# Camp Wisdom Road Transportation Safety Study

Limits: Camp Wisdom Road from Cockrell Hill Road to I-35E

Public Meeting December 17, 2024

City of Dallas Department of Transportation and Public Works





### **Presentation Purpose and Outline**

### **Presentation Purpose:**

- 1. Present a recap of the Existing Conditions analysis, the short-term recommendations to improve safety, and long-term options.
- 2. Collect public input on shortterm recommendations and long-term options before finalizing recommendations/ study report.

### **Presentation Outline:**

- Study Background
- Study Timeline
- Existing Conditions
- Proposed Improvements/
   Recommendations
- Potential Future Options
- Next Steps

# **Study Background**

### **Dallas Vision Zero Action Plan**



Goal of Vision Zero: Eliminate all traffic-related deaths and reduce severe injury crashes by 50% by 2030.

 The High Injury Network (HIN) identifies streets that account for a disproportionate number of fatal and severe crashes in Dallas.

- Camp Wisdom Road from US 67 to Hampton Road ranked 14 out of the 407 corridor segments in HIN (fatal and severe crash density of 18.48).
- Corridor study limits were expanded to capture all sections of Camp Wisdom Road on the HIN (Cockrell Hill Road to I-35E).

www.dallascityhall.com/visionzero



### **Study Background**

### **Study Purpose:**

- Recommend strategies and improvements to reduce severe traffic crashes. Improvements will be implemented through the City's Vision Zero Program, subject to funding availability.
- Inform the scope of the federally-funded Camp Wisdom project (limits: Westmoreland to US 67), which includes improvements to sidewalks, pedestrian lighting, and traffic signal upgrades. Design will kick off in January.

### **Prior Engagement Feedback:**

- Speeding and red-light running were the top concerns
- Desire for sidewalk improvements and traffic calming



# **Study Timeline**





Identify Opportunities



**Evaluate Future Operations** 



Identify and Evaluate Potential Treatments



Review and Revise Potential Treatments



Documentation and Reporting



Public Meeting #1



June 25, 2024



Public Meeting #2



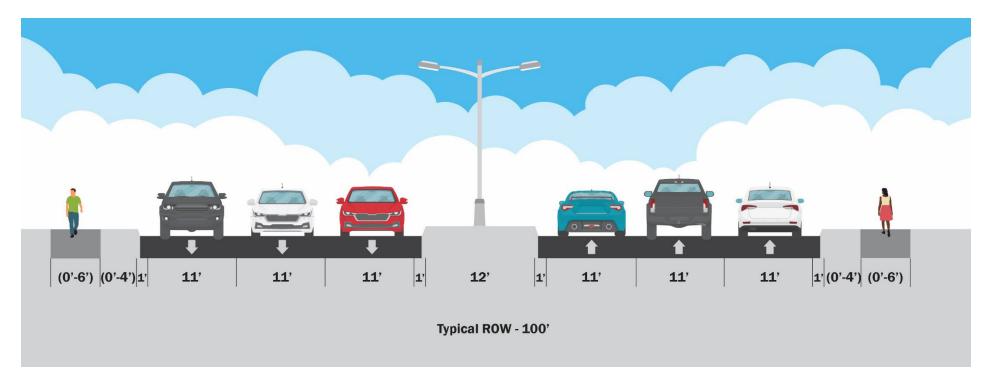
December 17, 2024



# **EXISTING CONDITIONS**



# **Existing Roadway Typical Section**



The typical cross-section shown represents a general cross-section at Camp Wisdom Road, away from the influence of any intersections.

- Six-lane divided roadway
- Right-of-way varies along corridor
- Three lanes in each direction 11' width
- Dedicated left turn bays at most major intersections



### **Existing Conditions Data**

### **Corridor Characteristics**

#### **Corridor Information**



Approximately 4 miles



Principal Arterial, six-lane divided roadway



Posted speed limit (40 mph)



41 bus stops (3 have benches, 6 have shelters)



16,000 - 25,000 vehicles per day



**Faded pavement markings** 



Curb ramps missing at American Way



Ramps not ADA compliant

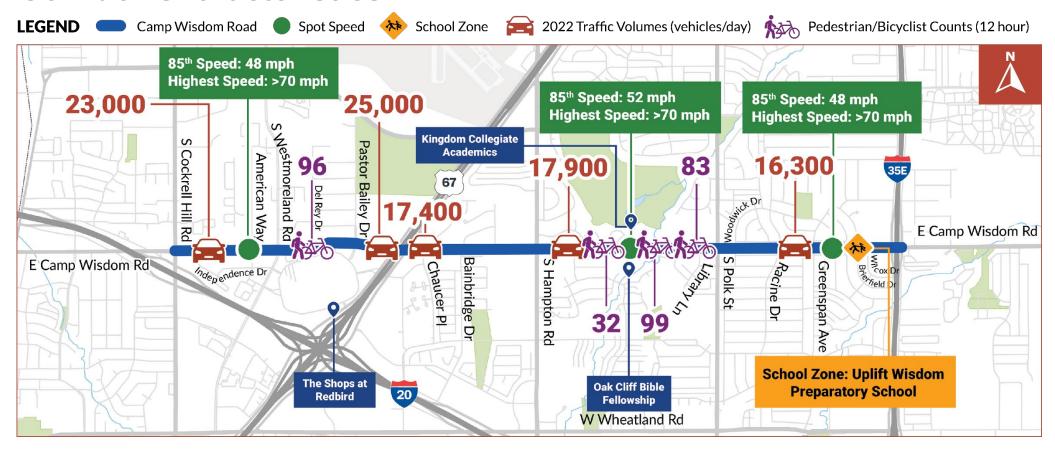


Absence of striped crosswalks at S. Hampton Road



### **Existing Conditions Data**

### **Corridor Characteristics**



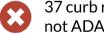


### **Existing Conditions Data**

### **Sidewalk Deficiencies**



### **Pedestrian Facilities**



37 curb ramps (40%) are not ADA compliant



Sidewalk is mostly in "Poor" condition from Cockrell Hill to US 67 and from S Polk to I-35E



No sidewalk just west of Westmoreland on north side

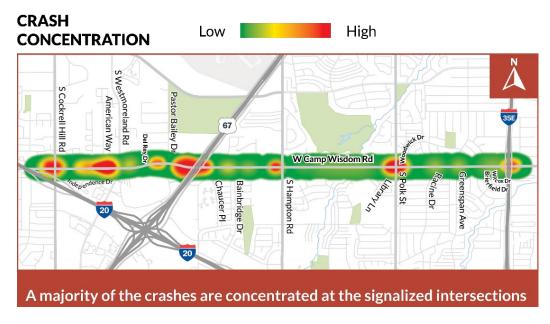


Dense cluster of driveways between Cockrell and US 67



# **Crash Data (2018-2022)**

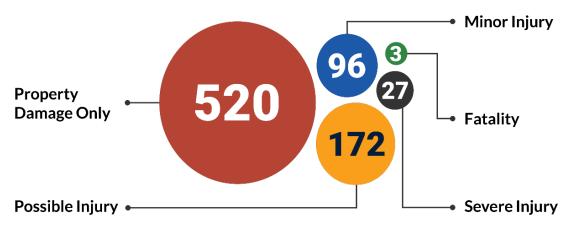
### **All Crashes**



#### Top 3 factors for all crashes include:

- Failed to control speed/speeding (125 crashes)
- Failed to Yield Right of Way Turning Left (124 crashes)
- Disregard Stop and Go Signal (107 crashes)

#### **Crash Count by Crash Severity for All Crashes (2018-2022)**





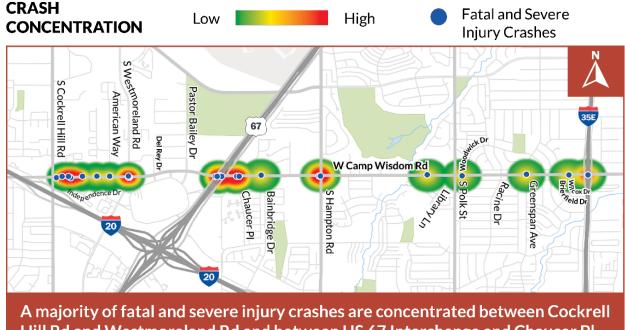
Camp Wisdom is part of High Injury Network and crash rate is about **3 times** that of similar facilities statewide in Texas.



Travel speeds along the corridor should be managed to provide more efficient flow of traffic and enhance safety for all road users.

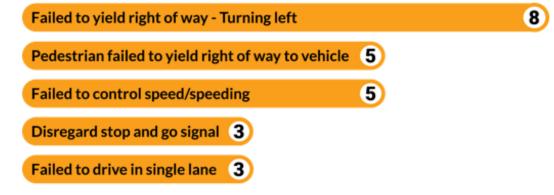
# Crash Data (2018-2022\*)

### **Fatal and Severe Injury Crashes**



Hill Rd and Westmoreland Rd and between US 67 Interchange and Chaucer Pl

#### **Top 5 Fatal and Severe Injury Crash Factors**



#### **Key Patterns:**

- 50% occurred during nighttime hours
- 43% occurred at signalized intersections and 3% at unsignalized intersections
- 10% occurred in wet pavement conditions

<sup>\*</sup> Looking at more recent crash data (2022 - 2024 to-date), there have been 8 fatal and severe injury crashes, also clustered between Cockrill Hill and US 67.

# Crash Data (2018-2022\*)

### **Crashes Involving Pedestrians or Bicyclists**



<sup>\*</sup> Looking at more recent crash data (2022 - 2024 to-date), there have been 3 fatal and severe injury crashes involving a pedestrian.

#### **Top 3 Crash Factors**

Pedestrian failed to yield right of way





More than 50% of the pedestrian and bicycle crashes occurred in nighttime hours.

# Summary

- 85<sup>th</sup> percentile speeds along the corridor are very high and it is easy to speed
- Managing travel speeds along the corridor will provide more efficient flow of traffic and enhance safety for all road users
- High pedestrian activity identified near Shops at Red Bird, Oak Cliff Bible Fellowship, Kingdom Collegiate Academies
- Pedestrian facilities require improvements to ensure accessibility for all users
- Based on low volume to capacity ratio (0.32 to 0.49) of traffic and need for traffic calming along the corridor, lane reduction could be feasible



# **Summary**

- The corridor is part of the HIN and experiences about 3 times the crash rate of similar facilities statewide in Texas
- Left turns were a prominent factor in fatal and severe injury crashes
- Many pedestrian crashes occurred at unsignalized locations without traffic signals or crosswalks
- About 50% fatal and severe injury crashes occurred during nighttime (all streetlights have since been converted to LED)
- Speed is the most significant crash factor for all crashes



# PROPOSED IMPROVEMENTS/ RECOMMENDATIONS





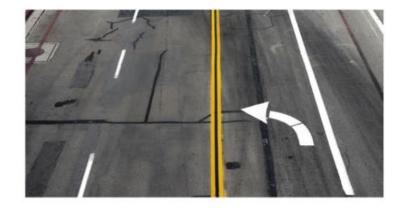
Where warranted, traffic signals can reduce crashes by 35%.

Source: <u>TxDOT HSIP Guidelines</u>



PHBs have been shown to reduce pedestrian crashes by 55%, and total crashes by 29%.

Source: <u>FHWA Proven</u> <u>Safety Countermeasures</u>



Installing a dedicated left-turn lane has been shown to reduce total crashes by 28-48%.

Source: <u>FHWA Proven</u> <u>Safety Countermeasures</u>





Installing dedicated right-turn lane has been shown to reduce total crashes by 14-26%.

Source: <u>FHWA Proven</u> <u>Safety Countermeasures</u>



Installing permanent dynamic speed feedback signs can reduce crashes by 7%.

Source: <u>TxDOT HSIP Guidelines</u>





#### **Access Management**

Between Cockrell Hill Road and US 67. 5 driveways recommended to be closed Eastbound and 1 Westbound.



#### **Install Stop Ahead Sign**

To increase conspicuity of stop sign, install at Woodwick Drive. Racine Drive and Brierfield Drive. Supplement stop ahead signs with LED enhanced stop signs as they have the most right-angle crashes.



#### **Install signal warning flashers**

For queue warning; intersection ahead warning at - Bainbridge Drive, S Hampton Road, S Polk Street and Greenspan Avenue intersections due to vertical sight distance issues.

Source: KRNV



#### **Improve Lighting**

City of Dallas has recently upgraded the lighting to LED fixtures along the corridor.



#### **Application of High Friction Surface Treatment (HFST)**

To reduce wet pavement and run-off crashes at intersection approaches.



#### **Backplates with retroreflective border**

Install on all traffic signal heads.



#### **Signal Timing**

Adequately time yellow change and all red intervals to reduce angle crashes and implement leading pedestrian intervals (LPIs) to reduce vehicle-pedestrian crashes at Cockrell Hill Road, Westmoreland Road, and Chaucer PL.





#### **Flashing Yellow arrow**

Upgrade vield-on-green indications to flashing yellow arrows.



#### **Traffic enforcement**

Increase law enforcement personnel dedicated to traffic enforcement.



#### Trees in the median

Add trees in the median throughout which will help with traffic calming.

Source: FHWA Safer Journey Countermeasures



### **Summary of Proposed Improvements**



- Independence Drive
- Del Rey Drive (recently installed)
- Racine Drive
- \* Above signals are warranted based on TMUTCD Warrant analysis



#### **Install permanent** speed feedback signs:

- West of American Way
- Between S Hampton Road and Library Lane at Church area
- West of Brieffield Drive



#### **New Pedestrian Hybrid** Beacons (PHBs)\*\* are recommended:

- Between Independence Drive and American Way at bus stop
- Upgrade Flashing Warning Beacon near Church area to PHB
- At Library Lane
- At Brierfield Drive
- \*\* Further studies are required for the PHB location and warrants



### Turn lane locations\*\*\*:

- NB Right-turn at US 67
- SB Left-turn and WB Rightturn at US 67
- EB Right-turn at Chaucer PI
- NB, SB, EB, and WB Left-turn at I-35E
- \*\*\* TxDOT approval is required for the intersections in TxDOT ROW



#### Signing and Striping, and Sidewalk **Improvements**

- Install/refresh signs and crosswalks with retroreflectivity throughout the corridor
- Repair existing sidewalks, widen/ repave deficient sidewalks: upgrade pedestrian curb ramps to make them ADA compliant throughout the corridor

\*\*A PHB is a traffic control device that help pedestrians cross streets safely by stopping traffic and providing pedestrians the right of way

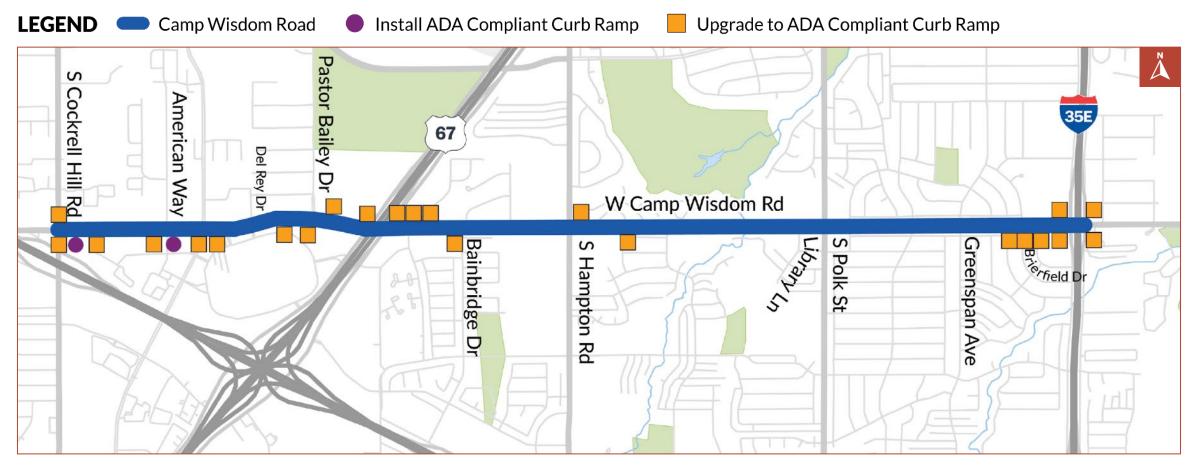
\*The proposed improvements/recommendations listed are applicable for all alternatives.





<sup>\*</sup>The proposed improvements/recommendations listed are applicable for all alternatives.







### **Additional Recommendations:**

- Landscaping in the median
- Continuous Lighting
- Signal timing changes
- Intersection improvements in coordination with TxDOT at US-67 and I-35E



# POTENTIAL FUTURE OPTIONS



# **Potential Long-Term Options**

- To further improve safety and traffic calming along the corridor, lane reduction options were analyzed for long-term consideration.
- A lane reduction could improve safety by reducing the number of conflict points, reducing pedestrian crossing distance (exposure time), reducing right-angle (T-bone) crashes as vehicles on side streets cross fewer lanes, and promoting more consistent speeds along the corridor.
- Note: All previous recommendations are included in all potential future options.



# **Overview of the Options**

### **Near Term:**

Option 1: No change in the number of lanes

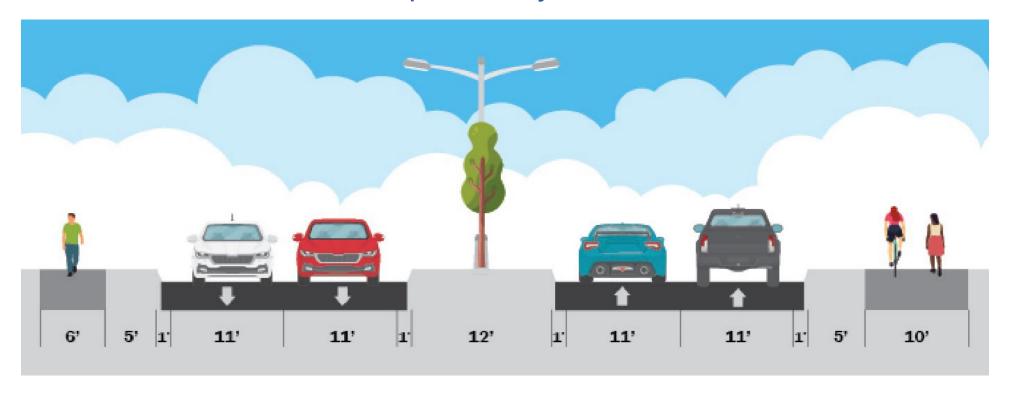
### **Long Term:**

- Option 2: Lane reduction with trail from Cockrell Hill Rd to I-35
- Option 3 (Hybrid): Lane reduction with trail from Cockrell Hill Rd to US 67



# Options 2 and 3

Illustration of what a lane reduction with a trail could potentially look like:





# **Traffic Impacts of the Options**

### Traffic Impacts in Year 2045, During the Busiest Hour of the Day:

- Option 1: 5-mph increase in speed eastbound, and a 1-mph increase in speed westbound during the PM peak compared to No Build.
- Option 2: 2-minute, 20-second increase in travel time in westbound during PM peak hour compared to Option 1.
- Option 3 (Hybrid): 2-minute, 8-second increase in travel time eastbound and 58 second increase in travel time westbound during PM peak hour compared to Option 1.
- All options observe spillback at US 67 and S Hampton Road intersections.



2.25%

Traffic modeling assumes that traffic will increase by 2.25% annually from 2023 - 2045

### **Evaluation Matrix**

Evaluation Matrix	Option 1: Continuous Sidewalks - Entire Corridor	Option 2: Full Lane Reduction with a Trail	Option 3: Partial Lane Reduction with a Trail
SAFETY AND SPEED MANAGEMENT			
Supports Reduction of all crashes and severity	Fair	Good	Good
Separation between ped/bike and vehicles	Poor	Fair	Fair
Encourages speed reduction	Poor	Good	Fair
MOBILITY AND ACCESS			
Improves pedestrian crossings and connections	Fair	Good	Good
Supports biking	Poor	Good	Good
Supports transit access and travel times	Good	Fair	Fair
Minimized impacts to vehicle travel times	Good	Poor	Fair
LIVABILITY			
Opportunity for street furnishings	Poor	Good	Fair
Maximizes pedestrian comfort	Poor	Fair	Fair
COST AND EASE OF IMPLEMENTATION			
Minimized ROW impacts	Good	Good	Good
Minimizes scale of construction	Good	Poor	Fair



# **Next Steps**



### Ways to Provide Feedback

- Provide comments on the comment cards
- Send us your comments using the online survey form on the project website
- Please help us spread the word!

### **Project Website:**

https://bit.ly/WCampWisdom

### **In-person Comment Card:**

Available at public meeting

### **Online Survey:**

https://form.jotform.com/ 241634139116048



# **Next Steps**

- Obtain and analyze public input on the presented options
- Finalize the short-term and long-term recommendations based on the public input
- Design and implement the short-term recommendations, subject to funding availability
- Amend the City of Dallas Throughfare Plan, if a lane reduction option is recommended and funding is available for implementation



# **THANK YOU!**

https://bit.ly/WCampWisdom

