

# Abrams Road Corridor Study

## Richmond Avenue to Northwest Highway

Public Meeting

November 7, 2024



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# Purpose of Meeting

This is a follow up meeting to the meeting held on September 10, 2024. The purpose of this meeting is to provide an opportunity to stakeholders that missed the previous meetings to provide input on the findings and recommendations of the study. and report results of the public surveys



# Presentation Outline

- Study Location & Objective
- Existing Conditions
- Survey Responses
- Preliminary Recommendations
- Next Steps
- Q&A and Comments



# Study Location & Objectives

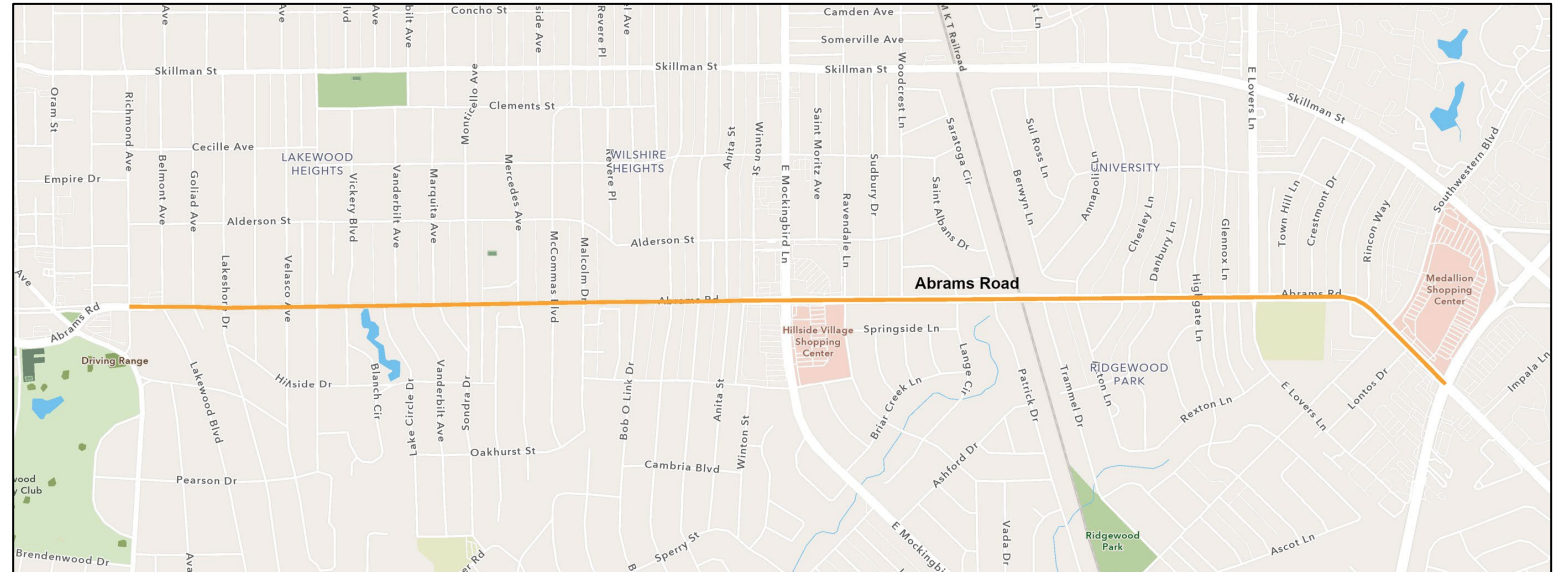
## Project Location

### Abrams Road

- Richmond Avenue to Northwest Highway

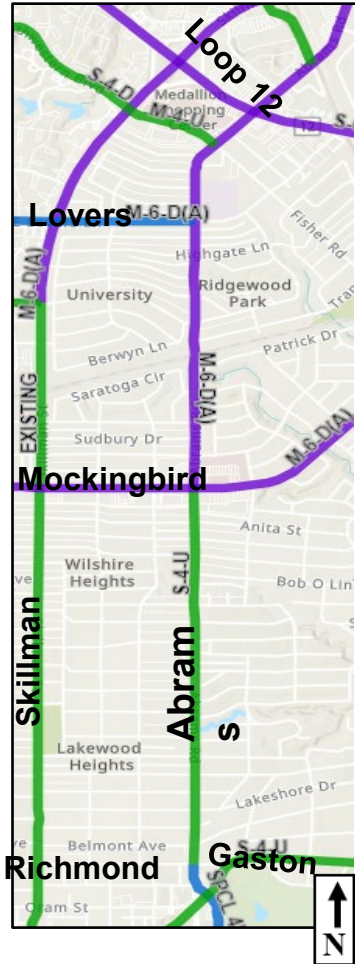
## Objective

- Identify deficiencies in existing infrastructure
- Analyze crash history and identify causal factors
- Recommend short and long-term improvements to enhance safety, walkability, and quality of life for all users of corridor



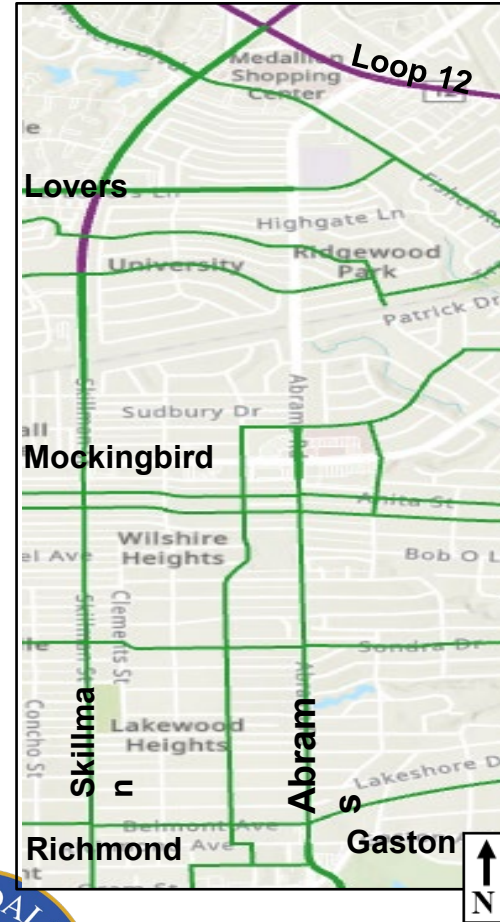
# Previous Plans and Studies

## City of Dallas Thoroughfare Plan



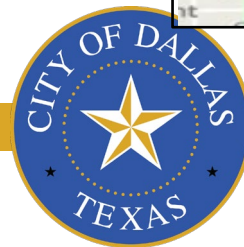
- Principal Arterial
- Minor Arterial
- Community Collector
- Residential Collector

## City of Dallas Bike Plan (2011)



- Planned On-Street Bike Facility
- Planned Off-Street Bike Facility

Note: The latest version of the ongoing Bike Plan Update (Summer 2023 version) does not recommend any bike facilities on Skillman or Abrams north of Richmond.



# Dallas Sidewalk Master Plan



## Existing Sidewalks

- Low Priority
- Medium-Low Priority
- Medium-High Priority
- High Priority

## Missing Sidewalks

- - Low Priority
- - Medium-Low Priority
- - Medium-High Priority
- - High Priority



# Community Engagement Survey – May 2024

- The improvements stakeholders desired most in the May survey are listed below:
  - Improve/add sidewalks – 78 responses
  - Implement traffic calming measures – 55 responses
  - Improve/add crosswalks – 49 responses
  - Add traffic signals – 47 responses
  - Add bike lanes / a shared-use path – 45 responses
  - Add center turn lane or more left-turn lanes – 40 responses



# Community Engagement Survey – September 2024

- Below is a list of issues identified in May survey:
  - Address Speeding
  - Improve or add traffic signals
  - Need for left-turn lanes
  - Preserve existing trees
  - Add Sidewalk
  - Traffic volumes and number of lanes
  - Safety for bicycles





# Corridor Data

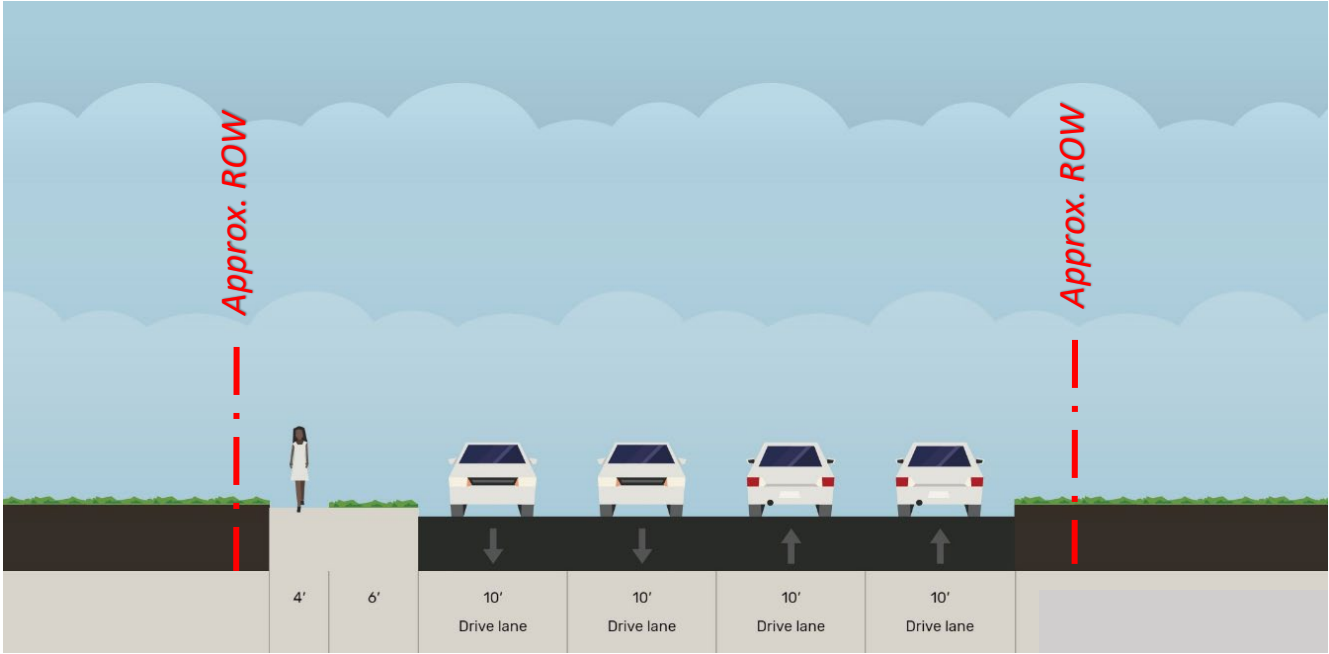
## Corridor Parameters

- Classified as a 6-Principal Arterial [(M-6-D (A)] w/ 100' r.o.w. north of Mockingbird Lane
- Classified as a 4-lane Undivided Collector [S-4-U) w/ 60' r.o.w. south of Mockingbird Lane, however, observed r.o.w. varies 64'-72'
- Active DART Bus Route # 249
- Posted speed limit: 35mph; 85<sup>th</sup> Percentile Speed: 43-46 mph (See Slide 12)
- Volume— 23k-31k vehicles per day
- 449 crashes (190 n/o Mockingbird; 259 s/o Mockingbird) recorded between 2019-2023
  - 5 crashes involved a pedestrian/bicyclist
  - Above crashes resulted in minor or possible injuries
  - 66% of all crashes occurred at intersections



# Existing 4-Lane Road South of Mockingbird Lane

## *Right of Way (ROW) Varies*

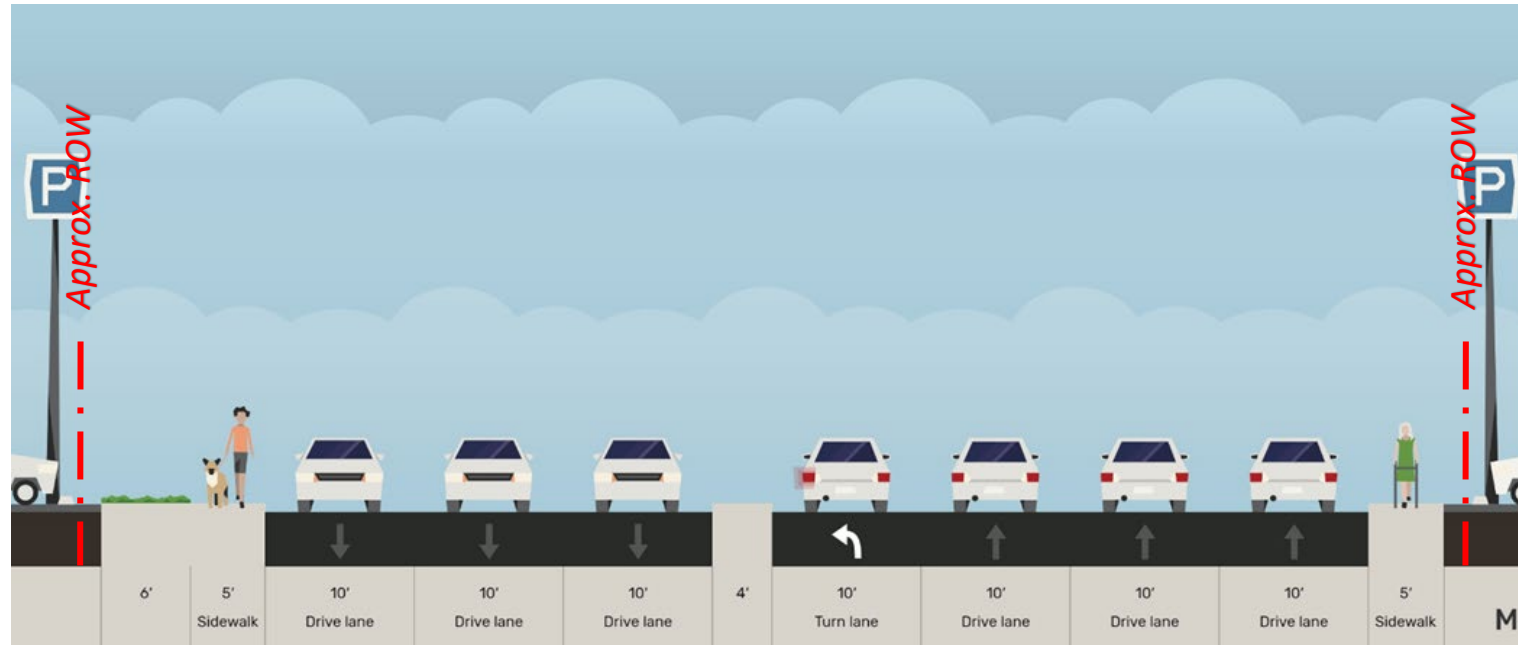


*Typical Section near Lakeshore Drive*



# Existing 6-Lane Road North of Mockingbird Lane

*Right of Way (ROW) Varies*

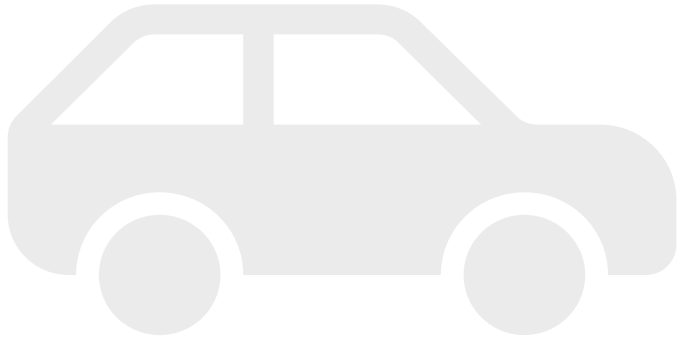


*Typical Section Between Fisher Road and NW Highway*

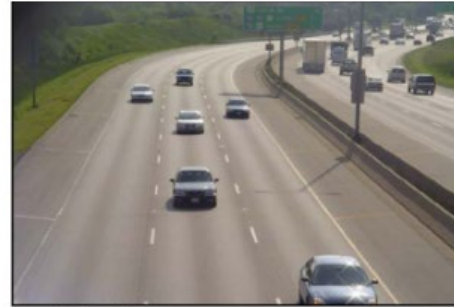


# What is Level of Service (LOS)?

| 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                | $> 80$  |



## 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



# Existing Conditions Summary

- Pedestrian Amenities
  - Existing sidewalks on both sides between Northwest Highway and Mockingbird Lane
  - Missing on either side for about half the length between Mockingbird Lane and Richmond Avenue
  - The remainder of the section sidewalk may be interspersed between the east and west sides of the roadway
  - Several obstructions on sidewalks, non-ADA compliant BFRs
- Streetlights - old infrastructure with High Pressure Sodium fixtures
- The 4-lane section does not have dedicated left turn bays at several intersections, creating long queues during peak hours
- Traffic and school signs are dated, school flashers missing at some schools
- Several intersections have missing or faded crosswalks



# Existing Levels of Service (LOS)

- Signalized intersections along the corridor operate at acceptable levels of service except for Kenwood and Mockingbird intersections, which operate at LOS E during p.m. peak hours; and Lovers Lane, which operates at LOS E during AM peak hours.
- Abrams approaches to NW Hwy operate at LOS F during AM peak Hours and LOS E during PM peak hours
- Several side streets at unsignalized intersections experience high levels of delay and failing levels of service during peak hours



# Existing Speed Data

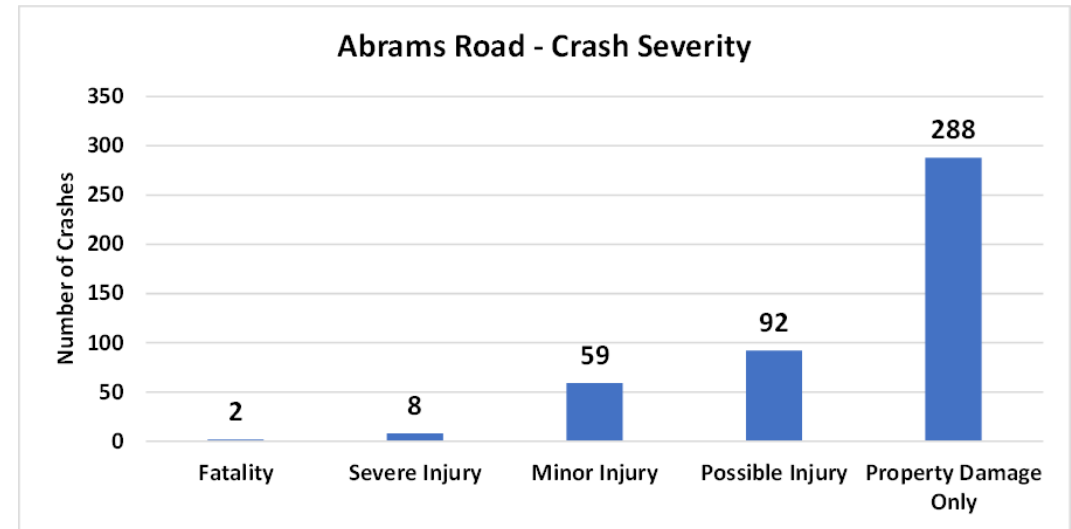
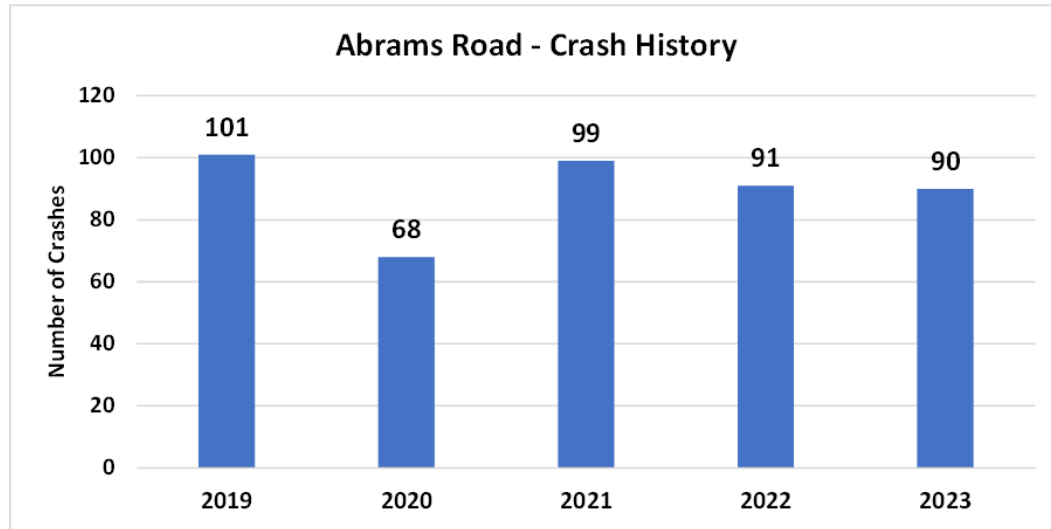
| <b>Richmond to Mockingbird (4-Lane Section)</b> |                           |                         |                               |  |
|---|---------------------------|-------------------------|-------------------------------|--|
|   | <b>Posted Speed Limit</b> | <b>Mean Speed (MPH)</b> | <b>85th %tile Speed (MPH)</b> | <b>% Of vehicles 10 MPH over speed limit</b> |
| Northbound                                      | 35                        | <b>41</b>               | <b>45</b>                     | 14%  |
| Southbound                                      | 35                        | <b>39</b>               | <b>45</b>                     | 13%  |

| <b>Mockingbird to Northwest Highway (6-Lane Section)</b> |                           |                         |                               |  |
|--|---------------------------|-------------------------|-------------------------------|--|
|  | <b>Posted Speed Limit</b> | <b>Mean Speed (MPH)</b> | <b>85th %tile Speed (MPH)</b> | <b>% Of vehicles 10 MPH over speed limit</b> |
| Northbound   | 35                        | <b>39</b>               | <b>43</b>                     | 6.3%   |
| Southbound   | 35                        | <b>41</b>               | <b>46</b>                     | 16.5%  |



# Crash History (2019-2023)

- Total crashes – 449 crashes
  - Pedestrian/bicycle related crashes – 5 crashes
  - Total fatalities – 2 crashes and one additional fatality in 2024



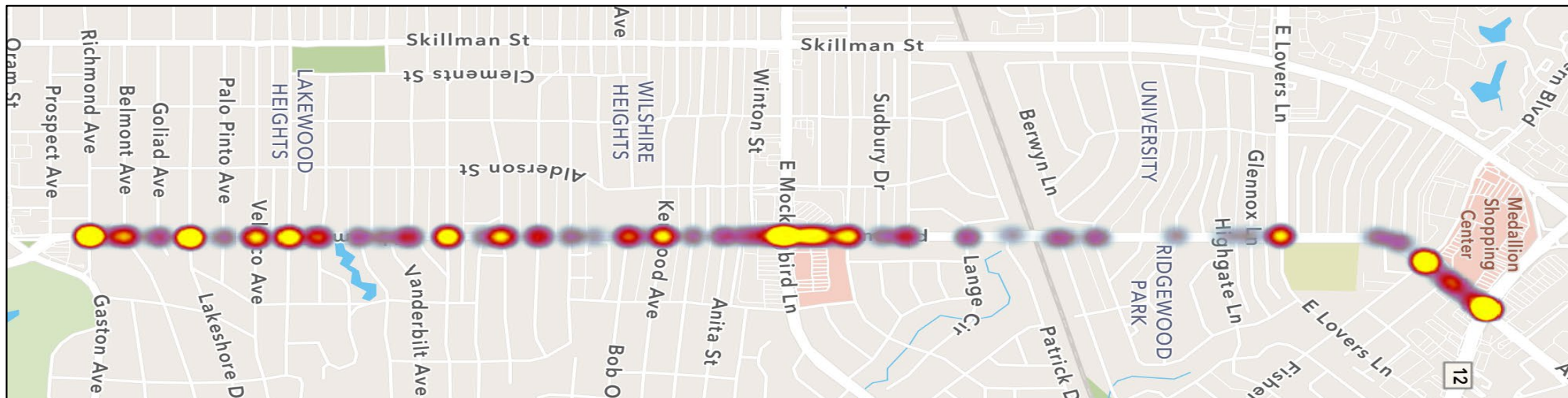


# Crash Data (2019-2023)

|                             | <b>2019</b> | <b>2020</b> | <b>2021</b> | <b>2022</b> | <b>2023</b> | <b>Total</b> |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|--------------|
| <b>Fatality</b>             | 0           | 0           | 0           | 1           | 1           | <b>2</b>     |
| <b>Severe Injury</b>        | 1           | 1           | 1           | 1           | 4           | <b>8</b>     |
| <b>Minor Injury</b>         | 10          | 8           | 20          | 13          | 8           | <b>59</b>    |
| <b>Possible Injury</b>      | 19          | 16          | 15          | 20          | 22          | <b>92</b>    |
| <b>Property Damage Only</b> | 71          | 43          | 63          | 56          | 55          | <b>288</b>   |
| <b>Total</b>                | <b>101</b>  | <b>68</b>   | <b>99</b>   | <b>91</b>   | <b>90</b>   | <b>449</b>   |



# Heat Map – Crashes (2019-2023)

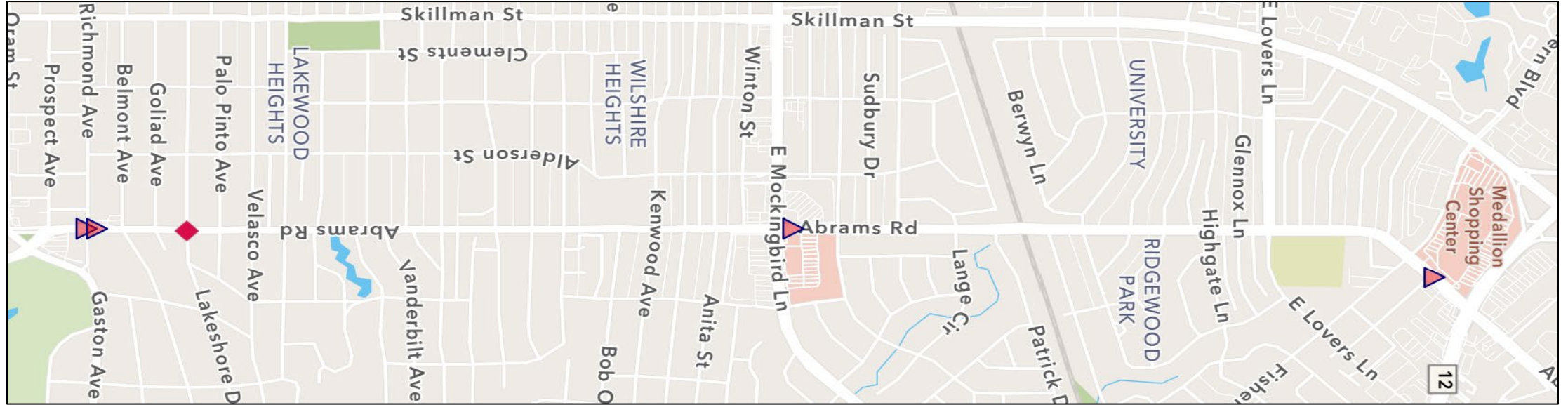


## Total Crashes – 449

- Fatal Crashes – 2 (+1 in 2024)
- Severe Injury Crashes – 8
- Minor/Possible Injury Crashes – 151
- Pedestrian & Bicycle Crashes – 5



# Pedestrian & Bicycle Crashes



Total Pedestrian  
& Bicycle crashes – 5

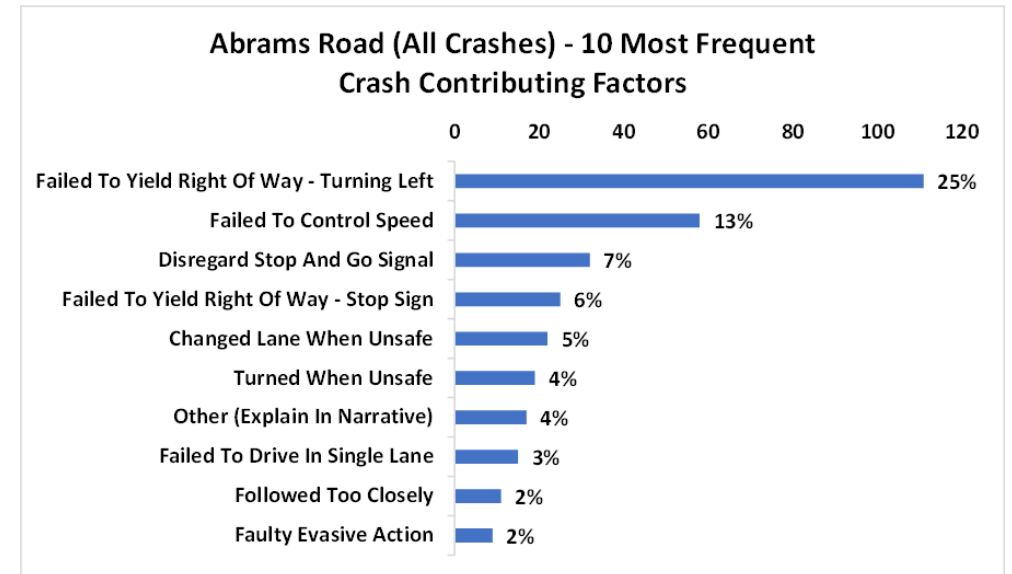
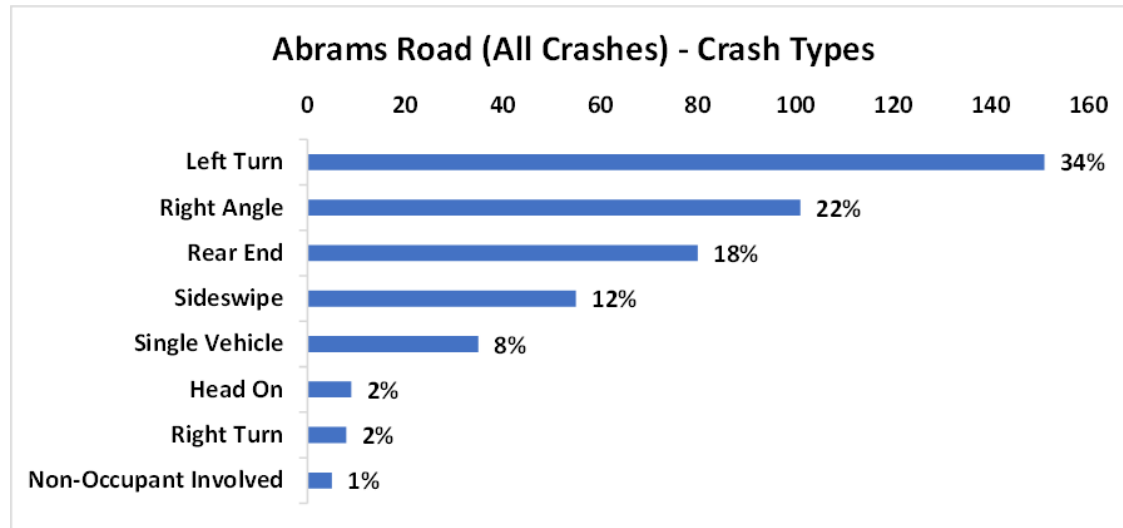
- Fatal – 0
- Severe Injury – 0
- Minor/ Possible Injury – 5



# Crash History (2019-2023)

## All Crashes

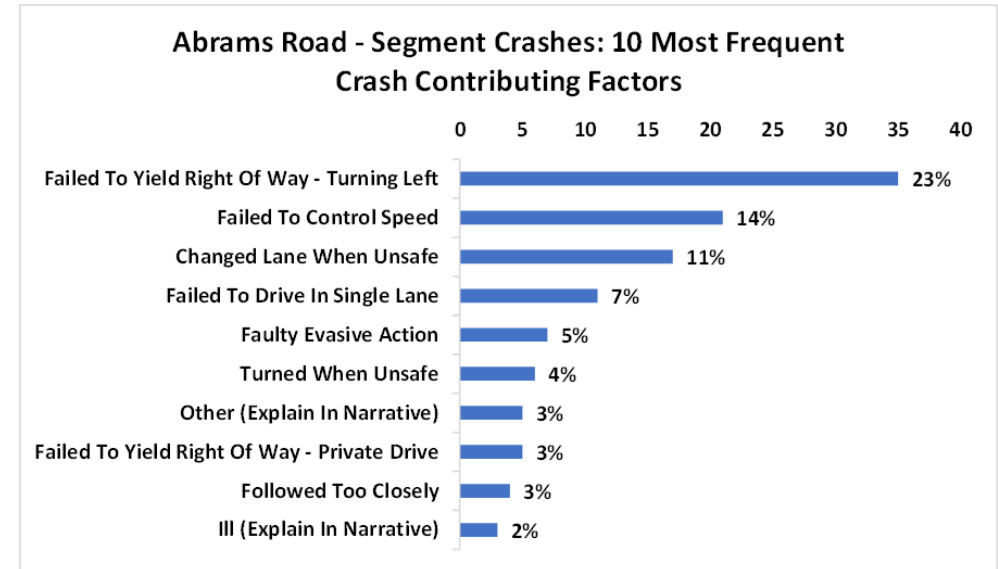
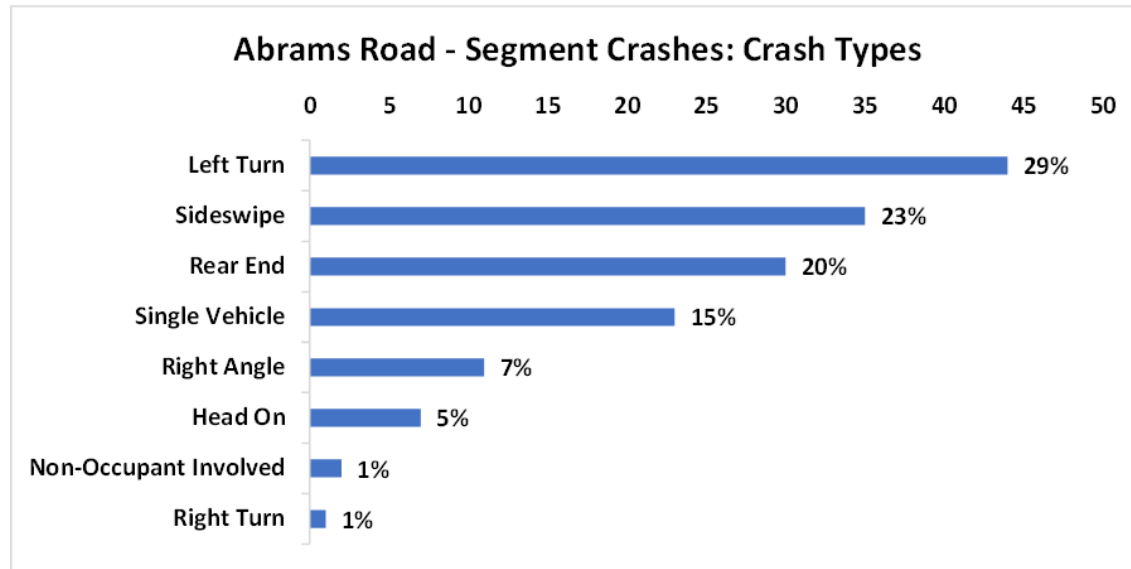
- Left-turn Crashes (34%), Right Angle Crashes (22%), Rear-end Crashes (18%)
- Failed to Yield the Right of Way – Turning Left (25%), Failed to Control Speed (13%), Disregard Signal (7%)



# Crash History (2019-2023)

## Roadway Segment Crashes

- Left-turn Crashes (29%), Sideswipe Crashes (23%), Rear-end Crashes (20%)
- Failed to Yield the Right of Way Turning Left (23%), Failed to Control Speed (14%), Changed Lane When Unsafe (11%)



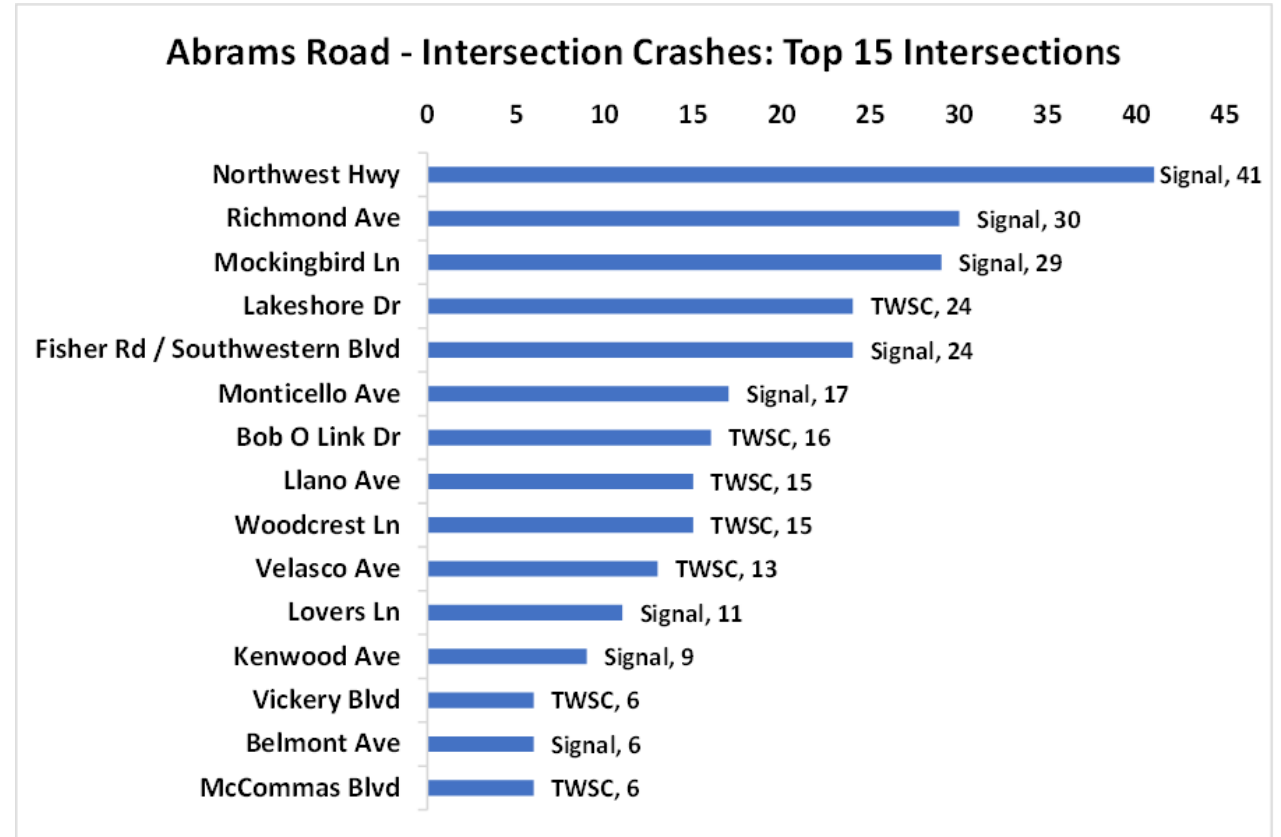
# Crash History (2019-2023)

## Crashes at Signalized Intersections

- Northwest Highway (9%)
- Richmond Avenue (7%)
- Mockingbird Lane (6%)
- Fisher/Southwestern Boulevard (5%)
- Monticello Avenue /Sondra Drive (4%)

## Crashes at Unsignalized Intersections

- Lakeshore Drive (5%)
- Bob o Link Drive (4%)
- Llano Avenue/Westlake Avenue (3%)
- Woodcrest Lane (3%)
- Velasco Avenue (3%)



## Causal Factors for Crashes

- Two main causal factors of crashes are **failure to yield right-of-way (Left-turns, Right-angle, Disregard Signal) and speeding**
- Together, they account for **75%** of all crashes
- Existing infrastructure deficiencies could also be indirect contributors
- Pedestrian and Bicycle crashes account for 1.1% of total crashes



# Recommendations

- Install warranted traffic signals and upgrade older signals (Slides 24 & 25)
- Install left-turn lanes at key intersections
- Maintain signing and striping at high level of retroreflectivity
- Clear sight-distance obstruction at intersections
- Replace/ install BFRs ramps at intersections where needed
- Install sidewalk where missing, repair existing sidewalk as identified
- Enhance illumination at intersections, convert existing streetlights to LED
- Enforce traffic infractions, educate public on high cost of traffic accidents
- A preliminary analysis of a reduced lane scenario indicated high levels of delays at key intersections





# Recommendations- Upgrade/Replace Existing Signals

Upgrade existing Traffic Signals at the following intersections:

- Northwest Highway
- Mockingbird Lane

Remove and Replace existing Traffic Signals at the following intersections:

- Lovers Lane
- Kenwood Avenue
- Monticello Avenue
- Belmont Avenue
- Richmond Avenue
- Southwestern Boulevard



# Recommendations – New Traffic Signals

Install New Traffic Signals at the intersections of Abrams Road with:

- University Boulevard/Axton Lane
- Trammel Drive
- Ravendale Lane
- Bob O Link Drive
- Lakeshore Drive



# Next Steps

## Implement of Short-term (0-3 years) solutions:

- Install/Refresh Signs and Pavement markings
- Upgrade Pedestrian Curb Ramps and Repair Sidewalks
- Remove visibility obstructions at intersections
- Traffic Enforcement
- Partner with sister Agencies to promote safe driving habits and educate public on the high costs associated with traffic accidents
- Install new Traffic Signal at Abrams and Lakeshore (funded)



# Next Steps contd.

## Pursue funding for implementation of long-term solutions:

- Install new sidewalk
- Install new LED street lighting along corridor
- Replace/Upgrade existing traffic signals as identified
- Install new Traffic Signals at intersections identified in this study
- Construct intersection and mid-block improvements, including left-turn lanes to reduce crashes and facilitate safe pedestrian crossings



# Q&A and Comments

Comments will be accepted through **November 30th**. Fill out one of the comment forms or submit your comments online.

## Project Webpage:

<http://bit.ly/abramsk>



Scan here to visit the project website!

Abrams Road Transportation Safety Study II

