Governments (NCTCOG) and state and federal partners.

# Project Development Process



## Right of Way Acquisition Process

- Before right-of-way can be acquired for the project, the project must be cleared environmentally and a notice to proceed must be received.
- A right-of-way map will be developed and ownership of properties that need to be acquired will be determined.
- An Independent Fee Appraiser will be hired to determine the value of the land, site improvements and any damages to the remaining property.

## Right of Way Acquisition Process

- Upon receipt and review of the Appraisal Report, a written offer will be presented to each landowner. The landowner will be offered “Fair Market Value”. Fair Market Value is defined as the price a willing buyer would pay and the value a willing seller would sell without duress.

## Right of Way Acquisition Process

- Each landowner will be given a minimum of 30 days to consider the offer and review the Appraisal Report.
- For land owners who will be displaced, benefits will be provided through the Relocation Assistance Program.

## Right of Way Acquisition Process

- For questions, please call:

Kelly Price

TxDOT Fort Worth District

Right-of-Way Office

817-370-6723

## Tentative Project Schedule

- Notice to Proceed – April 30, 2017
- Design Concept Conference – July 10, 2017
- Technical Advisory Group Meetings – Oct. 16, 2017  
Jan. 24, 2018  
April 4, 2018
- Public Meeting – Oct. 23, 2018
- Submit 100% Geometric Layout – November 2018
- Submit Environmental Document for Review – Winter/Spring 2019
- Public Hearing – Summer 2019
- Receive Environmental Clearance – Spring 2020

## Questions or Comments

- Study Team Representatives are available to interpret exhibits and answer questions.
- To submit comments or questions as part of the Official Record of today's meeting, please fill out a Comment Card and submit by Nov. 7, 2018

# Project Contacts

## TxDOT-Fort Worth District

Tom Marquardt, P.E.  
SH 114 Project Manager  
817-370-6772  
[Thomas.Marquardt@txdot.gov](mailto:Thomas.Marquardt@txdot.gov)

## Consultant Team

Kerry Miller, P.E.  
SH 114 Project Manager  
Kimley-Horn and Associates, Inc.  
806-686-1086  
[Kerry.Miller@Kimley-Horn.com](mailto:Kerry.Miller@Kimley-Horn.com)

On behalf of the Texas Department Of Transportation

Thank you for your attendance.