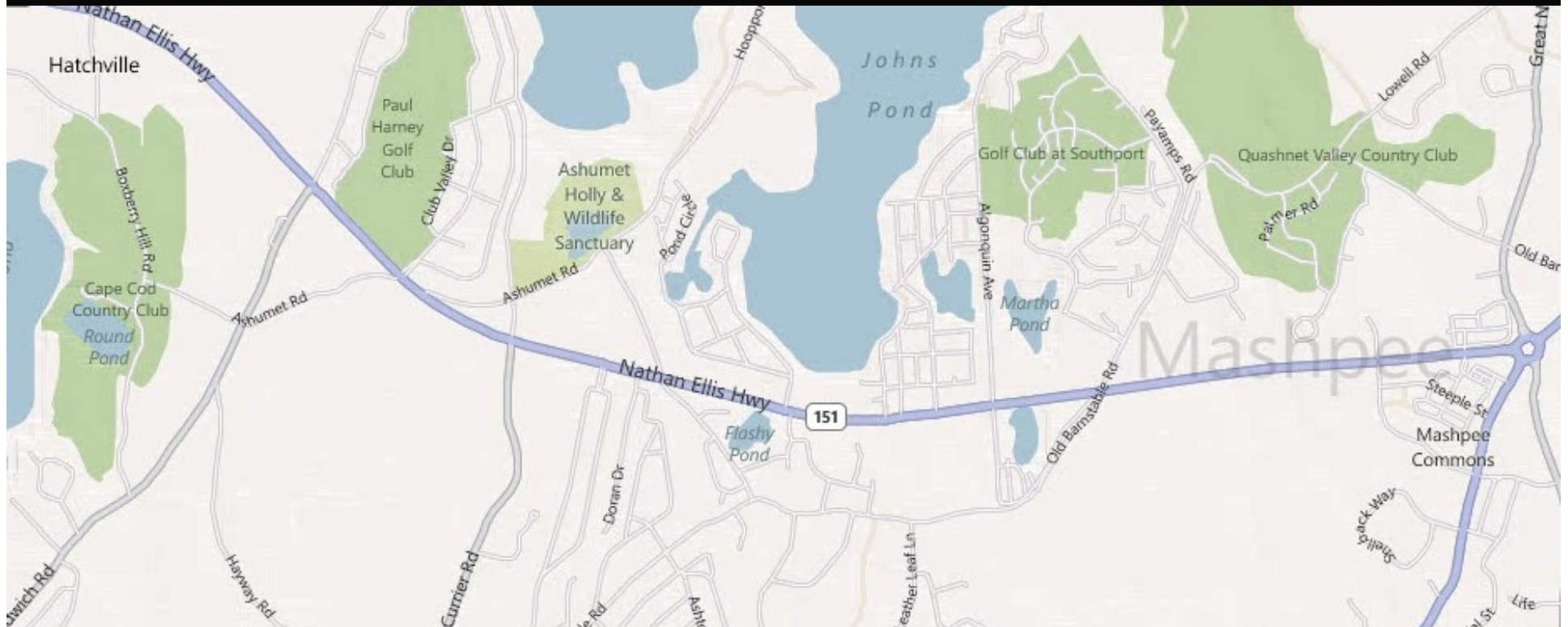


# Nathan Ellis Highway (Route 151)

## Mashpee, Massachusetts



## DESIGN PUBLIC HEARING

March 21, 2019





# PROJECT TEAM

- Town of Mashpee
  - Catherine Laurent, DPW Director
  
- MassDOT
  - Tom Currier, Project Manager
  
- Stantec
  - Jill McLaughlin, Design Project Manager
  - Alan Cloutier, Lead Traffic Engineer



March 21, 2019



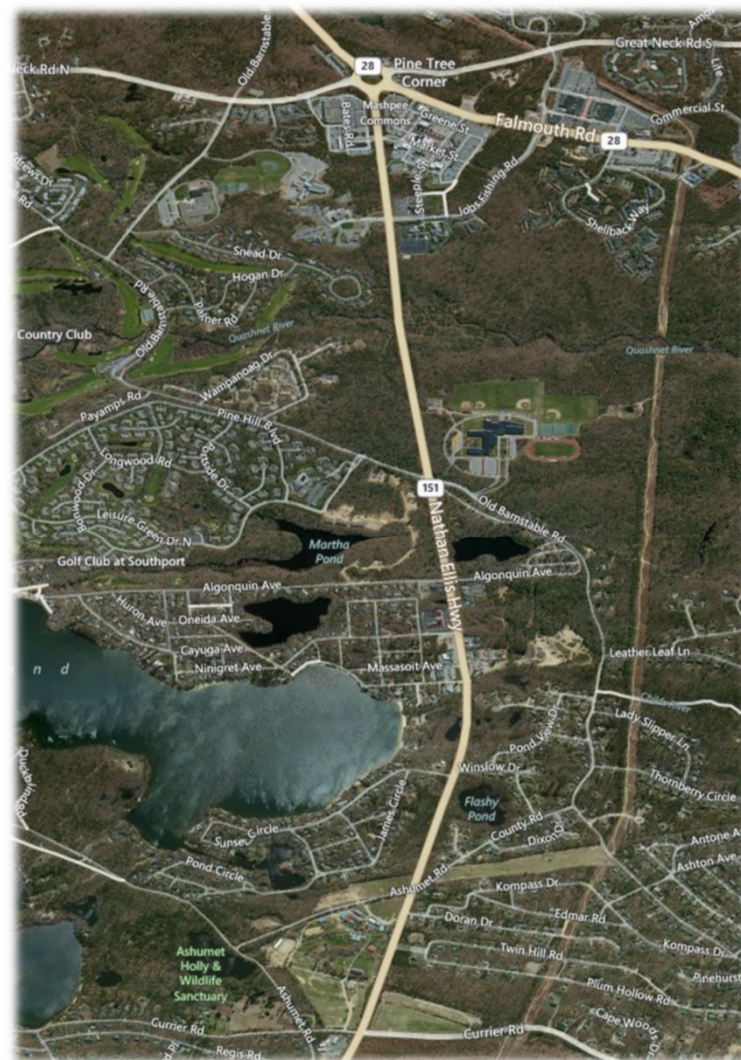


# Meeting Agenda

- Introductions
- Existing Conditions
- Proposed Design
- Right-of-Way
- Environmental
- Construction
- Schedule
- Questions



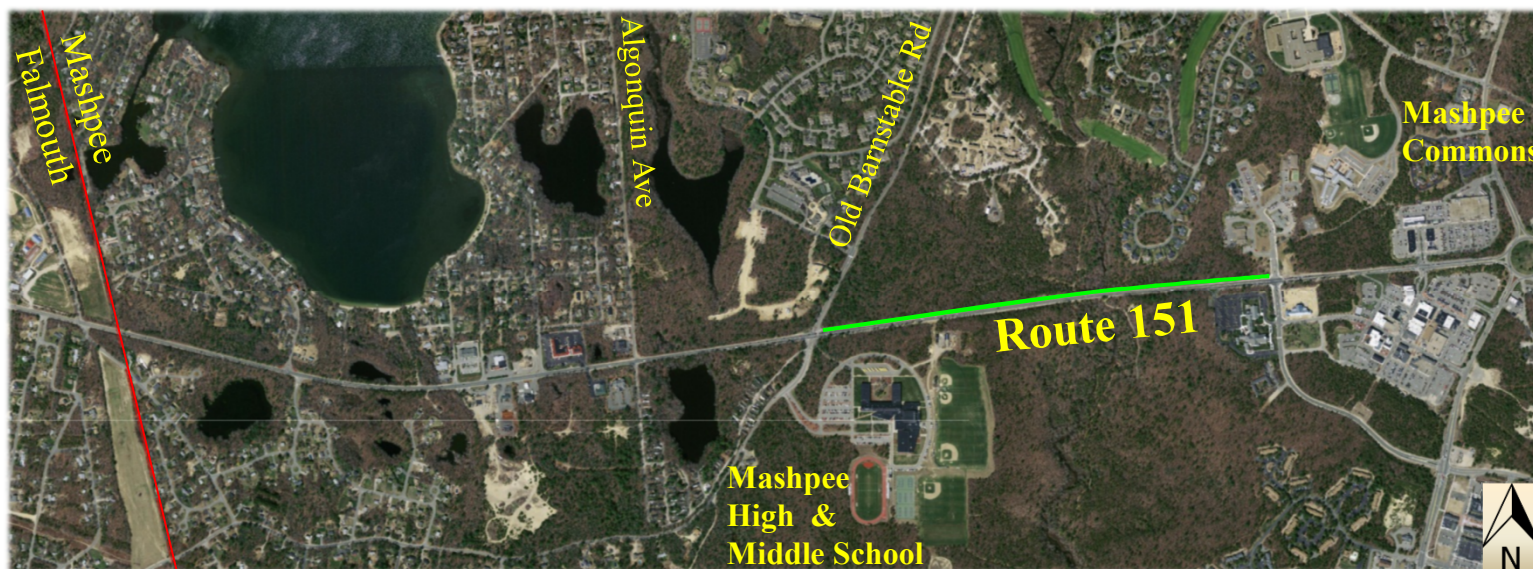
March 21, 2019





# Corridor Specifics

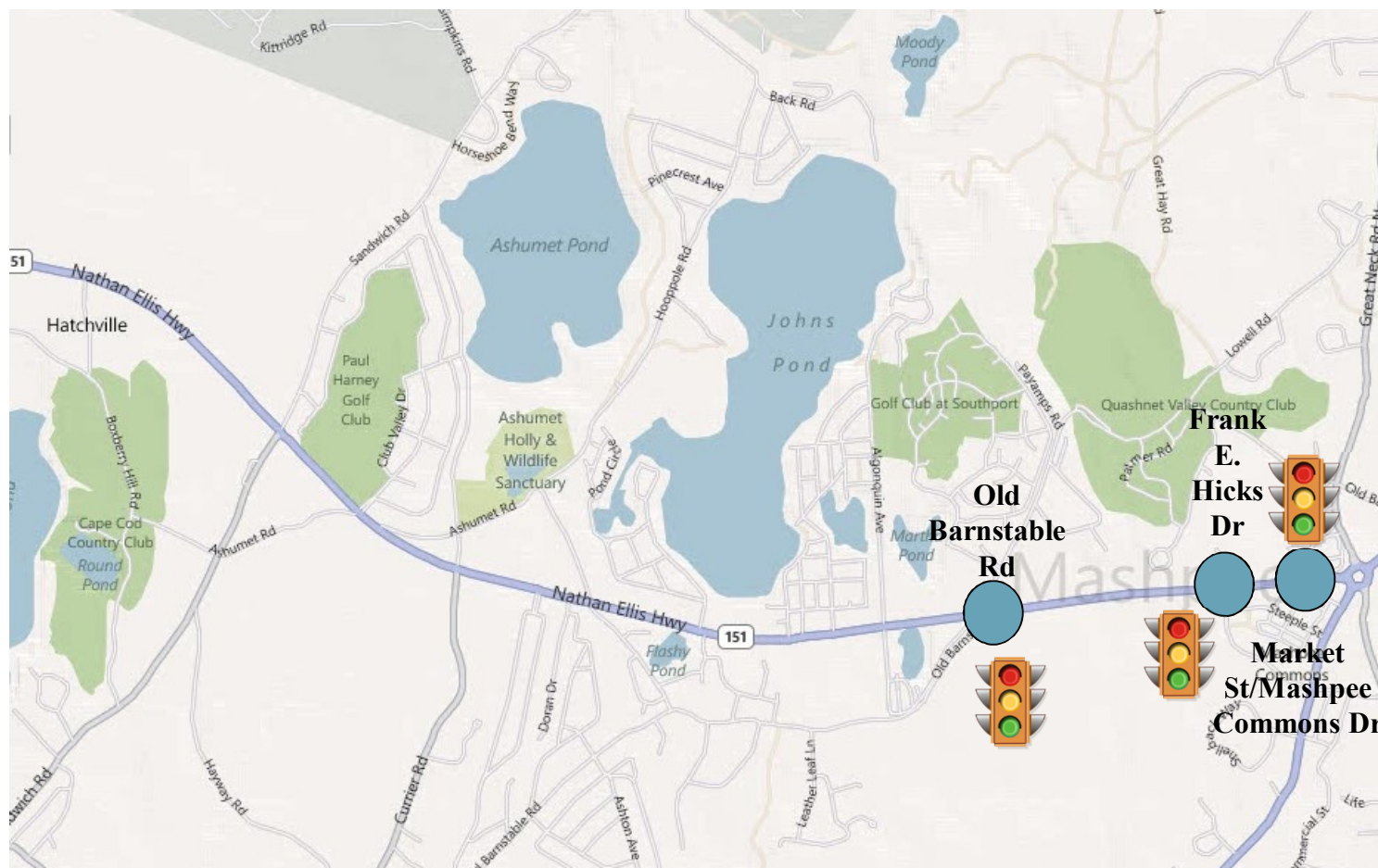
- Mix of commercial, retail, institutional and residential
- One lane each direction
- 45-50 mph posted speeds
- Minimal pedestrian and bicycle accommodations





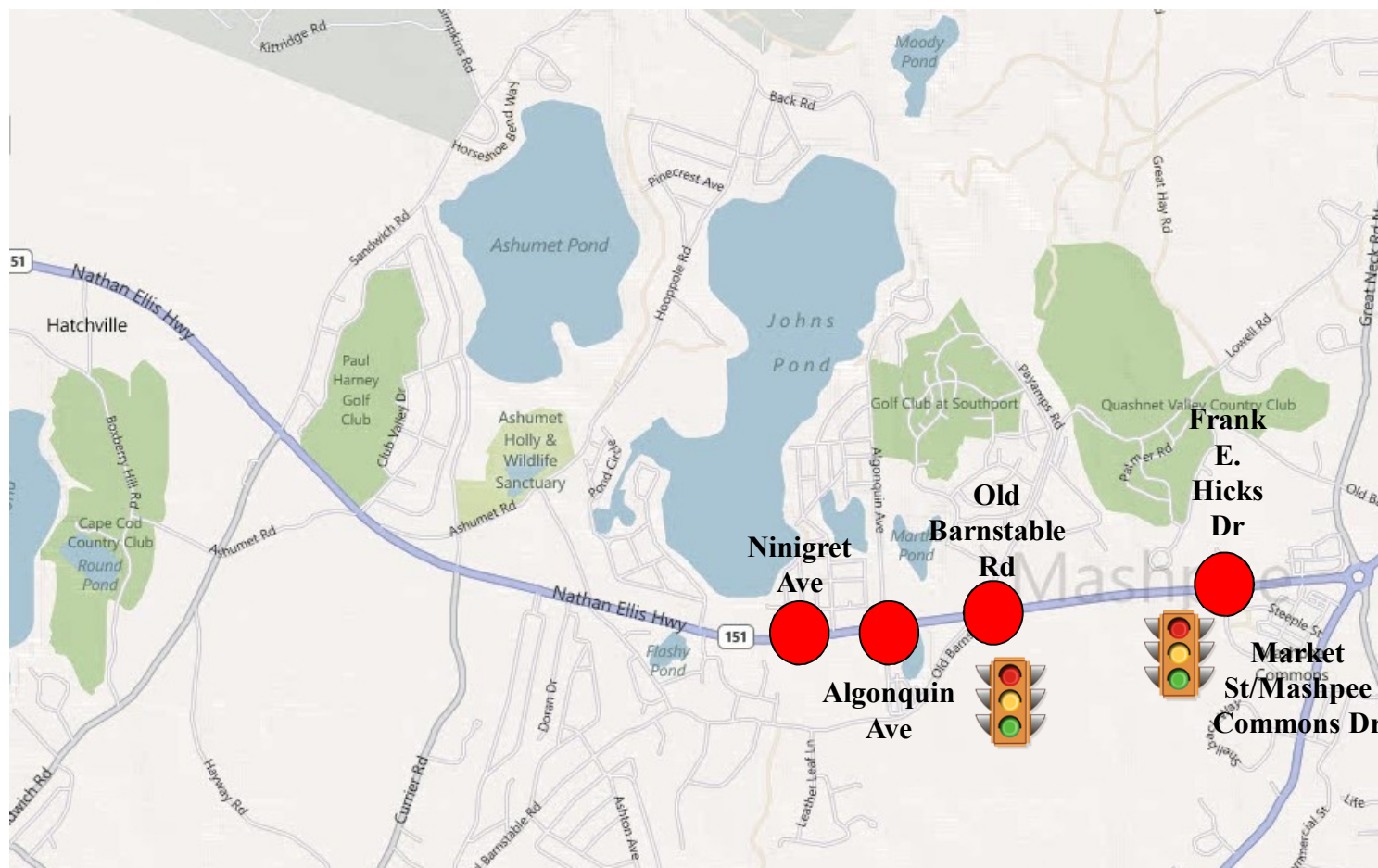


# Signalized Intersections





# High Crash Cluster Locations





# Road Safety Audit (RSA)

- 4 Crash Cluster Locations
  - Top 5% in the Regional Planning Agency
- RSAs conducted:
  - July 2014
  - April 2018







# Road Safety Audit Findings

- Findings
  - Inefficient signal timings and phasing
  - Many left turns in commercial section near Old Brickyard
  - Limited accommodations for pedestrians and bicycles
  - Sightline obstructions
  - High Speeds





# Design Objectives

- Improve safety and mobility for all users
  - Healthy Transportation
- Upgrade Signal equipment
- Add or Extend Turn Lanes
- Pavement Markings & Signs
- Remove Sight Obstructions

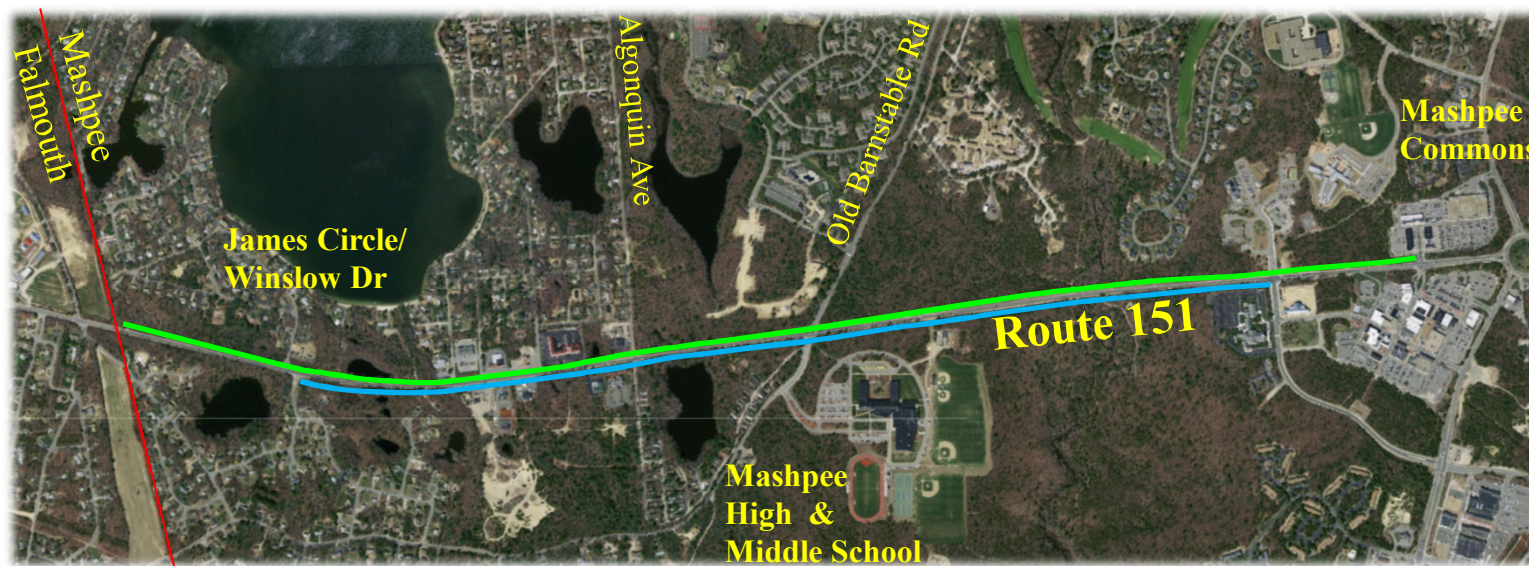




# Pedestrian and Bicycle Accommodations

— SHARED USE PATH

— SIDEWALK

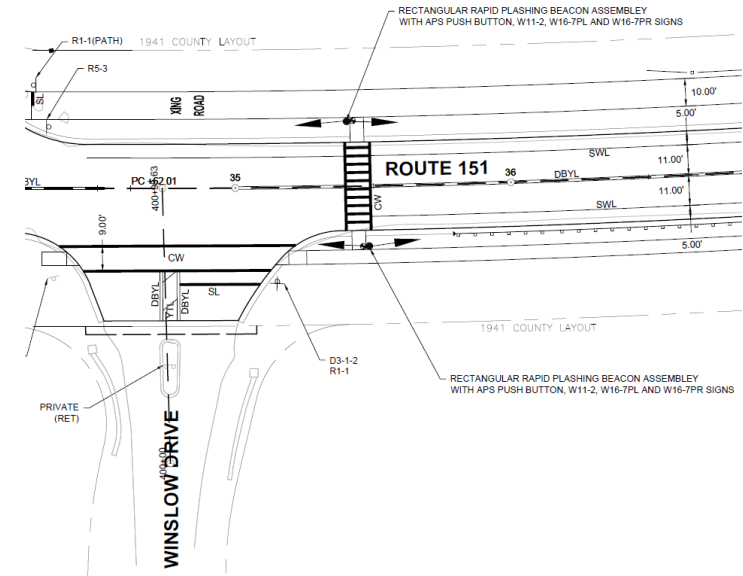






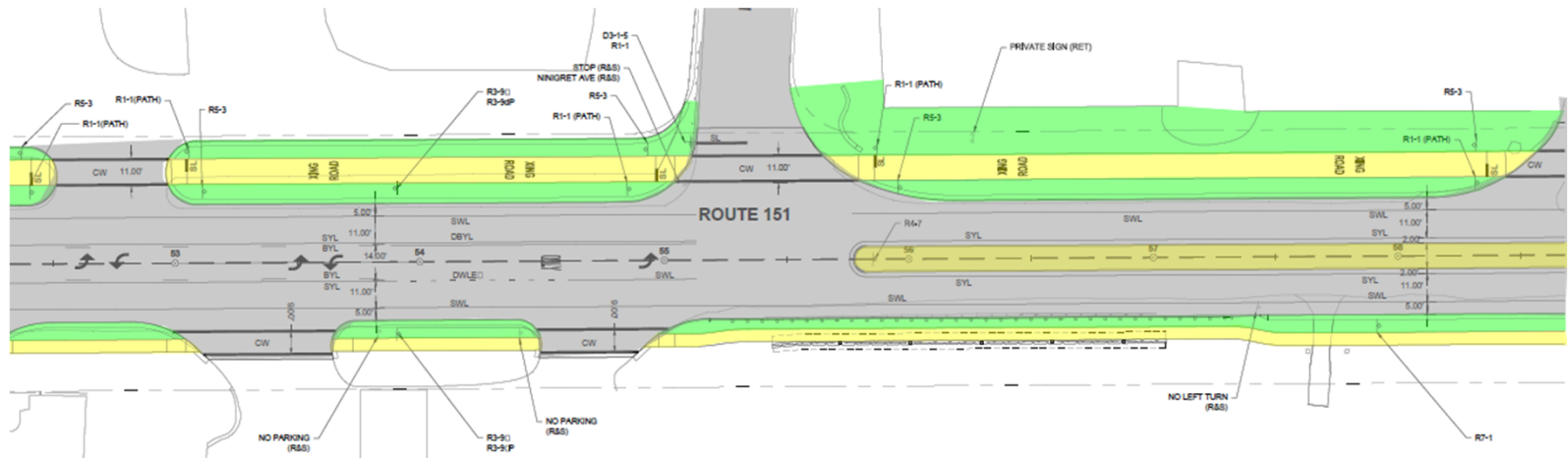
# Crosswalks

- Crossings at signalized crossings
- RRFB and Crossing at James Circle/Winslow Drive





- One Lane in Each Direction
- Center Turn Lane
- Median
- Left Turn Lane



**March 21, 2019**

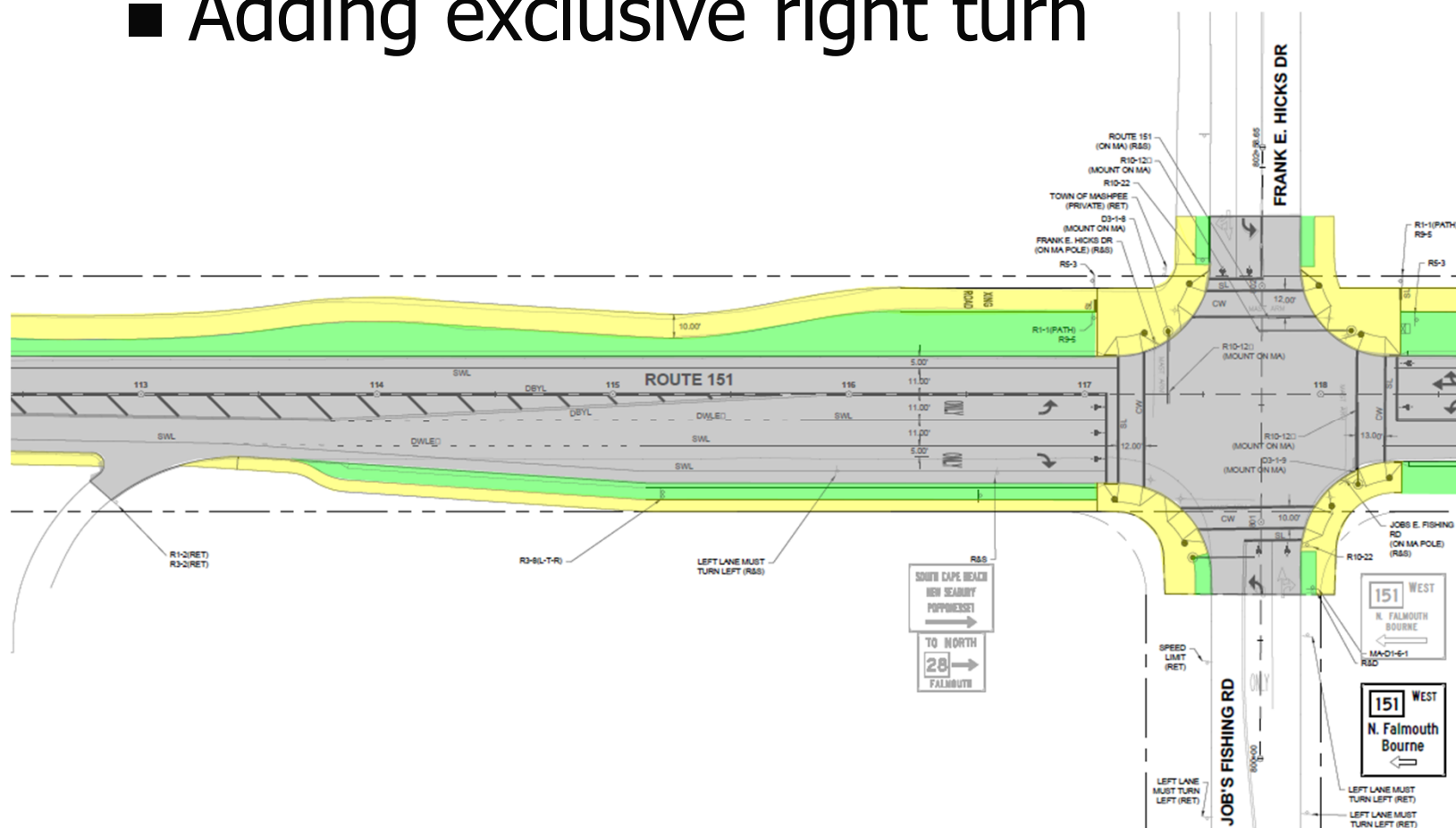






# Job's Fishing Road Intersection

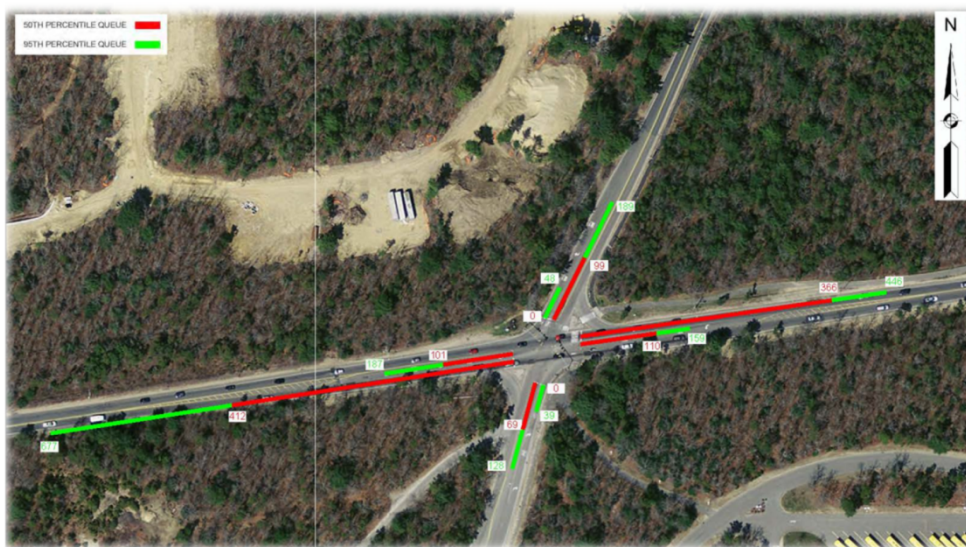
- Adding exclusive right turn





# Traffic Operations

## Route 151/ Old Barnstable Road



2031 AM  
No Build  
D – 35 sec

WITH PROPER CLEARANCE  
INTERVALS



2031 AM  
Build  
D – 32 sec





# Traffic Operations

## Route 151/ Old Barnstable Road



2031 PM  
No Build  
D – 53 sec

WITH PROPER CLEARANCE  
INTERVALS



2031 AM  
Build  
D – 46 sec



# Traffic Operations

## Route 151/ Jobs Fishing/ Frank Hicks Drive



2031 AM  
No Build  
C – 33 sec

WITH PROPER CLEARANCE  
INTERVALS



2031 AM  
Build  
B – 18 sec





# Traffic Operations

## Route 151/ Jobs Fishing/ Frank Hicks Drive



2031 PM  
No Build  
F – 109 sec

WITH PROPER CLEARANCE  
INTERVALS



2031 PM  
Build  
C – 33 sec



# Traffic Operations

## Route 151/ Mashpee Commons



2031 AM  
No Build  
C – 26 sec

WITH PROPER CLEARANCE  
INTERVALS



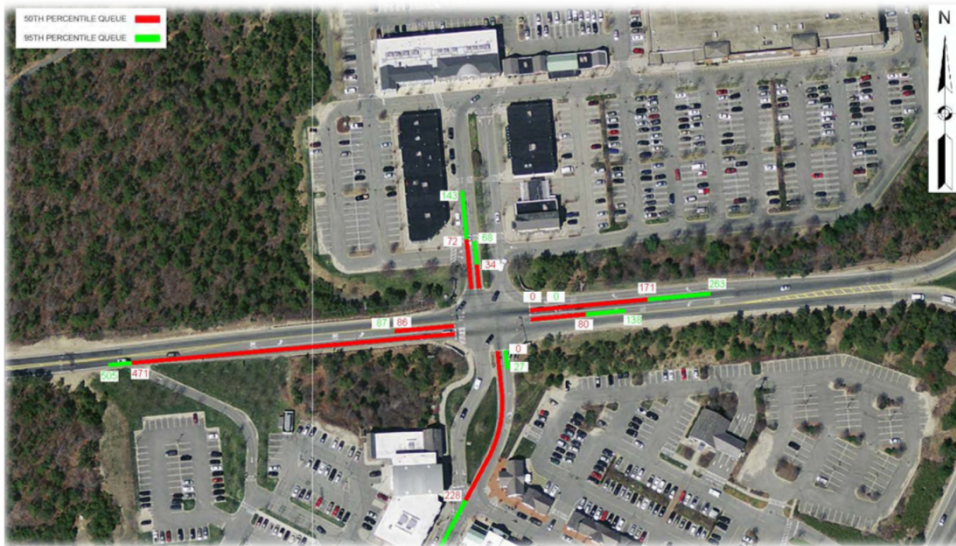
2031 AM  
Build  
C – 27 sec





# Traffic Operations

## Route 151/ Mashpee Commons



2031 AM  
No Build  
D – 44 sec

WITH PROPER CLEARANCE  
INTERVALS



2031 AM  
Build  
D – 36 sec



# Summary

- Shared use path and sidewalk improves access and safety for pedestrians.
- Shared use path and consistent shoulder improves access and safety for bicyclists
- Targeted improvements improve safety for motorists
- Intersection turn lanes improve efficiency for drivers
- Turn lanes/center turn lane improves access for businesses.



# Drainage Design

- Closed Drainage System
- Leaching Basins
- Maintain Existing Outlet Points







# Right-of-Way Impacts

- Temporary Easements
  - Grading/Slope Work
  - Driveway Reconstruction
- Permanent Easements
  - Sidewalk Construction
  - Work on Private Roads





## ■ Work in Wetlands



**March 21, 2019**



# Construction Staging

- Off Season Construction
- Alternating One Lane for Narrow Sections of Route 151
- 48 Hours Notice for any work impacting access to driveways







# Schedule

- Next Design Submission – 75%
- TIP Year – 2021/2022



March 21, 2019





# Questions?



Please

- state your name
- spell your last name
- state your address

prior to asking your question