

Route 28 at Chickatawbut Road Intersection Improvement Project Milton, MA

Virtual Design Public Hearing

October 27, 2022 | 7:00 p.m. – 8:00 p.m. Project File No. 607342



Zoom Public Hearing Webinar Controls



Drop down menu to check microphone and speakers



Ask a question and share comments



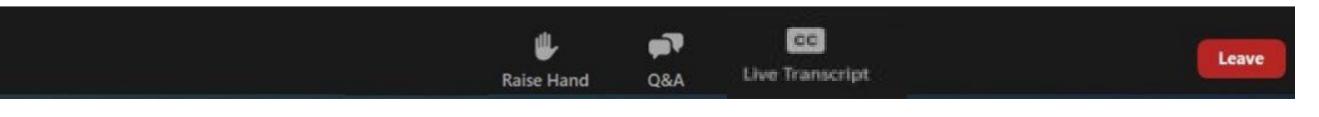
Raise your hand - *9 for users dialing in (Alt + Y to raise your hand)



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Public Meeting Notes and Procedures

Public Record

- chat transcript or written record of this meeting. Please use the Q&A feature for project related business only.
- The Massachusetts Department of Transportation may choose to retain and distribute the All written recordings and chat transcript will be considered a public record.

Important Notes

- Your microphone and webcam are automatically disabled upon entering the meeting. The meeting will be open to questions and answers at the end of the presentation. ullet• Please take time to respond to our survey at the end of the presentation. Your feedback
- is important.



Notice of MassDOT's Policy on Diversity and Civil Rights:

- All MassDOT activities, including public meetings, are free of discrimination.
- MassDOT complies with all federal and state civil rights requirements preventing discrimination based on sex, race, color, ancestry, national origin (limited English) proficiency), religion, creed, gender, sexual orientation, gender identity or expression, or veteran's status.
- We welcome the diversity from across our entire service area. If you have any questions or concerns, please visit https://www.mass.gov/nondiscrimination-intransportation-program to reach the Office of Diversity and Civil Rights.

Thank you for joining our meeting. We appreciate your participation!



Panel

MassDOT Highway Division

- Joshua Bartus Project Manager
- Erin Kinahan MassDOT District 6
- Robert Bertoldi Right of Way Bureau ullet

Town of Milton

Chase Berkeley, P.E. – DPW Director •

Howard Stein Hudson

- Steven Tyler, P.E. Project Manager
- Jessica Lizza, P.E., PTOE Manager of Traffic Engineering ullet

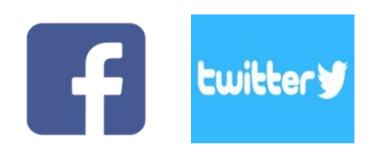
Producers

- Adetoyin Olaoye
- Leah Grodstein



Outreach Conducted for the Design Public Hearing

- Meeting notice published in local newspapers:
 - The Patriot Ledger
 - The Milton Times
- Flyer and meeting notices shared with Town of Milton
- Flyer and meeting notices shared with organizations in Milton and surrounding area:
 - Boston Region MPO
 - Boston Center for Independent Living ullet
 - Milton Senior Center (Council on Aging)
 - African Immigrant Legal Services
- Hearing information shared through MassDOT's website and social media





Agenda

- **01** Welcome and Opening Remarks
- 02 Project Overview
- **03** Existing Conditions
- 04 Project Goals
- 05 Proposed Design
- **06** Impact to Environment
- 07 Right of Way
- **11** Construction Approach
- 12 Next Steps
- **13** Questions & Feedback



Purpose of Project

- Improve safety and traffic conditions at the intersection of Route 28 (Randolph) \bullet Avenue) at Chickatawbut Road in Milton
- Consistently in the Top 5 of High Crash Locations in Massachusetts
- The project will improve vehicular, pedestrian, and bicyclist safety
- Include aesthetic improvements to this important gateway intersection into the Town \bullet of Milton and Metropolitan Boston



Project Area

Jurisdiction

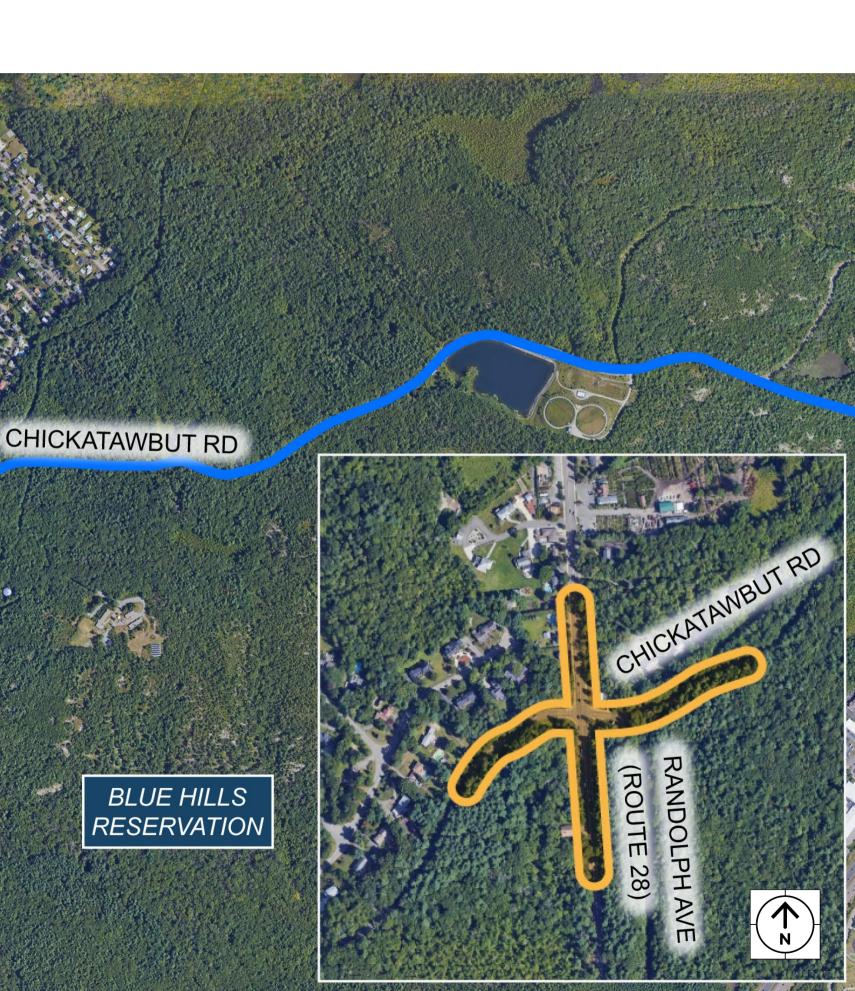
Massachusetts Department of Transportation (MassDOT)

Department of Convservation and Recreation (DCR)

BLUE HILLS RESERVATION RANDOLPH AVE (ROUTE

28)

CHICKATAMBUT RD



How Did We Get Here?

November 2016

Road Safety Audit conducted due to intersection being identified as a highcrash location **Winter** 2018 - 2019

Draft Conceptual Designs presented to MassDOT

Summer 2019

Public Information Meeting presenting intersection alternatives

Milton Select Board Meeting 10

2019 - 2022

Responded to comments received at previous meeting, design development, coordination with stakeholders, DCR, Town, and utilities, design considerations

October 2022

Virtual Design Public Hearing



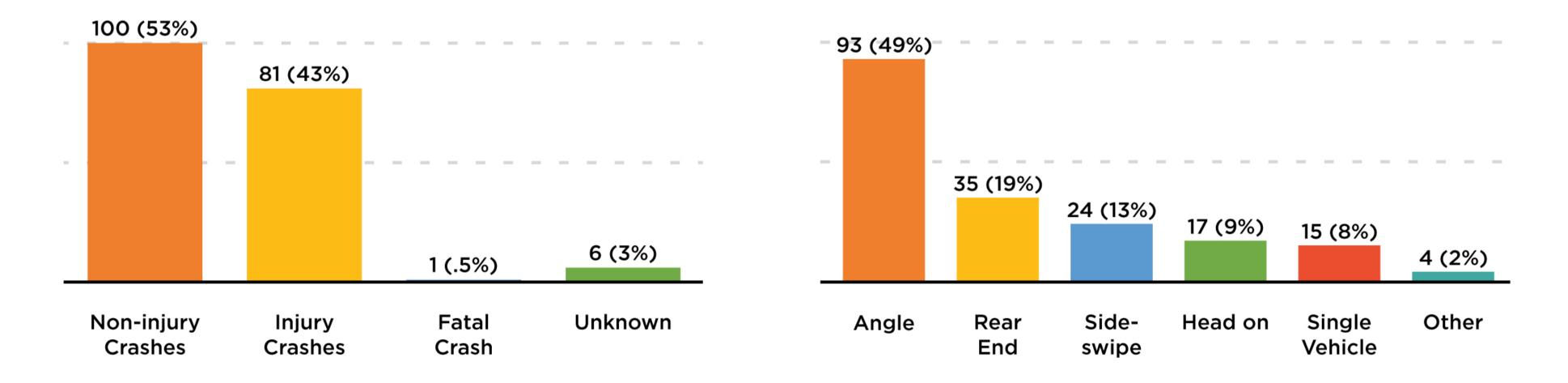


Why was this project initiated?

Crash Summary (2016-2022 Total Crashes: 188)

Crash Severity (2016-2022)

Crash Types (2016-2022)





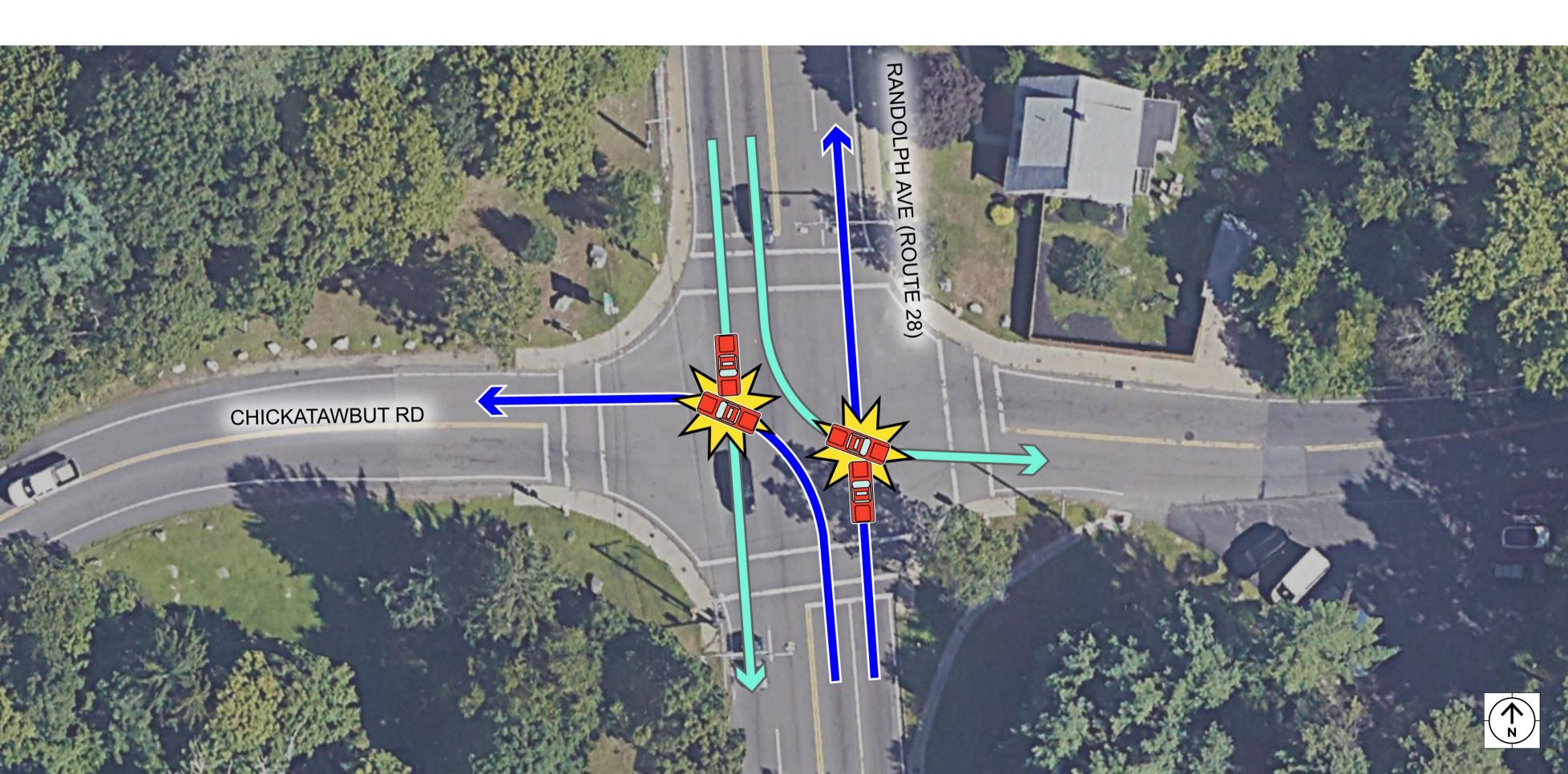
Existing Left-Turn Conflicts



Randolph Avenue looking north at the intersection with Chickatawbut Road.



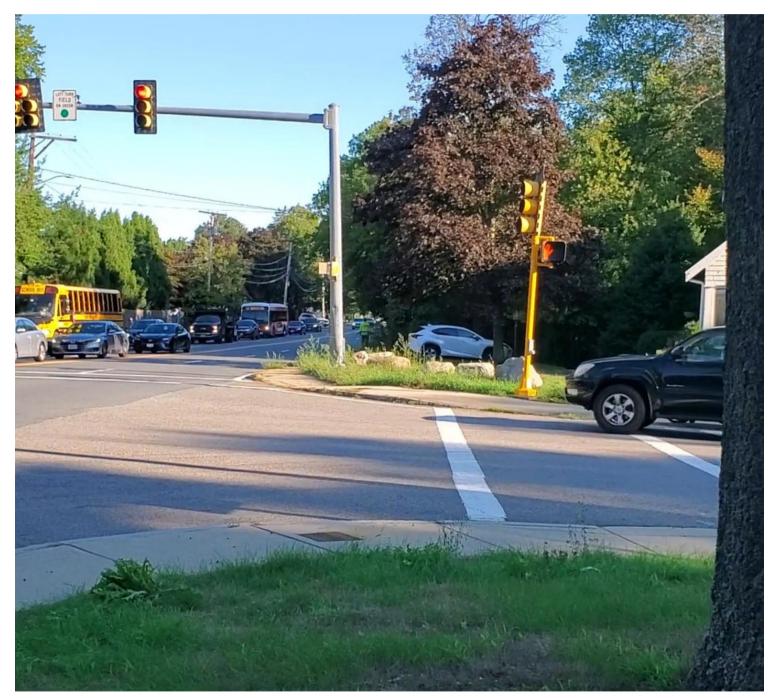
Left-Turn Crashes



Existing Pedestrian and Bicycle Accommodations

Chickatawbut Road Westbound Approach

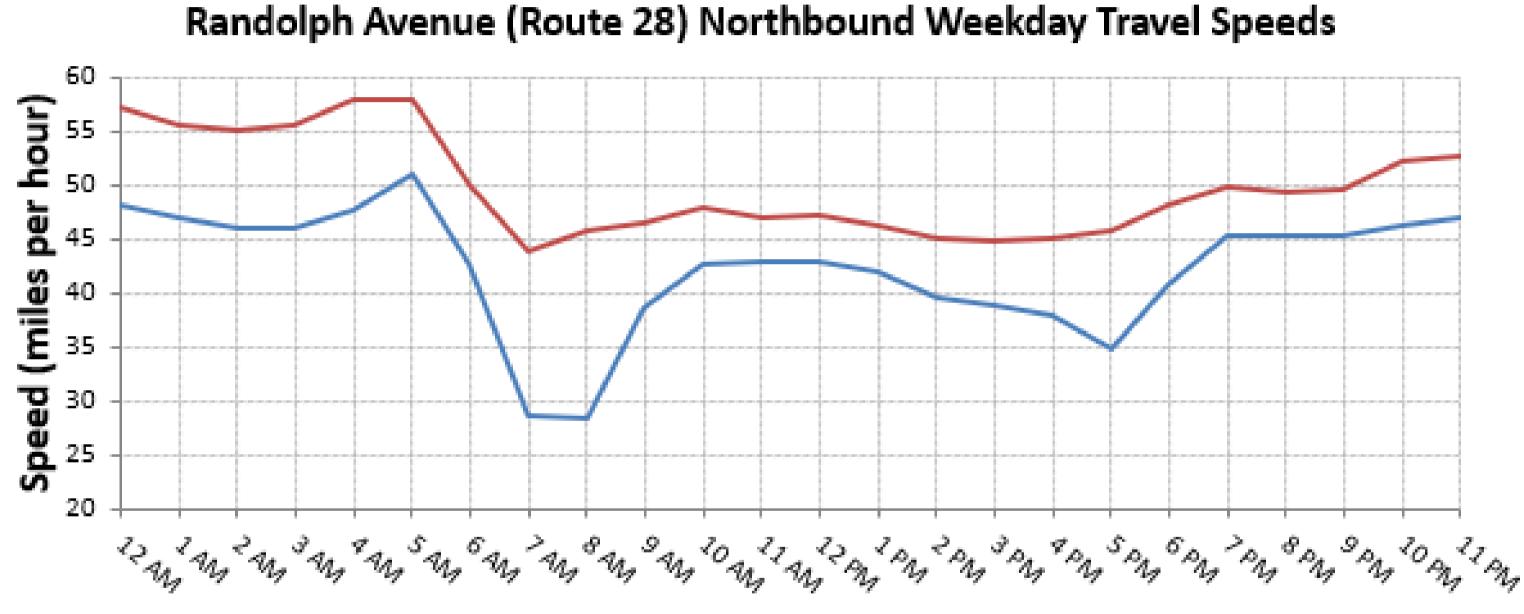




Pedestrian Accommodations Not ADA-Compliant



Existing Vehicular Speeds



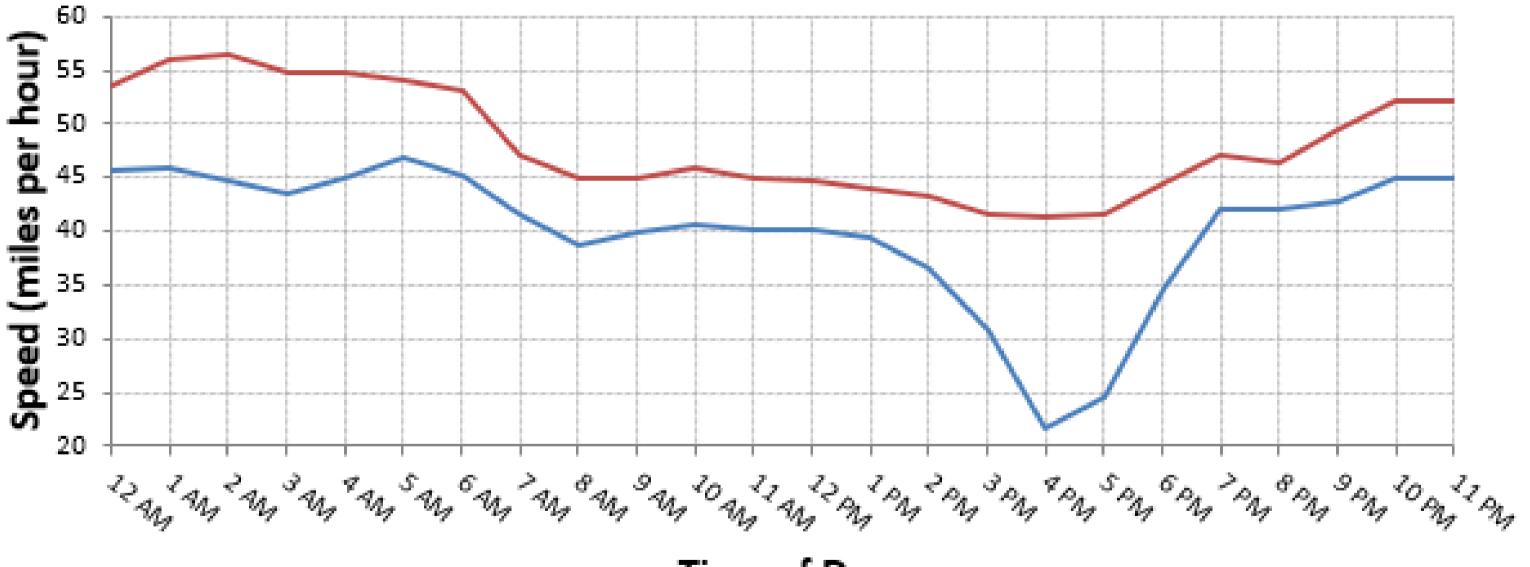
Time of Day

—Average Speed —Top Speeds



Existing Vehicular Speeds

Randolph Avenue (Route 28) Southbound Weekday Travel Speeds



Time of Day

—Average Speed —Top Speeds



Existing Traffic Conditions

Backups on Chickatawbut Road Westbound



Backups on Route 28 Northbound









What do we want to accomplish?

Project Goals

Roadway Safety

- Reduce the likelihood of fatal and injury crashes
- Lower vehicle travel speeds

Pedestrian and Bicycle Accommodations

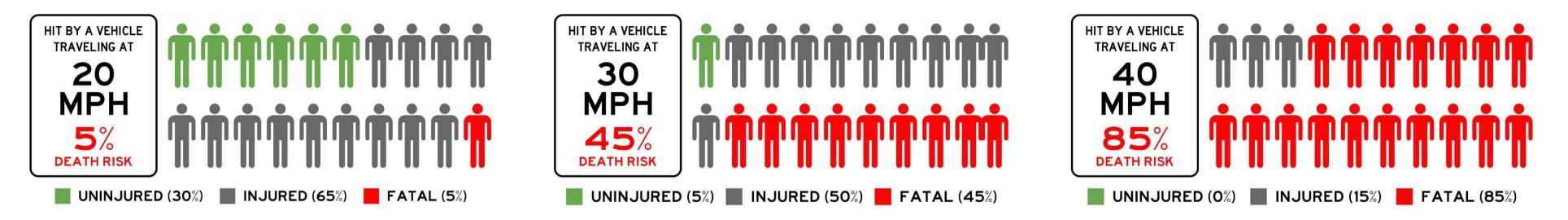
• Provide improved and accessible pedestrian and bicycle facilities within Project Limits

Traffic congestion

• Improve traffic flow along the Route 28 corridor within vicinity of the intersection of Route 28/Chickatawbut Road



Speed Matters



Field of Vision at 15 mph





Field of Vision at 30 to 40 mph

Why Can't We Just Lower the Speed Limit?

- Speed limit reduction requests must comply with State Law
 - Visit <u>mass.gov/massdot-speed-zoning</u> for more information regarding the speed management process
- Speed limit signs alone do not necessarily reduce speeds or change driver behavior
- Reconfiguration of the intersection is one of the most effective actions that can reduce speeds and provide a safer intersection





What are the benefits of a roundabout?

Roundabout Benefits

- Improves safety (29% more reduction in fatal and injury crashes vs. a traffic signal)
- Lower speeds Circulating speeds between 15-20 mph •
- Reduces conflict points
- Improves traffic operations on Route 28 approaching intersection \bullet

Percent of Crashes Reduced Compared to Signalized Alternative

Type of Crash	Signal	Ro
All crashes	43%	
Fatal and Injury	44%	
Property Damage	42%	

oundabout	
48%	
73%	
30%	



Roundabout Safety Improvements

FEWER CONFLICT POINTS THAN SIGNALIZED INTERSECTIONS

75% fewer vehicle-to-vehicle conflict points

67% fewer vehicle-to-pedestrian conflict points

LIVES SAVED

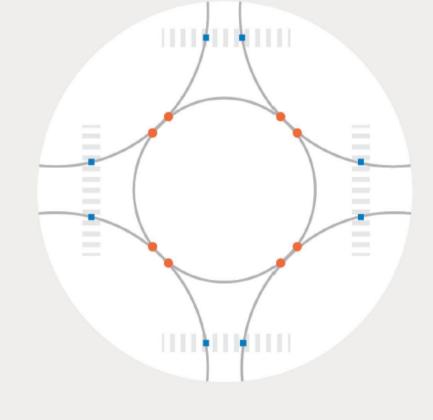
²**90%** reduction in fatalities

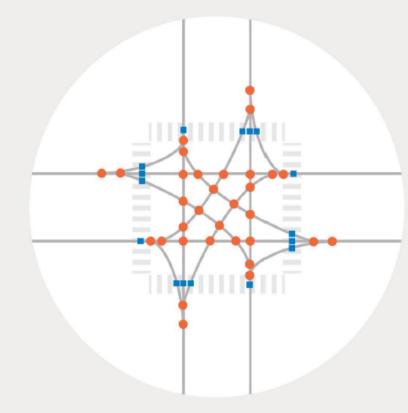
76% reduction in injury crashes

30-40% reduction in pedestrian crashes

10% reduction in bicycle crashes

POSSIBLE CONFLICTS POINTS: ROUNDABOUT VS. 4-WAY INTERSECTION





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Vehicle to Vehicle Conflicts

8

Vehicle to Pedestrian Conflicts

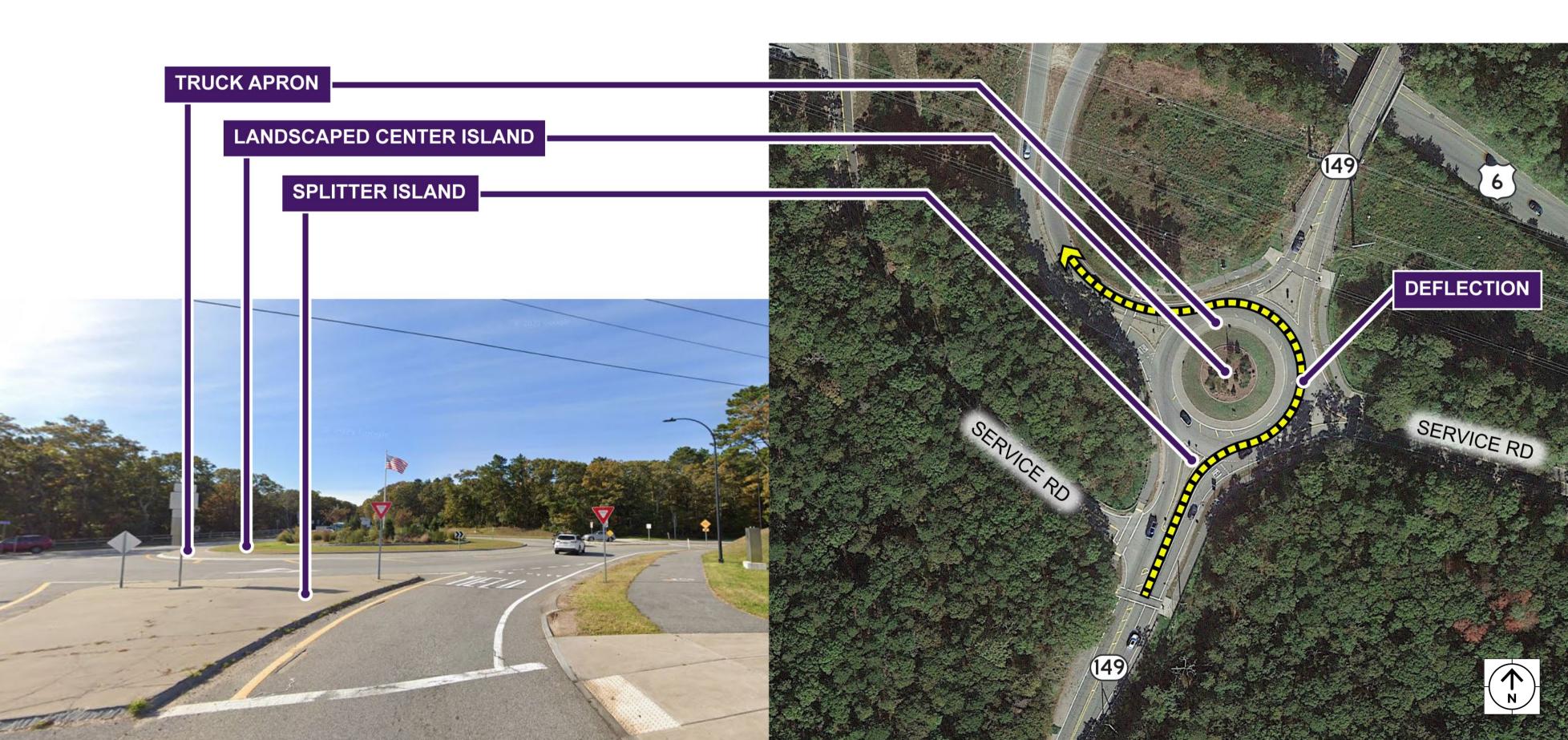
 32
 Vehicle to Vehicle Conflicts

16

Vehicle to Pedestrian Conflicts

This comparison assumes both intersections have single through lanes crossing the intersection.

Roundabout Design Elements



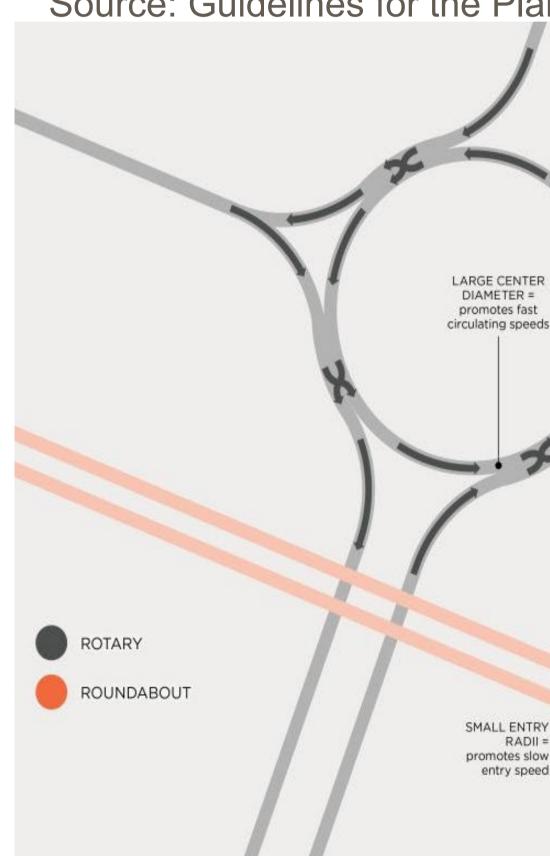
How are Roundabouts Different from Rotaries?

Rotaries are:

- Larger
- Faster speeds
- Lane changing may be required

Roundabouts are:

- Smaller
- Slower speeds
- Yield upon entry
- Avoid lane changing inside the roundabout



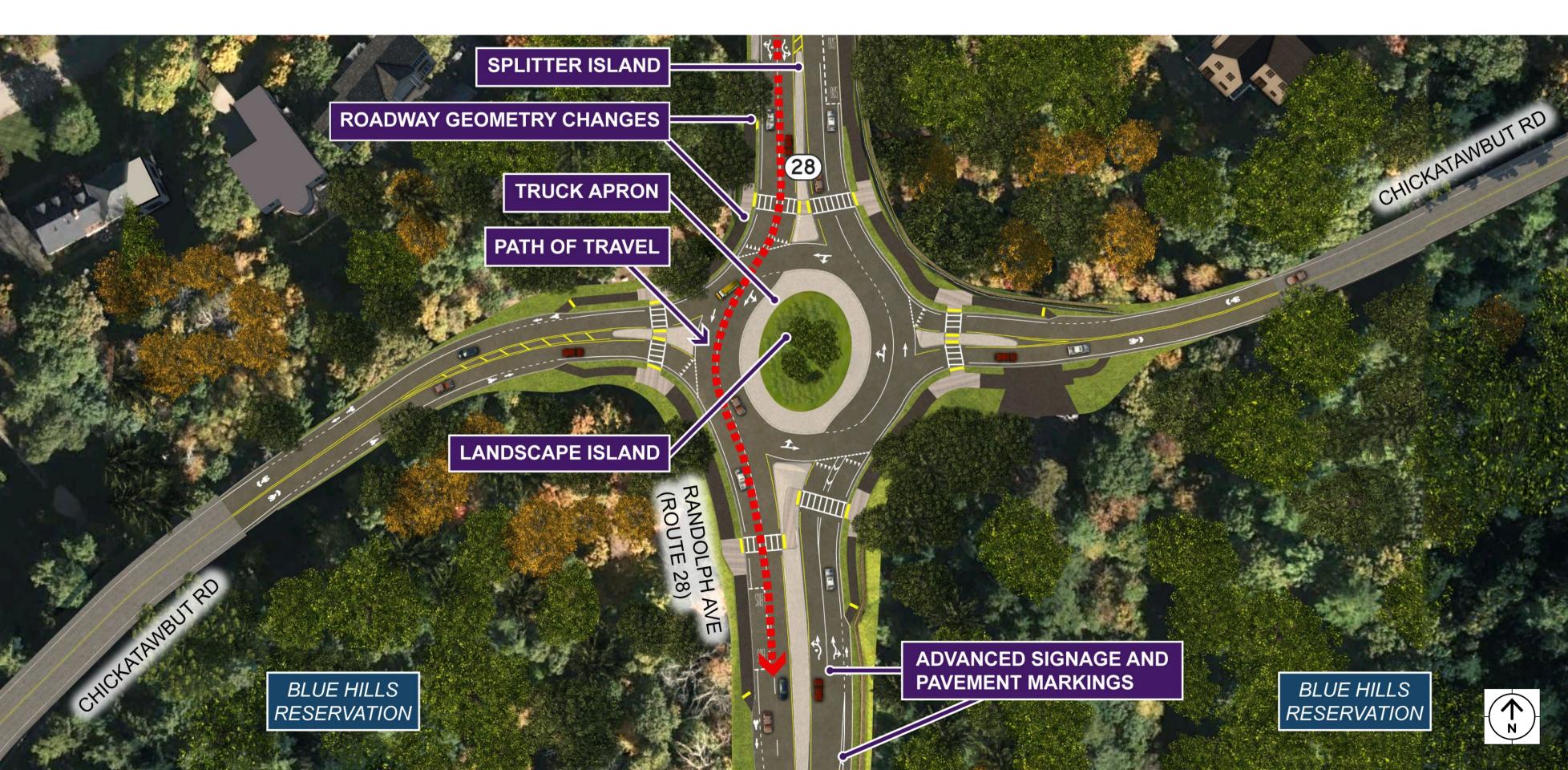
Source: Guidelines for the Planning and Design of Roundabouts (2020) LARGE SWEEPING EXIT RADII = potential for higher exit speeds WIDE WEAVING AREAS = promotes entry and exit vehicle mixing LARGE CENTER promotes fast LARGE SWEEPING ENTRY RADII = potential for higher entry speeds SMALL CENTER DIAMETER = promotes slow circulating speeds SMALL EXIT RADII = promotes slow exit speed SMALL ENTRY RADII = promotes slow entry speed

27

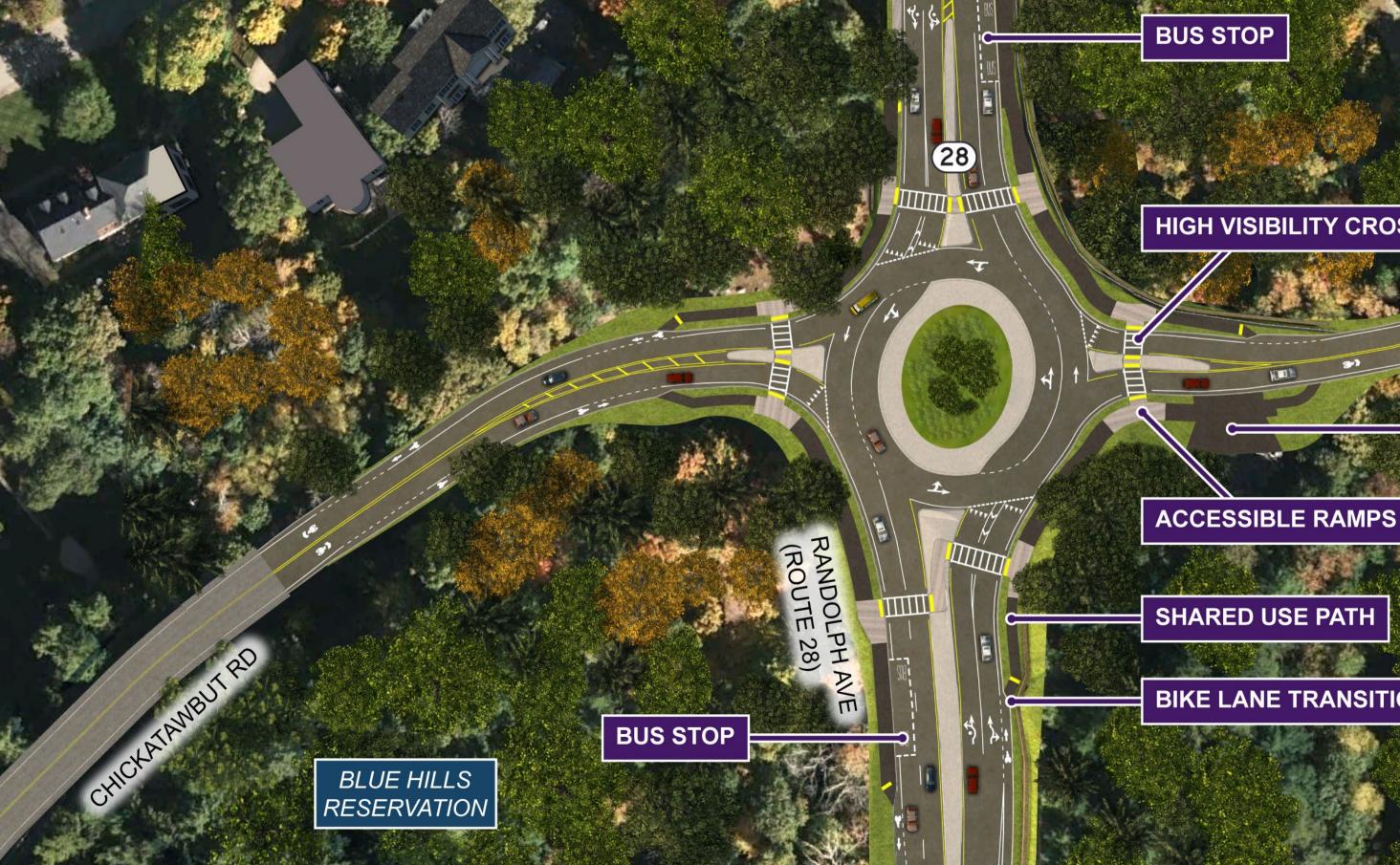


What is the proposed design?

Proposed Roundabout – Vehicular Improvements



Proposed Roundabout – Pedestrian and Bicycle Improvements



HIGH VISIBILITY CROSSWALKS

IMPROVED BLUE HILLS RESERVATION CONNECTIVITY

BIKE LANE TRANSITIONS

BLUE HILLS RESERVATION



CHICKATAWBUT RD

Existing Conditions – Aerial View from South



EXISTING STEEP EXPOSED ROCK CUT

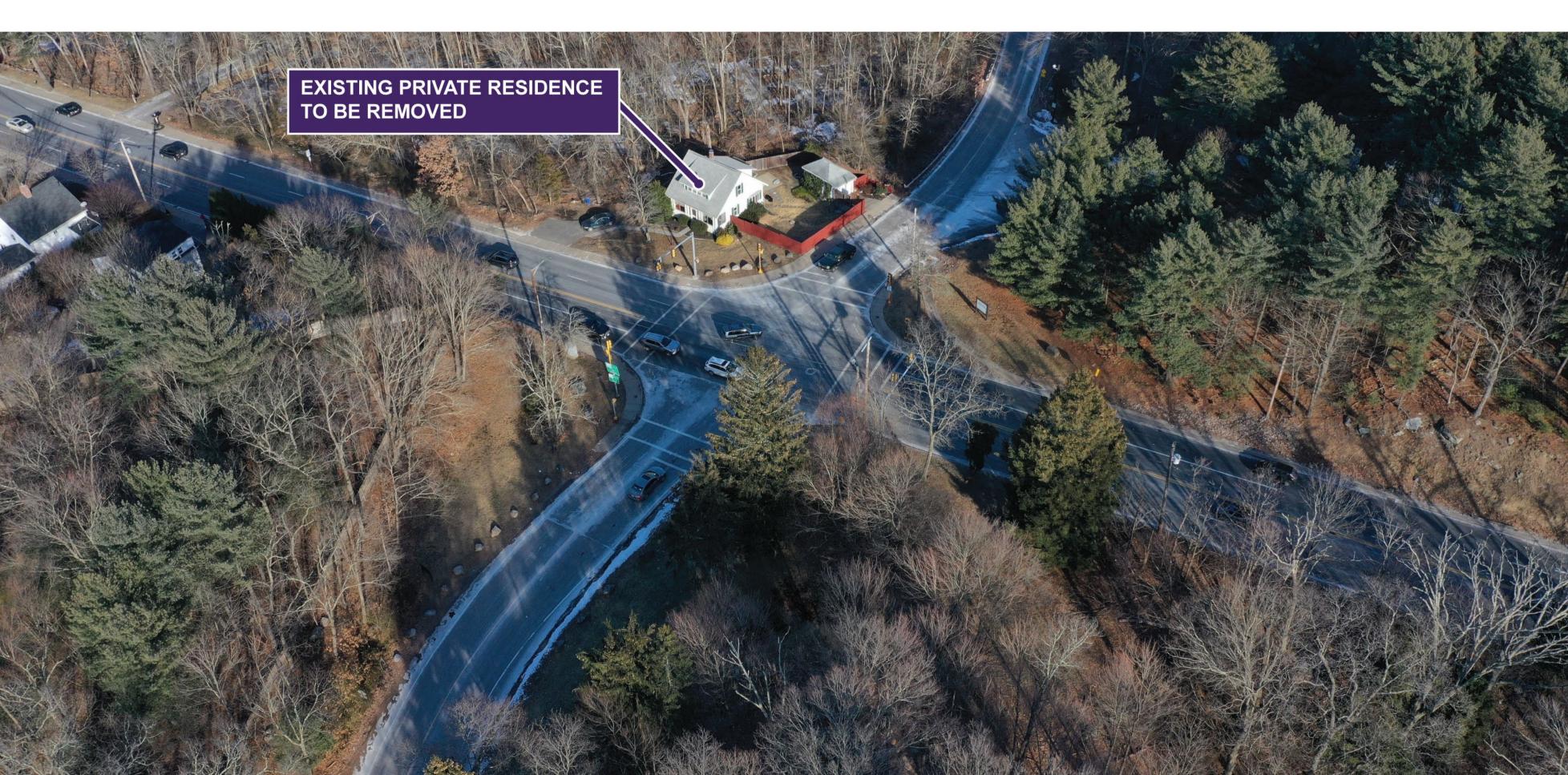
Proposed Roundabout – Aerial of View from South



PROPOSED BIKE LANES AND SHARED USE PATH TRANSITION



Existing Conditions – Aerial View from West

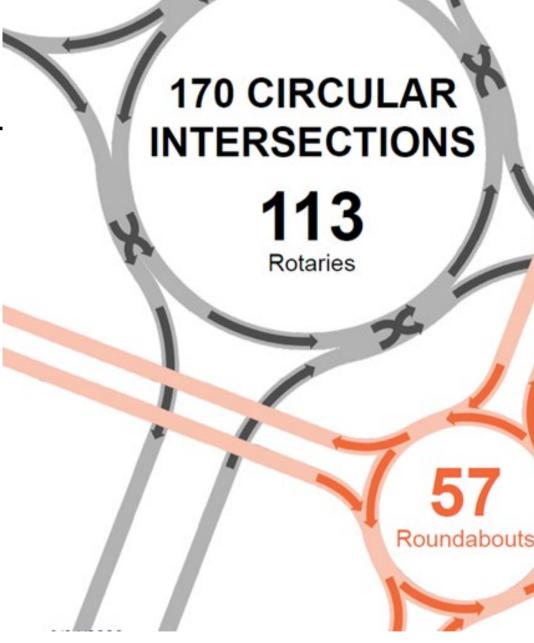


Proposed Roundabout – Aerial View from West



Roundabouts In Massachusetts

- Milton will not be the first Massachusetts municipality to implement a modern roundabout:
 - Service Rd/Meetinghouse Way West Barnstable
 - Rte 85/Broad St Hudson
 - Boylston St/Lincoln St –
 Worcester
 - Rte 28 Chatham
 - Main St/Rte 146 Millbury
 - Rte 115 Norfolk
 - Rte 116 South Amherst



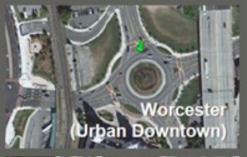
ROUNDABOUTS LOCATED IN MANY DIFFERENT CONTEXTS

Northampton, (Rural State Highway)

North Andover (Town Center)

Barnstable (Limited Access Interchange)



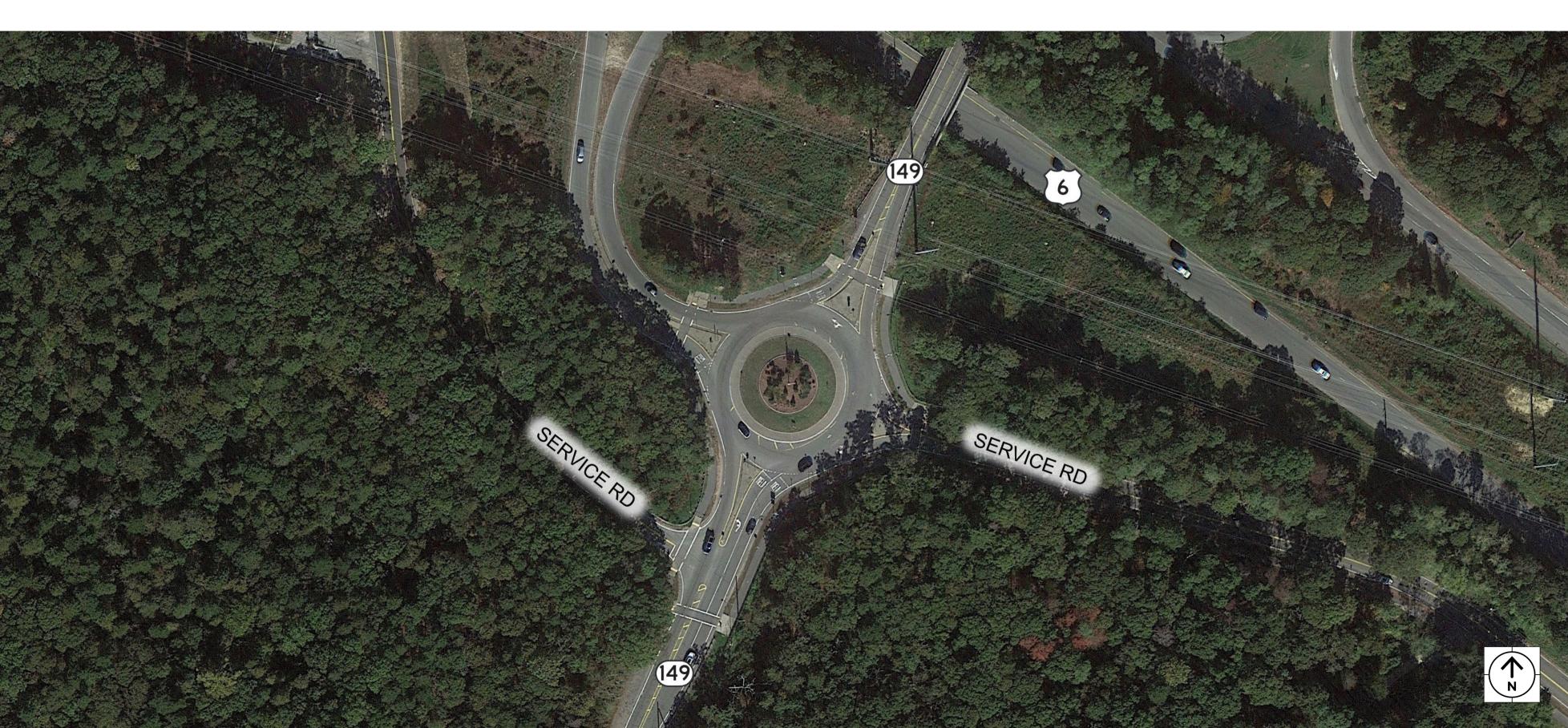






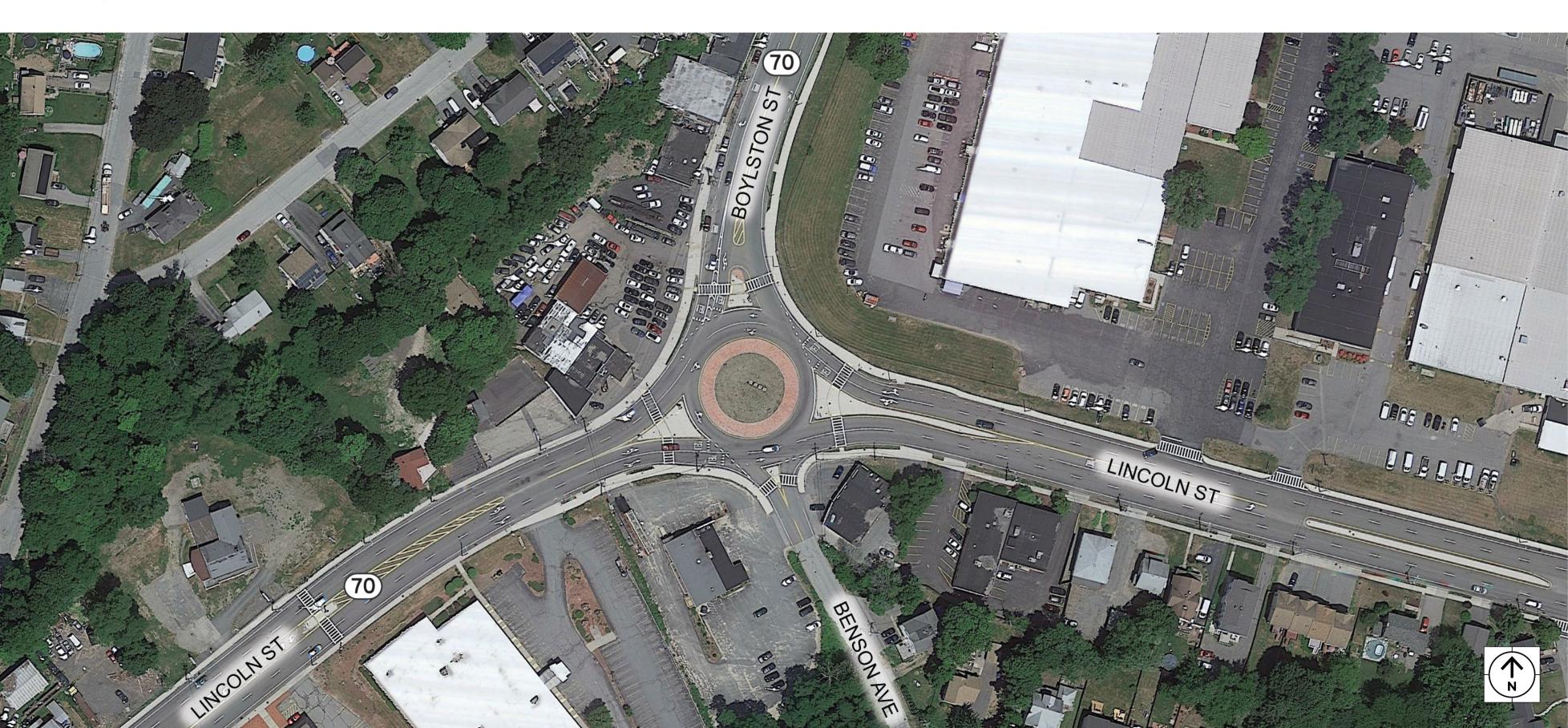
Roundabout Examples - Barnstable

Route 149 at Service Road, Barnstable



Roundabout Examples - Worcester

Boylston Street at Lincoln Street, Worcester



How Will I Exit My Driveway

- Roundabout will reduce backups along Randolph Avenue
 approaching Chickatawbut Road
- The roundabout can be utilized for U-turns
- Slower speeds will make gaps easier to judge



How Will I Exit My Neighborhood?

- Residents in the neighborhood
 west of Route 28 will be able to
 safely utilize Chickatawbut Road
 to access Randolph Avenue
- Can utilize the Hillside Street intersection
- Traffic backups heading south will be reduced

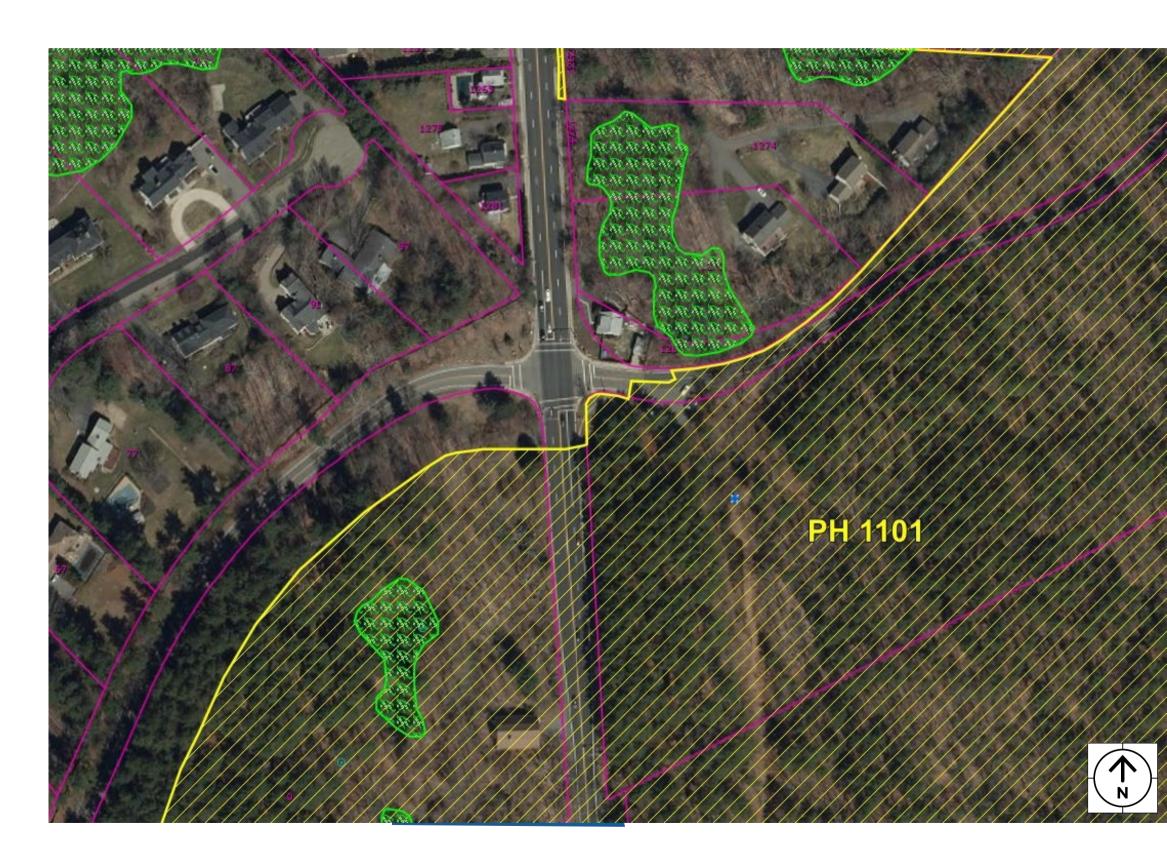




What are the environmental impacts?

Environmental Impacts and Permitting

- Wetlands Protection Act
- Completing Massachusetts
 Environmental Policy Act
 (MEPA) and National
 Environmental Policy Act
 (NEPA) Processes
- Coordinating with MassWildlife, MassDEP, and DCR
- Stormwater improvements









Preliminary Right of Way (ROW) discussion | 25% DPH

- MassDOT is responsible for acquiring all necessary rights in public land for design, \bullet construction, and implementation of this project.
 - Fee takings, permanent easements, and/or temporary construction easements may be required.
- Affected property owners will be contacted by personnel from the MassDOT ROW Bureau or consultants representing the responsible agency.

 Property owners are protected under Massachusetts General Laws, primarily Chapter 79. Preliminary Right of Way (ROW) drawings will be available at Milton Town Hall, in the Engineering Department, for public review and comment.

At this stage of design, the ROW process has not been finalized. This meeting is an opportunity for the public to comment on any impacts to properties.







Construction Approach

- Staged construction maintaining pedestrian access and two-way traffic
- Access to abutting driveways will be maintained throughout construction
- Long-term detours are not anticipated
- MBTA service will be uninterrupted





Estimated Project Next Steps





Fall 2022

75% Design Submission

2

January 2023



Environmental and Wetlands permitting

Coordinating with MassWildlife and DCR

100% Design Submission

February 2023 – November 2023



Final Design Submission

February 2024



Construction Anticipated to Start

Spring 2024





How will we keep you informed?

How To Reach Us

Submit Written Comments to: \bullet

> **Carrie Lavallee, P.E., Chief Engineer** MassDOT Highway Division 10 Park Plaza Boston, MA 02116 Attention: Major Projects, PROJECT FILE NO. 607342

- Submit Email Comments to: \bullet Massdotmajorprojects@dot.state.ma.us
- For Project Information Visit the MassDOT Design Public Hearing Website at: ullethttps://www.mass.gov/massdot-highway-design-public-hearings **or** use the QR Code at the right.







Questions and discussion

Share Your Questions and Comments

Q&A

• Submit your questions and comments using the Q&A button



• "Raise your hand" to be unmuted for verbal questions, (Alt + Y to raise your hand)

HELLO my name is	

• Please state your name before your question

1	

• Please share only **1** question or comment at a time, limited to **2** minutes, to allow others to participate.

*	
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• To ask a question via phone, dial *9 and the moderator will call out the last 4digits of your phone number and unmute your audio when it is your turn.

Please be advised that all Q&A and comments are subject to disclosure for public records, therefore use these functions for project-related business only.





