

# Webb-Chapel Lombardy Corridor Study

## Harry Hines Blvd to Shorecrest Dr

Public Meeting

Tuesday, March 4<sup>th</sup>, 2025

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City of Dallas Department of  
Transportation and Public Works



**VISION**  **DALLAS**  
**ZERO**

# Presentation Outline

- Project Overview
- Existing Conditions
- Proposed Improvements
- Next Steps
- Appendix



# Previous Plans and Studies

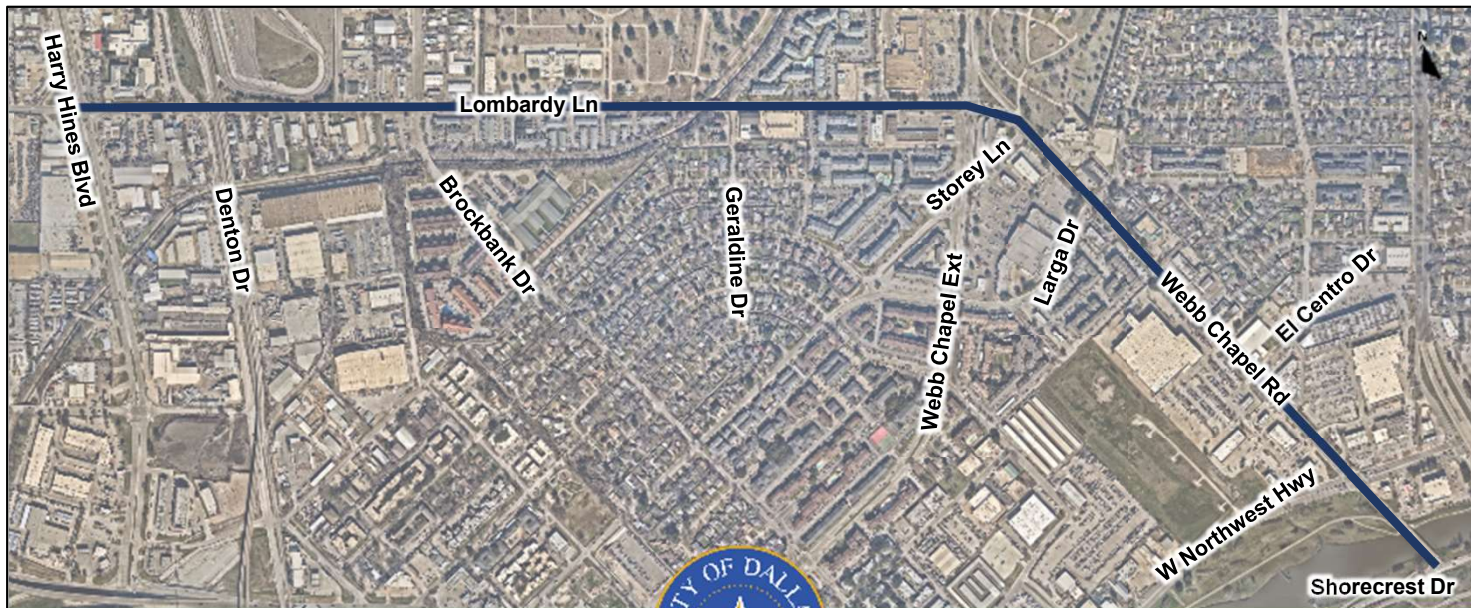
- **Vision Zero High Injury Network (HIN):** Webb Chapel is listed on the Vehicle HIN, and Lombardy is listed on both the Pedestrian and Vehicle HIN. Both Lombardy and Webb Chapel are in the top 20% of streets on the HIN Network. Lombardy ranks 22 out of 407 streets on the HIN.
- **City of Dallas Thoroughfare Plan:** Both Lombardy Lane & Webb Chapel Road are classified as a **community collectors**.
- **Dallas Bike Plan Update:** Not listed on the 2023 Bike Plan as a priority corridor, but connects to several priority corridors such as Denton, Brockbank, Larga, and Shorecrest Drive.
- **NCTCOG Bachman Lake Area Plan:** Plan describes the need for “wide and useful sidewalks” along Webb Chapel and the installation of dedicated pedestrian/bike lanes at the Webb Chapel bridge over Bachman Lake.



# Study Locations & Objectives

- ✓ Identify safety improvements to eliminate traffic fatalities and reduce severe injuries

- ✓ Evaluate and recommend walking and biking improvements to Bachman Lake Trail







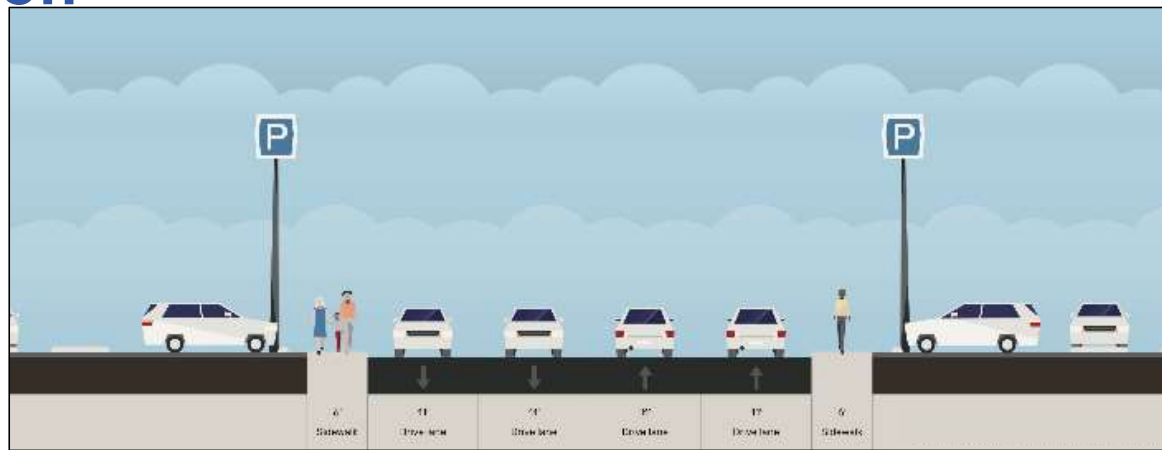
# Existing Conditions



# Lombardy Lane Typical Section

## Existing Cross-Section

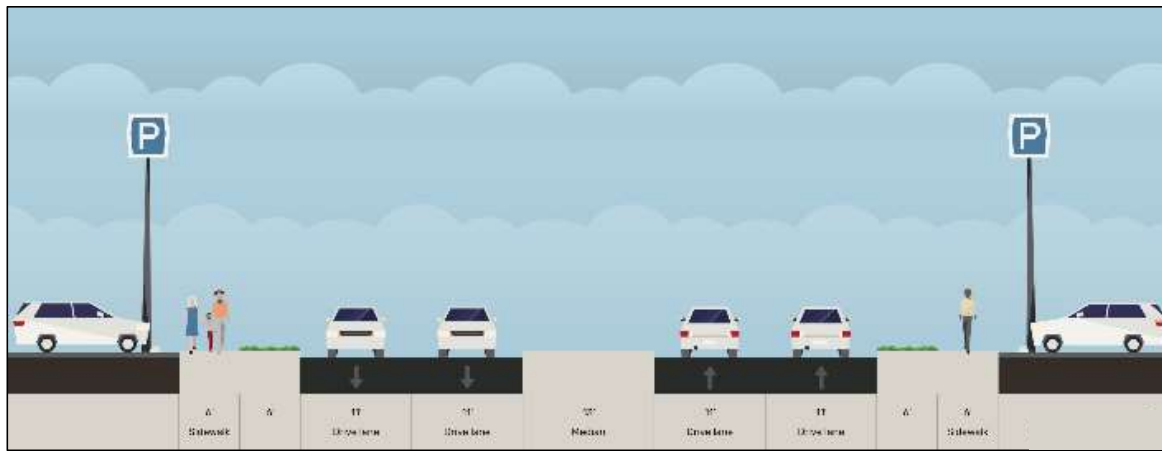
- 4-lanes undivided
- Sidewalks on either side



# Webb Chapel Typical Section

## Existing Cross-Section

- 4-lanes divided by raised median
- Sidewalks on either side



# Speeds

- Speed Limit: 35 mph
- Typical westbound speeds: 38-42 mph
- Typical eastbound speeds: 37-42 mph
- **High** operating speeds on Lombardy Lane between Brockbank Dr & Webb Chapel Ext

## Speed Kills

Higher vehicle speeds increase the likelihood of a pedestrian fatality when struck by a vehicle.



20  
MPH



10% RISK OF DEATH OR SEVERE INJURY



30  
MPH



40% RISK OF DEATH OR SEVERE INJURY

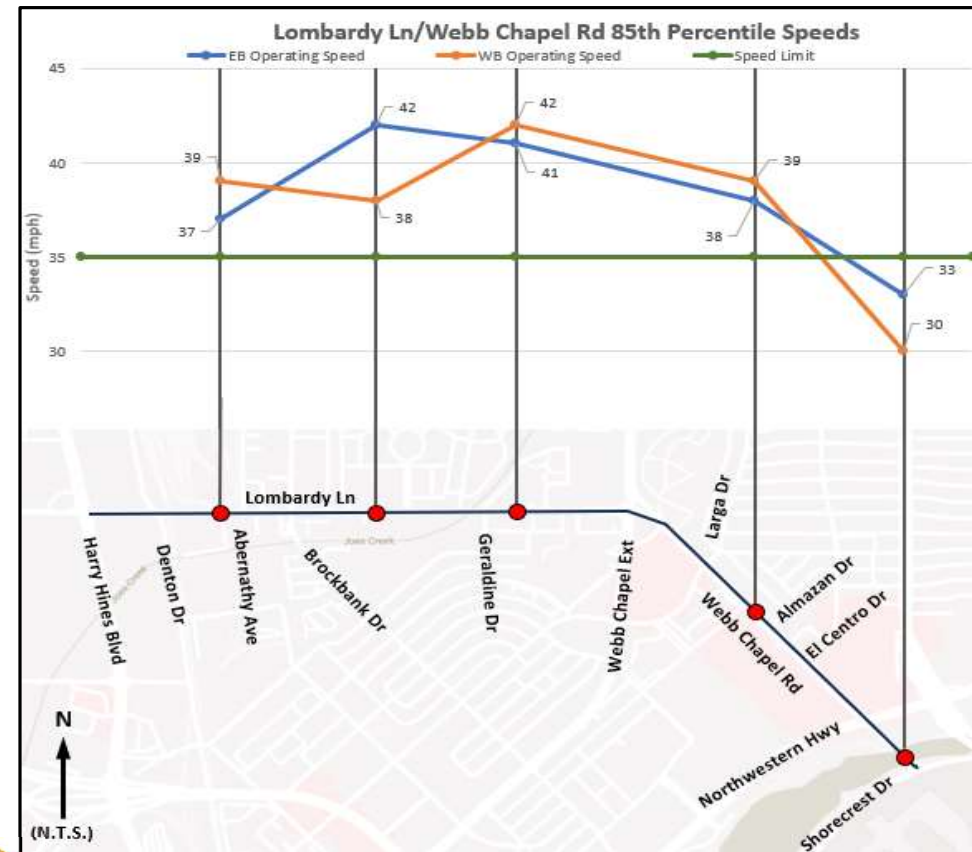


40  
MPH



80% RISK OF DEATH OR SEVERE INJURY

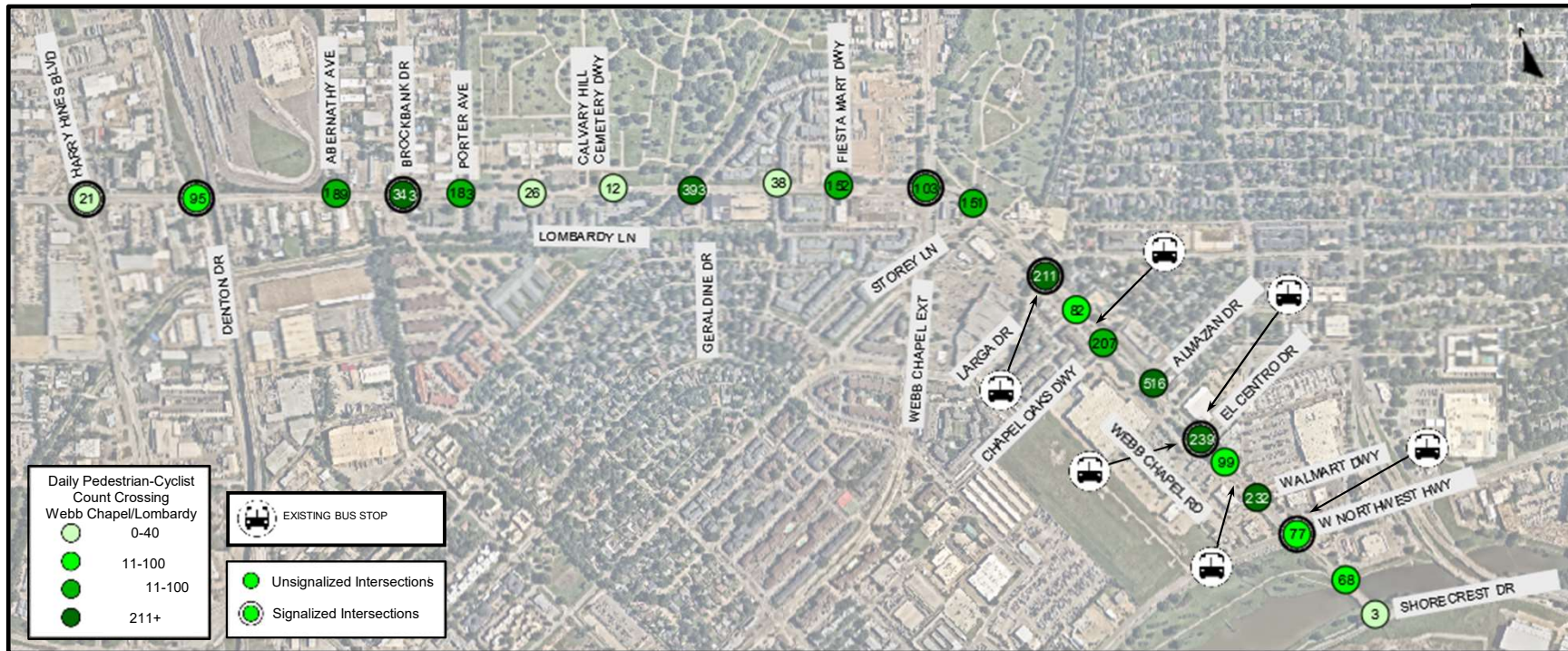
Source: The Institute for Road Safety Research  
Fact Sheet: The relation between speed and pedestrian fatalities





# Pedestrian/Cyclist Crossing Volumes

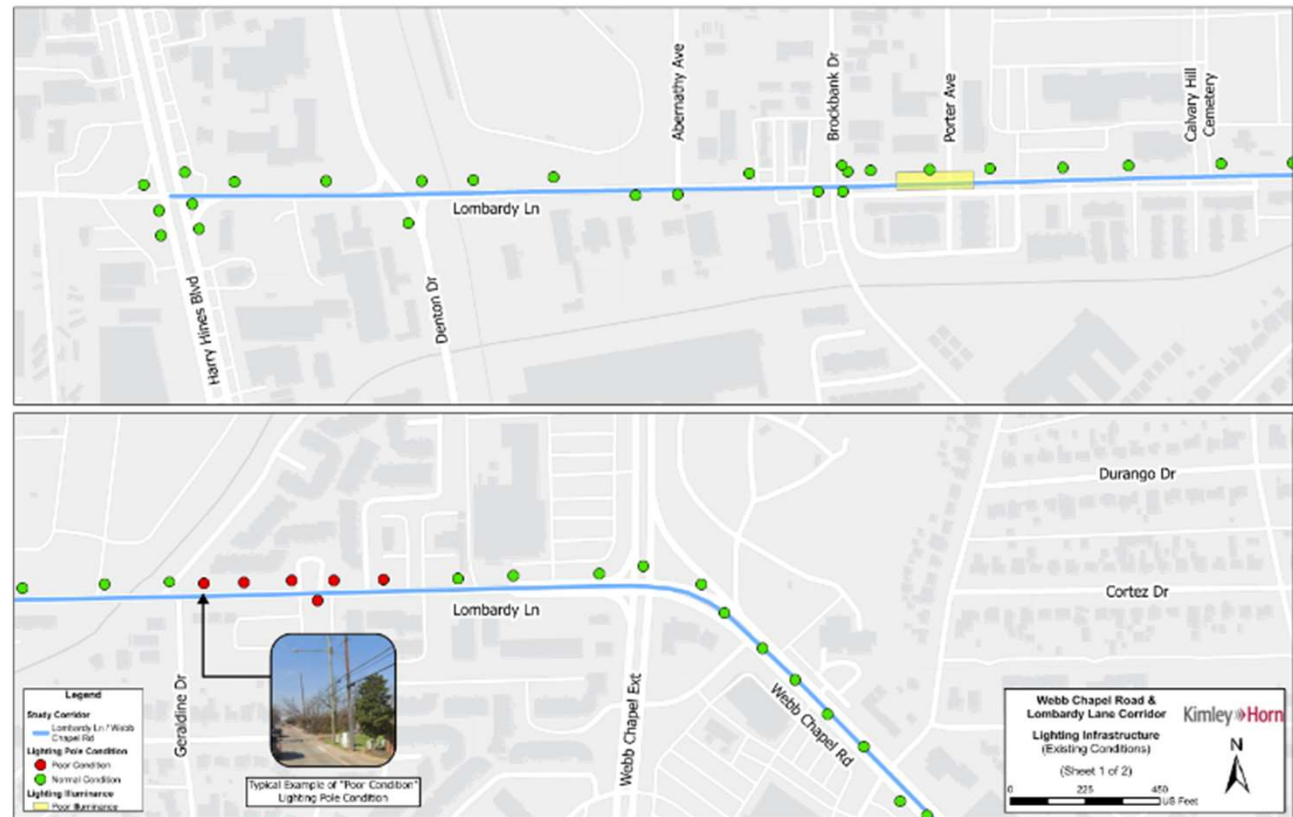
- High pedestrian volumes crossing both Lombardy Lane & Webb Chapel Road
- Several pedestrian generators in the area, including apartments and retail
- Bus Route 020 connects to Bachman Station



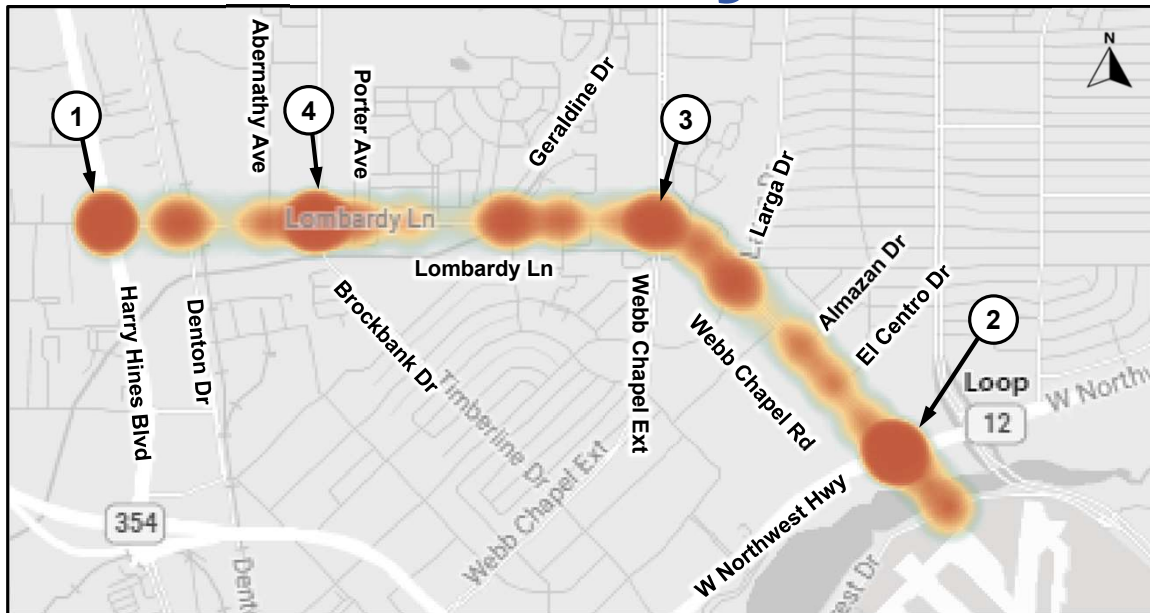


# Lighting Conditions

- Majority of corridor is well lit with lighting poles in good condition
- One area between **Geraldine Dr & Webb Chapel Ext** has poor condition poles
- Short stretch of Lombardy Ln with poor illuminance
- Signals poles in good condition throughout the corridor



# Crash Summary



**530 Total Crashes**

From Jan 2019 to Dec 2024



**16 Pedestrian & Cyclist Crashes**



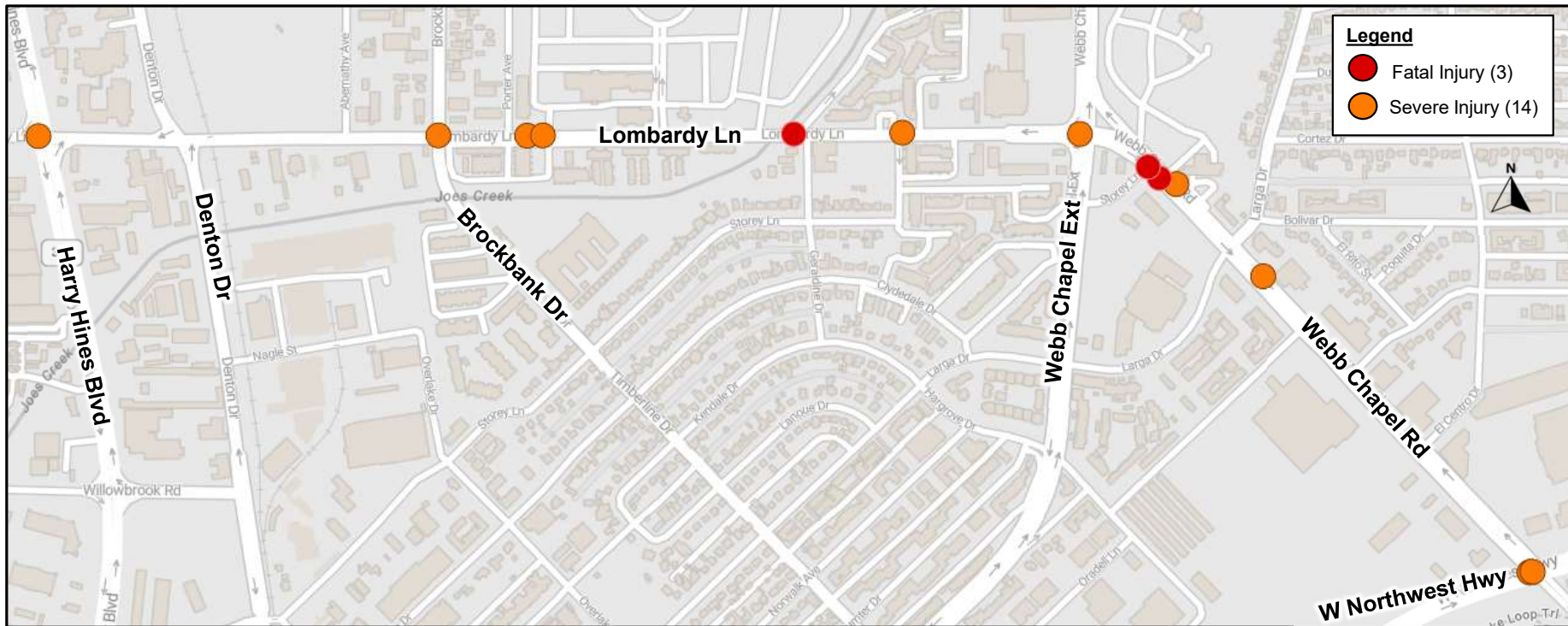
**17 Fatal or Serious Injury Crashes**

## Highest Crash Intersections:

- |  |  |
|--|--|
| <b>1</b> Harry Hines Blvd & Lombardy Ln<br>• 88 Crashes (1 Severe) | <b>2</b> W Northwest Highway & Webb Chapel Rd<br>• 74 Crashes (4 Severe) |
| <b>3</b> Webb Chapel Ext & Lombardy Ln<br>• 54 Crashes (2 Severe)  | <b>4</b> Lombardy Ln & Brockbank Dr<br>• 36 Crashes (1 Severe)           |



# Fatal and Serious Injury Crashes

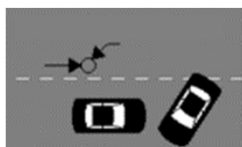




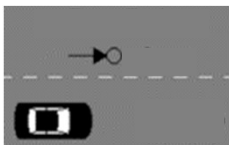
# Fatal and Serious Crash Summary

## Top 2 Crash Types (Full Corridor):

1. Left Turn- 41%

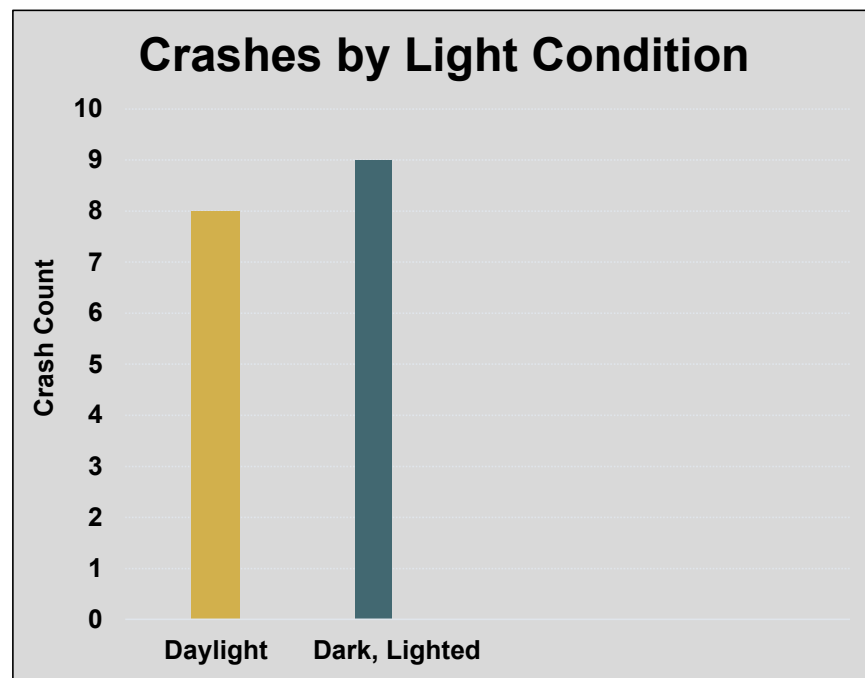


2. Single Vehicle - 41%

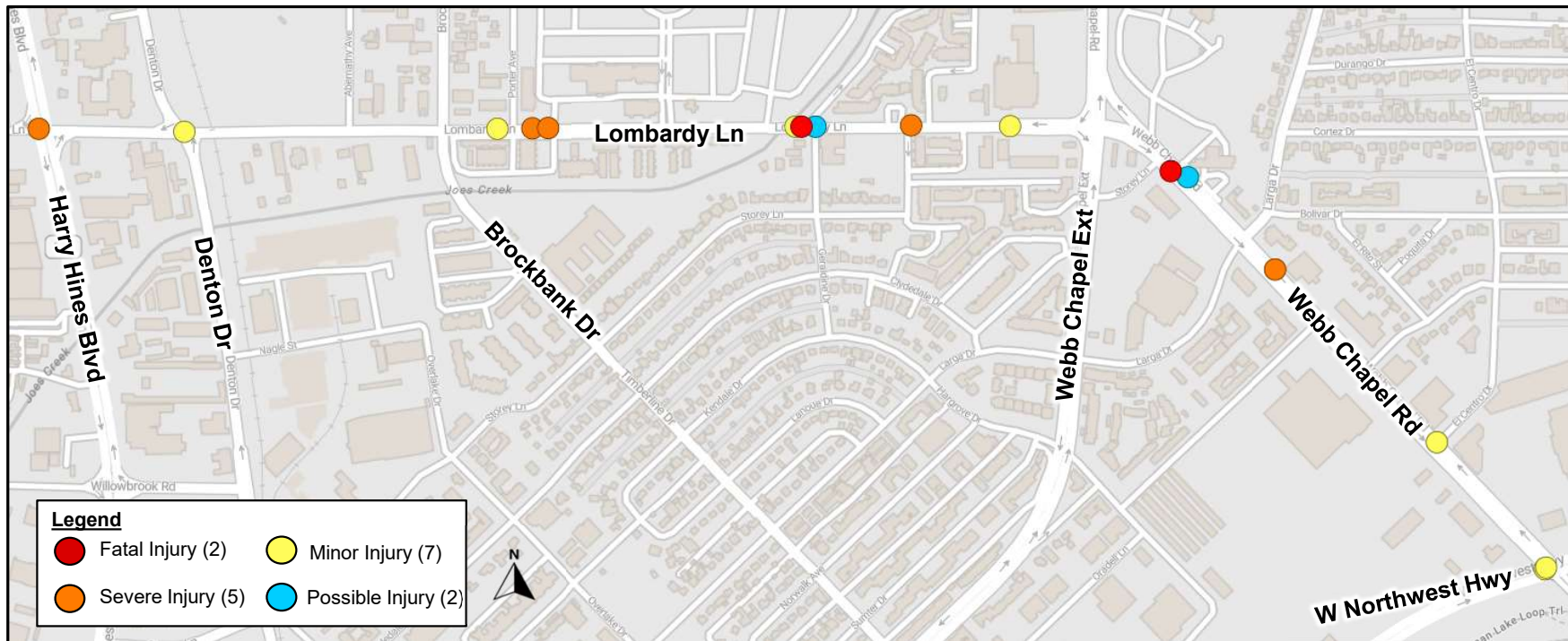


## Top 3 Contributing Factors (Full Corridor):

1. Failed to Yield ROW - Turning Left – 29%
2. Pedestrian Failed to Yield ROW – 29%
3. Failed to Control Speed – 12%



# Pedestrian/Cyclist Crashes



- **16 Pedestrian/Cyclist Crashes** from Jan 2019 to Dec 2024
- One fatality near Storey Lane (2019)
- One fatality near Geraldine Drive (2024)



# Summary of Existing Issues/Opportunities

1. Heavy volumes of pedestrians/cyclists crossing Lombardy & Webb Chapel throughout the corridor
2. Lighting is generally adequate, but has one area of poor illuminance near Porter Ave
3. Fatal and severe injury crashes occurred around unprotected crossings along the corridor
4. 85<sup>th</sup> percentile speeds along the corridor are higher than the speed limit and dangerous for pedestrians
5. Left-turn crashes were a prominent factor along the corridor
6. High amount of pedestrian/cyclist crashes along the corridor





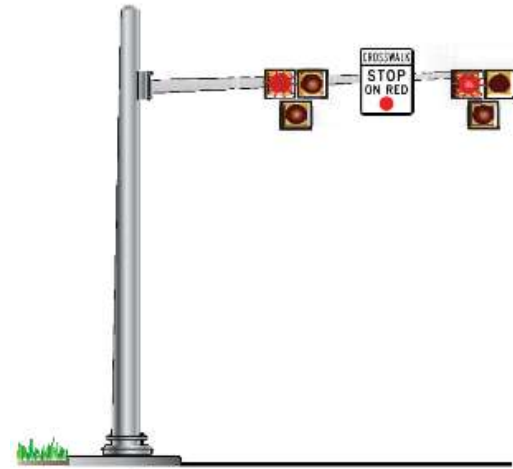


# Proposed Improvements



# Proposed Improvements

- Improve Sidewalks and Lighting (addresses issues 1,2)
- Enhanced Pedestrian Crossings (addresses issue 3)
  - Webb Chapel & Chapel Oaks Driveway
  - Webb Chapel & Near Walmart Driveway
  - Lombardy Lane & Abernathy Avenue
  - Lombardy Lane & East of Porter Avenue
  - Lombardy Lane & West of Geraldine Drive
  - Lombardy Lane & Fiesta Mart Driveway
- New Traffic Signal
  - Webb Chapel & Shorecrest Drive (warrants in 2030 and 2045)



**Pedestrian Hybrid Beacon (PHB)**



**Rectangular Rapid Flashing Beacon (RRFB)**

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

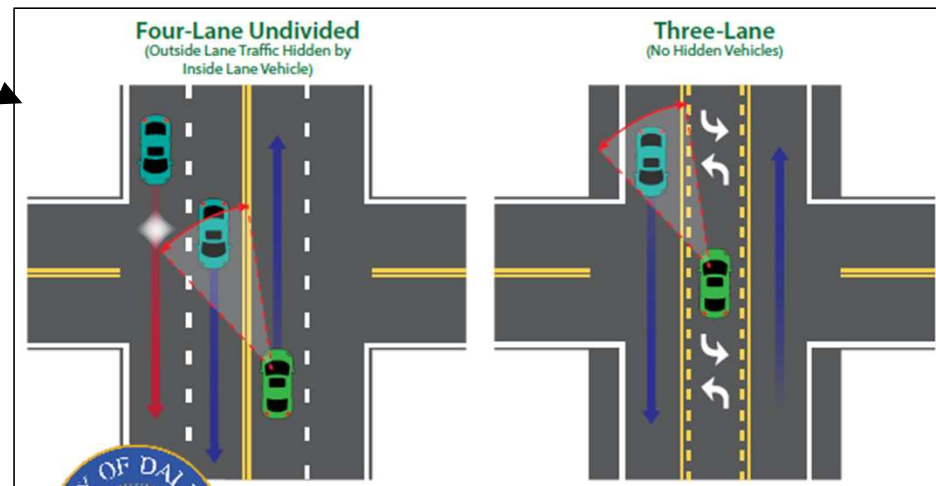
*\*\*\*A RRFB is a traffic control device that help pedestrians cross streets safely by warning traffic of pedestrians in the crosswalk*



# Proposed Improvements-Lane Reduction

## Benefits

- **Easier side-street traffic crossing** for drivers and pedestrians crossing the corridor (addresses issue 6)
  - Fewer lanes to cross
- **Safer left turns** into and out of side streets and driveways (addresses issue 5)
- **Traffic Calming** – tighter cross-section will reduce speeds (addresses issue 4)
- Reclamation of cross-sectional space for a **Shared-Use Path (SUP)**
  - Additional room for buffer spaces between pedestrians and vehicular traffic





# Lombardy Lane- Lane Reduction

## Proposed Cross-Section

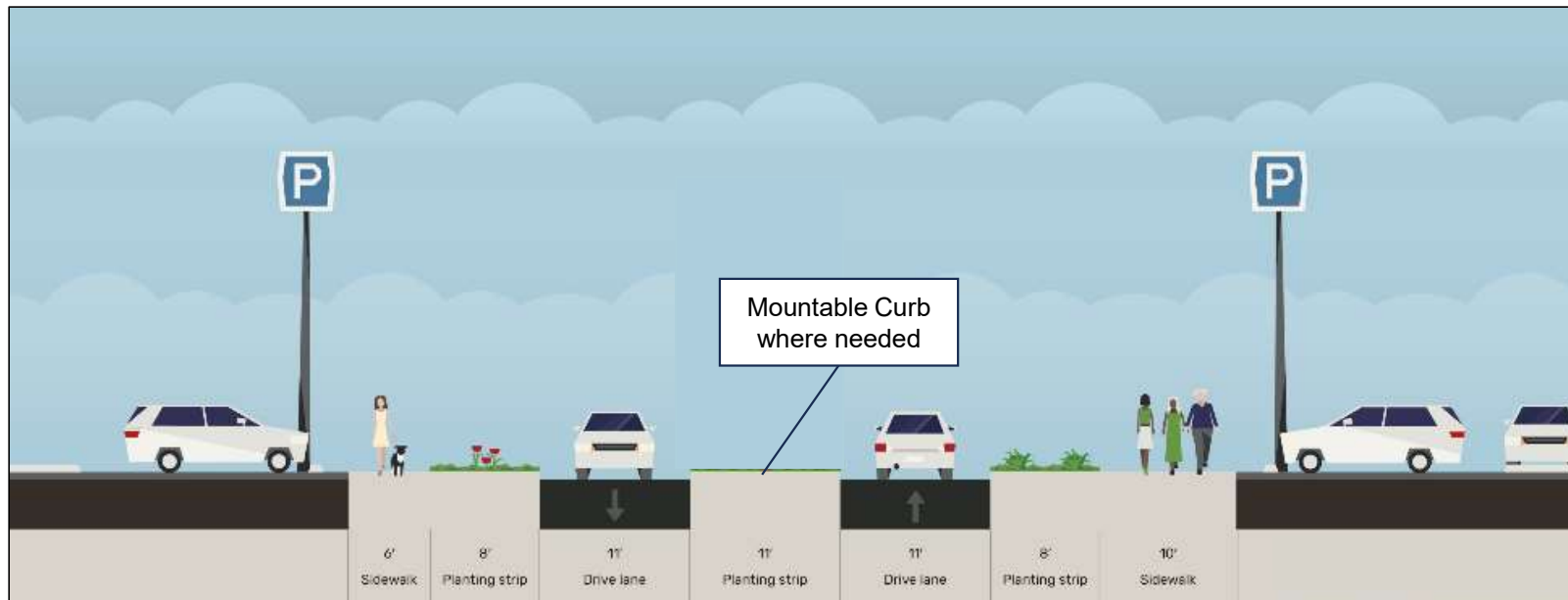
- 2-lanes with a two-way left-turn lane
- Shared-use path on the northern side
- Sidewalk on the southern side
- Buffer zone between sidewalk/SUP and road



# Webb Chapel Road (Webb Chapel Extension to El Centro Drive)- Lane Reduction

## Proposed Cross-Section

- 2-lanes with a two-way left-turn lane
- Shared-use path on the southern side
- Sidewalk on the northern side
- Buffer zone between sidewalk/SUP and road



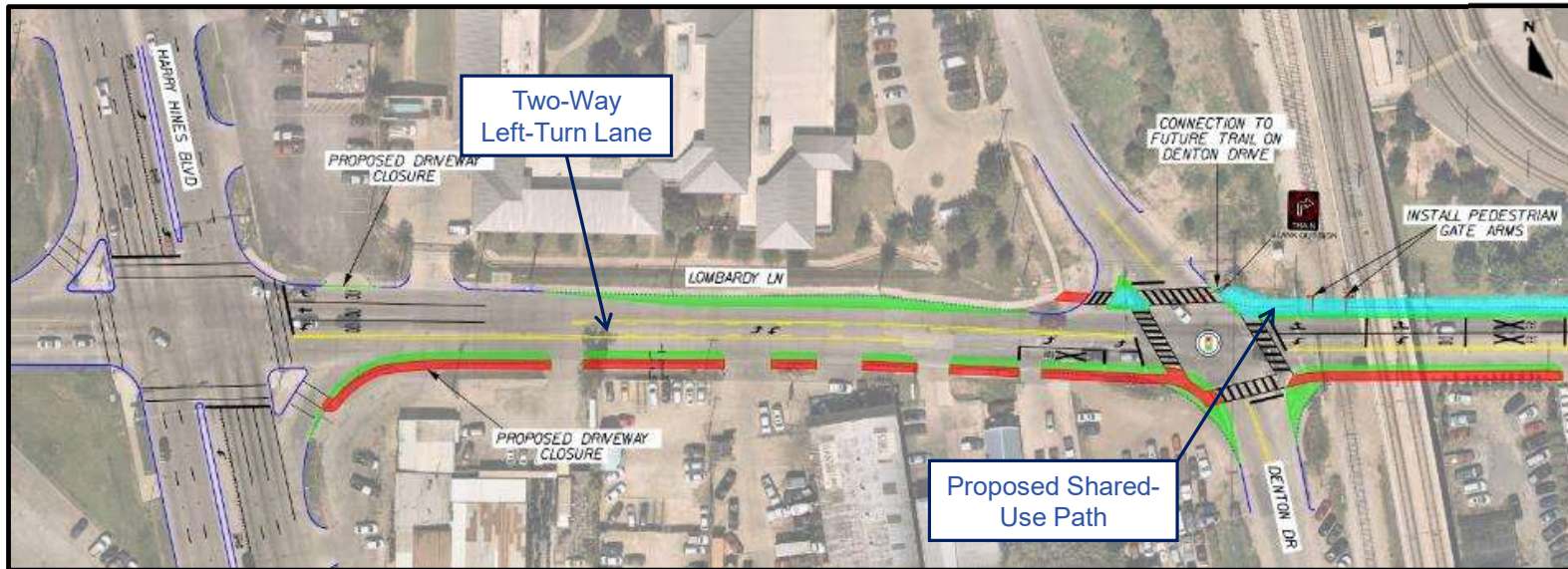
# Traffic Analysis Summary

- A traffic growth rate of 0.5% was assumed projecting traffic through 2045
- Even with the proposed road diet, the entire corridor will be **under capacity** in 2045 during **all hours of the day**
- All intersections will operate at **LOS D or better** in 2045 during the **peak hours**





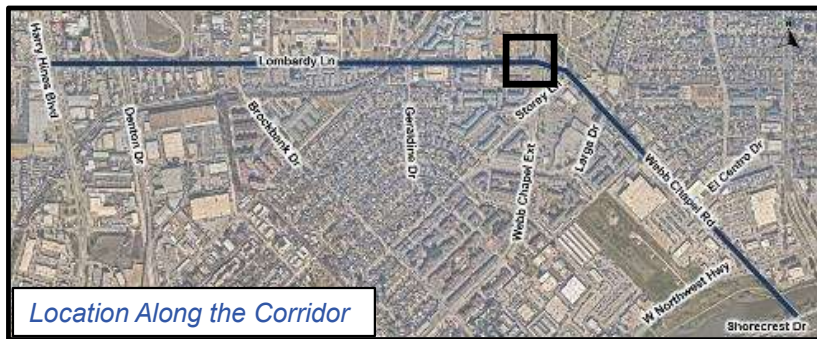
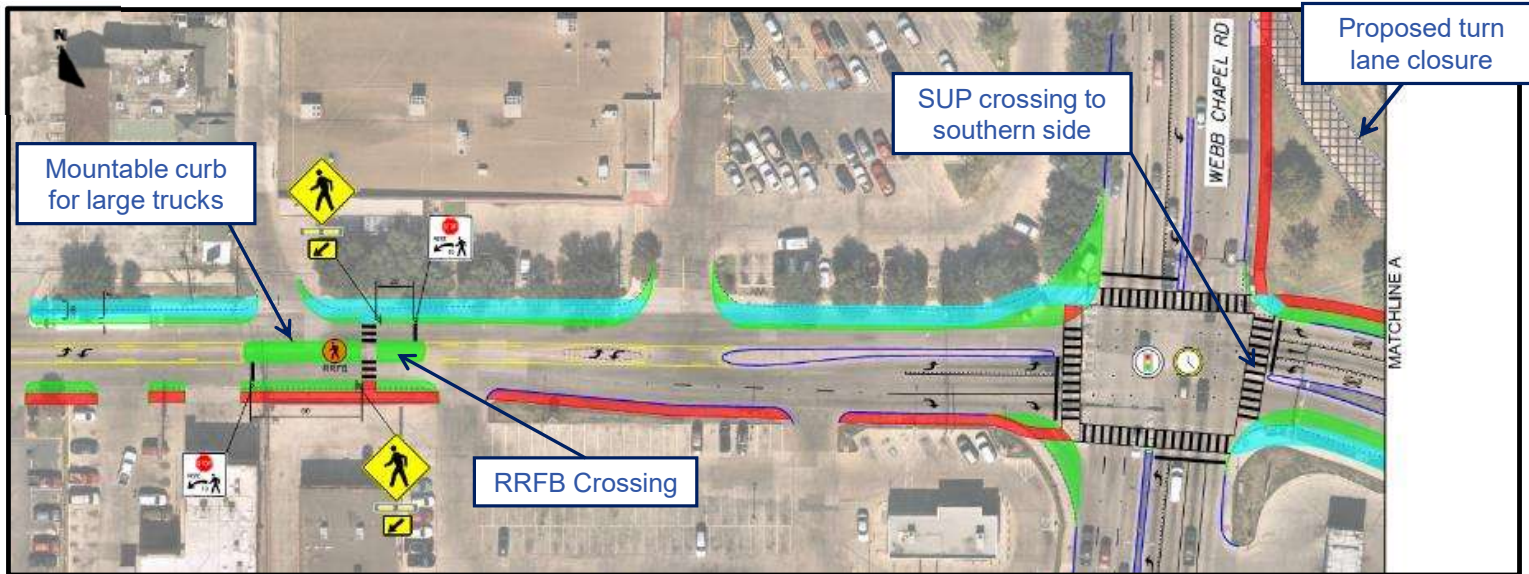
# Harry Hines Blvd to Denton Dr



LEGEND	
	EXISTING CURB
	EXISTING CURB TO BE REMOVED
	SIDEWALK IMPROVEMENTS
	SHARED USE PATH IMPROVEMENT
	CURB/MEDIAN IMPROVEMENTS
	EXISTING SIGNAL WITH PROPOSED INFRASTRUCTURE IMPROVEMENTS
	PROPOSED SIGNAL TIMING IMPROVEMENTS
	PROPOSED TRAFFIC SIGNAL
	PROPOSED PEDESTRIAN HYBRID BEACON (PHB)
	RECTANGULAR RAPID - FLASHING BEACON (RRFB)
	EXISTING BUS STOP
	EXISTING FIRE HYDRANT
	PROPOSED PAVEMENT REMOVAL



# Lombardy at Webb Chapel Ext



LEGEND	
	EXISTING CURB
	EXISTING CURB TO BE REMOVED
	SIDEWALK IMPROVEMENTS
	SHARED USE PATH IMPROVEMENT
	CURB/MEDIAN IMPROVEMENTS
	EXISTING SIGNAL WITH PROPOSED INFRASTRUCTURE IMPROVEMENTS
	PROPOSED SIGNAL TIMING IMPROVEMENTS
	PROPOSED TRAFFIC SIGNAL
	PROPOSED PEDESTRIAN HYBRID BEACON (PHB)
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	EXISTING BUS STOP
	EXISTING FIRE HYDRANT
	PROPOSED PAVEMENT REMOVAL

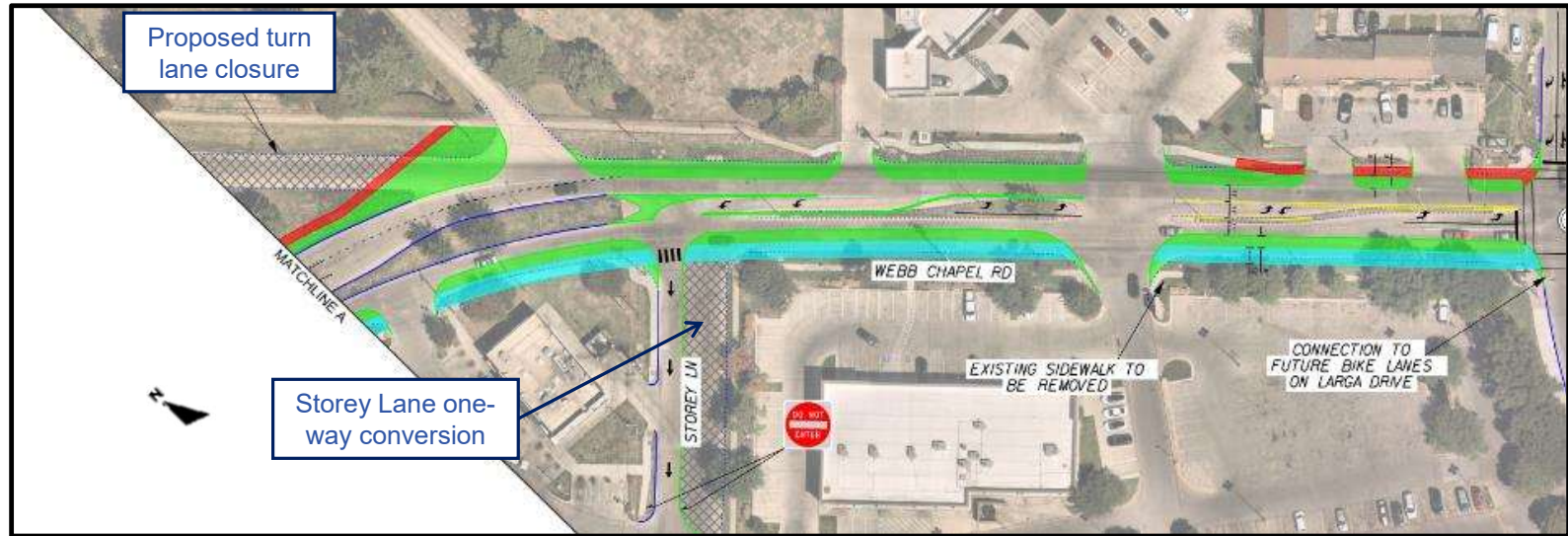




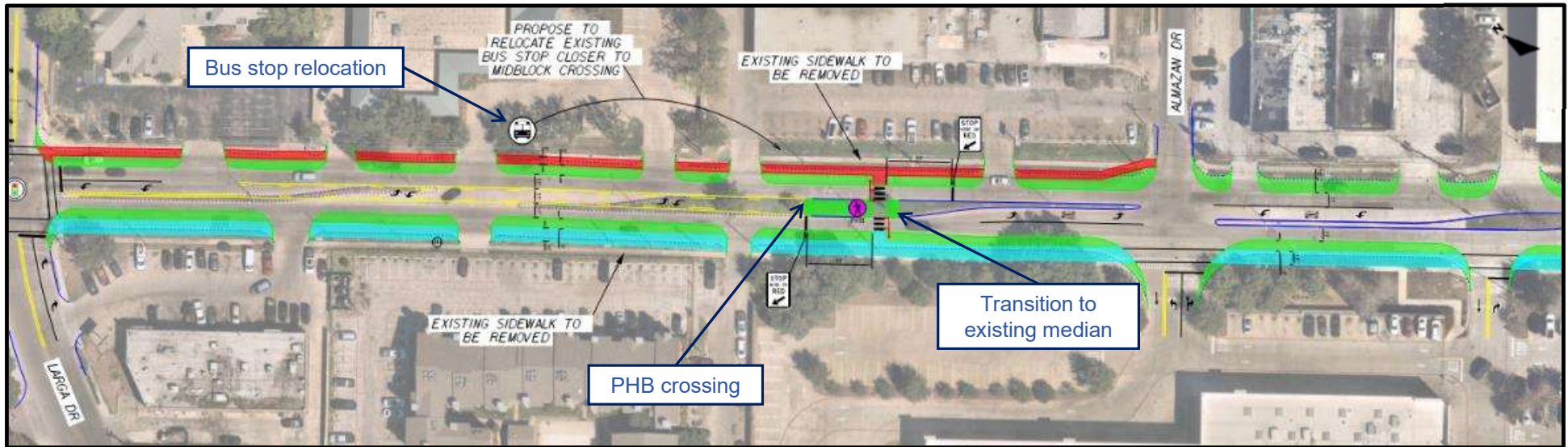
# Storey Lane at Webb Chapel Rd

## LEGEND

-  EXISTING CURB
-  EXISTING CURB TO BE REMOVED
-  SIDEWALK IMPROVEMENTS
-  SHARED USE PATH IMPROVEMENT:
-  CURB/MEDIAN IMPROVEMENTS
-  EXISTING SIGNAL WITH PROPOSED INFRASTRUCTURE IMPROVEMENTS
-  PROPOSED SIGNAL TIMING IMPROVEMENTS
-  PROPOSED TRAFFIC SIGNAL
-  PROPOSED PEDESTRIAN HYBRID BEACON (PHB)
-  RECTANGULAR RAPID - FLASHING BEACON (RRFB)
-  EXISTING BUS STOP
-  EXISTING FIRE HYDRANT
-  PROPOSED PAVEMENT REMOVAL



# Larga Dr to El Centro Dr



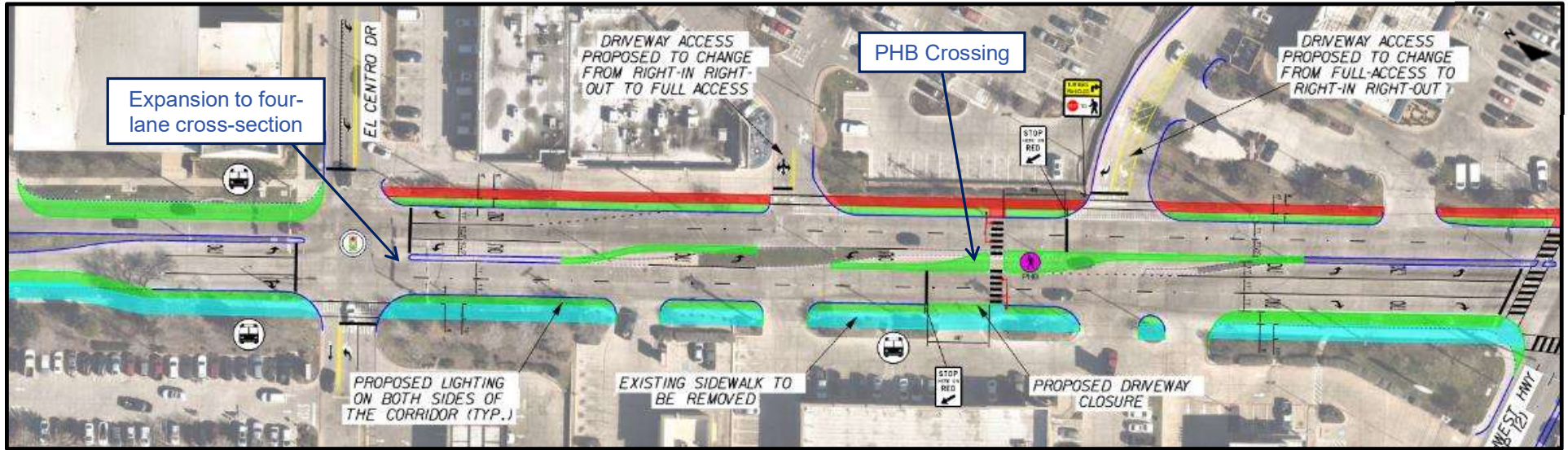
## LEGEND

-  EXISTING CURB
-  EXISTING CURB TO BE REMOVED
-  SIDEWALK IMPROVEMENTS
-  SHARED USE PATH IMPROVEMENTS
-  CURB/MEDIAN IMPROVEMENTS
-  EXISTING SIGNAL WITH PROPOSED INFRASTRUCTURE IMPROVEMENTS
-  PROPOSED SIGNAL TIMING IMPROVEMENTS
-  PROPOSED TRAFFIC SIGNAL
-  PROPOSED PEDESTRIAN HYBRID BEACON (PHB)
-  RECTANGULAR RAPID - FLASHING BEACON (RRFB)
-  EXISTING BUS STOP
-  EXISTING FIRE HYDRANT
-  PROPOSED PAVEMENT REMOVAL





# El Centro Dr to W Northwest Hwy



## LEGEND

- |  |   |  |  |
|--|---|--|--|
|  | EXISTING CURB   |  | PROPOSED TRAFFIC SIGNAL                  |
|  | EXISTING CURB TO BE REMOVED                               |  | PROPOSED PEDESTRIAN HYBRID BEACON (PHB)  |
|  | SIDEWALK IMPROVEMENTS                                     |  | RECTANGULAR RAPID-FLASHING BEACON (RRFB) |
|  | SHARED USE PATH IMPROVEMENTS                              |  | EXISTING BUS STOP                        |
|  | CURB/MEDIAN IMPROVEMENTS                                  |  | EXISTING FIRE HYDRANT                    |
|  | EXISTING SIGNAL WITH PROPOSED INFRASTRUCTURE IMPROVEMENTS |  | PROPOSED PAVEMENT REMOVAL                |
|  | PROPOSED SIGNAL TIMING IMPROVEMENTS                       |  |  |

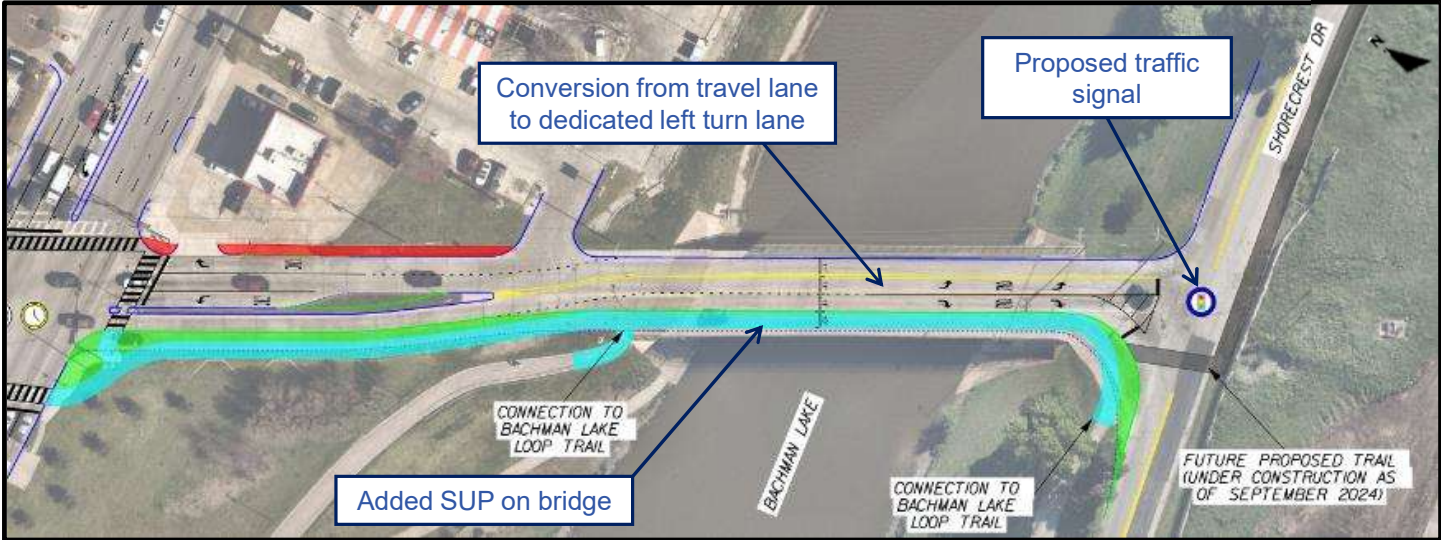




# Storey Lane at Webb Chapel Rd

## LEGEND

-  EXISTING CURB
-  EXISTING CURB TO BE REMOVED
-  SIDEWALK IMPROVEMENTS
-  SHARED USE PATH IMPROVEMENT:
-  CURB/MEDIAN IMPROVEMENTS
-  EXISTING SIGNAL WITH PROPOSED INFRASTRUCTURE IMPROVEMENTS
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-  PROPOSED PEDESTRIAN HYBRID BEACON (PHB)
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-  EXISTING BUS STOP
-  EXISTING FIRE HYDRANT
-  PROPOSED PAVEMENT REMOVAL



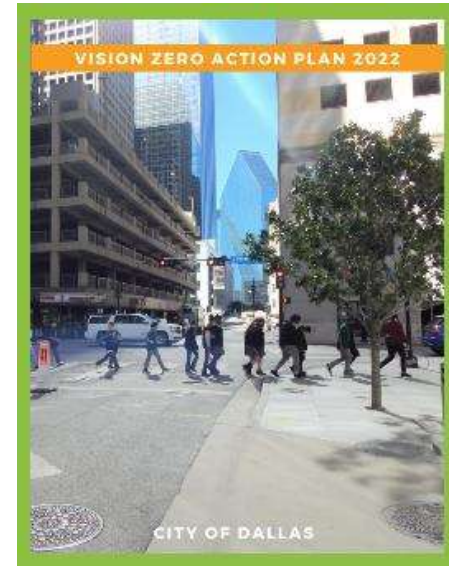
# Summary of Proposed Improvements

Summary of Improvements	
Short Term-Medium Term	Long Term
<ul style="list-style-type: none"> <li>• <b>Road diet- pavement markings</b> from 4-lane undivided to 3-lane section</li> <li>• <b>Signal timing improvements</b> at key intersections</li> <li>• <b>RRFB crossings</b> at Abernathy Avenue, east of Porter Avenue, west of Geraldine Drive, and at Fiesta Mart Driveway.</li> <li>• Address poor illuminance near Porter Ave</li> <li>• Refresh crosswalks and lane striping</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Road diet</b> from 4-lane undivided to <b>3-lane section</b> with a <b>shared-use path</b> on alternating sides of Lombardy Lane &amp; Webb Chapel Extension</li> <li>• <b>Install PHBs</b> at Chapel Oaks Driveway and near Walmart Driveway</li> <li>• <b>Relocation of existing bus stop</b> from south of Larga Drive to proposed PHB at Chapel Oaks Driveway</li> <li>• <b>Improve traffic signal infrastructure</b> and implement <b>flashing yellow arrow</b> improvements at key intersections</li> <li>• <b>Sidewalk improvements</b> along corridor</li> <li>• <b>Construct new traffic signal</b> at Shorecrest Drive</li> </ul>



# Concluding Thoughts

- Corridor has a **large amount of pedestrian traffic** and **few safe crossings**
- **Road diet** enhances **safety of the corridor** and better accommodates **pedestrians and cyclists**
- **Road diet** leads to acceptable vehicular capacity and LOS constraints during peak hours
- Prioritization of **pedestrian utility over vehicular mobility**
- Improvements support **City of Dallas Vision Zero Plan**







# Next Steps



# Q&A and Comments

Comments will be accepted through March 23<sup>rd</sup>. Enter your comments using the QR code.



## Project Webpage:

[bit.ly/webbchapellombardy](http://bit.ly/webbchapellombardy)

## Survey URL:

<https://forms.office.com/g/xwkf9Aqmmk>



# Appendix



## Levels of Service (LOS)



Level of Service A



Level of Service D



Level of Service B



Level of Service E



Level of Service C



Level of Service F

## What is LOS?

Level of Service	Signalized Intersection Average Total Delay (sec/veh)
A	$\leq 10$
B	$> 10$ and $\leq 20$
C	$> 20$ and $\leq 35$
D	$> 35$ and $\leq 55$
E	$> 55$ and $\leq 80$
F	$> 80$



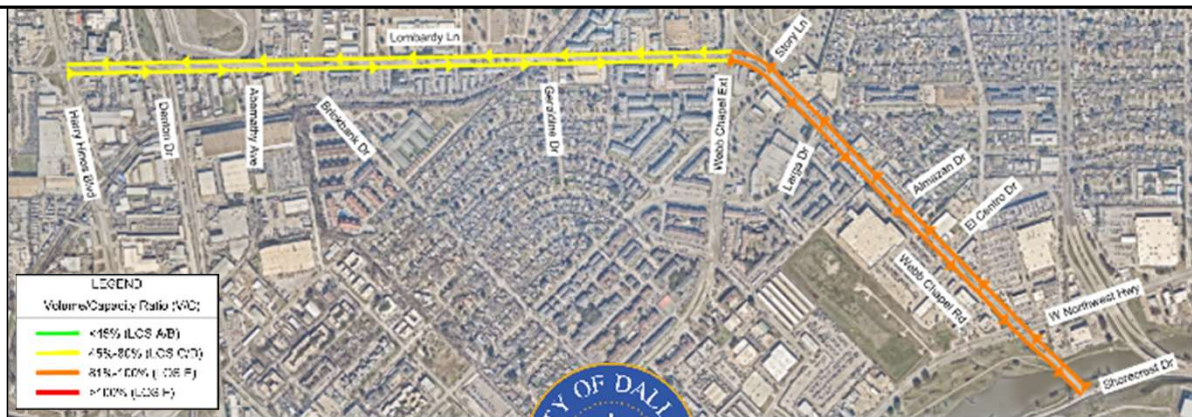


# Lombardy/Webb Chapel Roadway Capacity (2045)

## AM Peak Hour



## PM Peak Hour

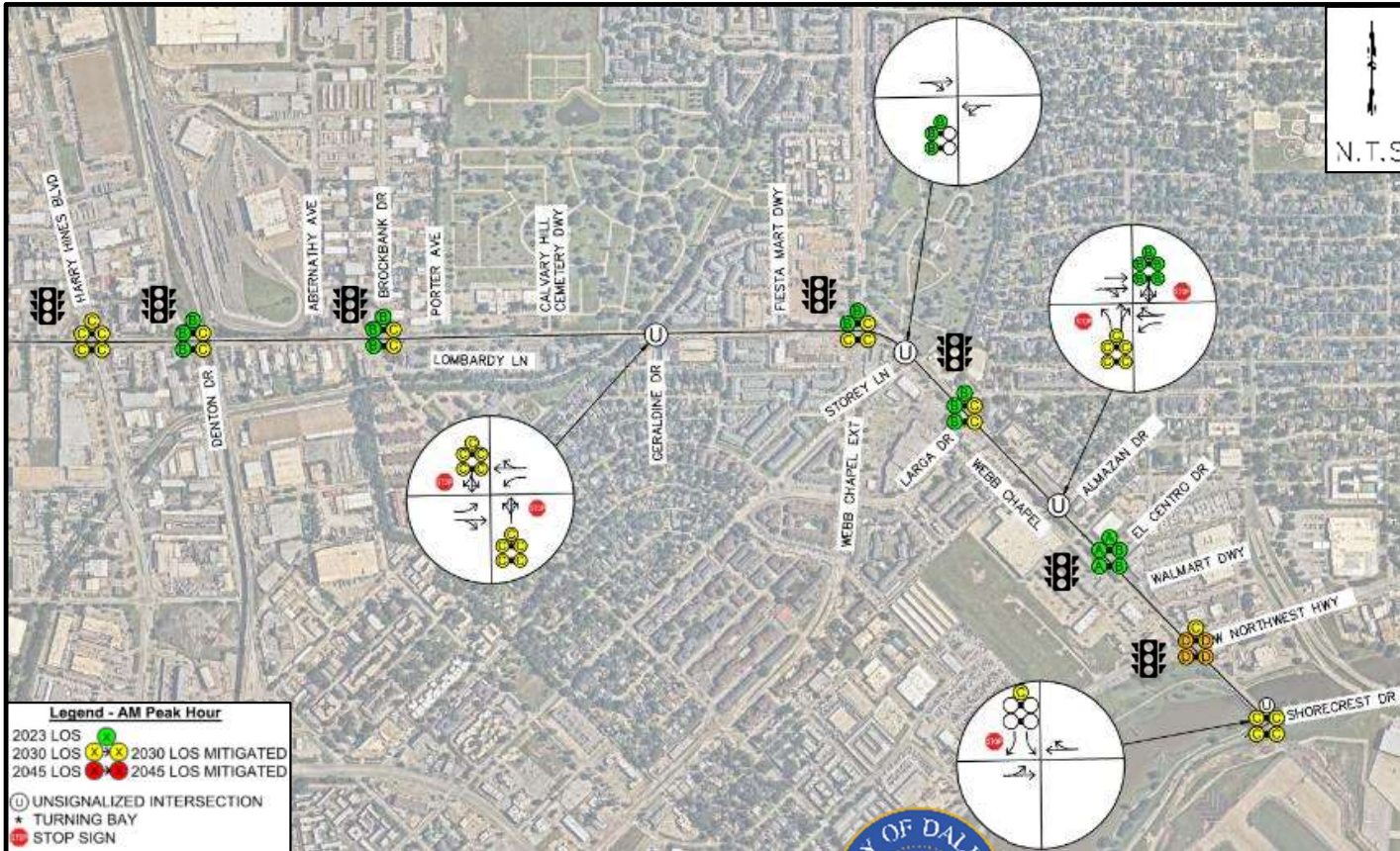


Results shown for 2045 traffic projections





# AM Peak Hour Intersection LOS Evaluation

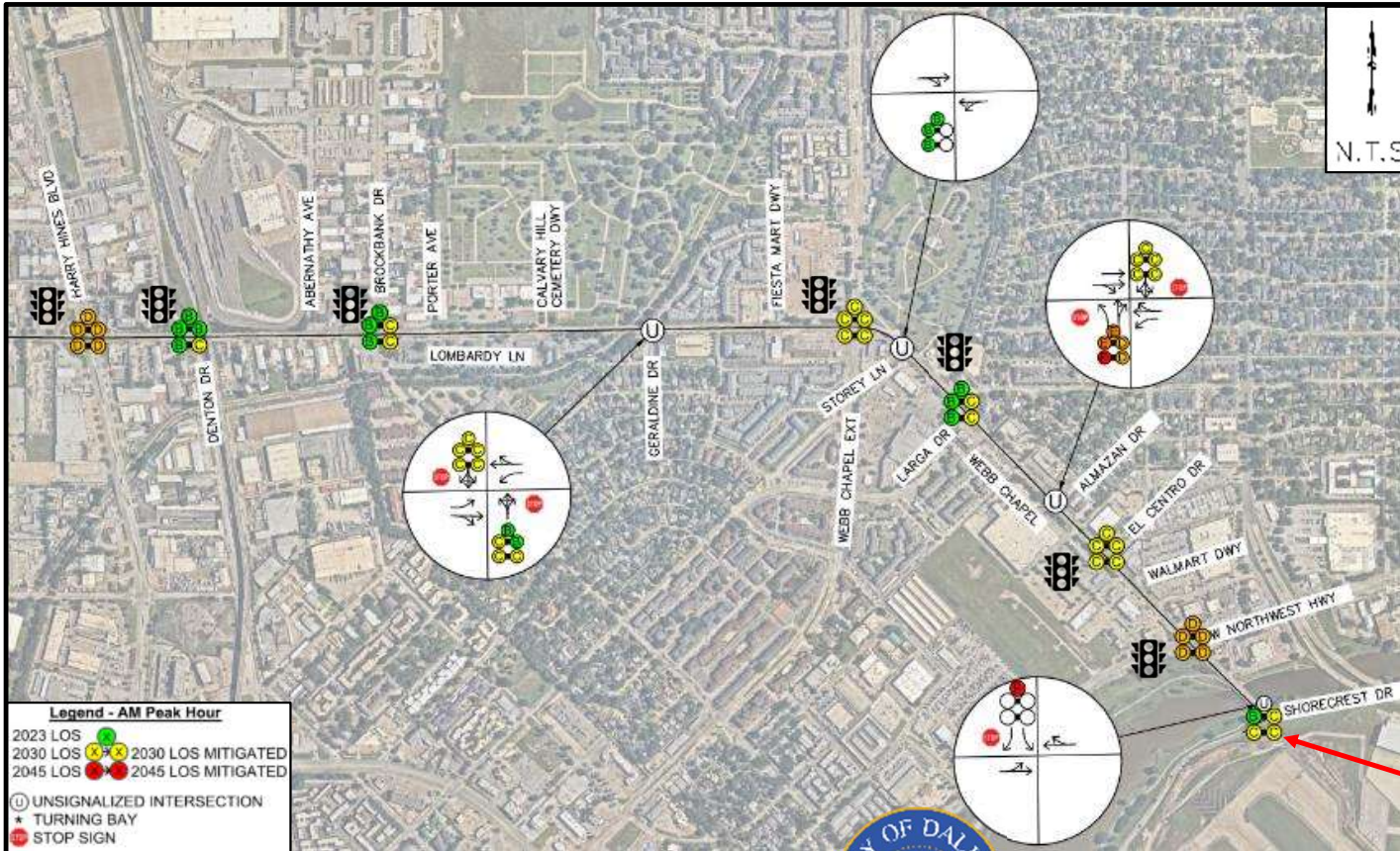


**All intersections** are projected to operate at **LOS D or better** during the **AM peak hour in 2045 with the road diet and signal timing adjustments.**





# PM Peak Hour Intersection LOS Evaluation



**All intersections** are projected to operate at **LOS D or better** during the **PM peak hour in 2045** with **the road diet and signal timing adjustments**.

