ROUTE 104 BRIDGEWATER Corridor Study

Community and MassDOT Coordination Meeting

Route 104 Corridor Transportation Study Preview

June 11, 2025

Old Colony Metropolitan Planning Organization

FFY 2025 UPWP Task 3400

OLD COLONY PLANNING COUNCIL

Agenda

- Introduction
- Project Overview
- Public and Agencies Outreach
- Route 104 Corridor Study Findings
- Route 104 Corridor Planning Recommendations
  - Funding Resources
- Action Plan
  - Discussion with Stakeholders: June - August 2025
  - Public Meeting: July 2025
  - Reports and Documentation: September 2025

Bridgewater Route 104 Corridor Overview

Key places:

- Route 24 Interchange
- Central Square, BSU
- BR Regional High School, Middle School

Jurisdiction:

- 7.4 Mile under local jurisdiction
- 0.6 Mile MassDOT owned (Route 24 Interchange area)
- 4 State owned Traffic Signals
- 6 Local owned Traffic Signals

Road Operation:

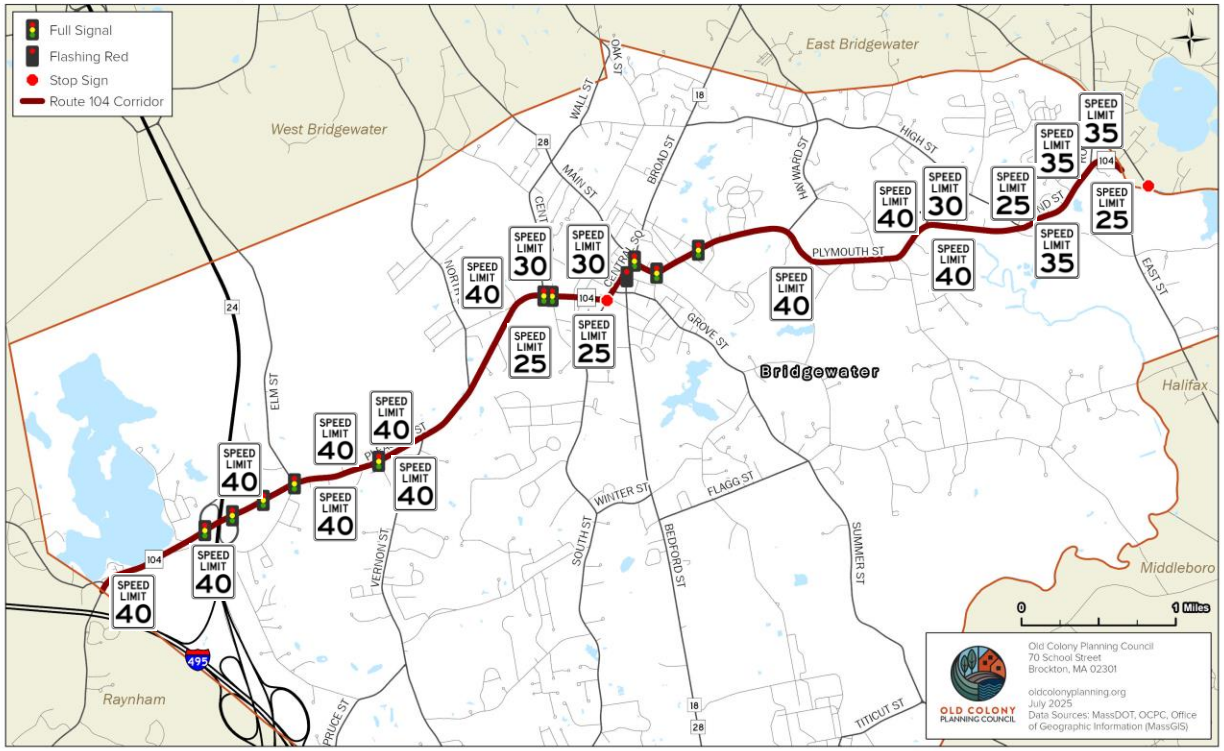
- Urban minor arterial
- Posted Speed Limit: 25 MPH, 30 MPH, 35 MPH, and 40 MPH (including Special Speed Regulation#792)

APPROXIMATELY

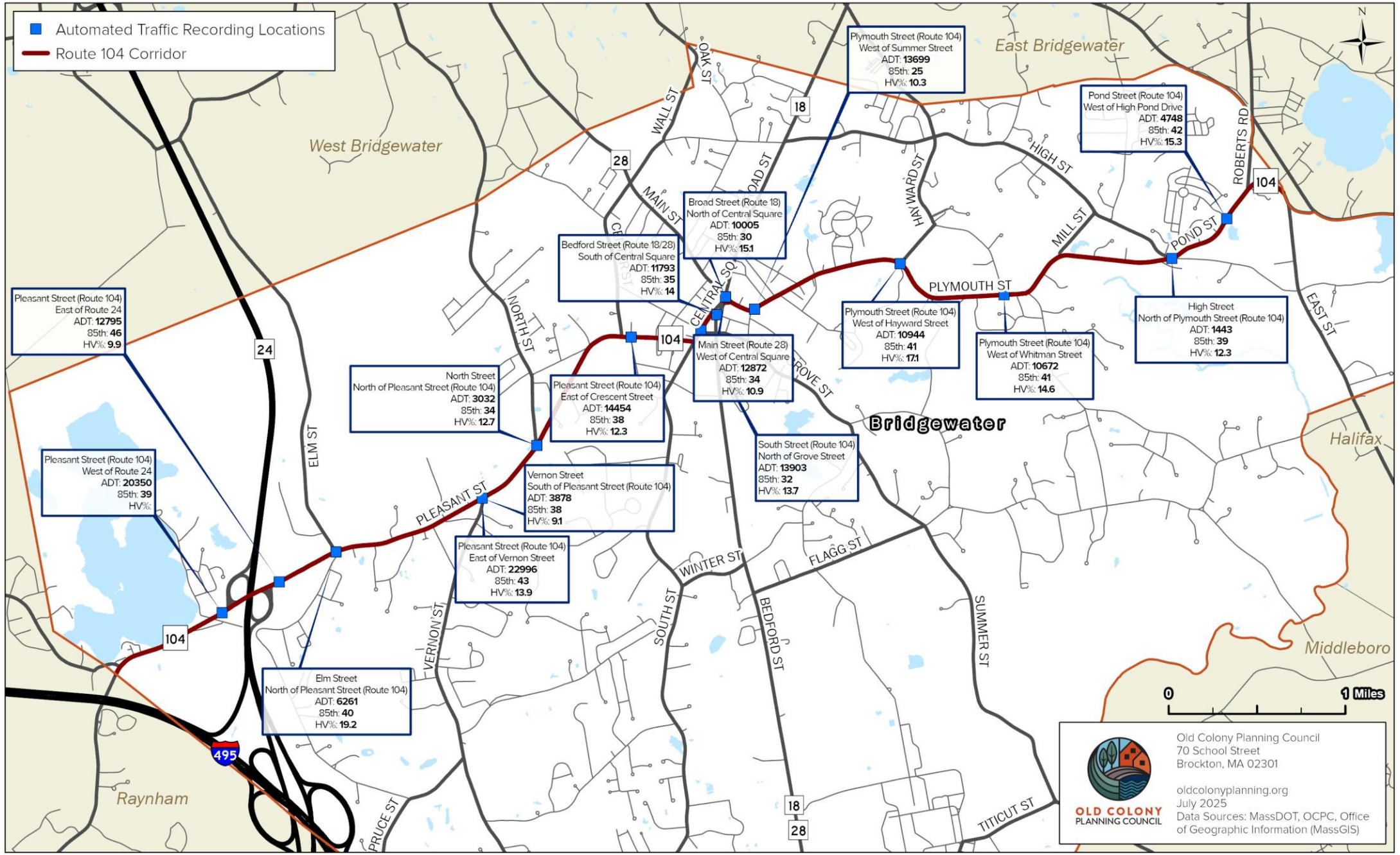
8 MILES

in centerline distance

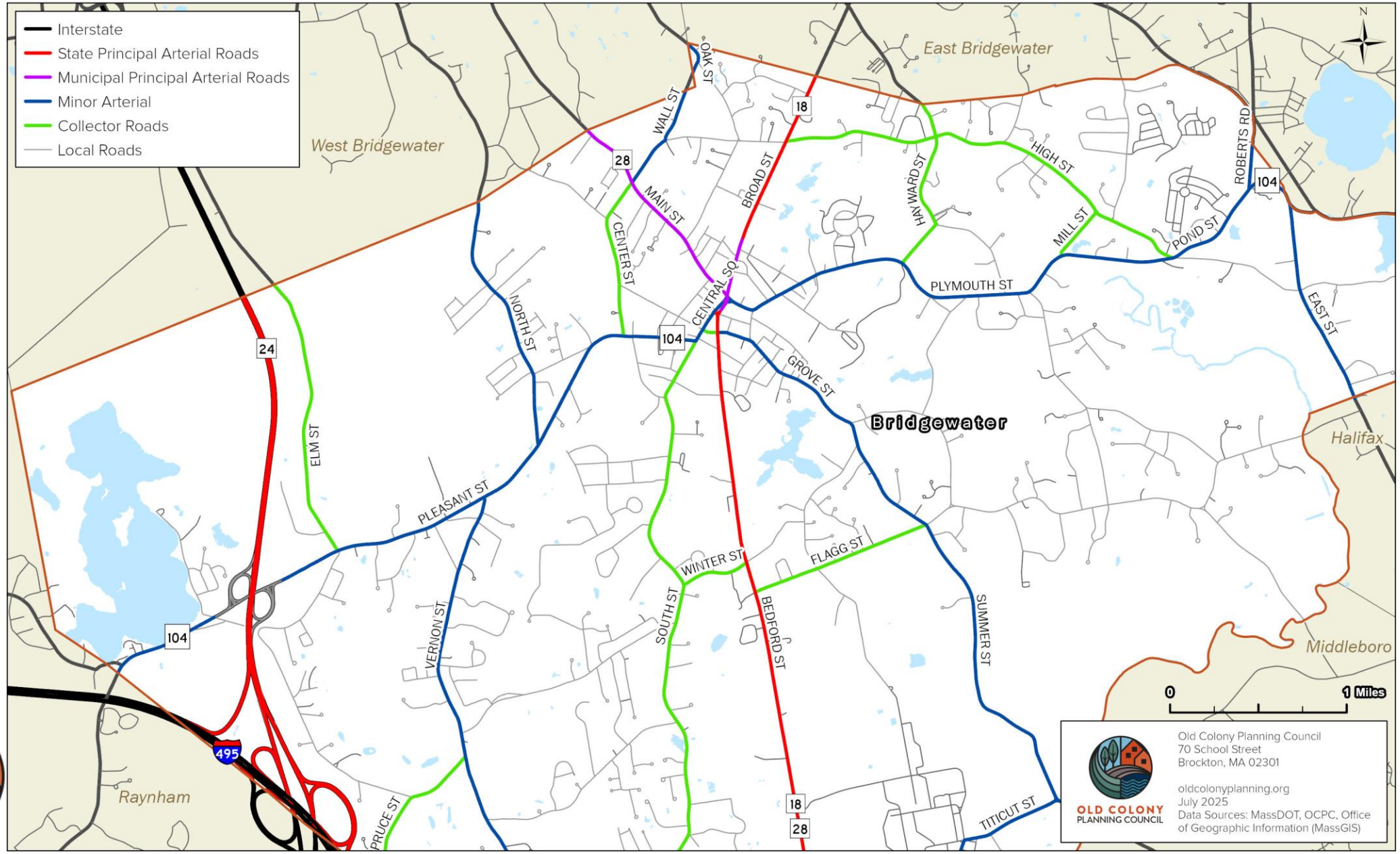
Route 104 Corridor Study Area



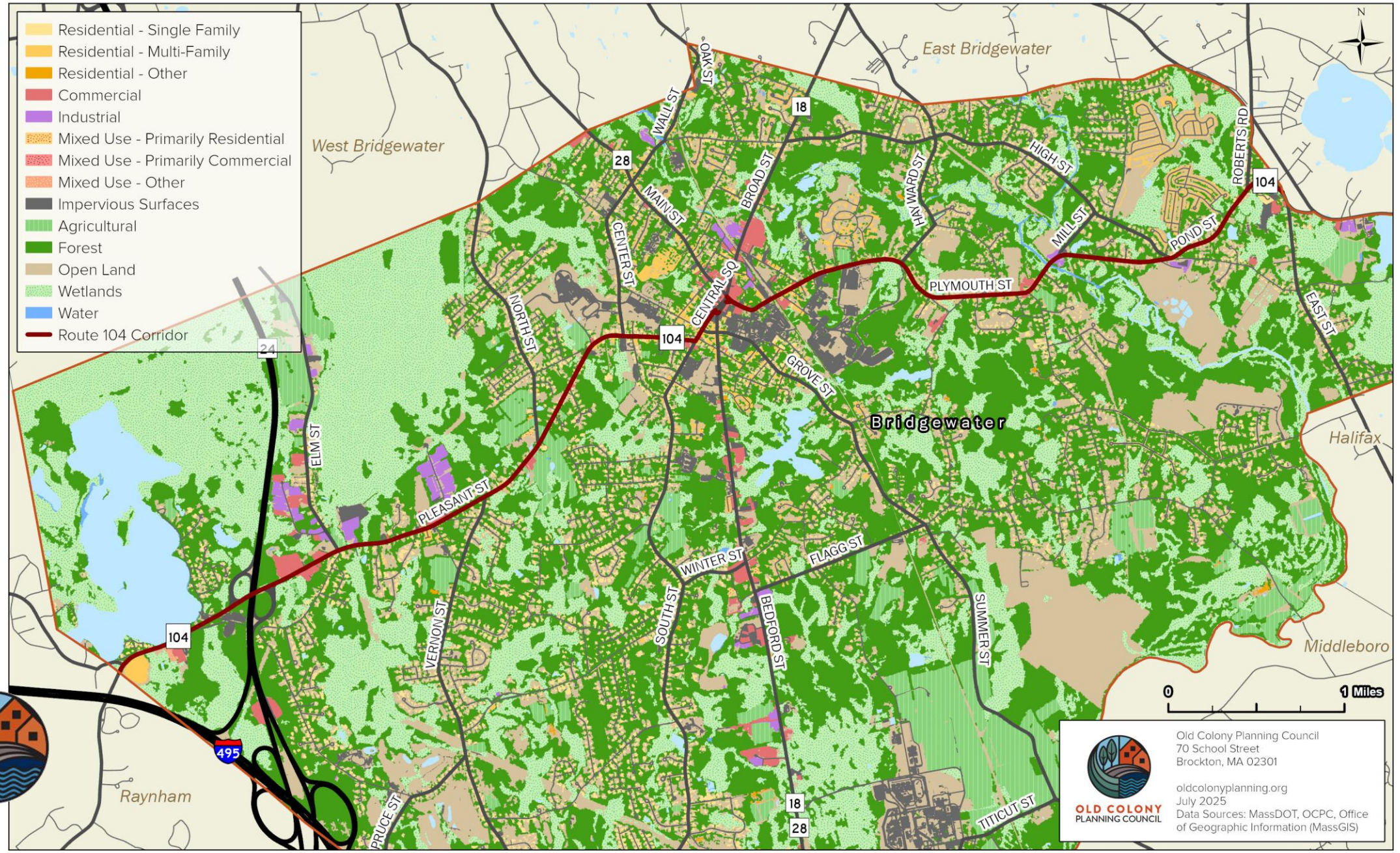
Route 104 Corridor Study Traffic Volume and Speed



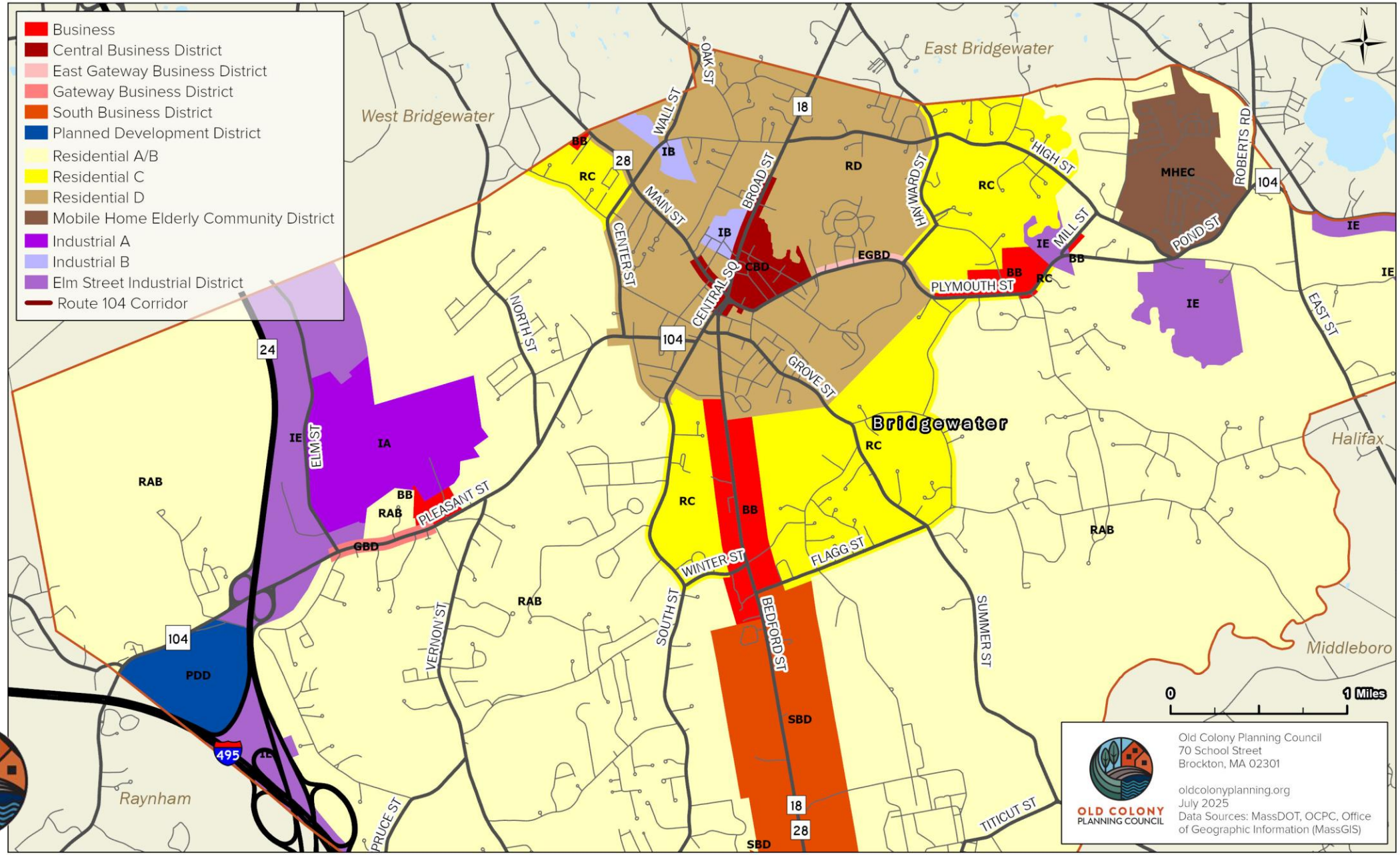
Route 104 Corridor Study Roadway Classification and Jurisdiction



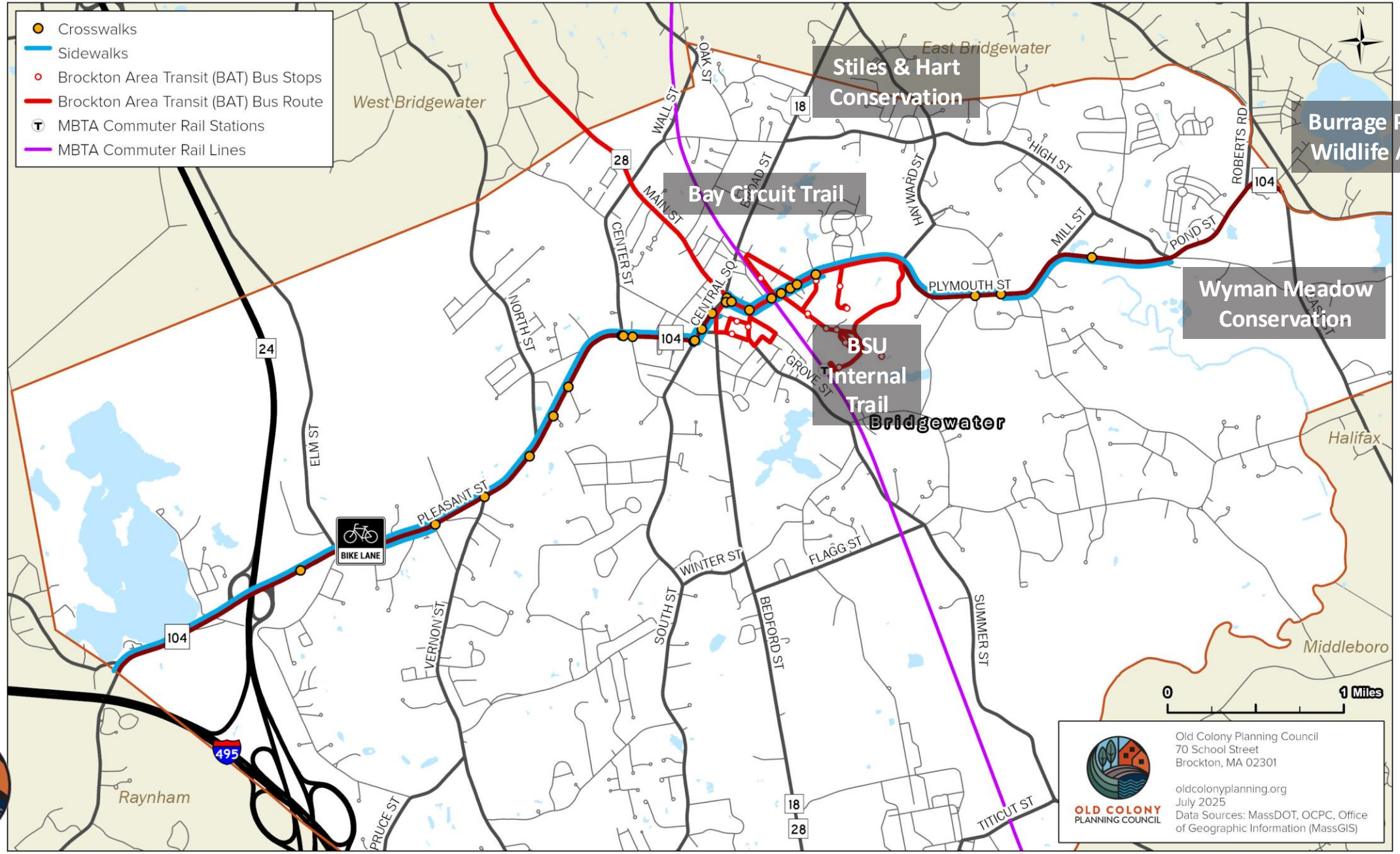
Route 104 Corridor Study Land Use



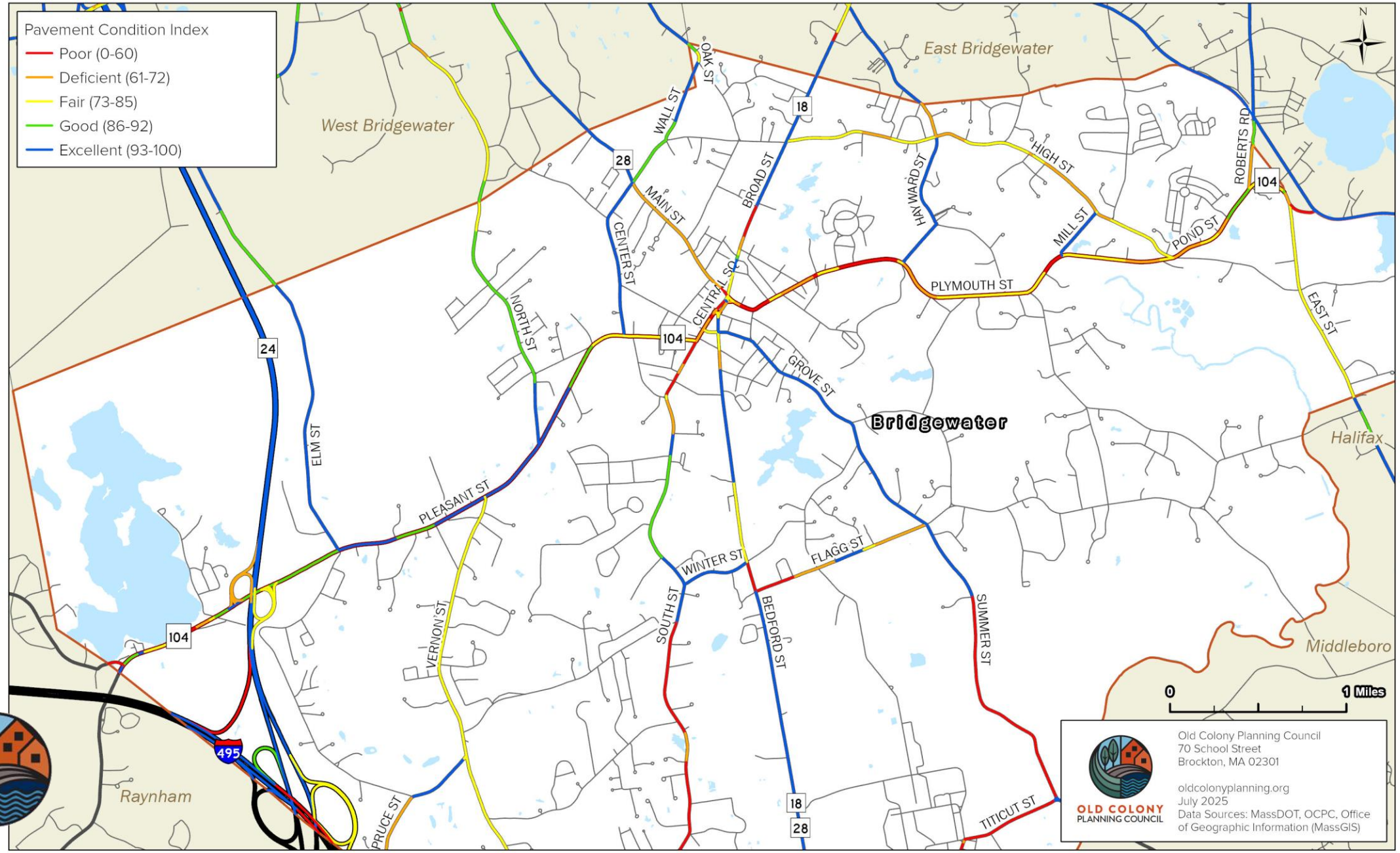
Route 104 Corridor Study Zoning



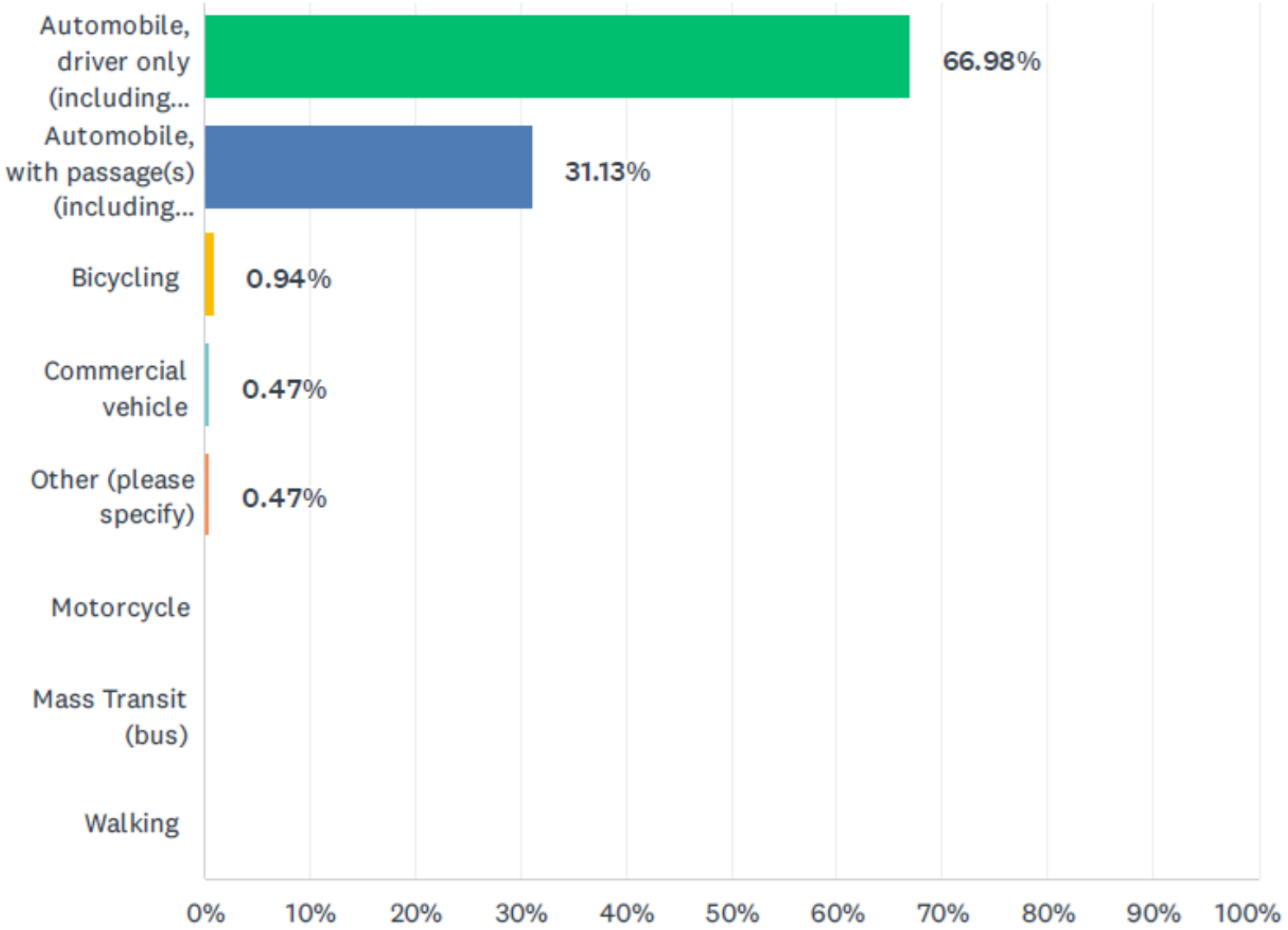
Route 104 Corridor Study Bicycle, Pedestrian & Transit Access



Route 104 Corridor Study Pavement Conditions

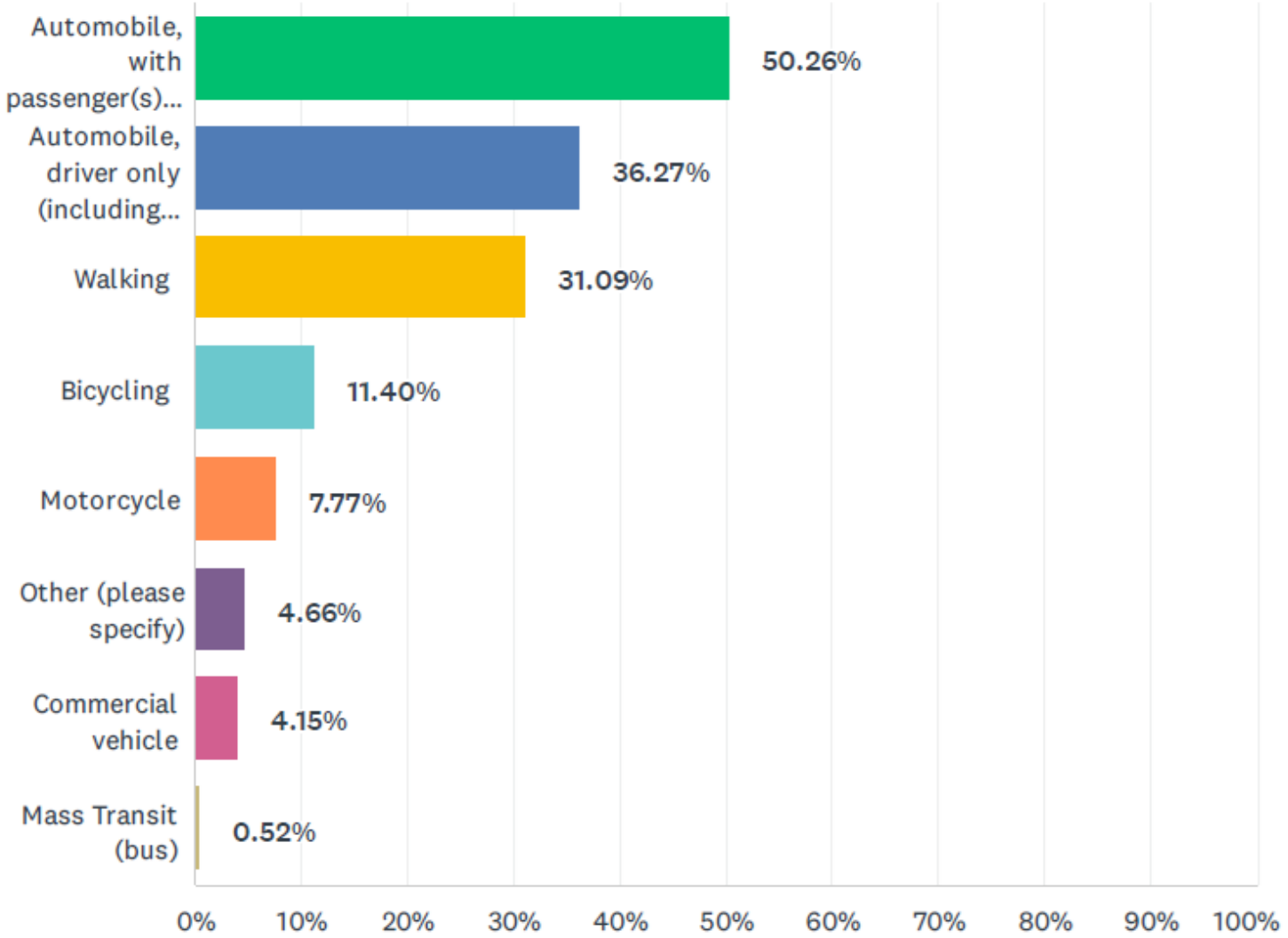


When traveling on Rt 104 in Bridgewater, what is your primary mode of transportation *(Please choose only one answer)*



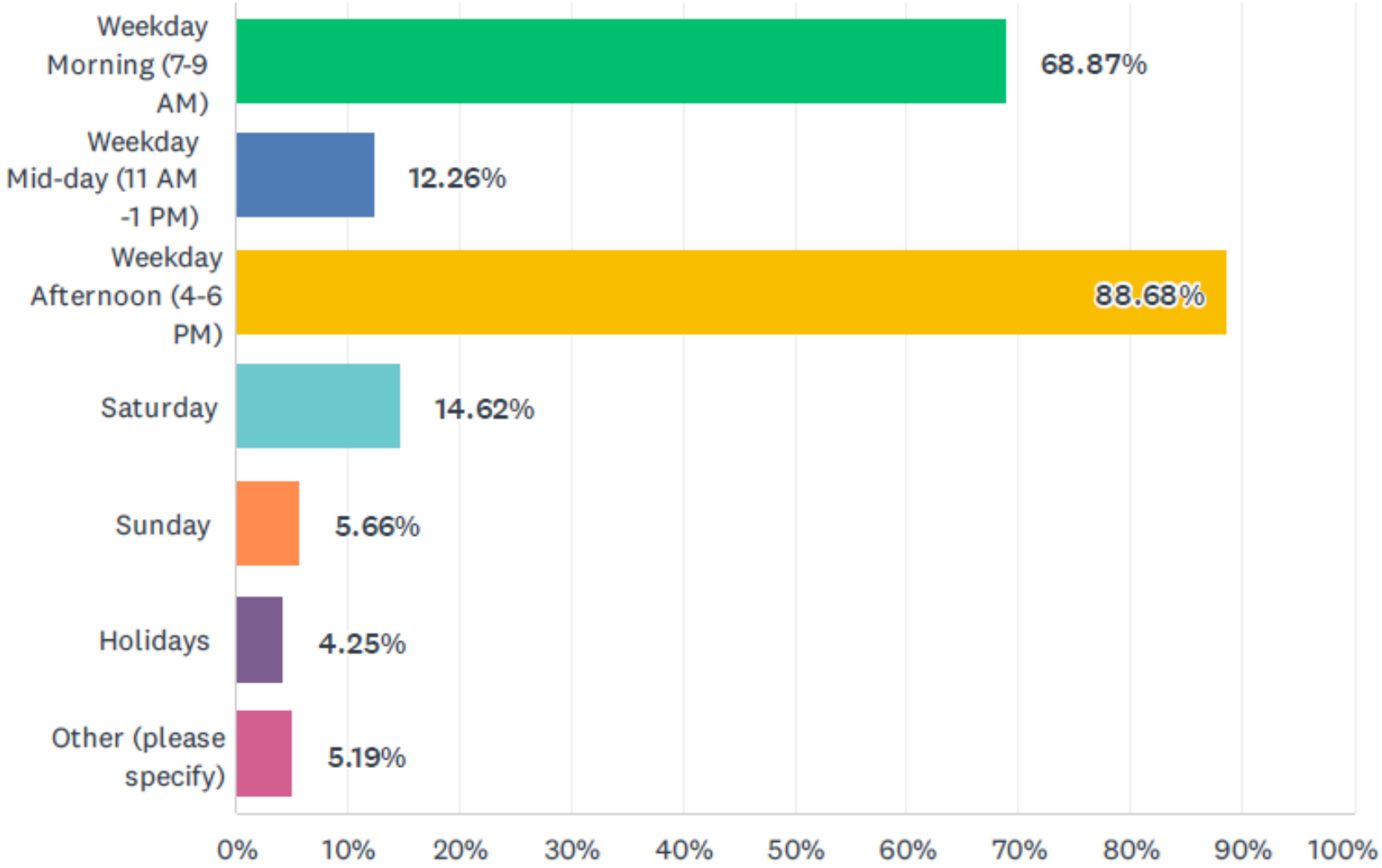
212 Answered
2 Skipped

In addition to your primary mode of travel specified in Q2, what other modes of travel do you utilize when traveling on Rt 104 in Bridgewater *(select all that apply)*



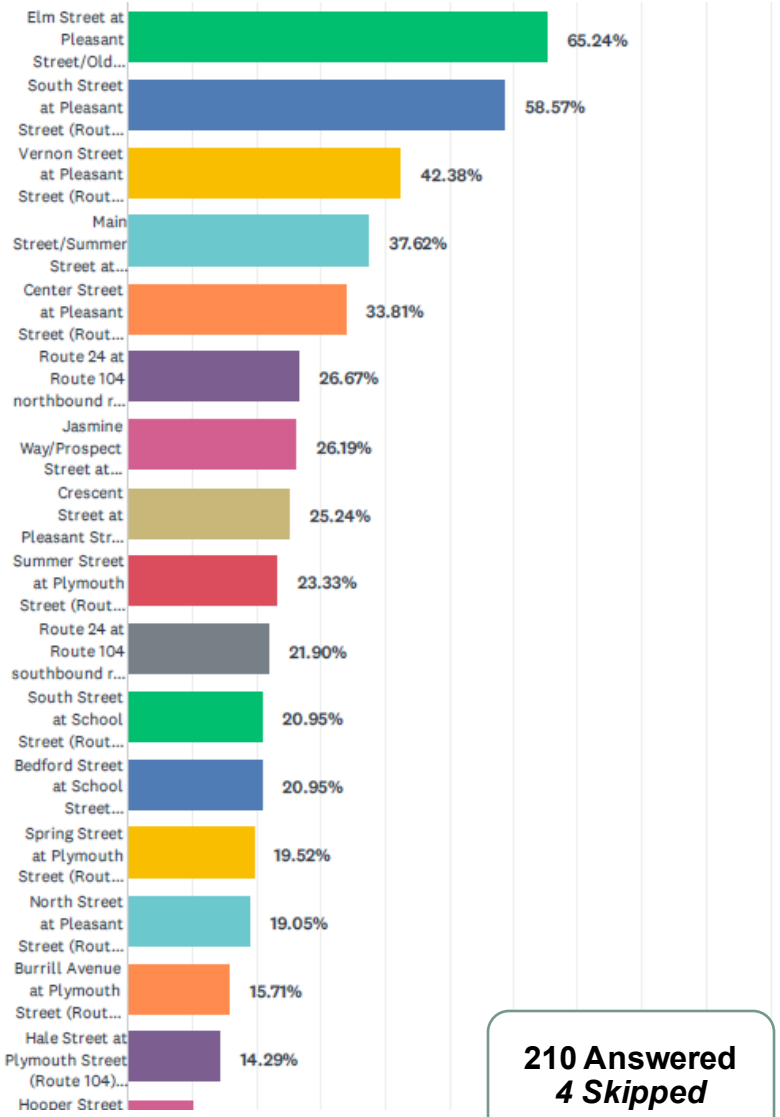
193 Answered
21 Skipped

What time periods do you think are the most congested time along Rt 104 in Bridgewater? *(Select all that apply)*



212 Answered
2 Skipped

What locations along Rt 104 in Bridgewater are the most congested?
(Select all that apply)



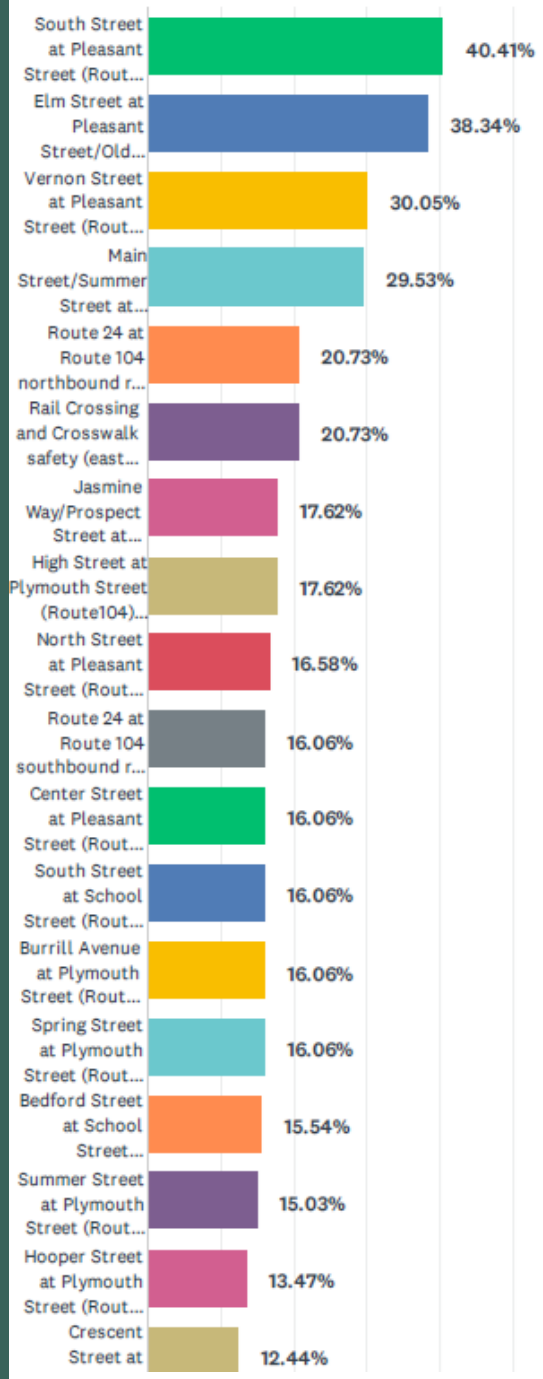
210 Answered
4 Skipped

ANSWER CHOICES	RESPONSES	
Elm Street at Pleasant Street/Old Pleasant Street at Pleasant Street (Route 104) intersection (signalized) (3)	65.24%	137
South Street at Pleasant Street (Route 104) intersection (10)	58.57%	123
Vernon Street at Pleasant Street (Route 104) intersection (5)	42.38%	89
Main Street/Summer Street at Central Square (signalized) (13)	37.62%	79
Center Street at Pleasant Street (Route 104) intersection (8)	33.81%	71
Route 24 at Route 104 northbound ramp intersection (signalized) (2)	26.67%	56
Jasmine Way/Prospect Street at Pleasant Street (Route 104) intersection (signalized) (4)	26.19%	55
Crescent Street at Pleasant Street (Route 104) intersection (9)	25.24%	53
Summer Street at Plymouth Street (Route 104) intersection (signalized) (14)	23.33%	49
Route 24 at Route 104 southbound ramp intersection (signalized) (1)	21.90%	46
South Street at School Street (Route 104) intersection (signalized) (11)	20.95%	44
Bedford Street at School Street intersection (12)	20.95%	44
Spring Street at Plymouth Street (Route 104) intersection (signalized) (17)	19.52%	41
North Street at Pleasant Street (Route 104) intersection (6)	19.05%	40
Burrill Avenue at Plymouth Street (Route 104) intersection (16)	15.71%	33
Hale Street at Plymouth Street (Route 104) intersection (15)	14.29%	30
Hooper Street at Plymouth Street (Route 104) intersection (18)	10.00%	21
High Street at Plymouth Street (Route104) intersection (21)	9.05%	19
Birch Street at Pleasant Street (Route 104) intersection (7)	8.57%	18
Other (please specify) (23)	7.62%	16
Hayward Street at Plymouth Street (Route 104) intersection (19)	3.81%	8
Mill Street at Plymouth Street (Route 104) intersection (20)	1.43%	3
Roberts Road at Pond Street (Route 104) intersection (22)	1.43%	3

Along Rt 104 in Bridgewater, what locations in your experience require the most improvements for safety?

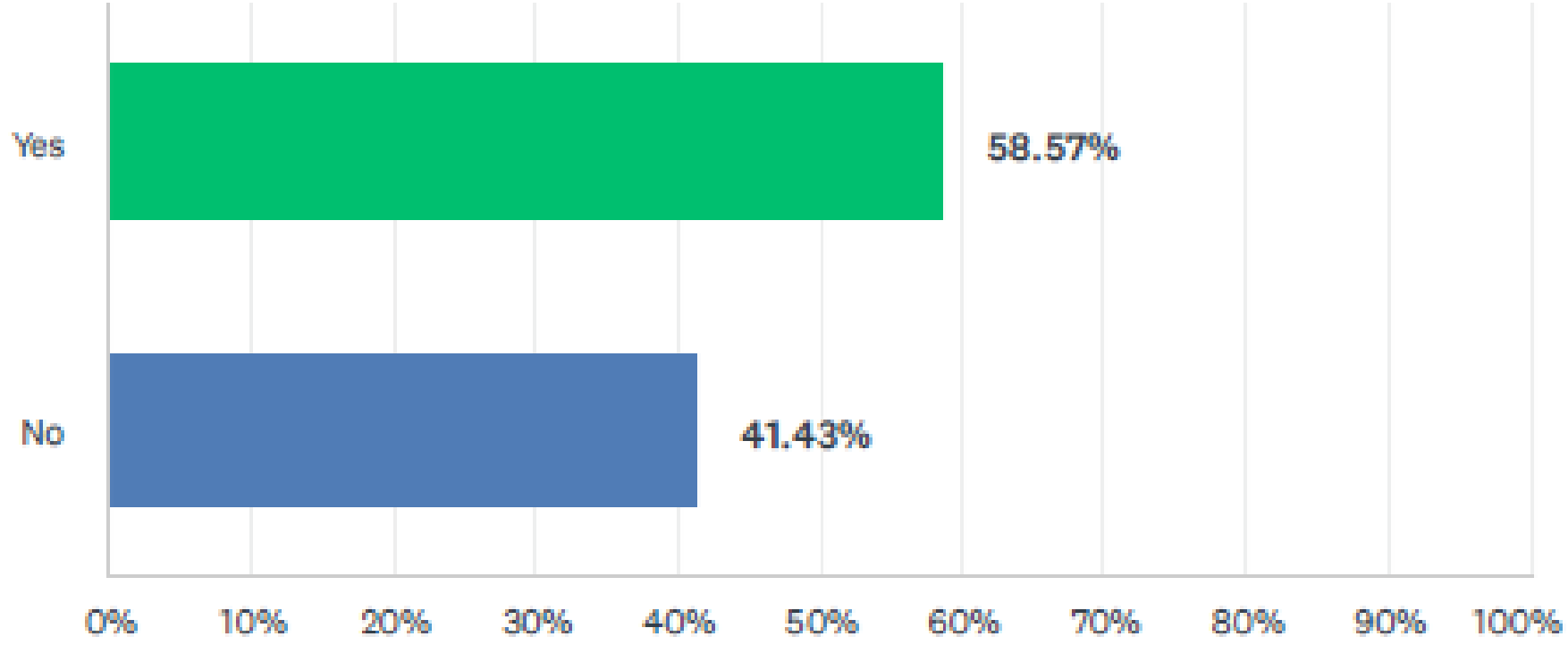
(Select all that apply)

193 Answered
21 Skipped



ANSWER CHOICES	RESPONSES	
South Street at Pleasant Street (Route 104) intersection (10)	40.41%	78
Elm Street at Pleasant Street/Old Pleasant Street at Pleasant Street (Route 104) intersection (signalized) (3)	38.34%	74
Vernon Street at Pleasant Street (Route 104) intersection (5)	30.05%	58
Main Street/Summer Street at Central Square (signalized) (13)	29.53%	57
Route 24 at Route 104 northbound ramp intersection (signalized) (2)	20.73%	40
Rail Crossing and Crosswalk safety (east of Hale Street) (16)	20.73%	40
Jasmine Way/Prospect Street at Pleasant Street (Route 104) intersection (signalized) (4)	17.62%	34
High Street at Plymouth Street (Route104) intersection (22)	17.62%	34
North Street at Pleasant Street (Route 104) intersection (6)	16.58%	32
Route 24 at Route 104 southbound ramp intersection (signalized) (1)	16.06%	31
Center Street at Pleasant Street (Route 104) intersection (8)	16.06%	31
South Street at School Street (Route 104) intersection (signalized) (11)	16.06%	31
Burrill Avenue at Plymouth Street (Route 104) intersection (17)	16.06%	31
Spring Street at Plymouth Street (Route 104) intersection (signalized) (18)	16.06%	31
Bedford Street at School Street intersection (12)	15.54%	30
Summer Street at Plymouth Street (Route 104) intersection (signalized) (14)	15.03%	29
Hooper Street at Plymouth Street (Route 104) intersection (19)	13.47%	26
Crescent Street at Pleasant Street (Route 104) intersection (9)	12.44%	24
Hayward Street at Plymouth Street (Route 104) intersection (20)	9.33%	18
Other (please specify) (24)	9.33%	18
Birch Street at Pleasant Street (Route 104) intersection (7)	8.81%	17
Hale Street at Plymouth Street (Route 104) intersection (15)	8.29%	16
Roberts Road at Pond Street (Route 104) intersection (23)	5.70%	11
Mill Street at Plymouth Street (Route 104) intersection (21)	4.66%	9
Total Respondents: 193		

Do you find yourself seeking alternate routes to avoid congestion on Rt 104 in Bridgewater on a regular basis?

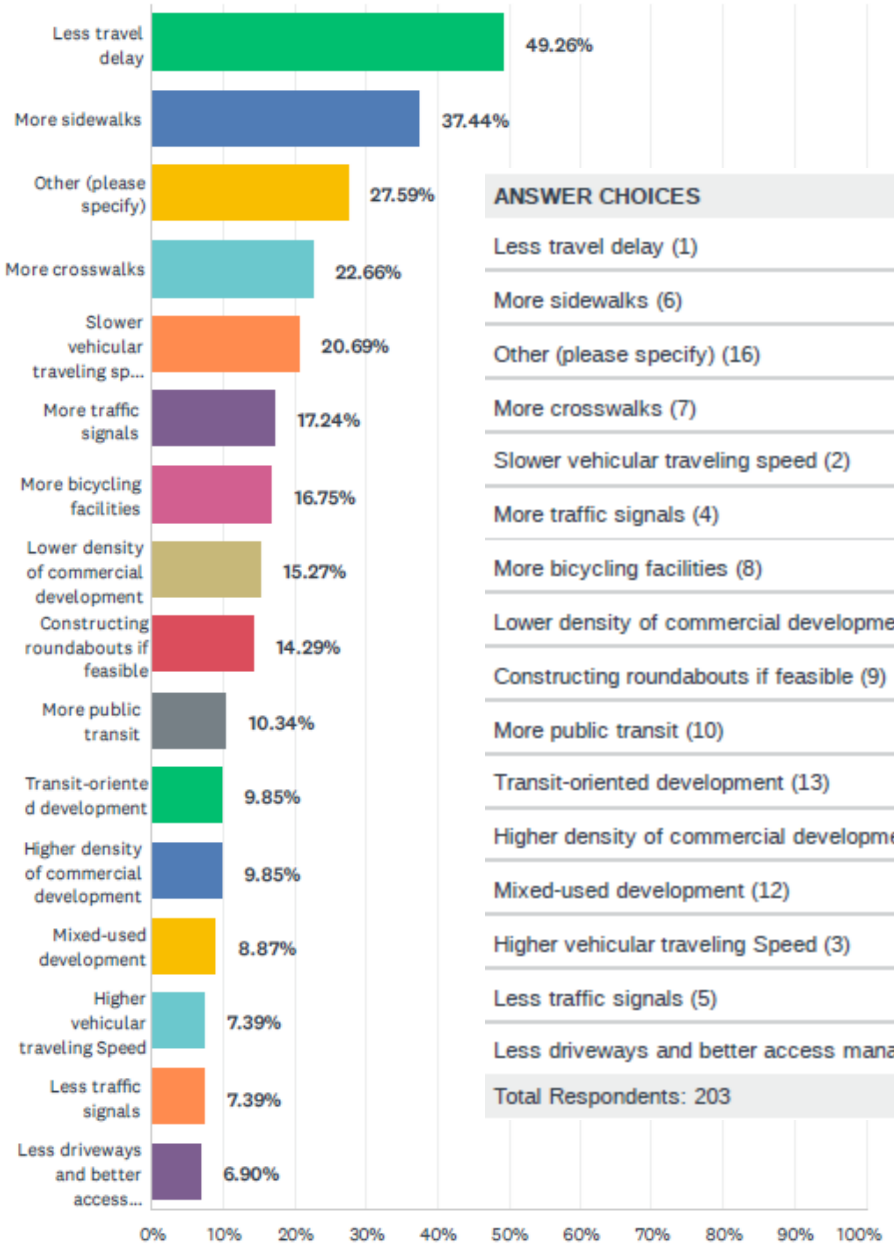


210 Answered
4 Skipped

What infrastructure investments & improvements would you like to see for the future of Rt 104

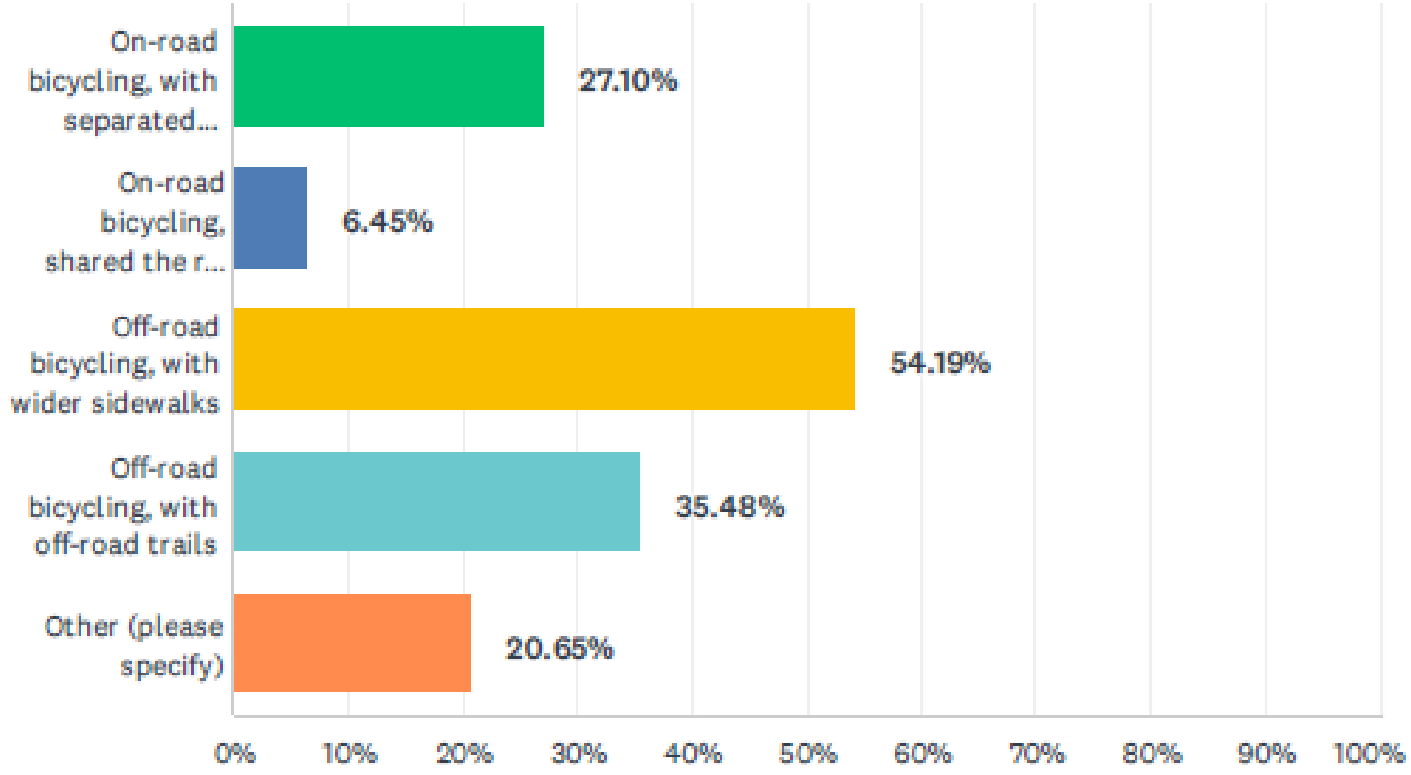
(Select all that apply)

203 Answered
11 Skipped



ANSWER CHOICES	RESPONSES	
Less travel delay (1)	49.26%	100
More sidewalks (6)	37.44%	76
Other (please specify) (16)	27.59%	56
More crosswalks (7)	22.66%	46
Slower vehicular traveling speed (2)	20.69%	42
More traffic signals (4)	17.24%	35
More bicycling facilities (8)	16.75%	34
Lower density of commercial development (15)	15.27%	31
Constructing roundabouts if feasible (9)	14.29%	29
More public transit (10)	10.34%	21
Transit-oriented development (13)	9.85%	20
Higher density of commercial development (14)	9.85%	20
Mixed-used development (12)	8.87%	18
Higher vehicular traveling Speed (3)	7.39%	15
Less traffic signals (5)	7.39%	15
Less driveways and better access management (11)	6.90%	14
Total Respondents: 203		

If available, which type(s) of bicycling facilities would you prefer to use to travel along Rt 104 in Bridgewater? *(Select all that apply)*



ANSWER CHOICES	RESPONSES	
On-road bicycling, with separated bicycle lanes (1)	27.10%	42
On-road bicycling, shared the road with other vehicles (2)	6.45%	10
Off-road bicycling, with wider sidewalks (3)	54.19%	84
Off-road bicycling, with off-road trails (4)	35.48%	55
Other (please specify) (5)	20.65%	32

155 Answered
59 Skipped

Transportation Operation along Route 104, Bridgewater

VEHICLE VOLUME RANGE:

4,846 – 22,996 per day

85% SPEED RANGE:

25 MPH – 46 MPH

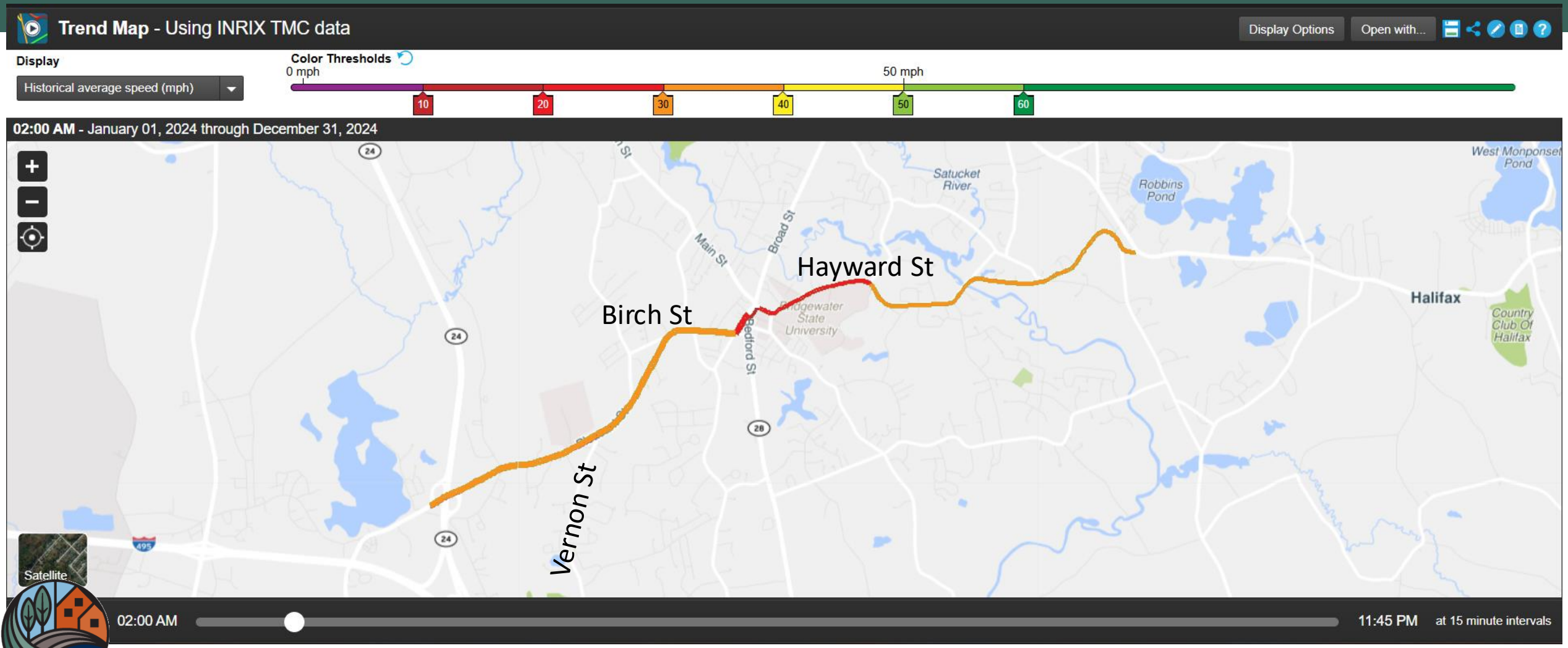
HEAVY VEHICLE % RANGE:

5% - 19.2%

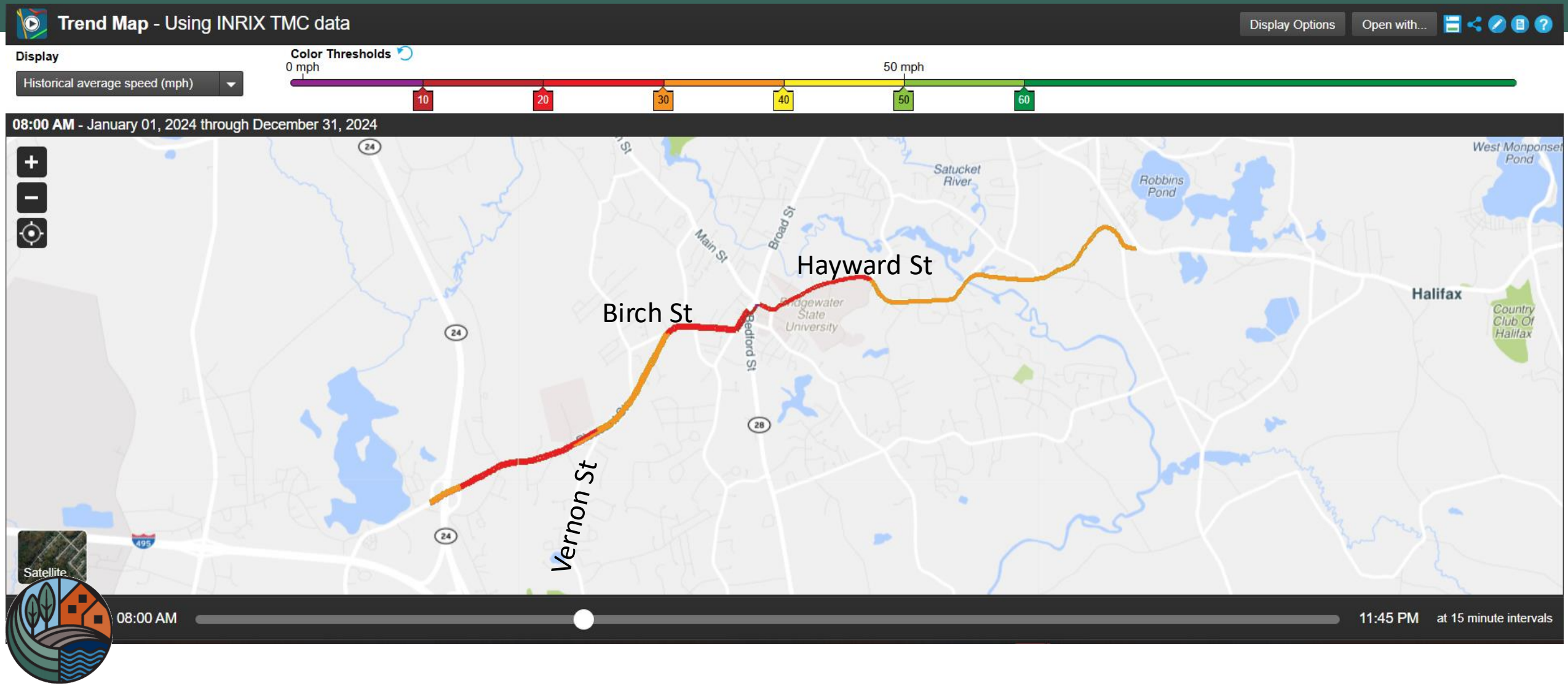
Top Pedestrian Intersections

1. **Route 104 at Hale St (130/2Hour)**
2. **Route 104 at School St (48/2Hour)**

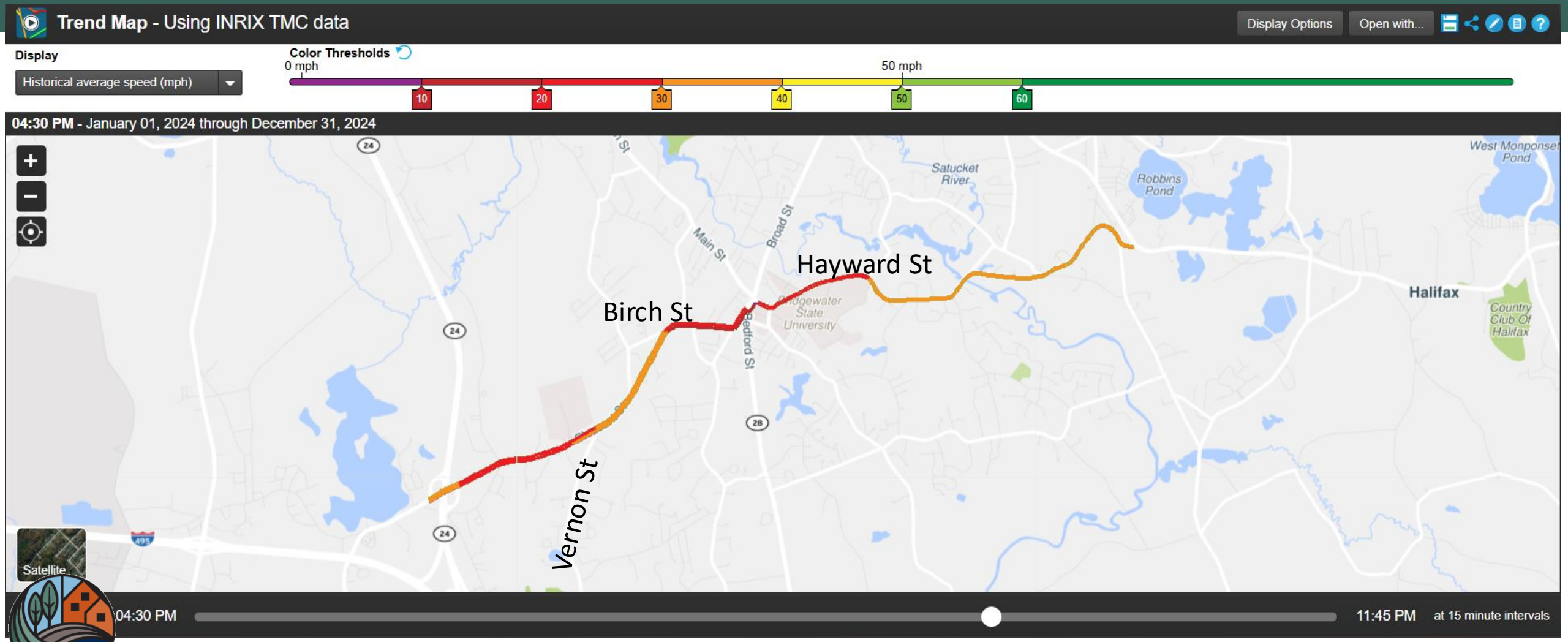
Average Traffic Speed at Non-peak Hour



Average Traffic Speed at 8AM in 2024



Average Traffic Speed at 4:30 PM in 2024

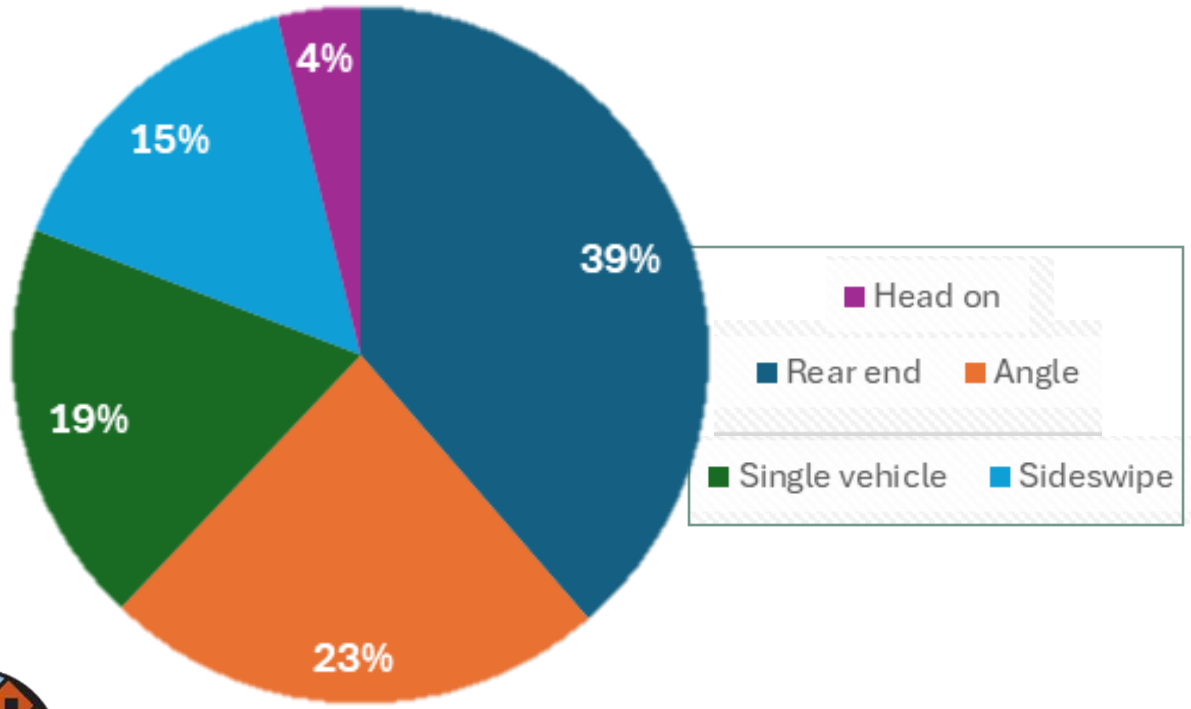


Intersection Capacity Summary

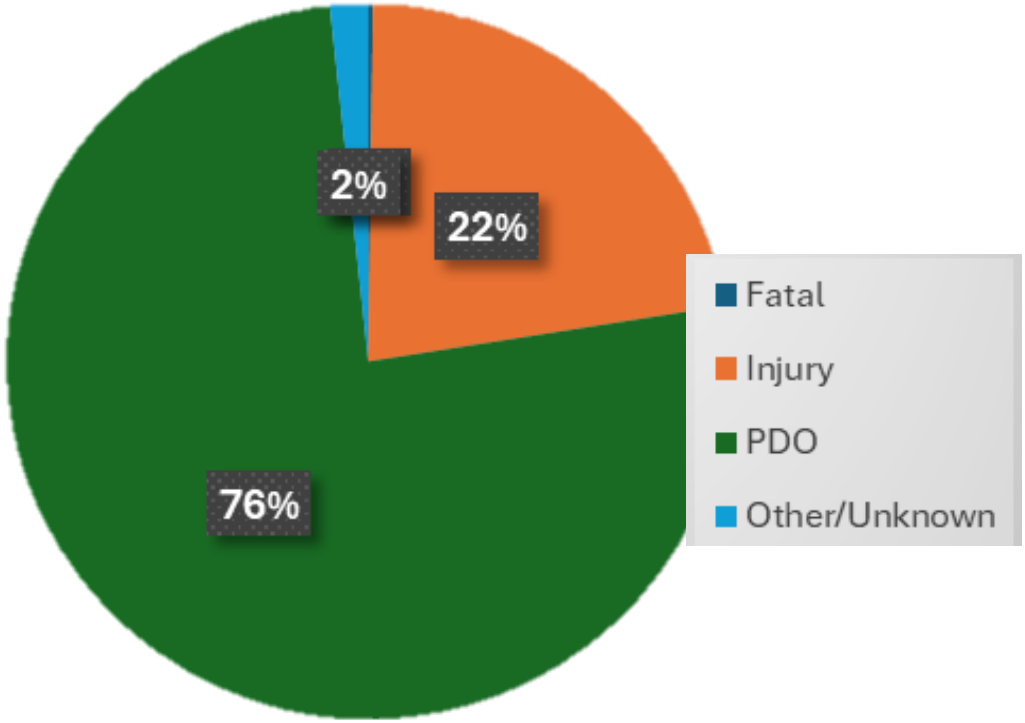
		LOS (A-F)		Delay (Second)		ICU (%)	
Location	**Type**	AM	PM	AM	PM	AM	PM
Route 24 at Route 104 SB Ramp intersection	Signal	A	A	8.8	9.1	95.6%	95.6%
Route 24 at Route 104 NB Ramp intersection	Signal	D	E	47.7	79.1	97.6%	104.0%
Pleasant St at Bridgewater Place (HomeDepot)	Signal	A	A	8.2	9.5	56.6%	63.2%
Elm St at Pleasant St(Route 104) intersection	Signal	C	F	31.3	145.9	70.6%	63.2%
Jasmine Way/Prospect St at Pleasant St(Route 104) intersection	Signal	F	F	137.5	111.2	78.3%	68.1%
Vernon St at Pleasant St(Route 104) intersection	Stop	F	F	51.0	61.7	-	-
North St at Pleasant St(Route 104) intersection	Stop	D	E	25.8	36.5	-	-
Birch St at Pleasant St(Route 104) intersection	Stop	F	F	64.5	74.5	-	-
Center St at Pleasant St(Route 104) intersection	Signal	E	E	75.9	75.1	97.3%	101.7%
Crescent St at Pleasant St(Route 104) intersection	Signal	B	B	19.5	18.1	52.1%	55.1%
South St at Pleasnt St (Route 104) intersection	Stop	F	F	113.2	181.7	-	-
Main St/Summer St at Central Square intersection	Signal	D	D	42.9	50.2	83.0%	85.9%
Summer St at Plymouth St (Route 104) intersection	Signal	B	B	14.5	16.8	36.7%	45.3%
Hale St at Plymouth St(Route 104) intersection intersection	Stop	C	C	16.7	23.4	-	-
Burrill Ave at Plymouth St(Route 104) intersection	Stop	C	C	16.6	23.0	-	-
Spring St at Plymouth St (Route 104) intersection	Signal	B	B	13.8	16.2	41.5%	74.6%
Hayward St at Plymouth St (Route 104) intersection	Stop	C	D	16.3	34.4	-	-
Mill St at Plymouth St (Route 104) intersection	Stop	B	B	11.5	12.6	-	-
High St at Plymouth St (Route 104) intersection	Stop	B	C	14.1	17.5	-	-
Roberts Rd at Pond St(Route 104) intersection	Stop	B	B	10.2	10.6	-	-

946 Collisions 5 Years

Collision Types

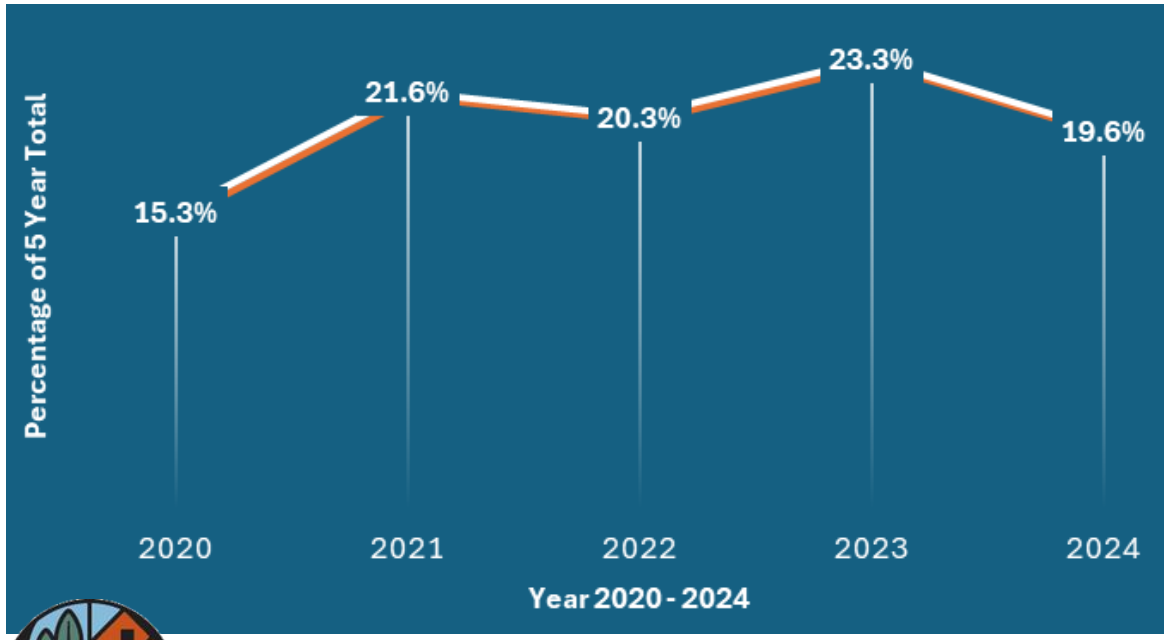


Collision Severity Types

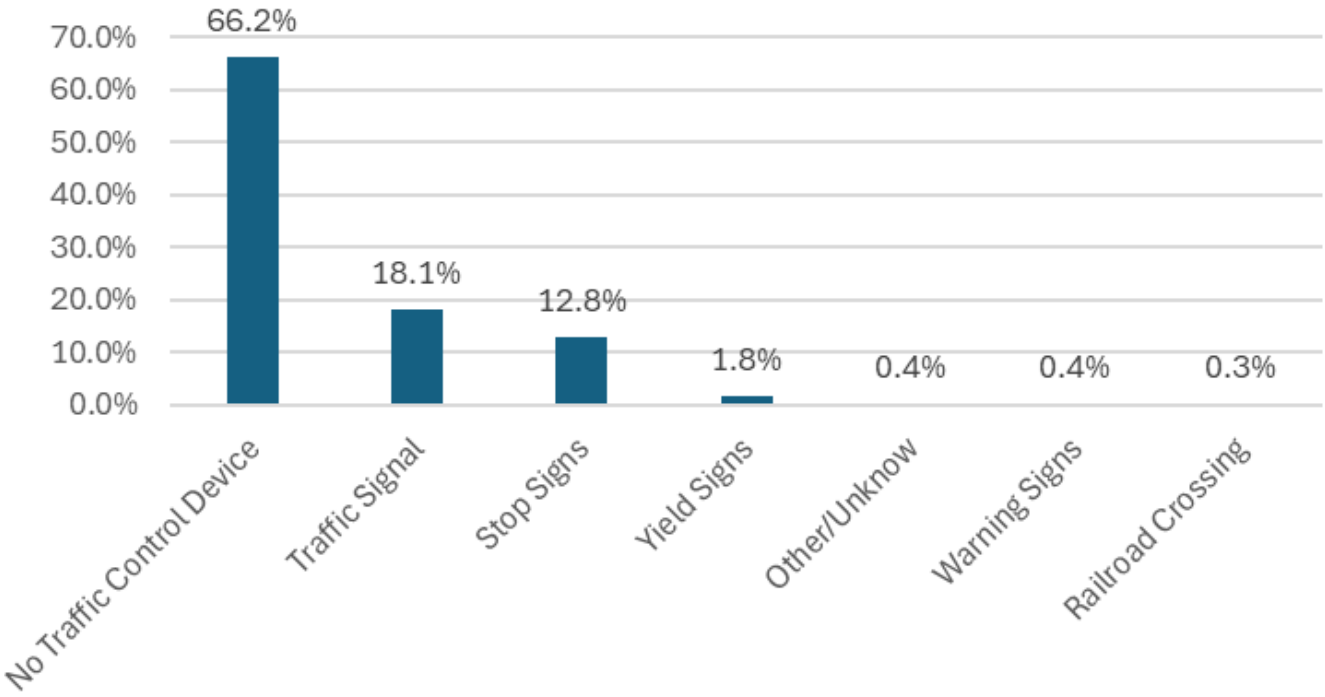


946 Collisions 5 Years

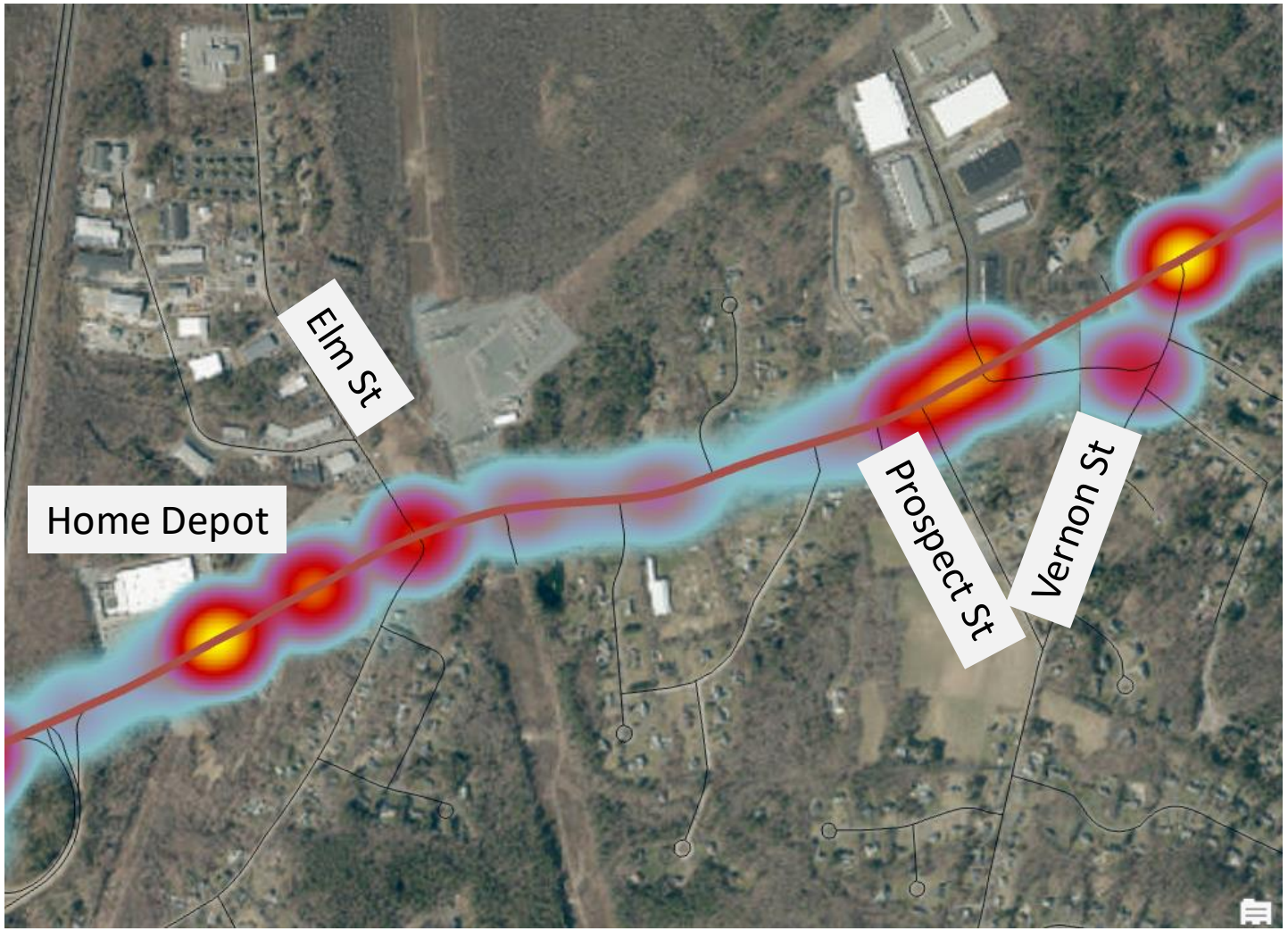
5 Year Collision Trend



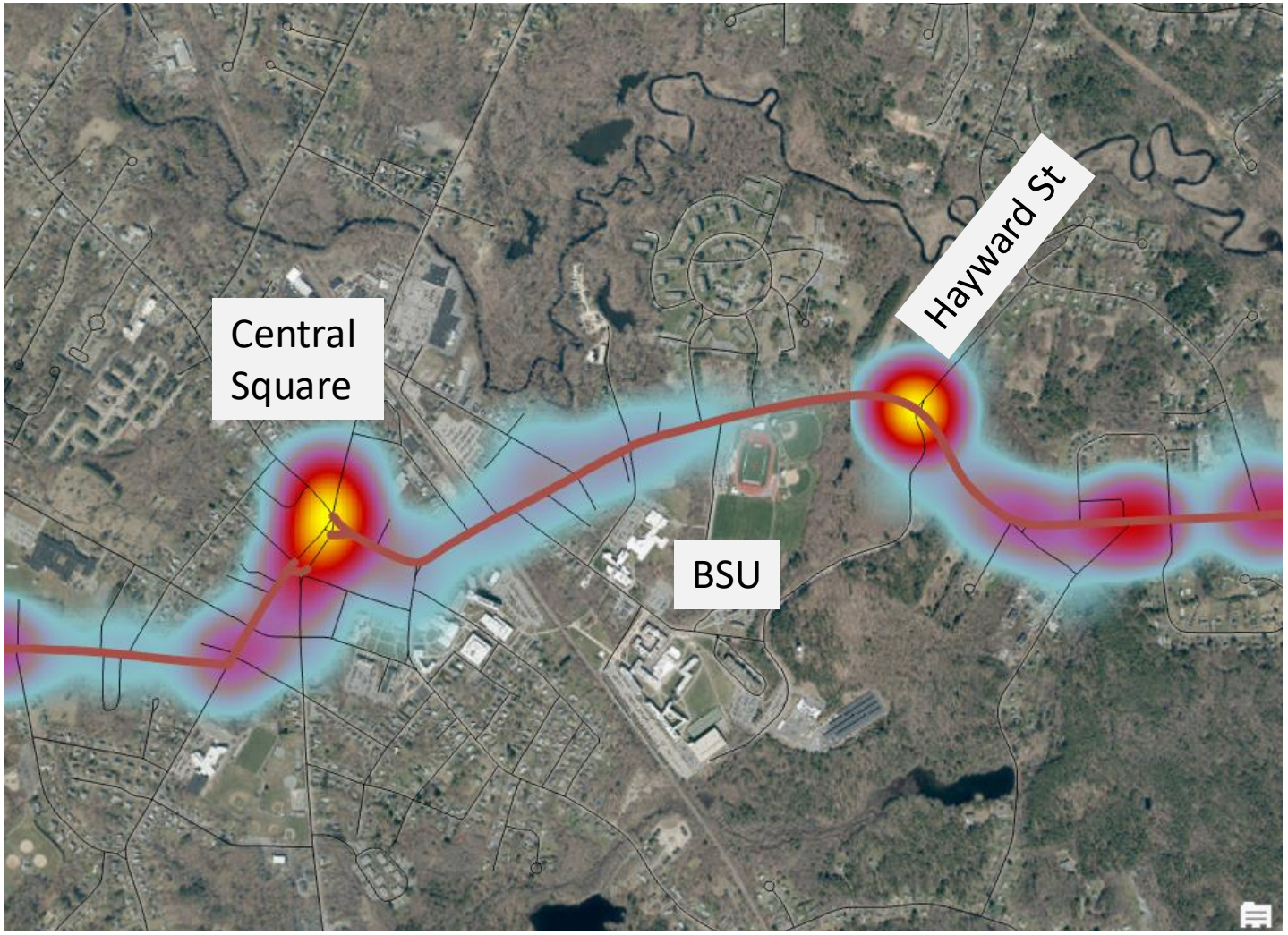
Presence of Traffic Control Types for Collisions



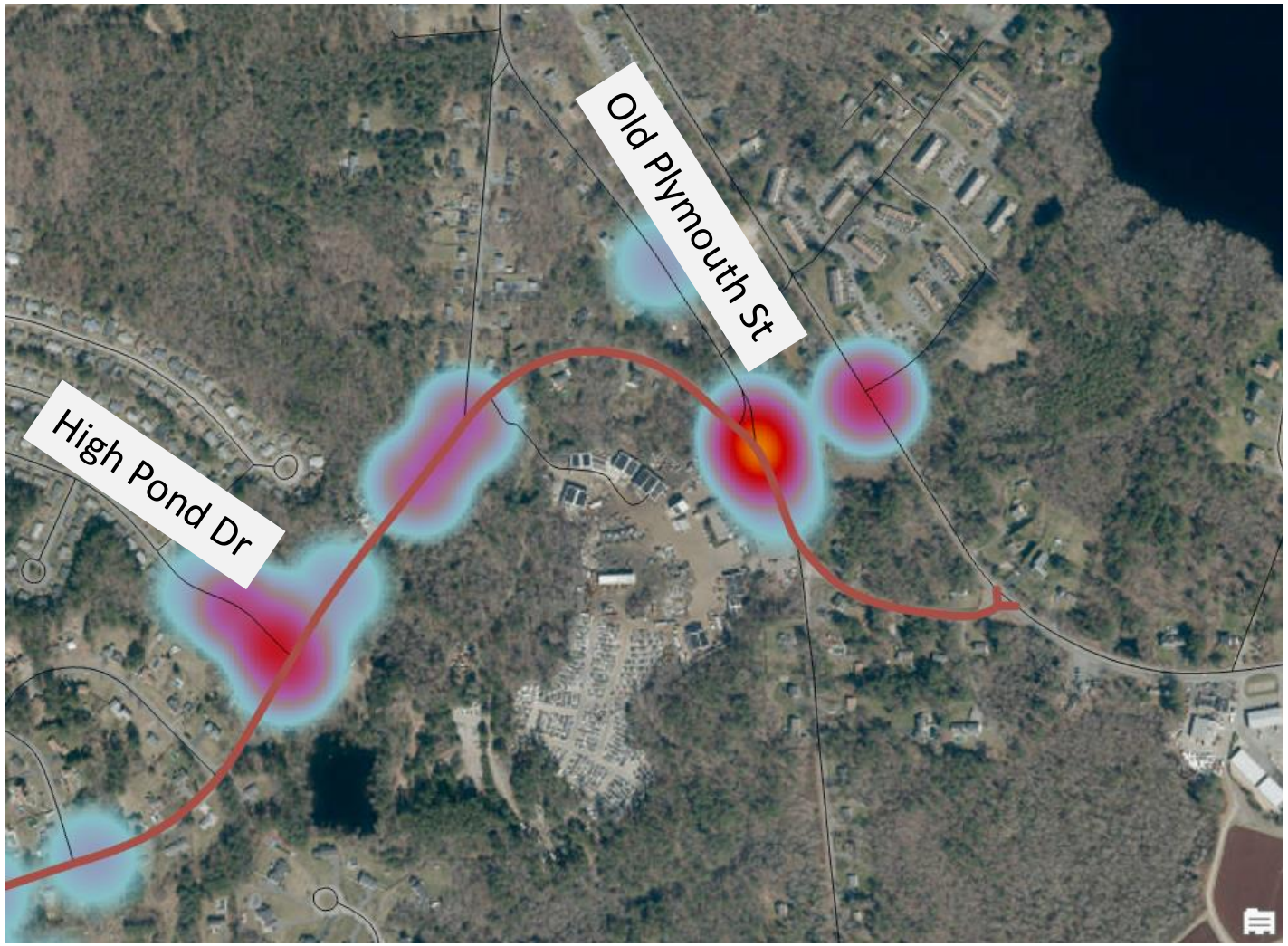
Collision Heat Map for the Elm Street to Vernon Street



Collision Heat Map for the Central Square to Hayward Street



Collision Heat Map for the High Pond Drive to Old Plymouth Street



Route 104 Corridor Wide Improvement Consideration

Continuous Bicycling and Pedestrian Network
- Consider sidewalks, off-road multiuse paths, and separated bike lanes as warranted

Enhanced Pedestrian Crossings
- Consider Rectangular Rapid Flashing Beacons (RRFBs), Pedestrian Hybrid Beacons (HAWKs/PHBs) at selected locations as warranted

Access Management
- Consider access management design by optimizing driveway spacing, restricting left-turn movements, re-designing driveways where appropriate
- Consider median treatments and access control as warranted

Lane and Turning Capacity Enhancements
- Assess throughfare lane configuration and capacity
- Focus on locations with heavy recurring congestion

Vehicle Restrictions
- Evaluate heavy vehicle exclusion in residential and business zones

Traffic Calming Measures
- Introduce strategies to reduce speeding and enhance traffic safety

Elm Street at Pleasant Street (Route 104)

Prospect Street at Pleasant Street Intersection

Route 104 Near Crescent Street

South Street at Pleasant Street Intersection

Bedford St at School St (Bridgewater Center)

Railroad Crossing at Bridgewater State University

Corridor Existing & Future Conditions Analysis

Future Development

- Lakeshore Center mixed-use project (over 3000 daily traffic)
- Prospect Street/Jasmine Way commercial development and 40B Project
- New municipal Fire Department
- Central Square Vision to Reality Project
- MBTA Platform

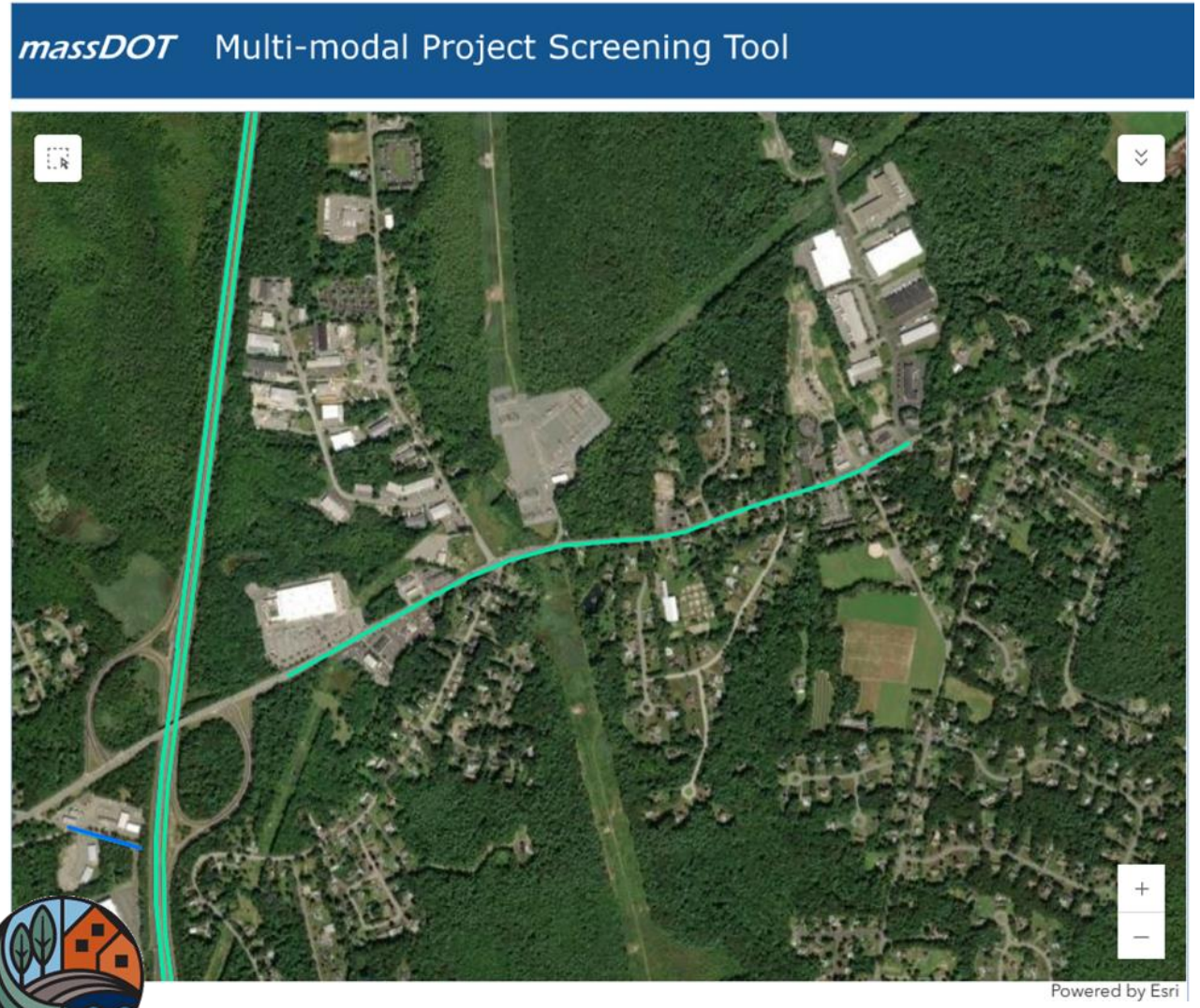
Future Conditions Assessment

- Traffic increase by the proposed developed will be added to the future roadway assessment
- 1% Annual Background growth rate will be applied to develop future traffic volume and LOS assessment
- 88% seasonal factor will be applied to October TMC counts for annual average for Urban Minor Arterial intersections

Potential Funding Resources

- Complete Street
- SS4A
- SRTS
- CMAQ
- Chapter 90
- Special Grants
- Others

MassDOT Projects Information



Current Project:

- Highway Project: Bridgewater – Metal Building Renovations at 10 Fruit Street Maintenance Depot (25% Design)

Completed Project:

- Highway Project: Bridgewater – 3R project at Route 104 (Pleasant Street) from Prospect Street to Route 24.

OLD COLONY
PLANNING COUNCIL

www.oldcolonyplanning.org

QUESTIONS / COMMENTS?

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