Abrams Road Corridor Study
Richmond Avenue to Northwest Highway

Public Meeting

09/10/2024

Auro Majumdar, P.E., P.T.O.E.
Asst. Director – Engineering & Operations
City of Dallas, Department of Transportation

Purpose of Meeting

The purpose of this meeting is to present the preliminary findings and recommendations of the study and solicit stakeholder input

Presentation Outline

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

Study Location & Objectives

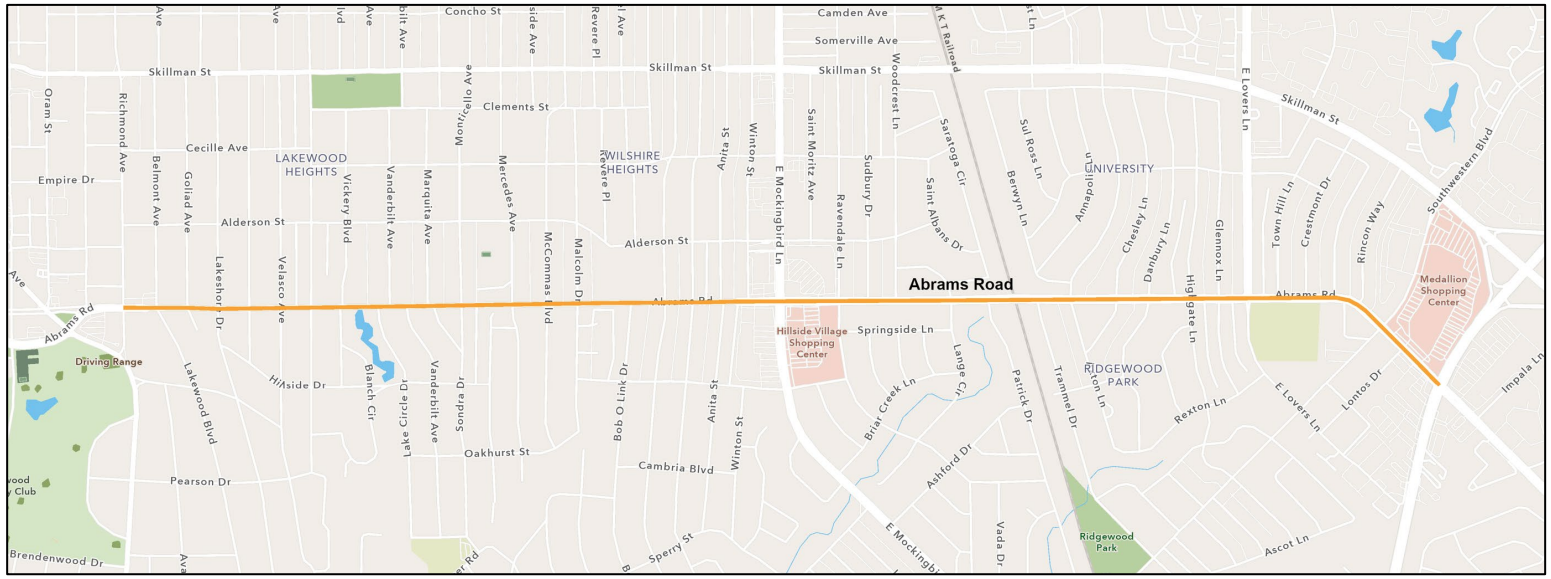
Project Location

Abrams Road

- Richmond Avenue to Northwest Highway

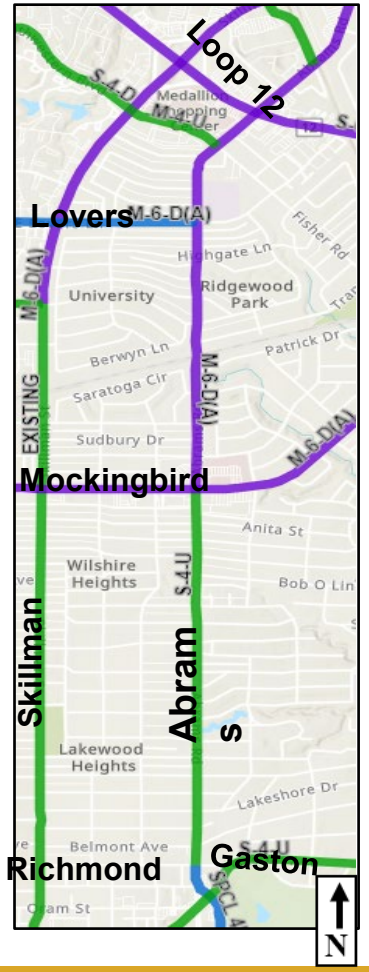
Objective

- 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



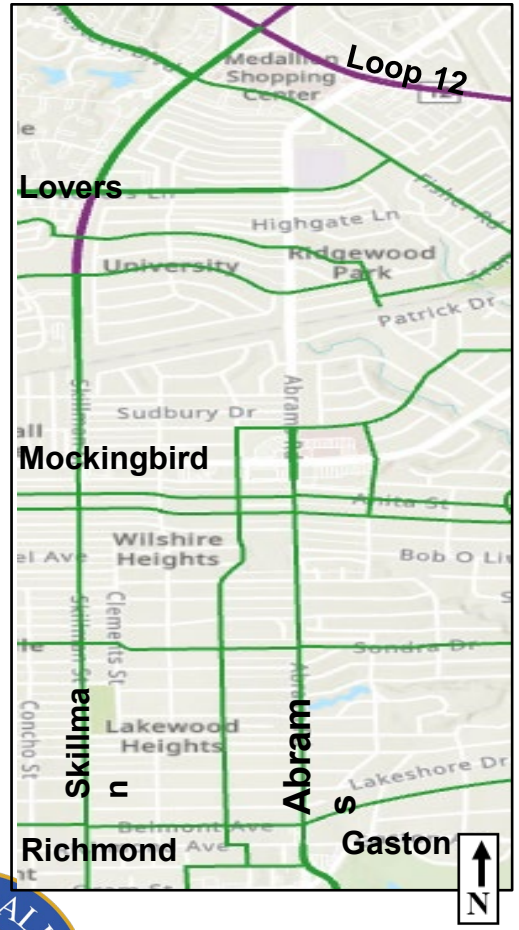
Previous Plans and Studies

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

- A survey for the Abrams and Skillman corridor studies was open to the public from May 3 to May 30, 2024.
- 210 respondents answered the question “What improvements would you like to see to Abrams Road within the study limits?”
  - The six improvements identified in the greatest number of responses include:
    - 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
- A more detailed version of the survey results is on the project webpage.

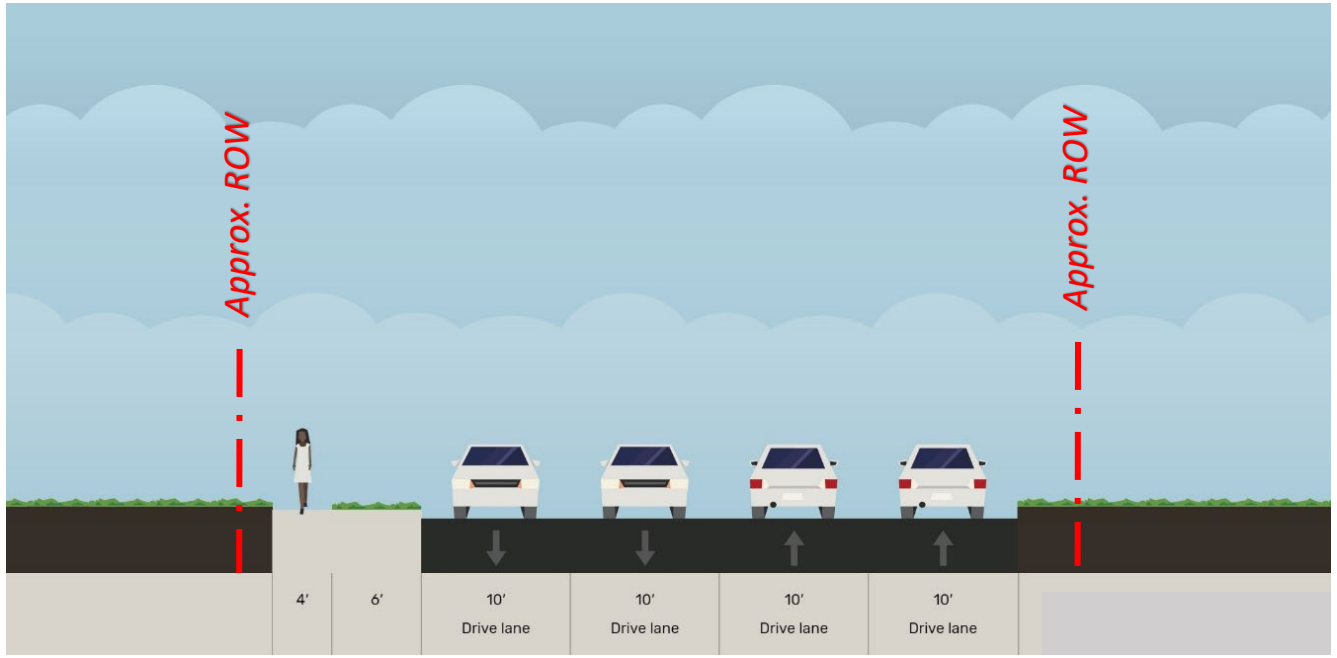
Corridor Data

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; 85th 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

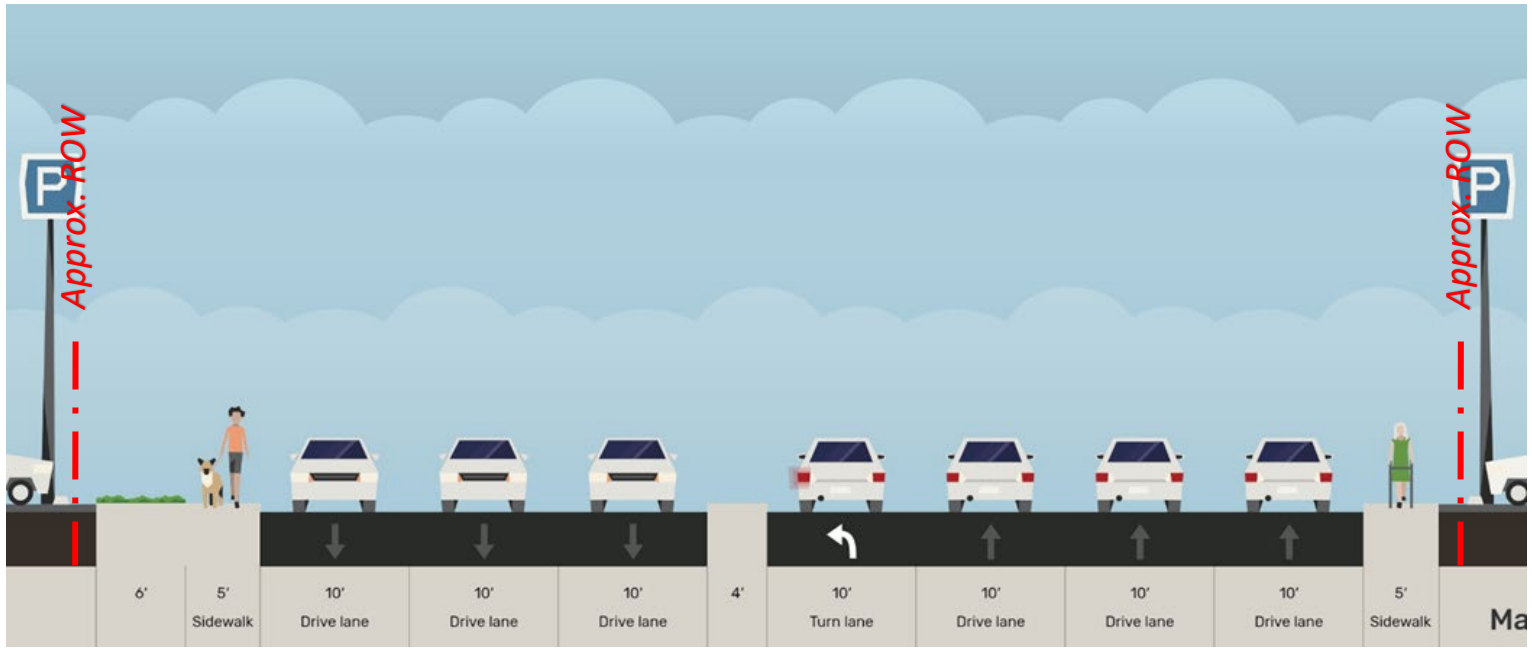
Right of Way (ROW) Varies



Typical Section near Lakeshore Drive

Existing 6-Lane Road North of Mockingbird Lane

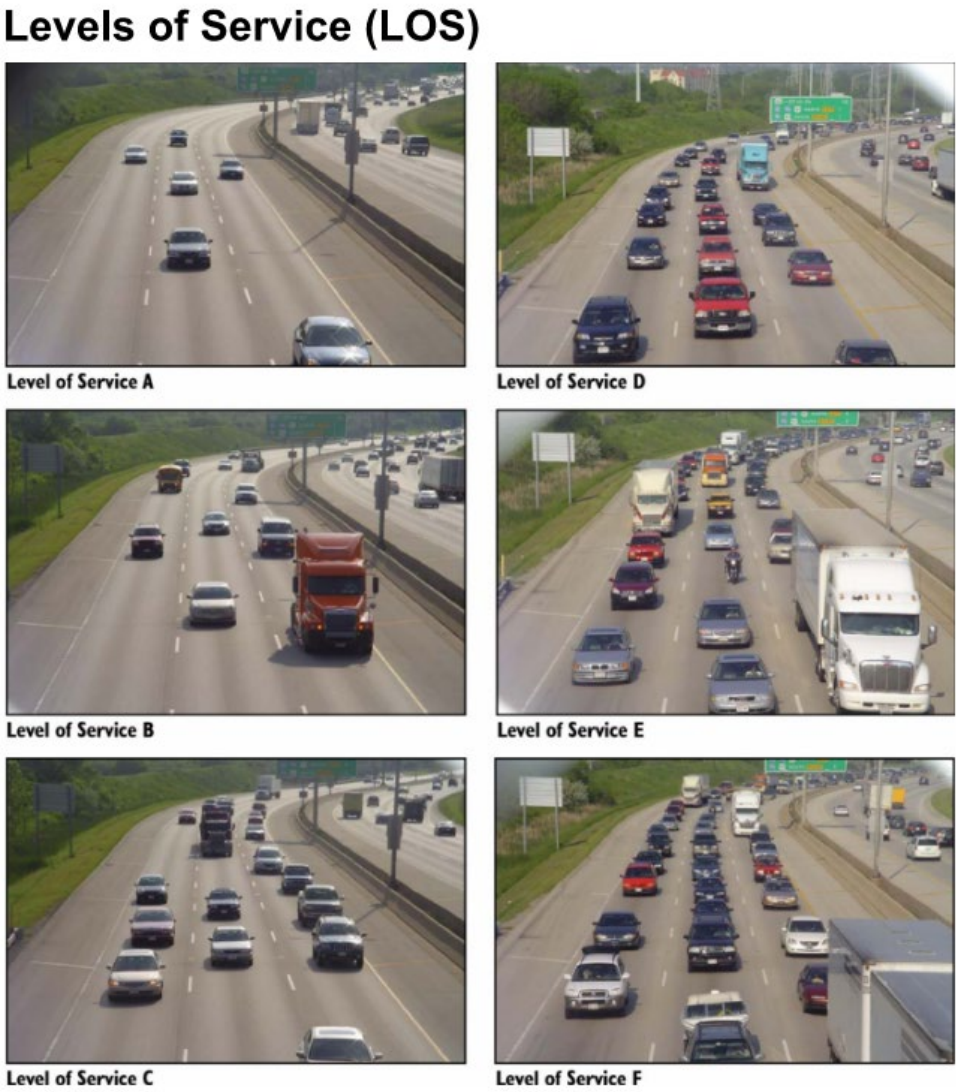
Right of Way (ROW) Varies



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	≤10
B	>10 and ≤20
C	>20 and ≤35
D	>35 and ≤55
E	>55 and ≤80
F	>80



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

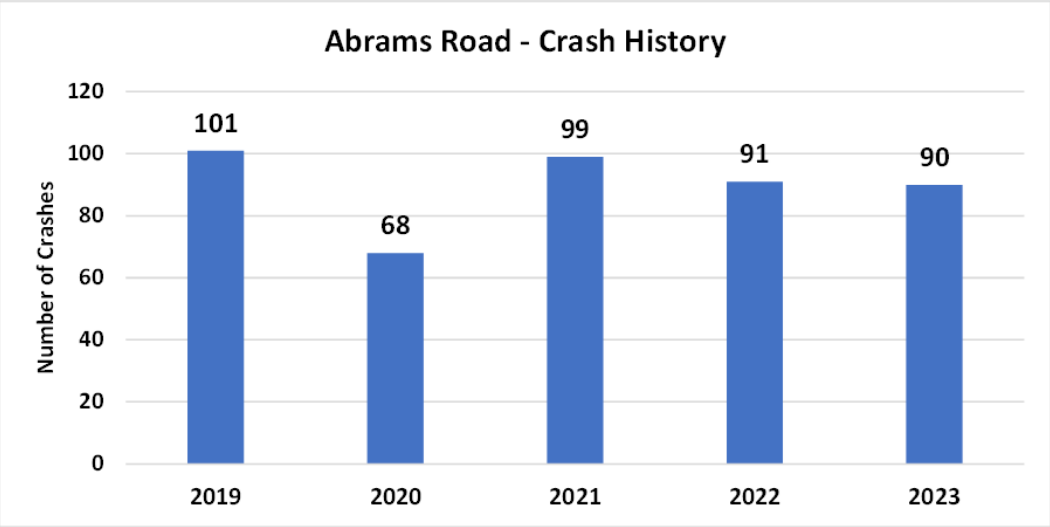
Existing Speed Data

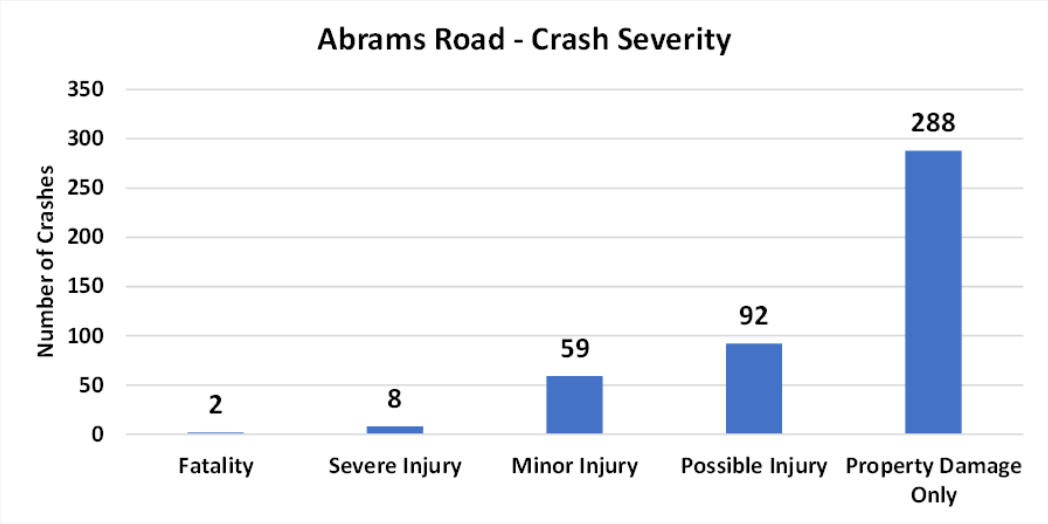
Richmond to Mockingbird (4-Lane Section)				
	Posted Speed Limit	Mean Speed (MPH)	85th %tile Speed (MPH)	% Of vehicles 10 MPH over speed limit
Northbound	35	**41**	**45**	14%
Southbound	35	**39**	**45**	13%

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

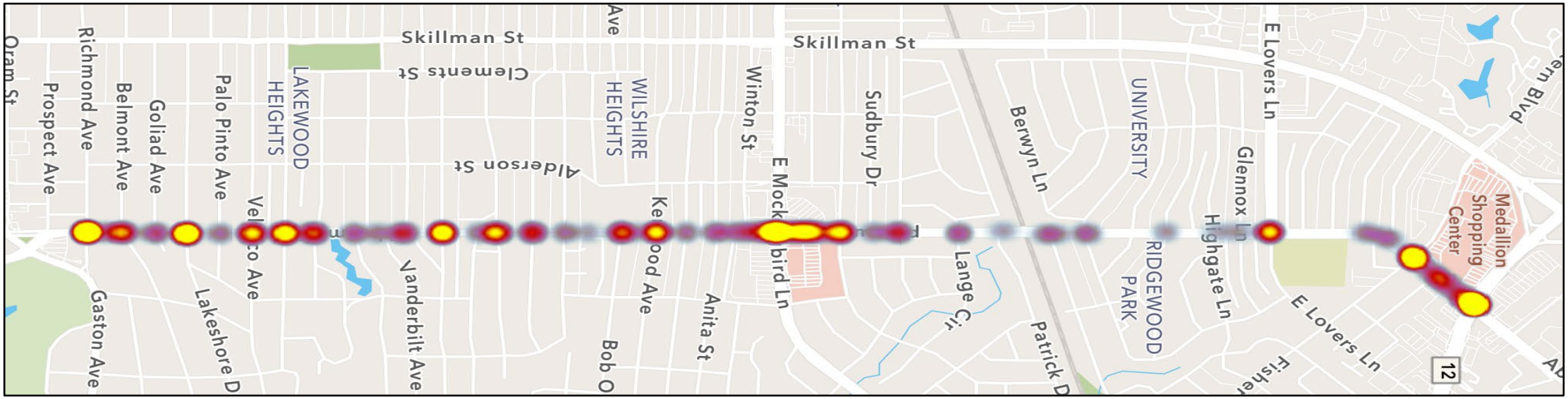




Crash Data (2019-2023)

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

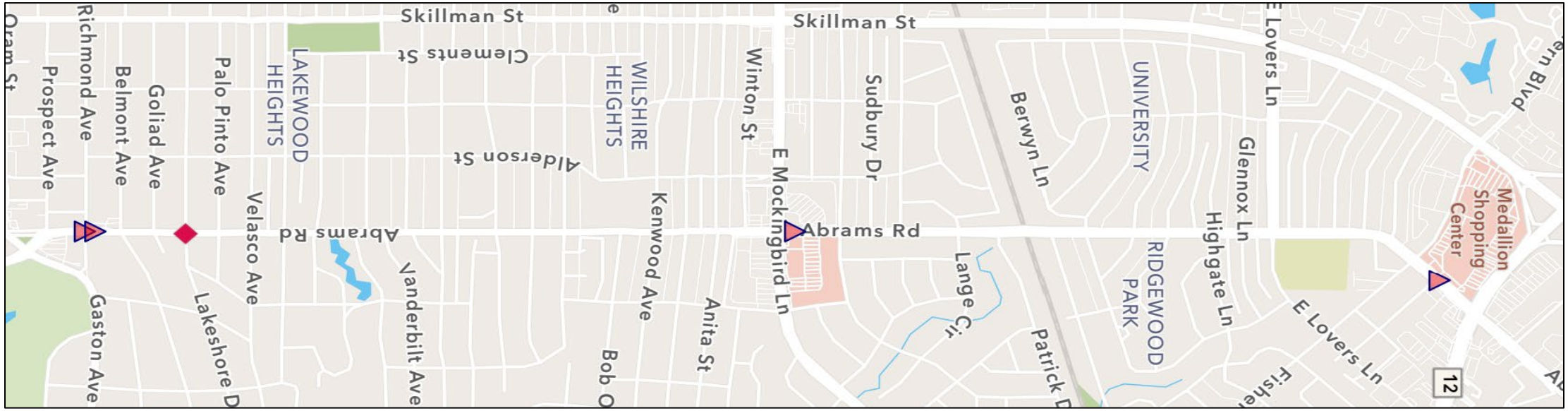
Heat Map – Crashes (2019-2023)



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



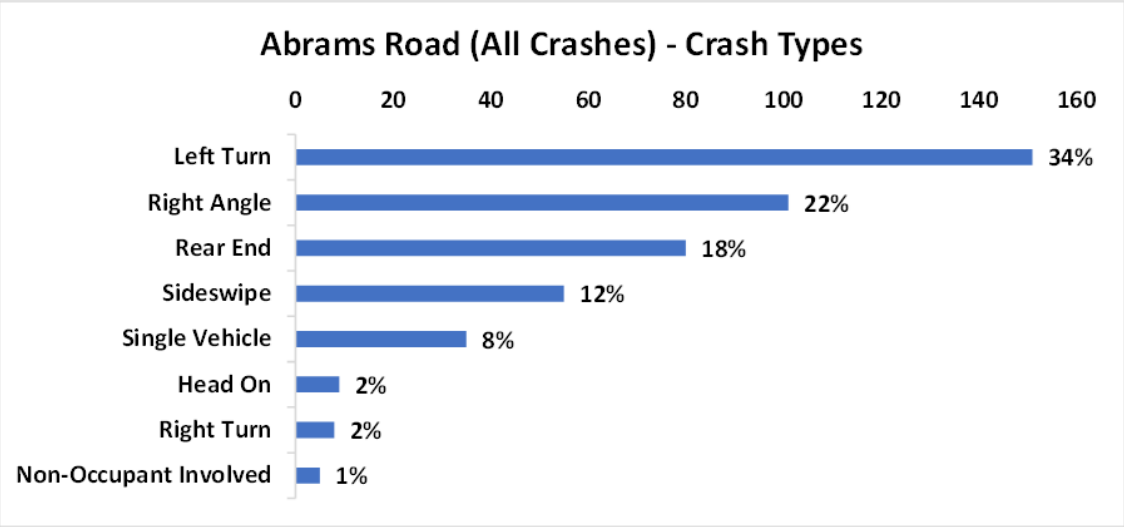
Total Pedestrian
& Bicycle crashes – 5

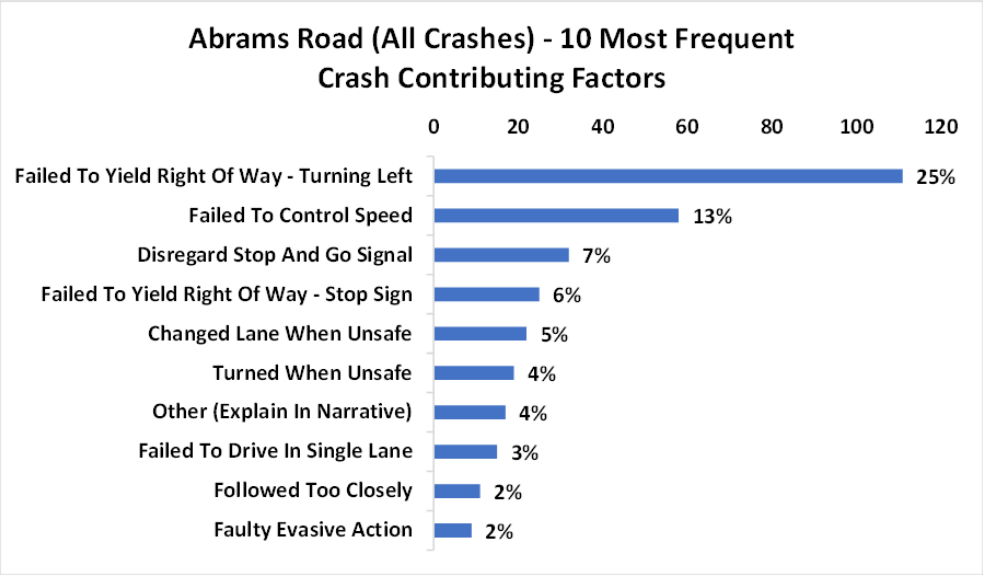
- Fatal – 0
- Severe Injury – 0
- Minor/ Possible Injury – 5

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%)

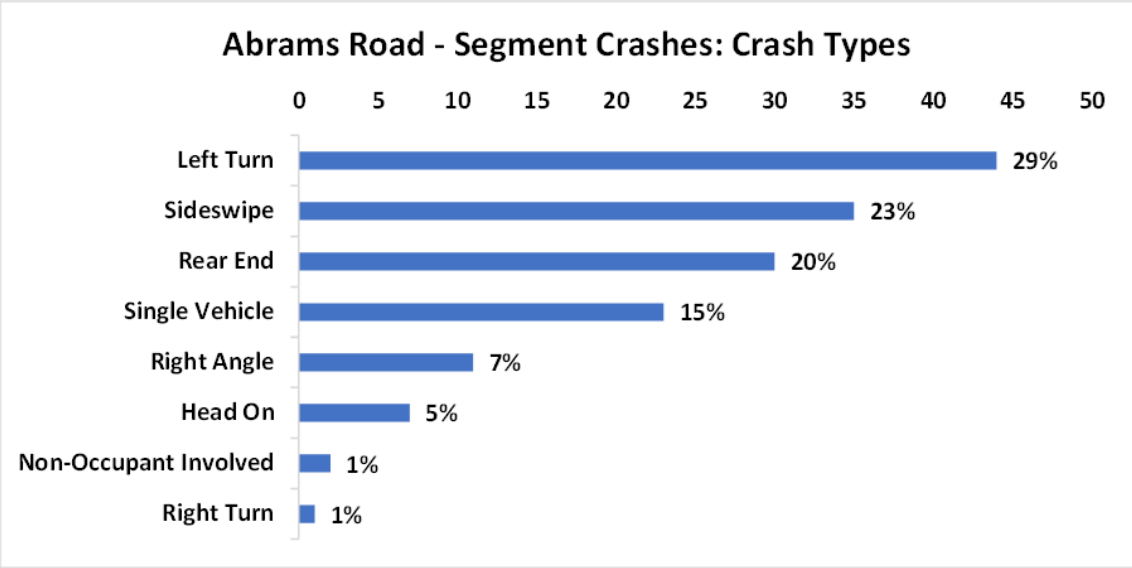


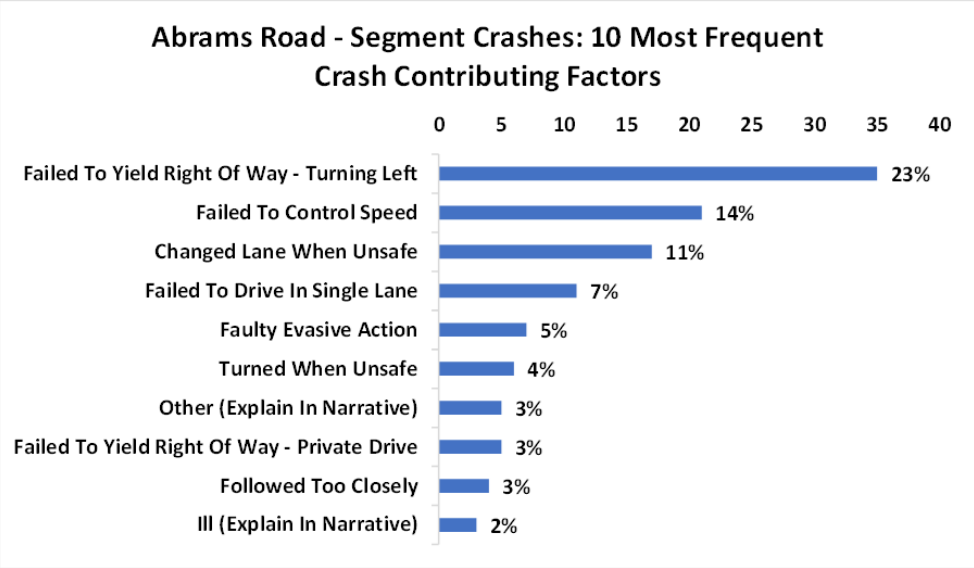


Crash History (2019-2023)

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%)





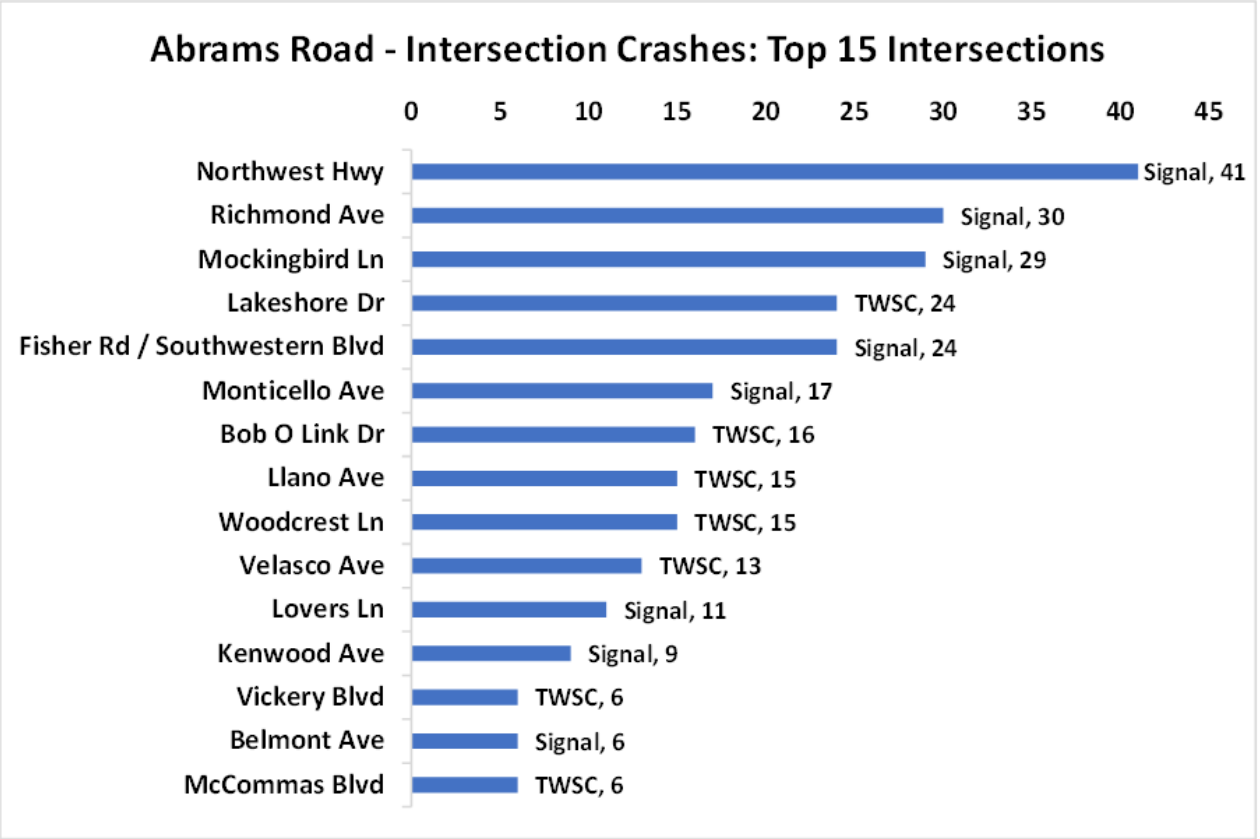
Crash History (2019-2023)

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

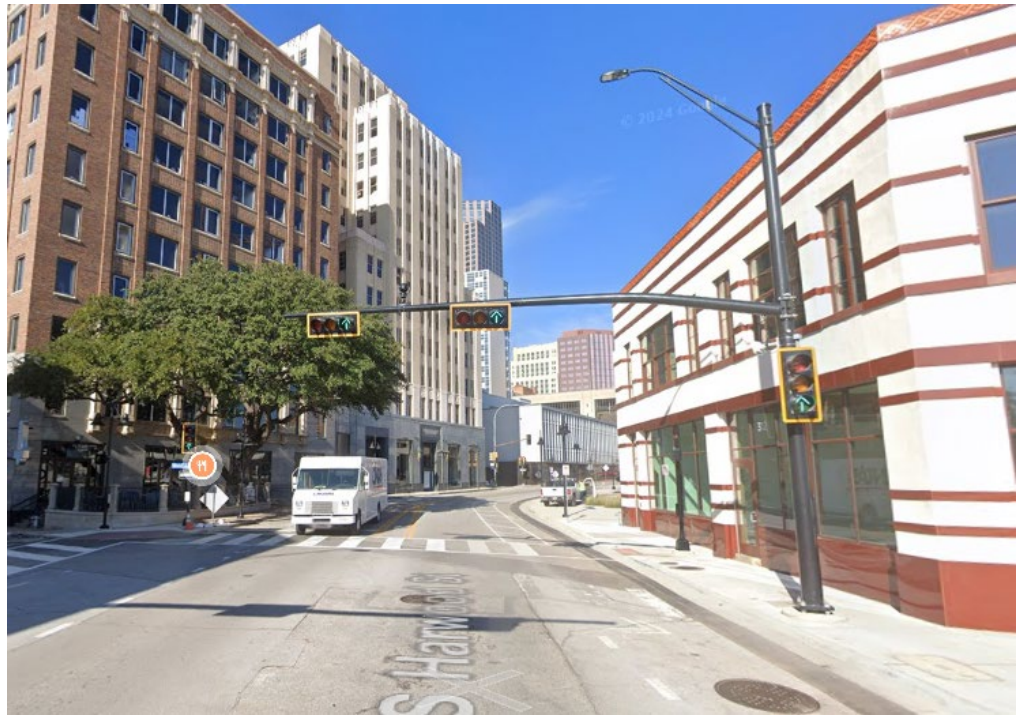
Recommendations- Upgrade/Replace Existing Signals

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 **September 30th**. Fill out one of the comment forms.

Project Webpage:

http://bit.ly/abramsk