

North Decatur Road Initiative

Public Work Session #2

June 21, 2023



Delivering a better world

STREET  **SMARTS**

The North Decatur Road Initiative

Agenda

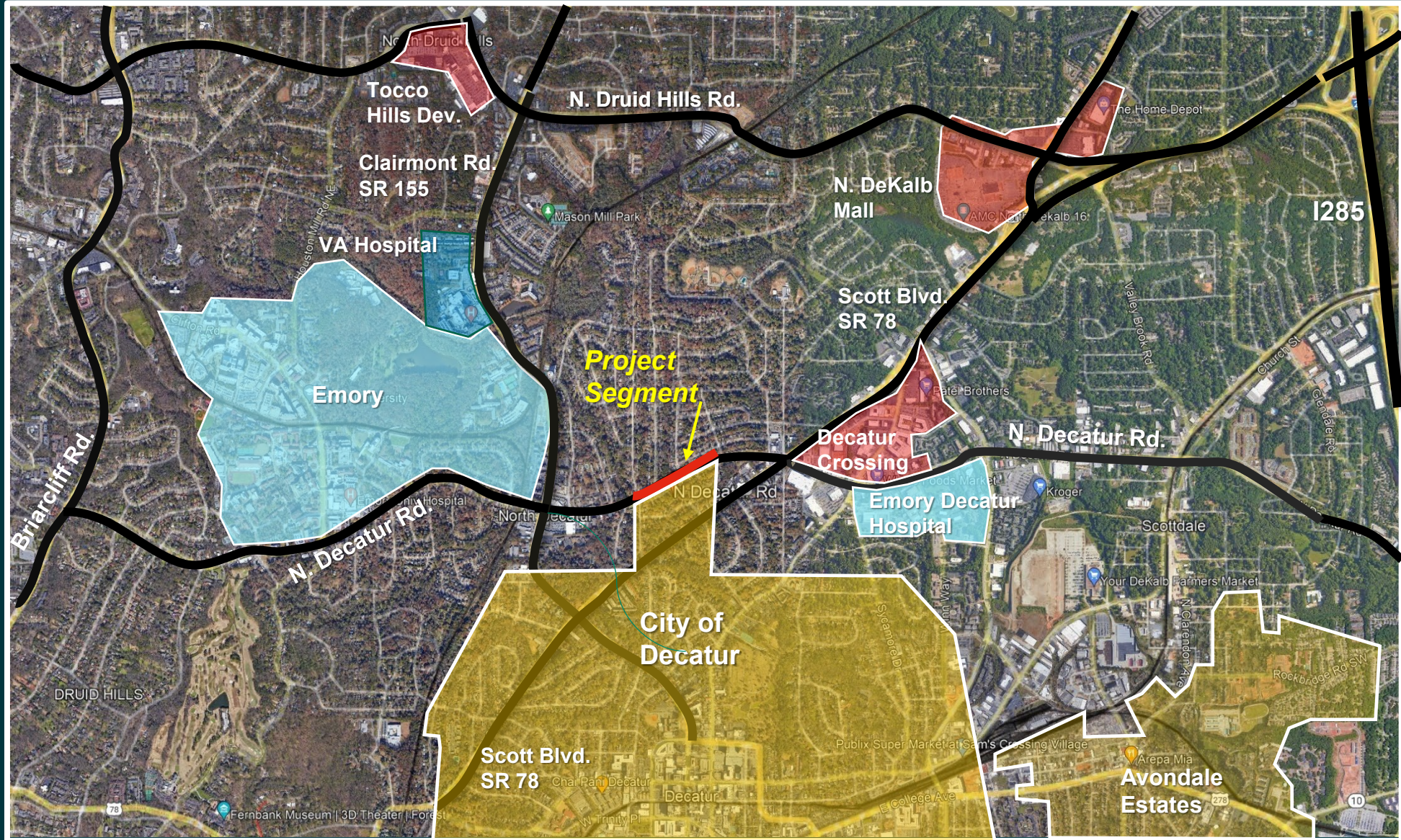
1. Introductions
2. Project Background
3. Your Role
4. Alternatives Overview
5. Traffic Analysis Results
6. Question and Answer Session
7. Next Steps



Project Background

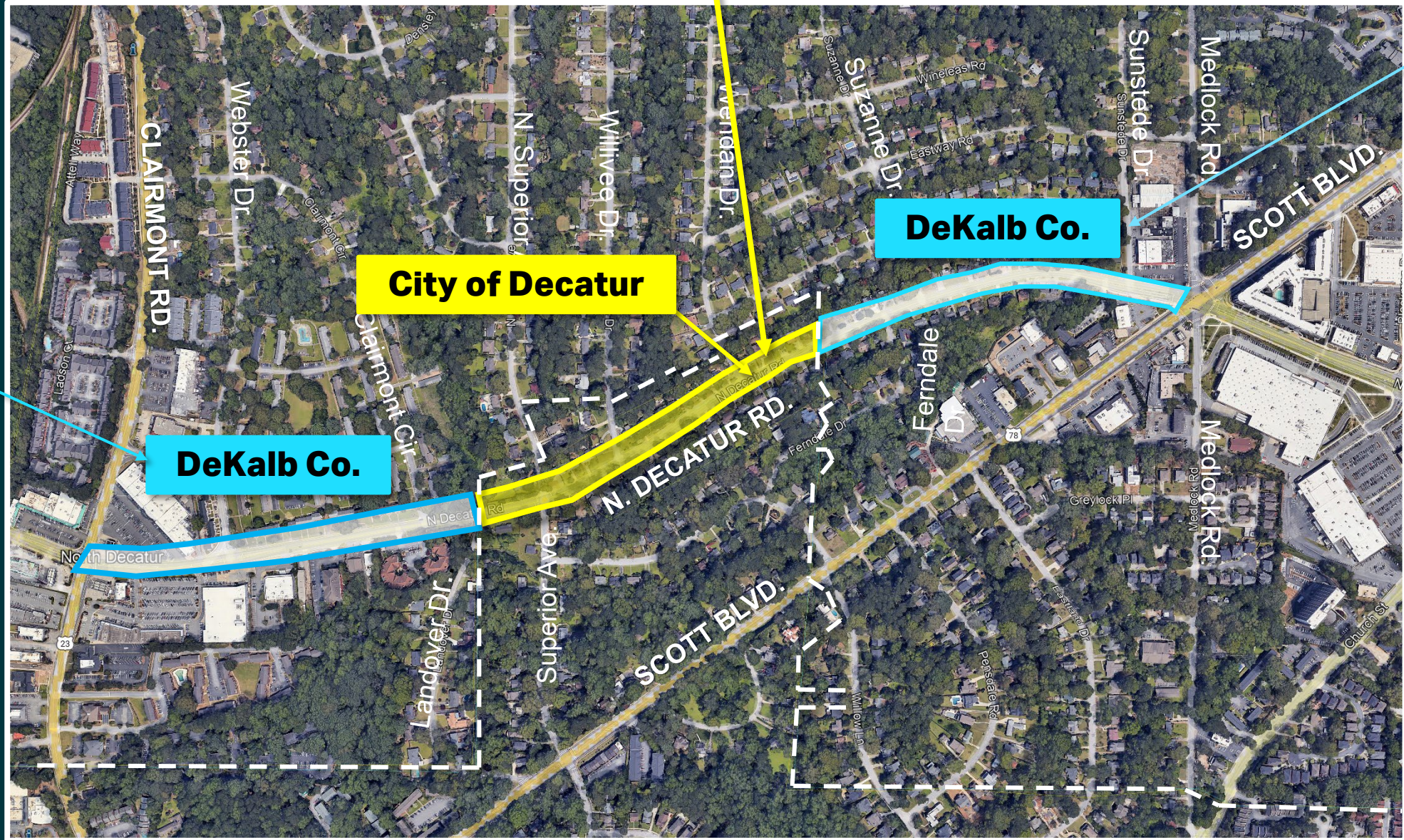


Project Location Map



Project Limits:

Project Limits = 1,745' +/-



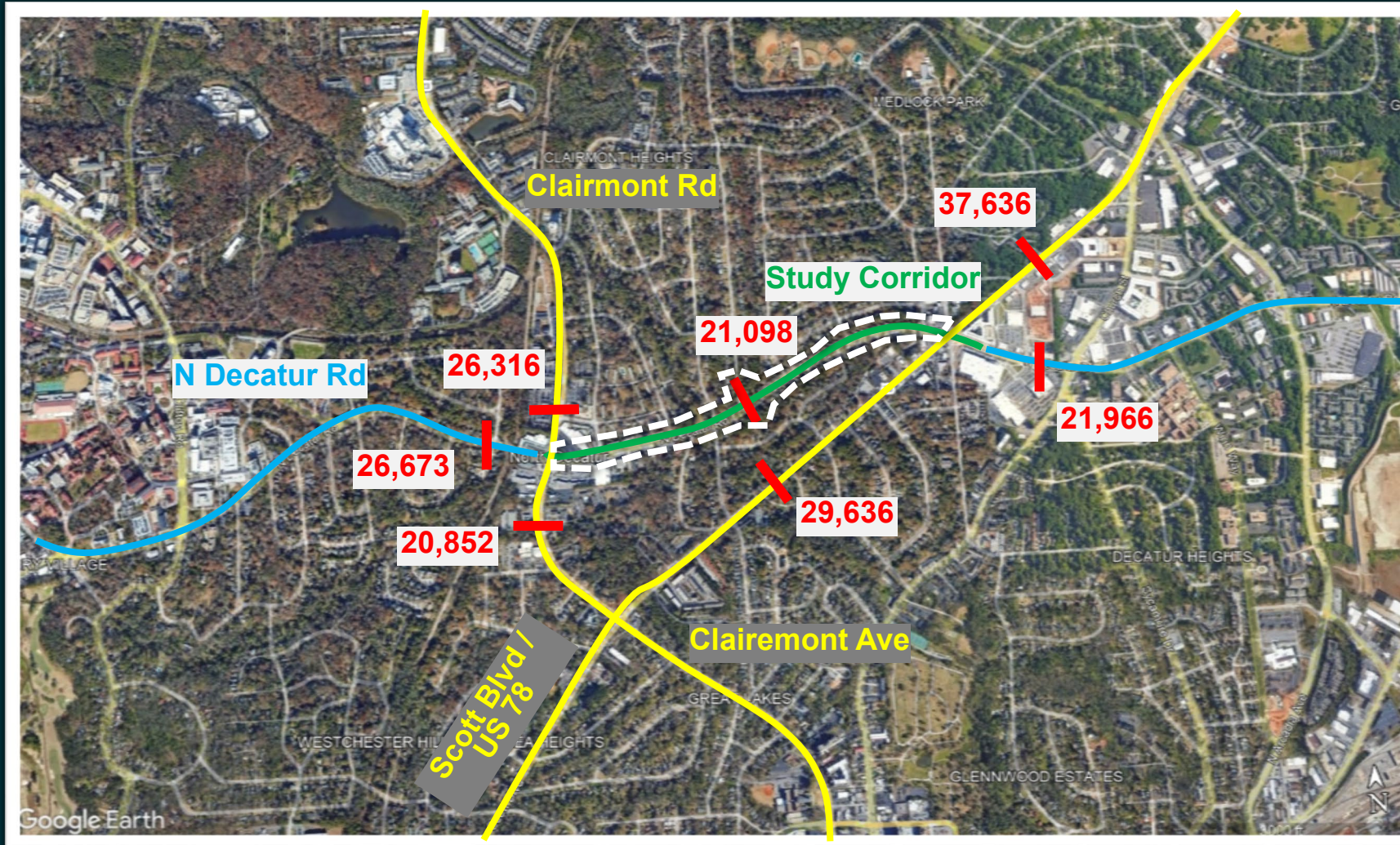
1,665' +/-

1,760' +/-



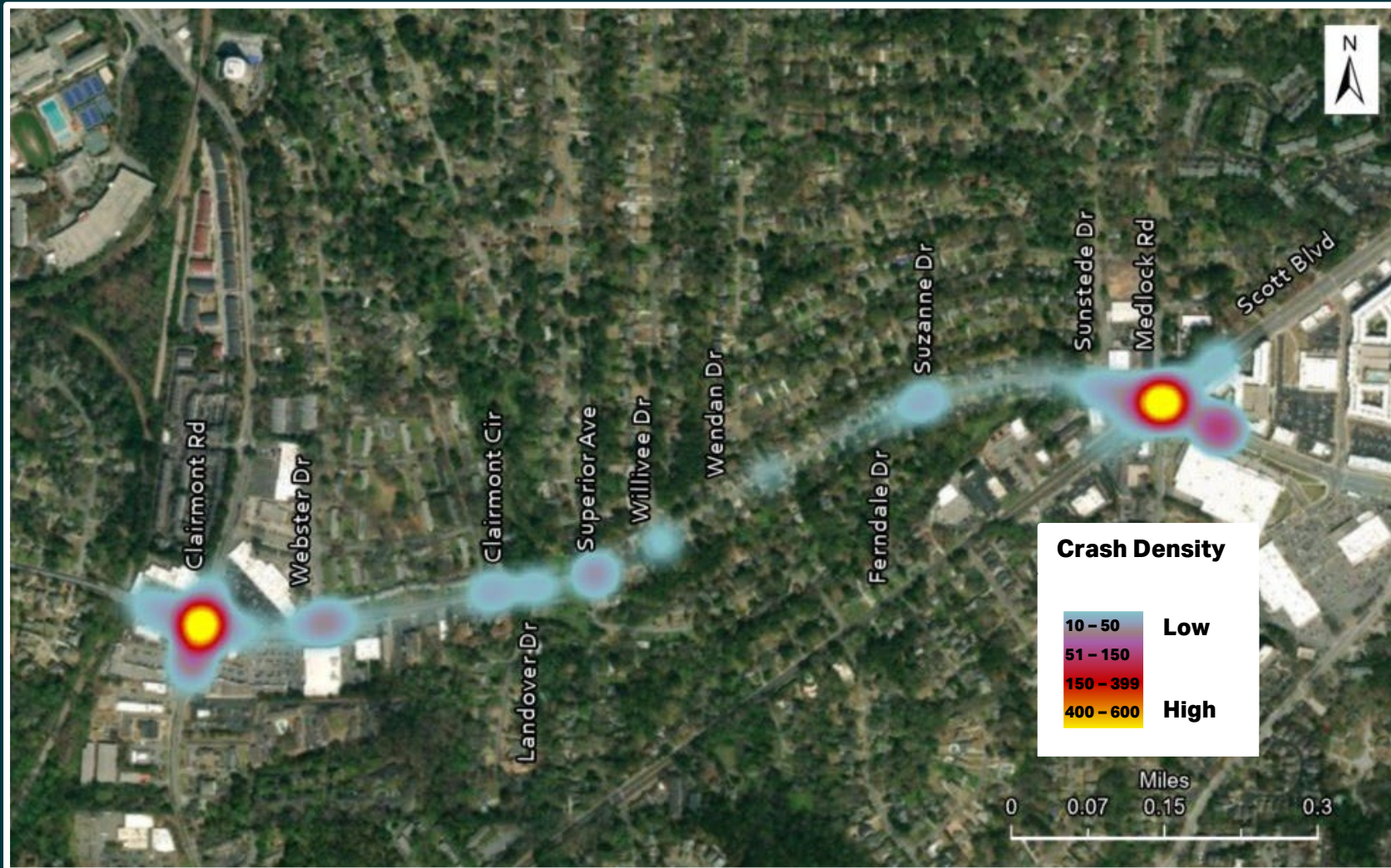
Daily Traffic Counts

Counts collected on Wednesday, November 9th and Thursday, November 10th of 2022.



Crash Analysis – Crash Density

N Decatur Road from Clairmont Road to Scott Blvd - January 1, 2013 to October 31, 2022

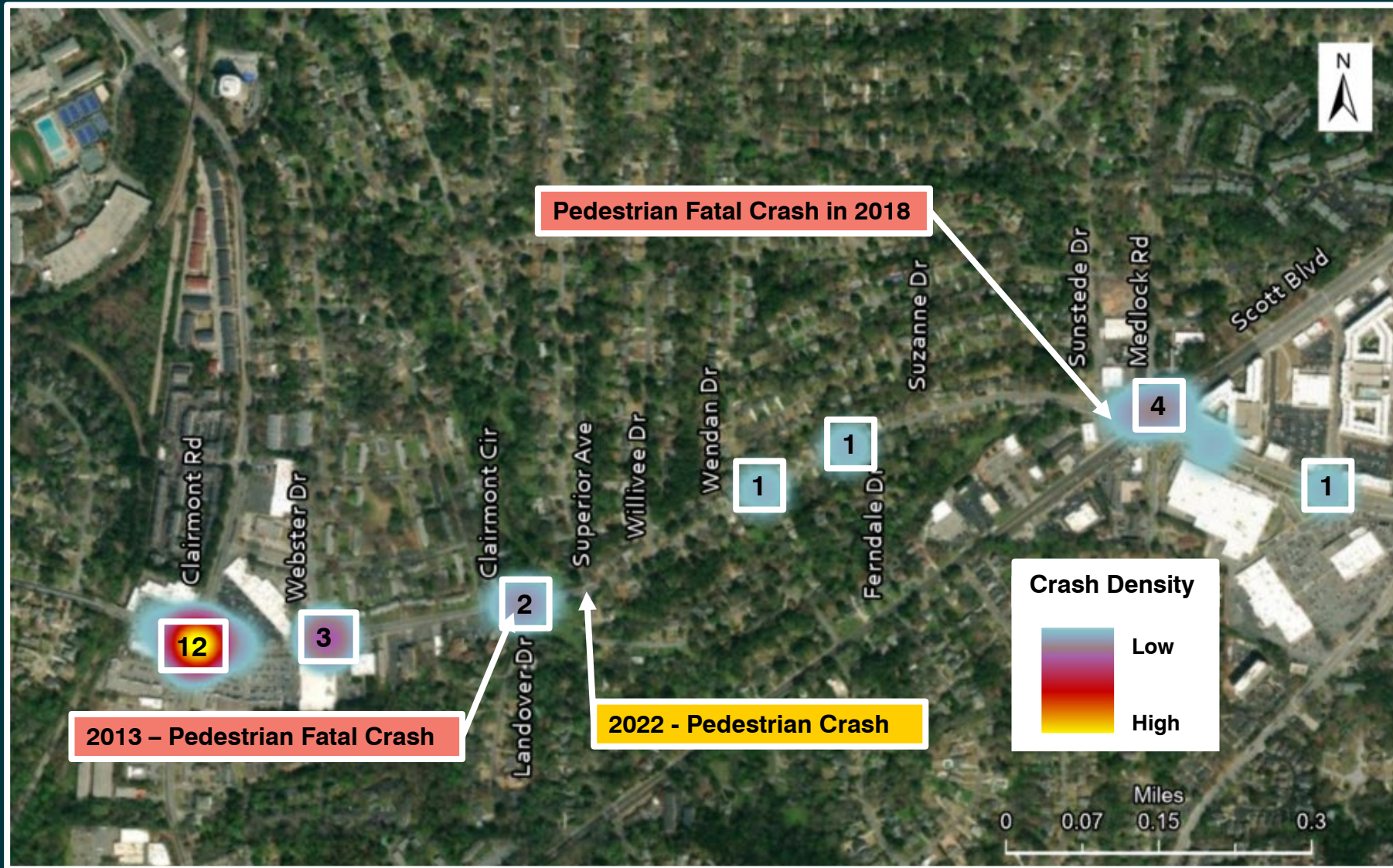


Source: Numetric, GEARS



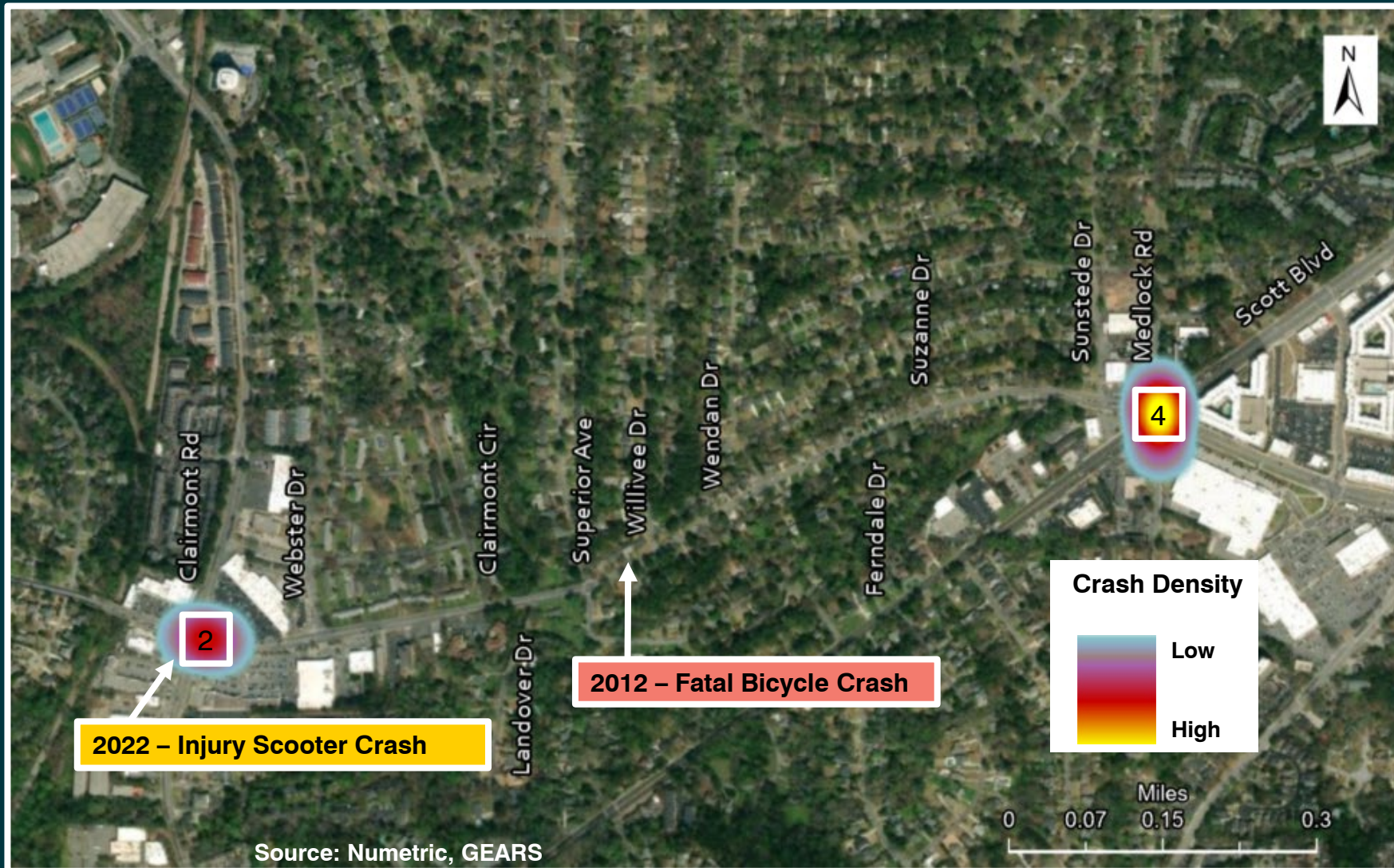
Crash Analysis – Pedestrian Crashes

N Decatur Road from Clairmont Road to Scott Blvd - January 1, 2013 to October 31, 2022



Crash Analysis – Bicycle Crashes

N Decatur Road from Clairmont Road to Scott Blvd - January 1, 2013 to October 31, 2022



Your Role - Your Road



Meaningful public involvement is crucial for success of this project.

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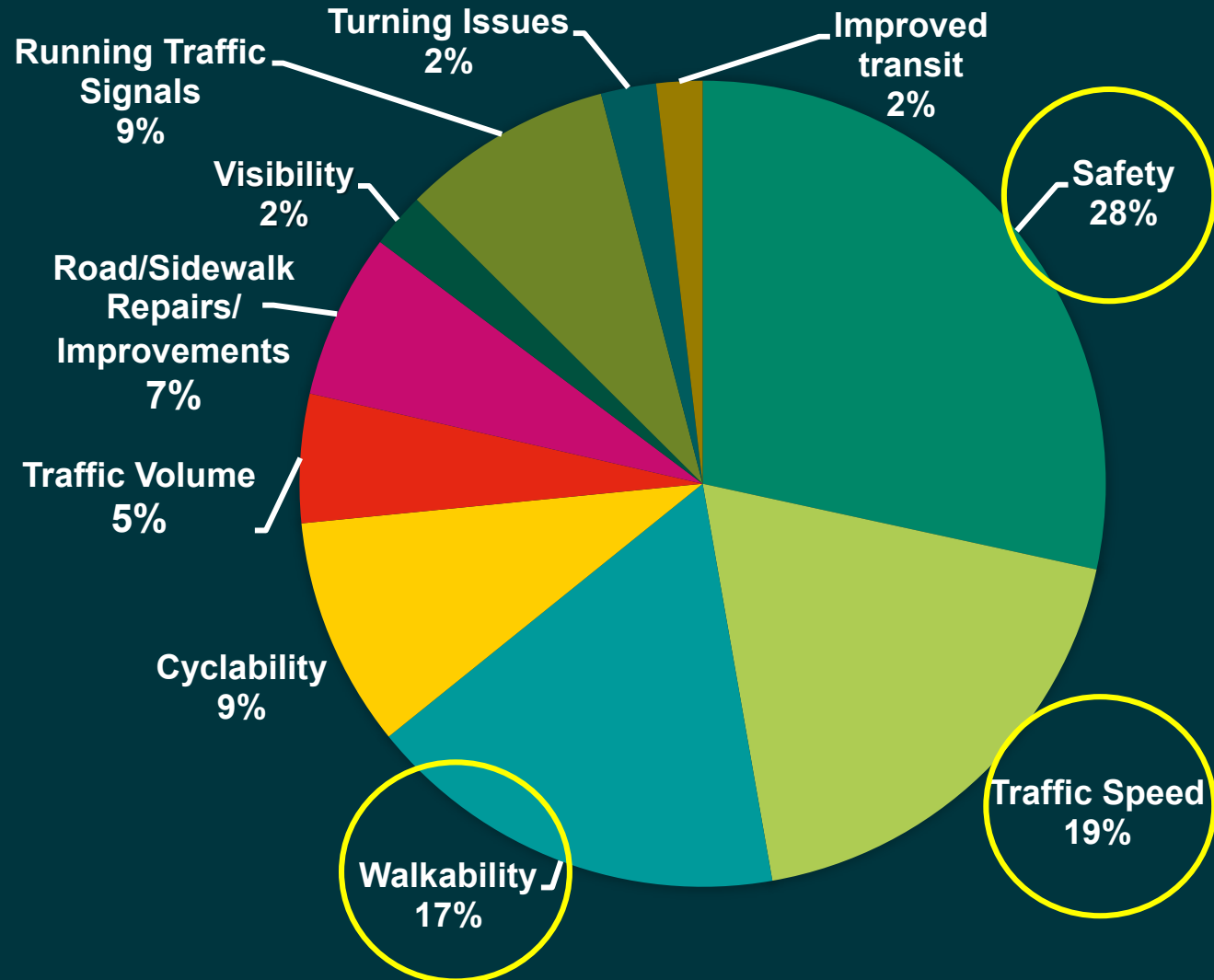
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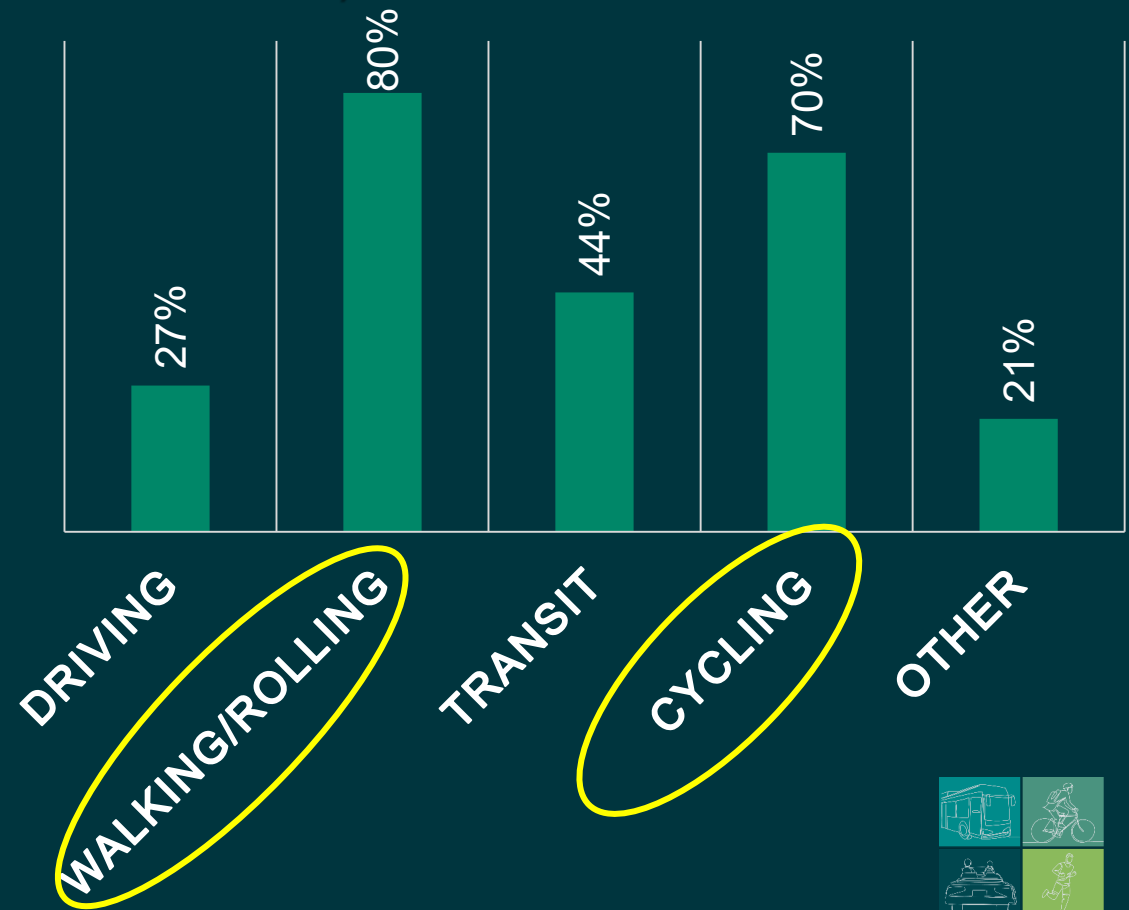
Public Feedback Summary

From December 7th 2022 to February 15th 2023

WHAT ARE YOUR MAIN CONCERNS REGARDING NORTH DECATUR ROAD? (% OF COMBINED RESPONSES)



WHAT TYPE OF TRANSPORTATION WOULD YOU LIKE TO SEE PRIORITIZED? (% OF INDIVIDUAL RESPONSES)



Alternatives Overview



Traffic Modeling Alternatives:

- **No Build - 4 Lanes (Existing)**
 - Sidewalks, ADA ramps, crosswalk improvements only
- **Road Diet/Lane Reduction - Complete Street**
 - Three lanes (One Eastbound, One Two Way Left Turn Lane, One Westbound)
 - From 100 ft east of Clairmont Circle to 300 ft east of Suzanne Drive
 - 10% Diversion
- **Road Diet/Lane Reduction - Complete Street with capacity improvements at Scott Boulevard/Dual Lefts**
 - Three lanes (One Eastbound, One Two Way Left Turn Lane, One Westbound)
 - From 100 ft east of Clairmont Circle to 300 ft east of Suzanne Drive
 - 10% Diversion
 - Capacity improvements at Scott Boulevard, **(Dual Lefts)**
 - Sunstede Drive changed to Right-In/Right-Out (RIRO)



Traffic Modeling Alternatives:

- **Imbalanced Lanes**

- Four lanes (Two Eastbound, One Two Way Left Turn Lane, One Westbound)
- From 100 ft east of Clairmont Circle to 300 ft east of Suzanne Drive
- 10% Diversion

- **Imbalanced Lanes with capacity improvements at Scott Boulevard**

- Four lanes (Two Eastbound, One Two Way Left Turn Lane, One Westbound)
- From 100 ft east of Clairmont Circle to 300 ft east of Suzanne Drive
- 10% Diversion
- Capacity improvements at Scott Boulevard, **(Dual Lefts)**
- Sunstede Drive changed to Right-In/Right-Out (RIRO)



Traffic Modeling Scenarios:

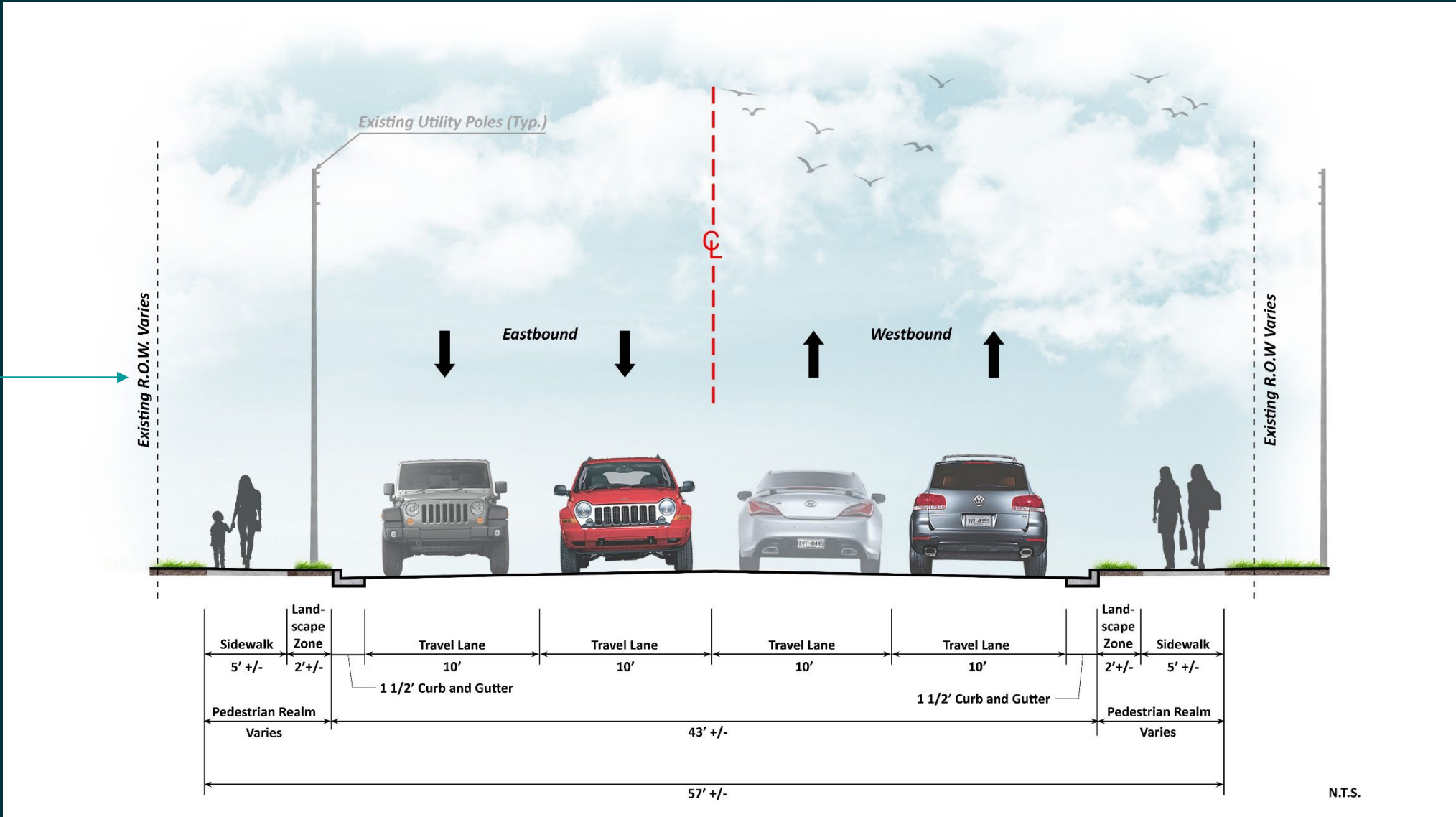
Roundabout at Superior Avenue:

- Single-lane Roundabout at Superior Avenue
 - One circulating lane with no bypass lanes
 - Needs to be implemented alongside a road diet
 - Assumes a reduced traffic flow based on 10% diversion.
- Hybrid Multi-lane Roundabout at Superior Avenue
 - Preserves two through lanes on N. Decatur Road eastbound and westbound approaches.
 - *Implemented without a road diet.*



Typical Section – No Build/Existing Alternative: Shoulder Improvements Only

Easements/ ROW will be required to accommodate a new sidewalk in some places



N.T.S.



Corridor Plan View - Alternatives: No Build - Shoulder Improvements



*Property lines are approximate only, typical

Corridor Plan View - No Build - Shoulder Improvements



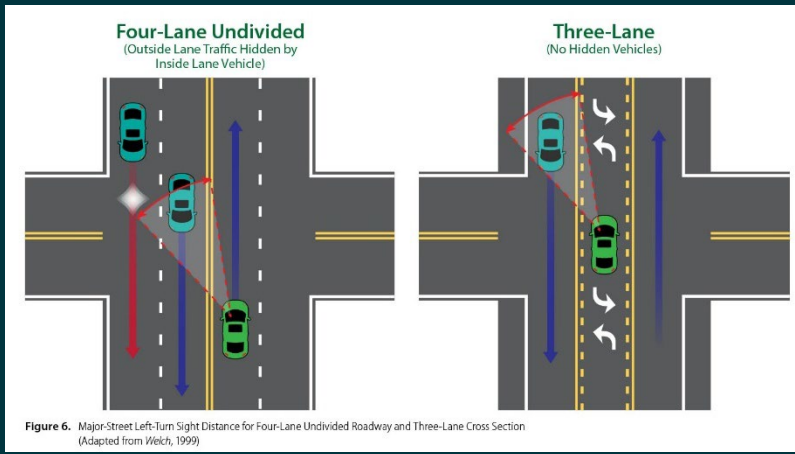
*Property lines are approximate only, typical

Road Diet/Lane Reduction Benefits:

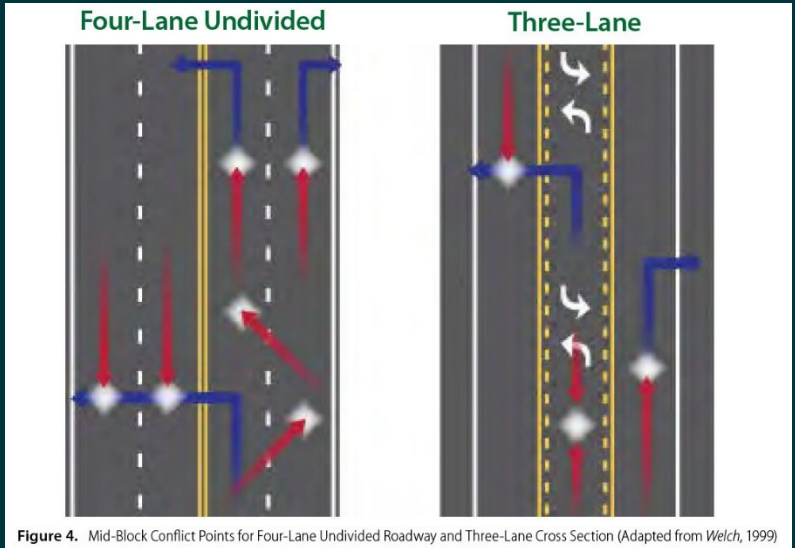
Benefits of Road Diet installations may include:

- An overall crash reduction of 19 to 47 percent.
- Reduction of rear-end and left-turn crashes through the use of a dedicated left-turn lane.
- Fewer lanes for pedestrians to cross and an opportunity to install pedestrian refuge islands.
- The opportunity to install bicycle lanes when the cross-section width is reallocated.
- Improved multi-modal safety and connectivity.
- Reduces conflict points.

Improves site distance for left hand turns

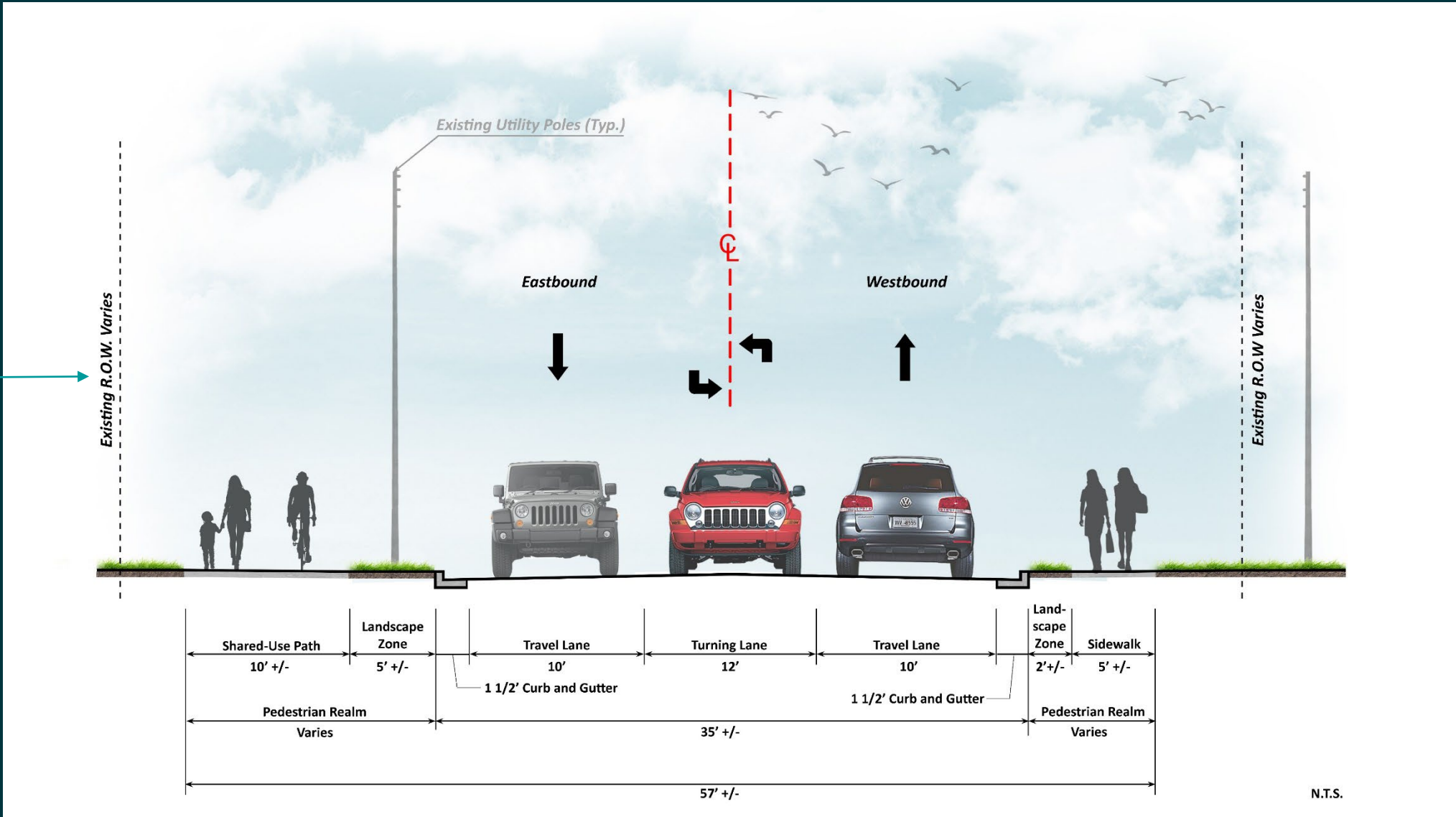


Reduces Conflict Points



Typical Section - Alternatives: Road Diet

Easements/ ROW will be required to accommodate the shared use path



Corridor Plan View - Alternatives: Road Diet/Lane Reduction



*Property lines are approximate only, typical

Corridor Plan View - Alternatives: Road Diet/Lane Reduction



*Property lines are approximate only, typical

Alternatives: Approximate Extents of Road Diet/Lane Reduction

Transition to Road Diet

Western terminus of road diet
~100 ft east of Clairmont Cir

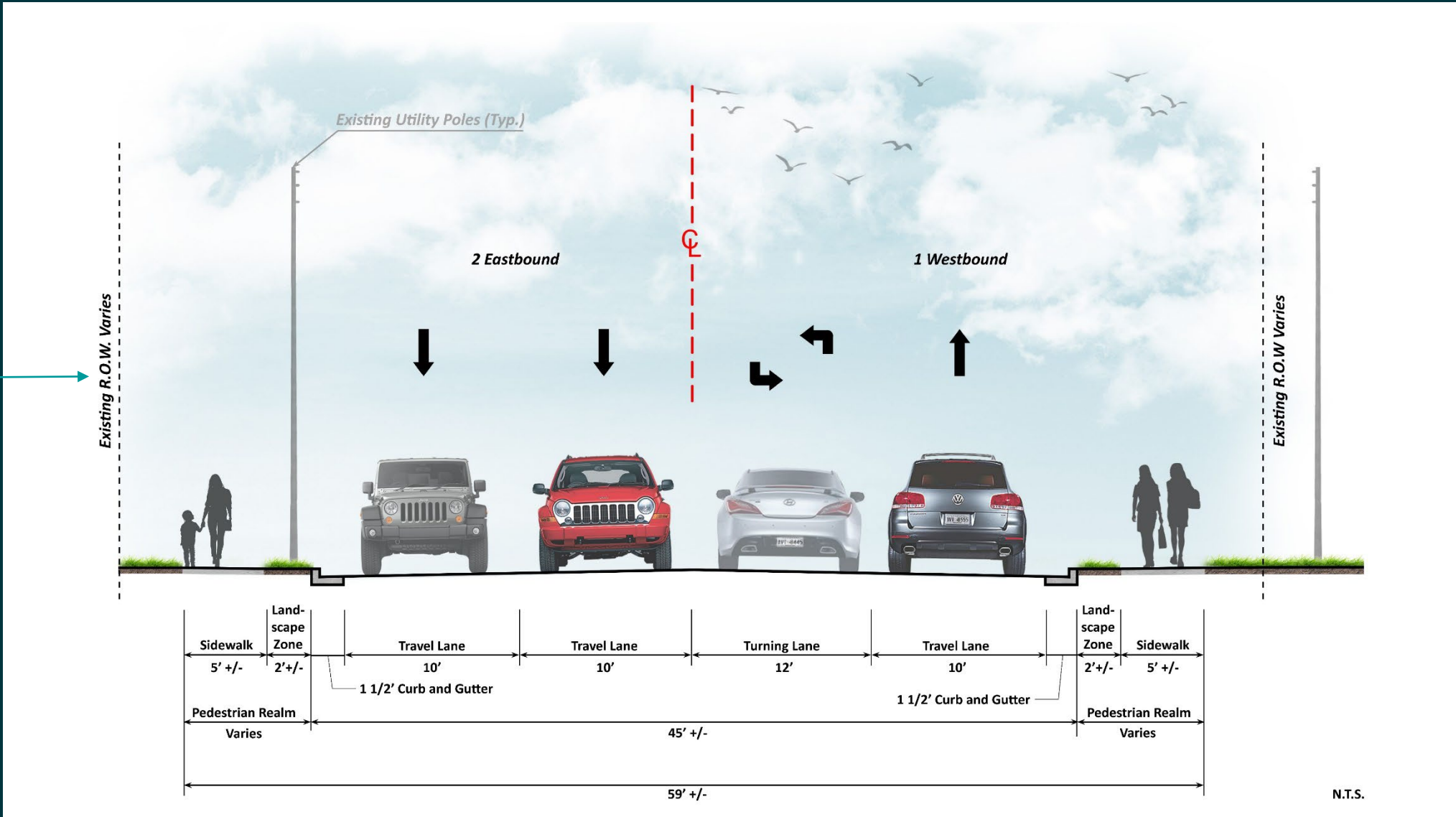
Eastern terminus of road diet
~300 ft east of Suzanne Drive

No geometric changes to Clairmont Road or Scott Boulevard intersections

Transition to Road Diet

Typical Section Alternatives: 2 Eastbound / 1 Westbound Imbalanced Lanes

Easements/ ROW will be required to accommodate a new sidewalk in some places



Corridor Plan View - Alternatives: 2 Eastbound / 1 Westbound Imbalance Lanes



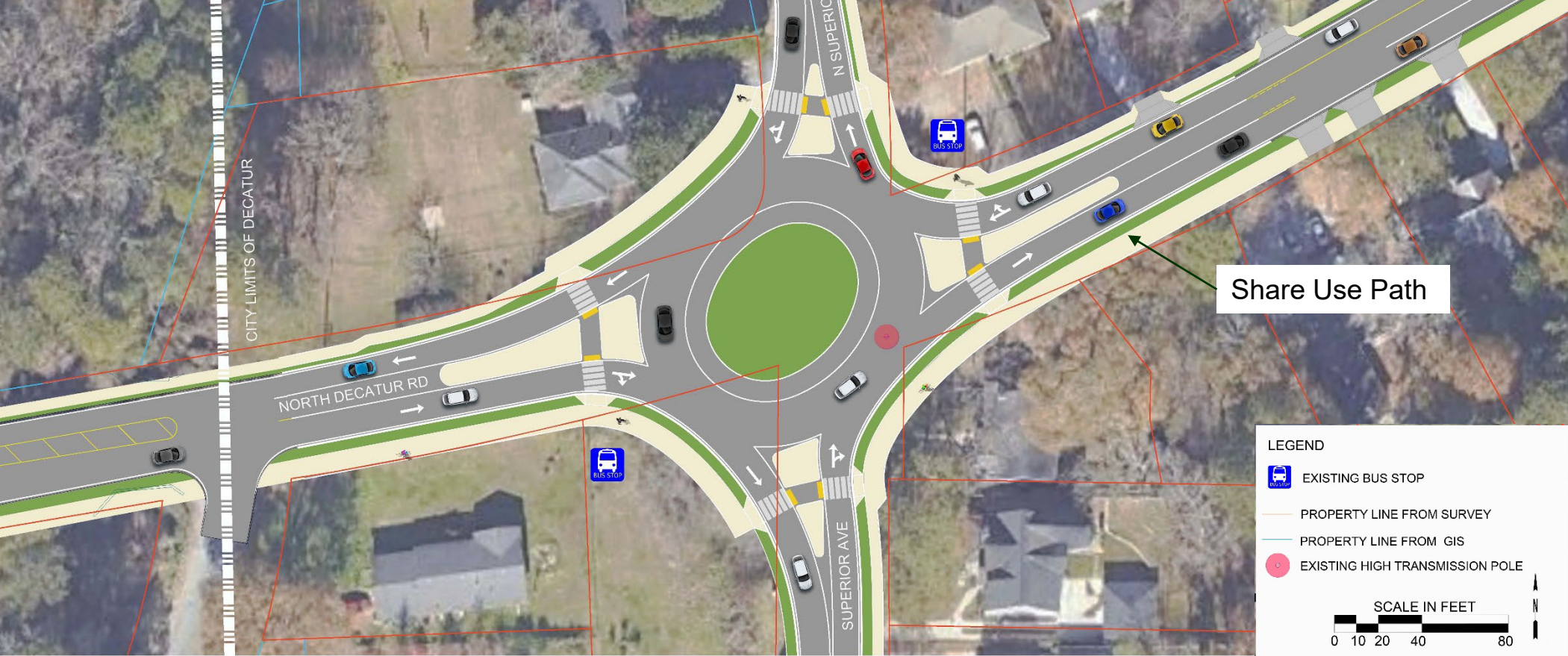
*Property lines are approximate only, typical

Corridor Plan View - Alternatives: 2 Eastbound / 1 Westbound Imbalanced Lanes



*Property lines are approximate only, typical

Single Lane Roundabout: Superior Avenue/N Superior Avenue



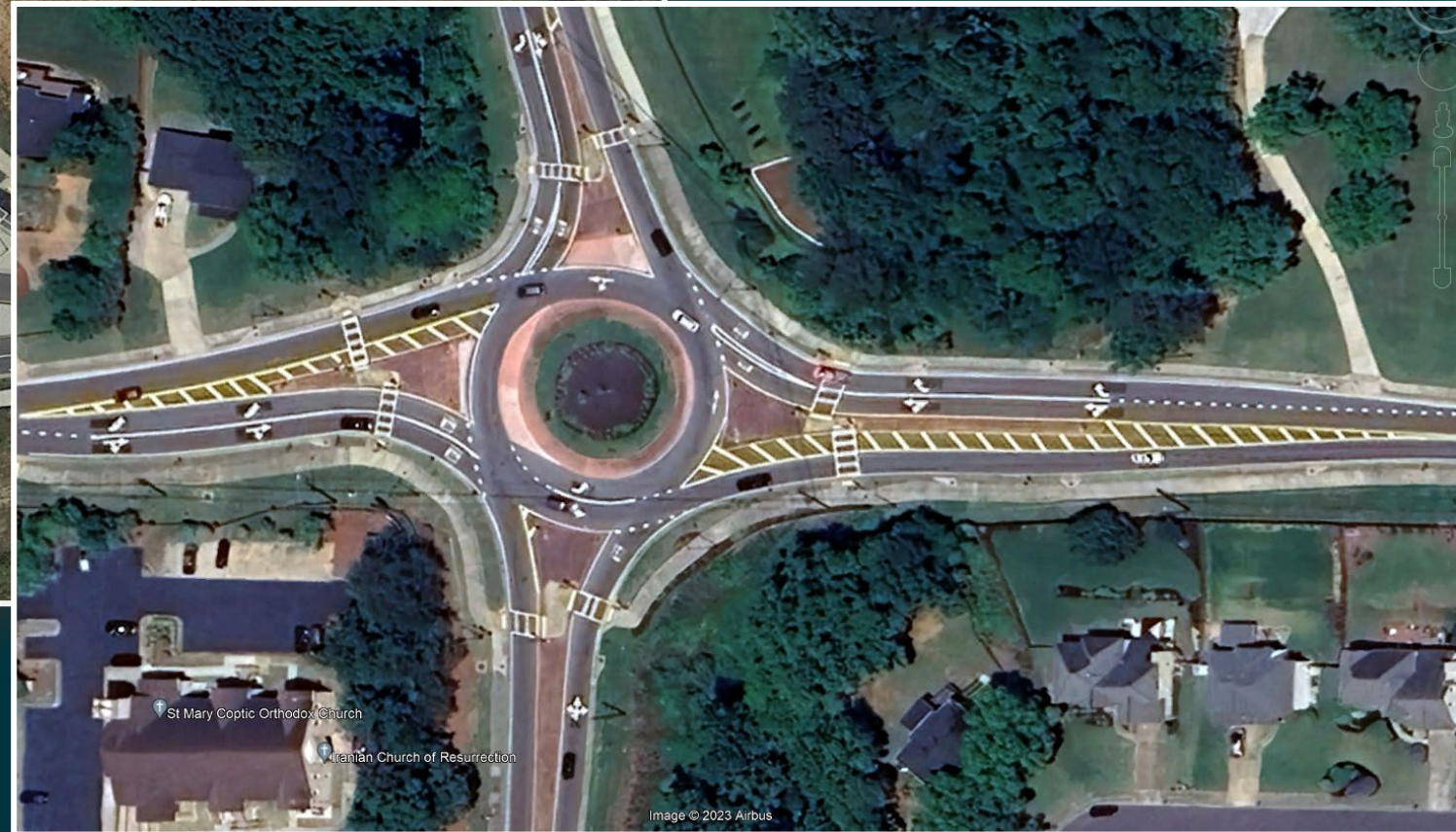
*Property lines are approximate only, typical

Hybrid Multi-Lane Roundabout: Superior Avenue/N Superior Avenue

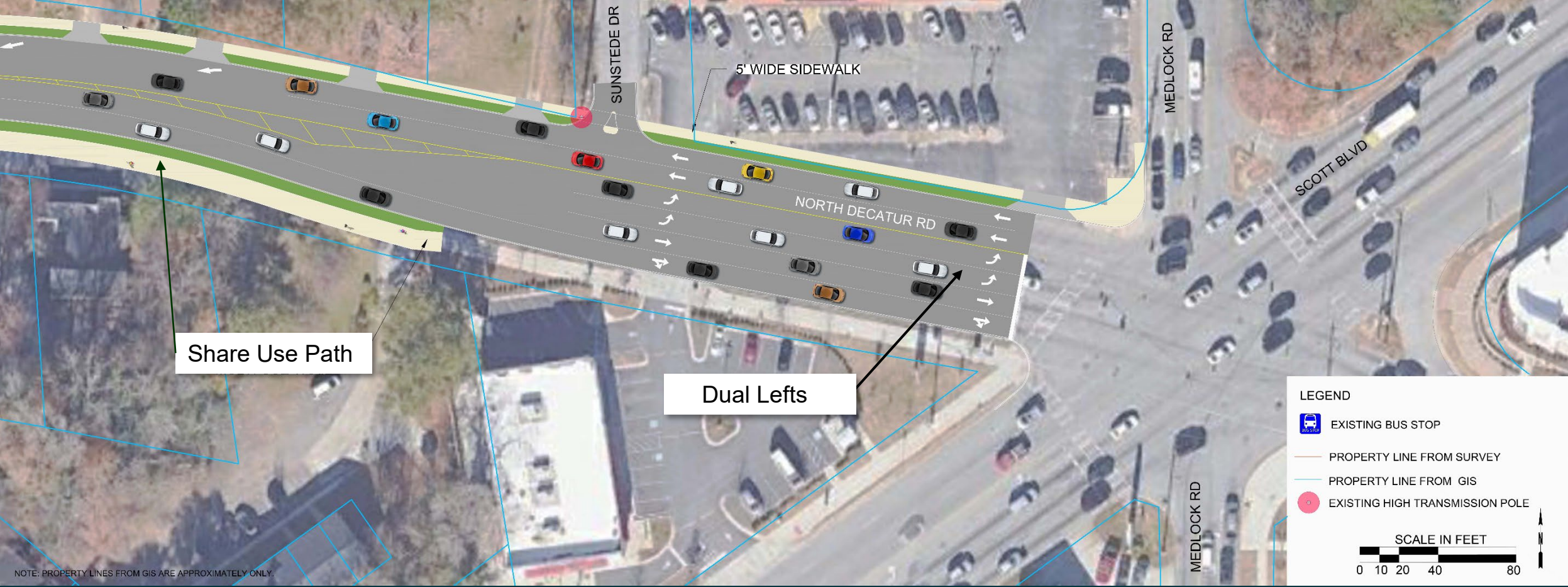


*Property lines are approximate only, typical

Hybrid Multi-Lane Roundabout: Examples



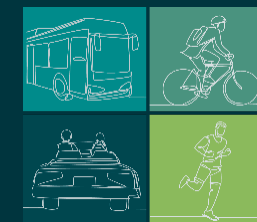
Capacity Improvements at Scott Boulevard & Medlock Road



NOTE: PROPERTY LINES FROM GIS ARE APPROXIMATELY ONLY.

*Property lines are approximate only, typical

Traffic Analysis Results



Traffic Analysis Assumptions:

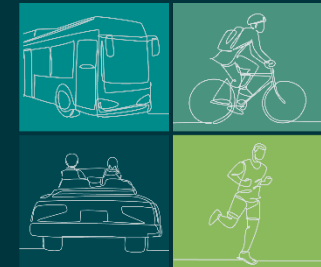
- 10% diversion of traffic assumed on North Decatur Road for all scenarios involving a lane reduction (road diet & imbalanced lanes)
- Capacity improvements were analyzed at Scott Blvd
Dual left turn lanes eastbound on North Decatur Road
(preserving one existing through and one shared through / right lane, Sunstede Drive to be right-in/right-out (RIRO))
- Growth Rate of 1.3%



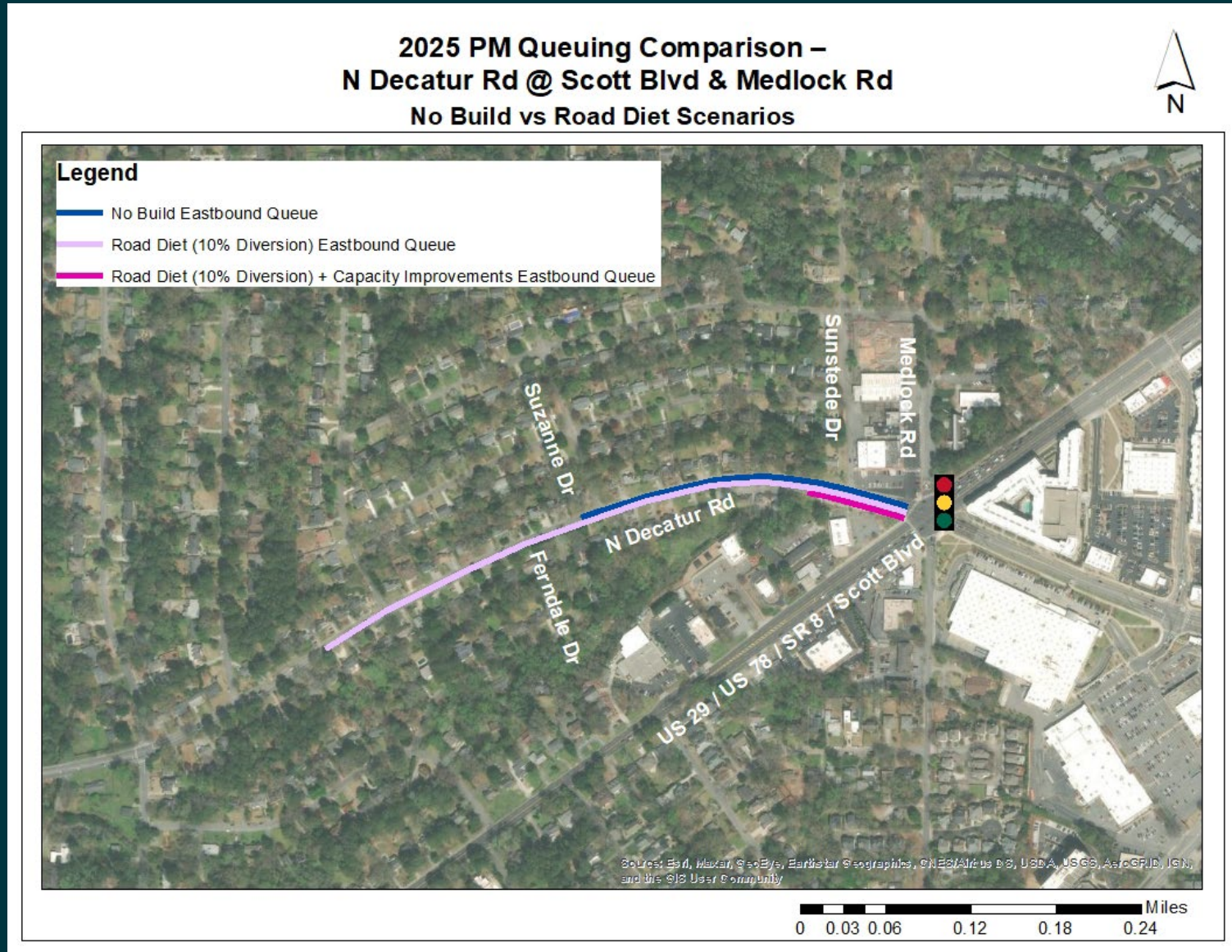
Road Diet Analysis: Queuing Comparison in Peak Hours (2025 AM)



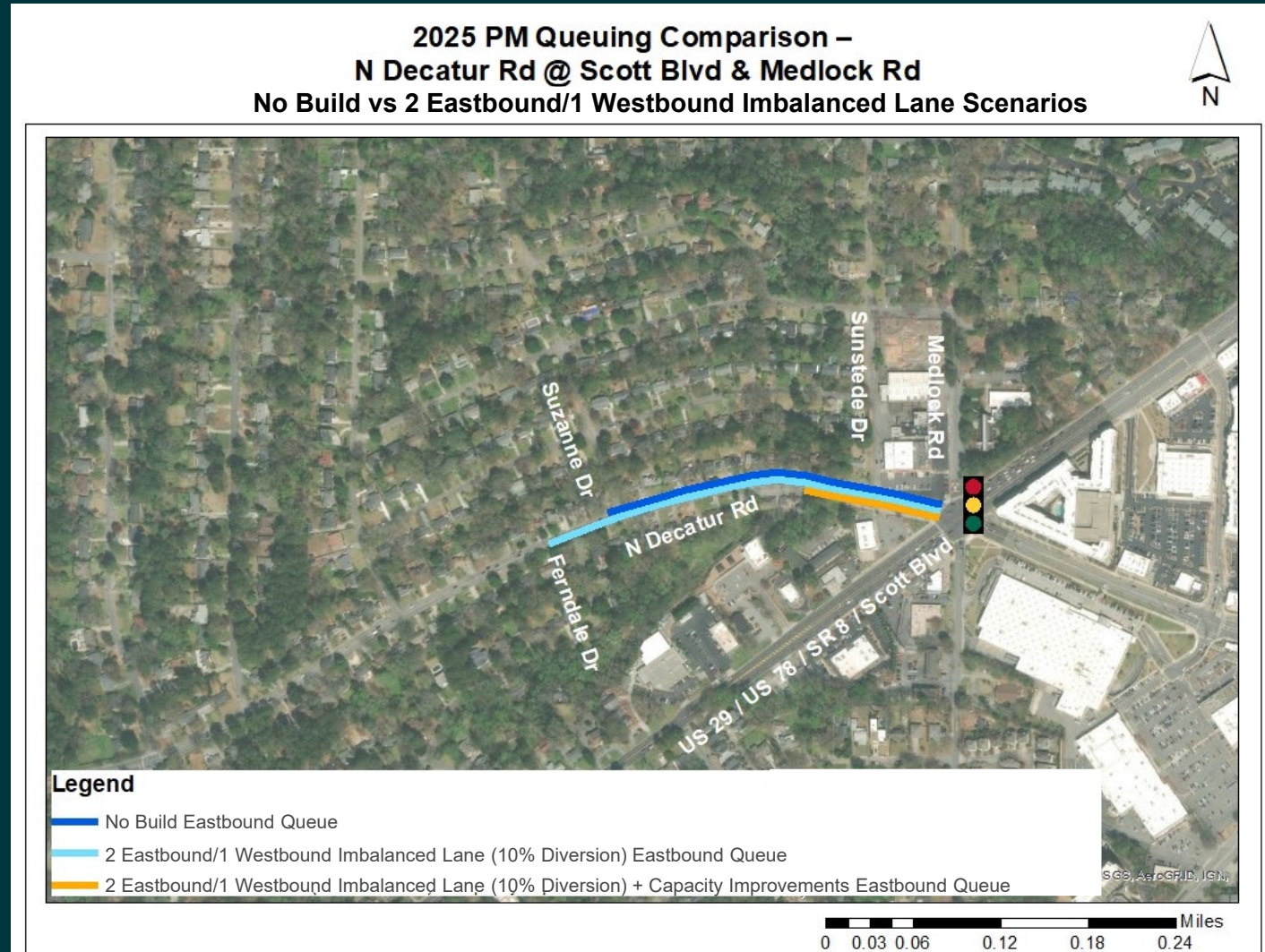
2 Eastbound / 1 Westbound Imbalanced Lanes Analysis: Queuing Comparison in Peak Hours (2025 AM)



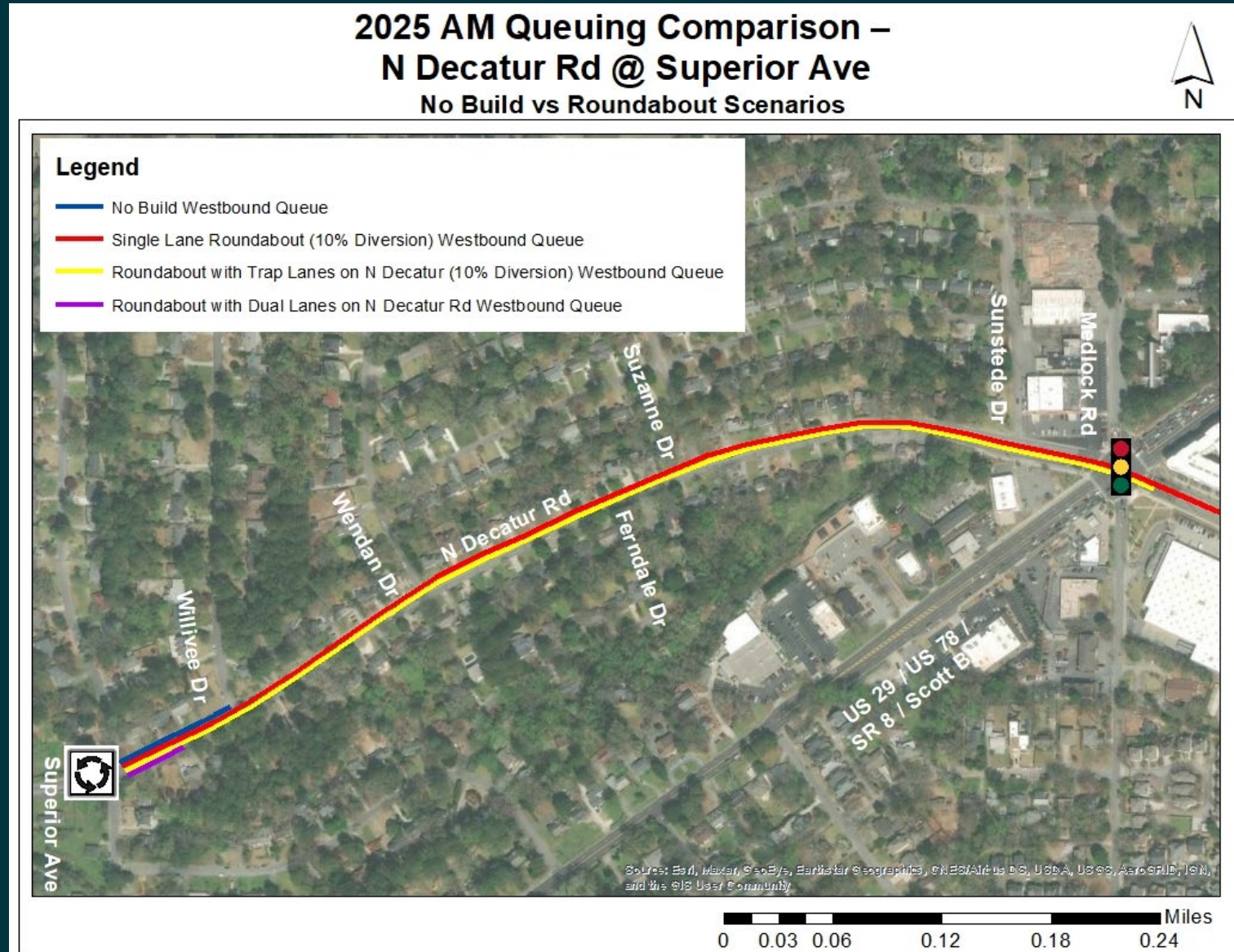
Road Diet Analysis: Queuing Comparison in Peak Hours (2025 PM)



2 Eastbound / 1 Westbound Imbalanced Lanes Analysis: Queuing Comparison in Peak Hours (2025 PM)



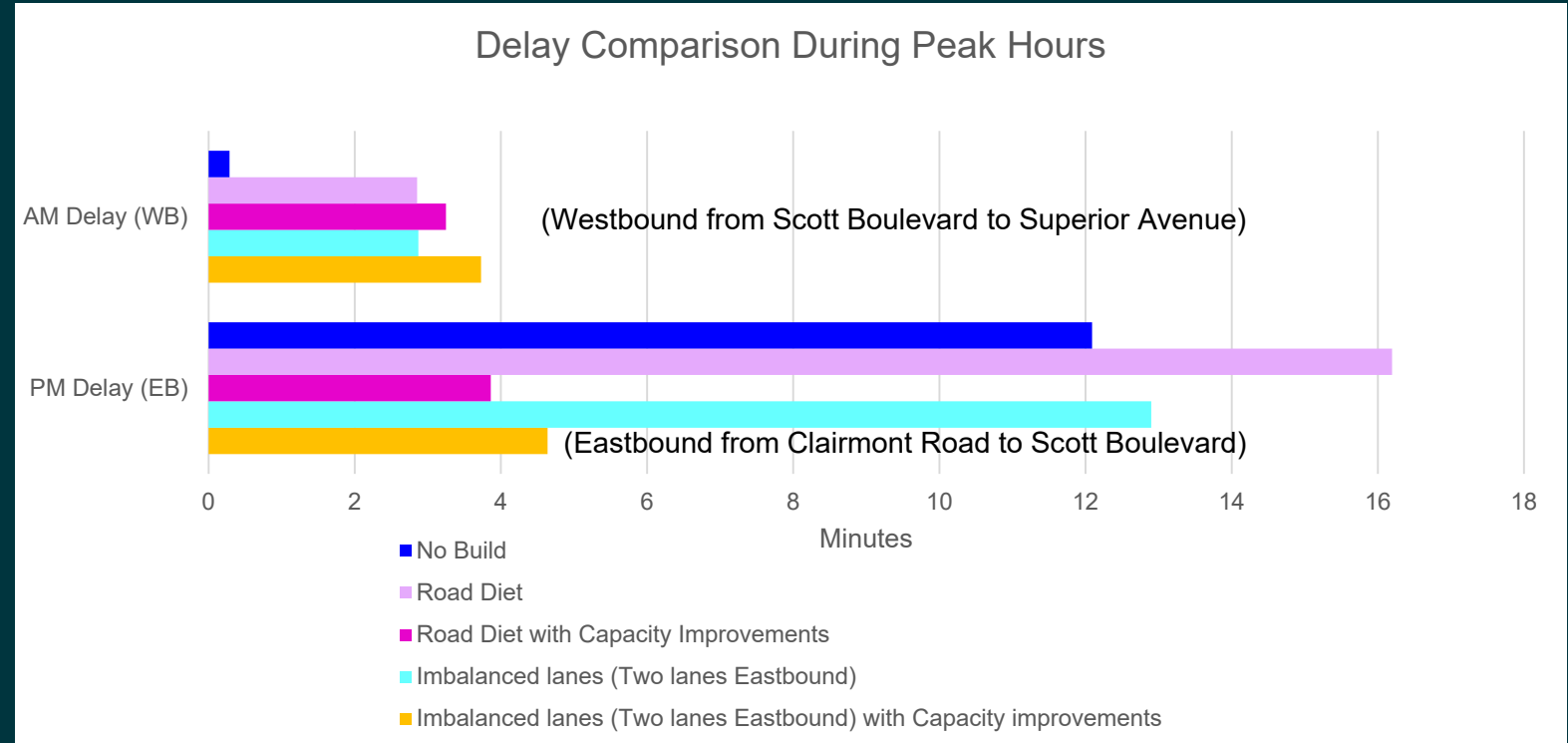
Roundabout Analysis: Queuing Comparison in Peak Hours (2025 AM)



Road Diet Analysis: Delay Comparison During Peak Hours

Differences in delay:

- The road diet and imbalanced lanes scenarios show increased delay in both AM and PM peak periods
- The results show that capacity improvements significantly reduce delay during the PM peak period but are not as effective in the AM peak hour
- Scott Boulevard intersection controls the capacity flowing throughout the corridor



Qualifiers:

AM delay reported is the average vehicle delay in minutes.

PM delay reported is the average vehicle delay in minutes.



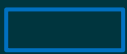
Evaluation Matrix

Roundabouts are evaluated only between the single and hybrid configurations and are only evaluated at the Superior Ave. intersection.

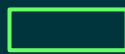
Legend Star Rating: ★ 1 to 5 Stars 5 Stars = Best	Road Diet/Complete Street	Road Diet/Complete Street <u>with Capacity Improvements at Scott Blvd.</u>	Imbalanced Lanes 2 East bound Lanes, 1 Center Two Way Left Turn Lane, 1 Westbound Lane	Imbalanced Lanes 2 Eastbound Lanes, 1 Center Two Way Left Turn Lane, 1 Westbound Lane <u>with Capacity Improvements at Scott Blvd.</u>	No Build-Shoulder Improvements 2' Buffer/5' Sidewalks	Single Lane Roundabout	Hybrid Multi-Lane Roundabout
Pedestrian Safety	★★★★★	★★★★★	★★★	★★★	★★★	★★★★★	★★★★
Bicycle Safety	★★★★★	★★★★★	★★	★★	★	★★★★★	★★★
Vehicle Safety	★★★★★	★★★★★	★★	★★	★	★★★★★	★★★★
Vehicle Traffic Operations	★★	★★★★	★★	★★★★	★★★★	★	★★★★
Cost	★★★	★	★★★	★★	★★★★	★★	★
Schedule/Time to Implement	★★★	★	★★★	★	★★★★	★	★



Safety



Traffic Operations



Cost



Schedule

Cost Estimates for Corridor Wide Alternatives

Estimate Qualifiers:

- Costs are planning-level only in today's dollars and are approximate only.
- Utility coordination has not been conducted.
- Existing pavement evaluation has not been conducted; however, conducting one is recommended.
- Mill and inlay with patching may not be a beneficial long-term solution.
- Full-depth reconstruction or pavement reclamation may be needed.
- Excludes ROW or Easement Costs for all corridor alternatives.
- Excludes drainage items and corridor wide streetscape improvements.

- **Road Diet w/ dual lefts at Scott Blvd. - \$9,600,000.00**
- **Road Diet - \$8,600,000.00**
- **Existing 4 - Lane Typical Section - \$8,200,000.00**
- **Imbalanced Lanes - \$8,800,000.00**
- **Imbalanced Lanes - w/ dual lefts at Scott Blvd. - \$9,200,000.00**

Cost Estimates

Estimate Qualifiers:

- Costs are planning-level only in today's dollars.
- Utility coordination has not been conducted.
- Existing pavement evaluation has not been conducted; however, conducting one is recommended.
- Mill and inlay with patching may not be a beneficial long-term solution.
- Full-depth reconstruction or pavement reclamation may be needed.
- Excludes ROW costs for road diet and non-road diet alternatives.
- Excludes drainage items.

▪ **Single-lane roundabout at Superior Avenue - \$7,700,000.00**

Including: Roundabout with 120' inscribed circle diameter, tying in all approaches, ROW impacts to at least 6 properties, 3 residential displacements and associated fees, relocation of high-tension electrical transmission tower(s) at the intersection.

▪ **Hybrid Multi-Lane roundabout at Superior Avenue - \$10,200,000.00**

Including: Roundabout with 150' inscribed circle diameter, tying in all approaches, ROW impacts to at least 8 properties, 3 residential displacements and associated fees, relocation of high-tension electrical transmission tower(s) at the intersection.

Question and Answer



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What do you consider the highest priority for improvements to the N. Decatur Rd. corridor?

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From a safety perspective, which mode of transportation do you think should be the highest priority?



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For improved safety, are you willing to support the anticipated 10% diversions and associated delays as presented today?

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Which corridor alternative would you support?

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Would you support a Hybrid Multi-Lane Roundabout as a stand alone treatment at Superior Ave.?



Next Steps

- Public meeting #3, July 20th, 2023 from 6:00pm to 8:00pm at N. Decatur Presbyterian Church
- Complete technical memorandum, August, 2023

Thank you!

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Safety Countermeasure Toolkit for Improved Safety

Pedestrian Crossings & Sidewalks

- High Visibility Crosswalks
- Pedestrian Hybrid Beacons (PHB)
- Improved Street and Pedestrian Lighting
- Sidewalk Improvements (Connectivity, Width, Buffer, ADA Ramps).

Speed Management

- Speed Feedback Signs
- New 6" Tall Curbs
- Streetscape elements such as landscape buffers, street trees where feasible

Intersection Treatments

- Leading Pedestrian Interval (LPI) at Superior Ave
- Pedestrian Scramble Phase at Superior Ave
- Signal Rest in Red or Pedestrian Recall
- Signal Back Plates with Retroreflective Borders
- Signal Ahead Signage
- Vegetation Trimming and Management
- Treated intersection with texture/color at Superior Ave

Lane and Roadway Departure

- Wider (6") Edge Lines
- Raised Pavement Markers
- Chevron Signage on Curves
- Audible Profiled Thermoplastic with Raised Bumps on Centerline – GDOT looking at application for urban settings in new rumble strip policy. (e.g., curve between Sunstede Dr and Suzanne Dr)