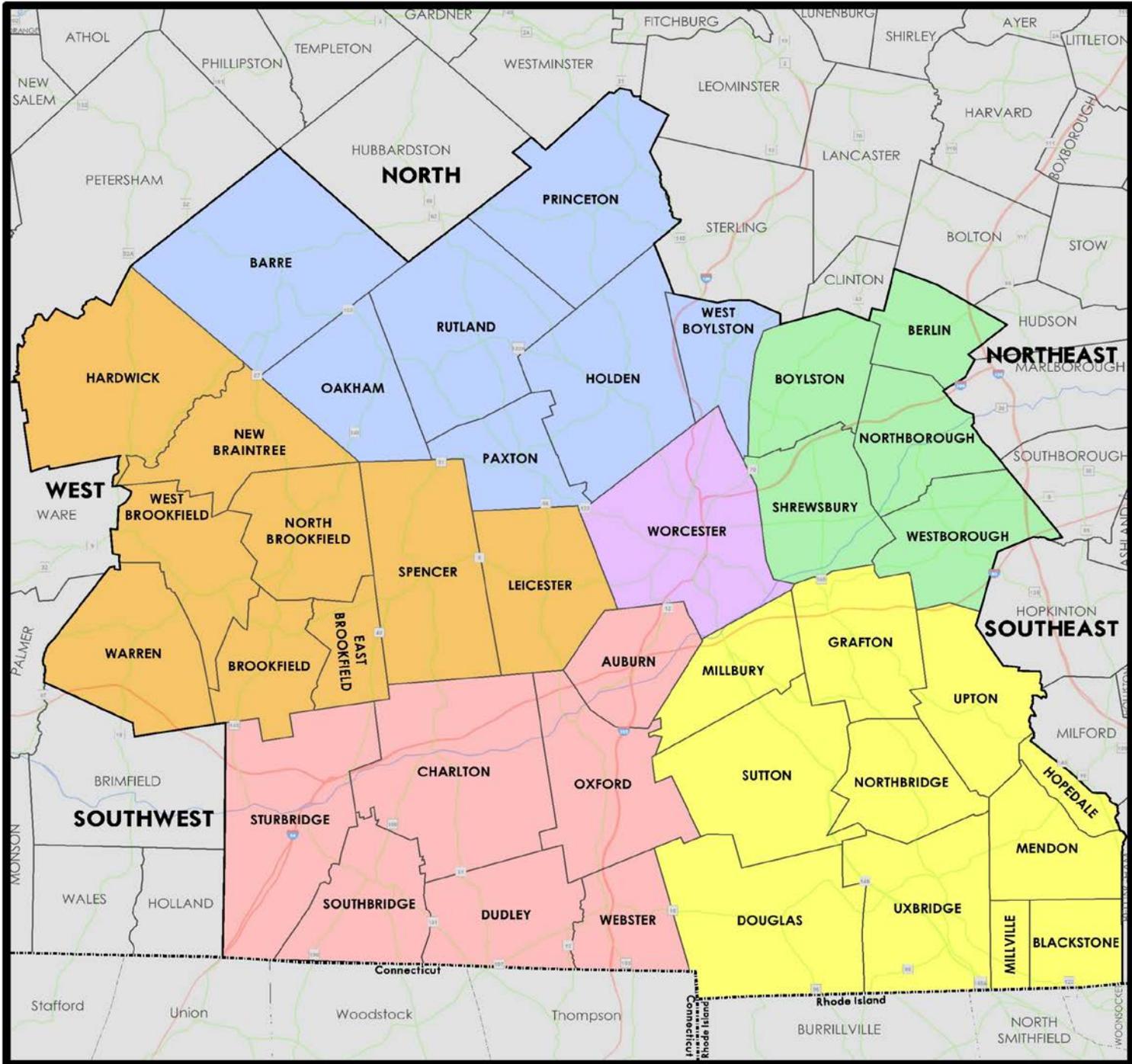




NORTHBOROUGH PLANNING BOARD

CMRPC Traffic
Presentation

FEB 16, 2021



INTRODUCTION

**CENTRAL MASS
REGIONAL PLANNING
COMMISSION
(CMRPC)**





Balancing traffic impact and economic development



Mitigating the impacts of truck traffic on residential areas

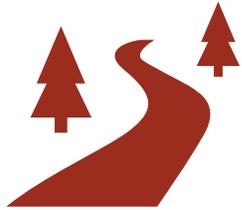


General recommendations on town level and corridor traffic management strategies

**WHAT WILL
WE COVER
TODAY**



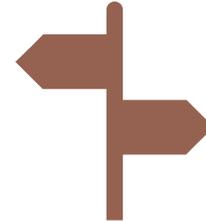
EXISTING CORRIDOR



Corridor Review

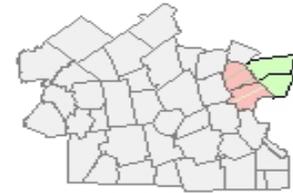
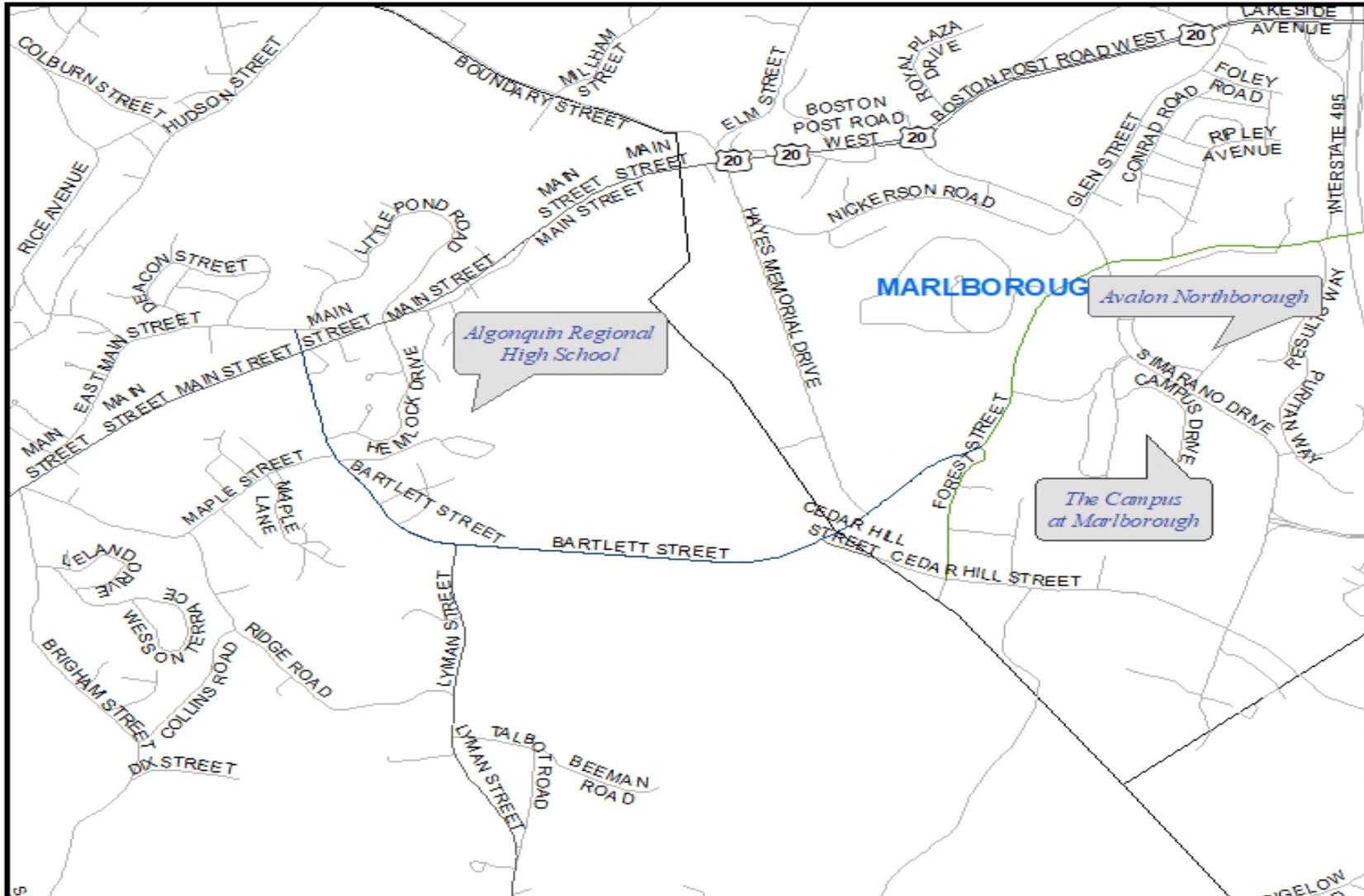


LandUse



Cross streets





Focus Streets
 — Bartlett Street
 — Forest Street

0 0.1 0.2 0.4 Miles



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Source: Data provided by the Central Massachusetts Regional Planning Commission (CMRPC), massDOT/Office of Transportation Planning, Geographic Resources Section and the Office of Geographic Information (MassGIS), Commonwealth of Massachusetts, Information Technology Division.

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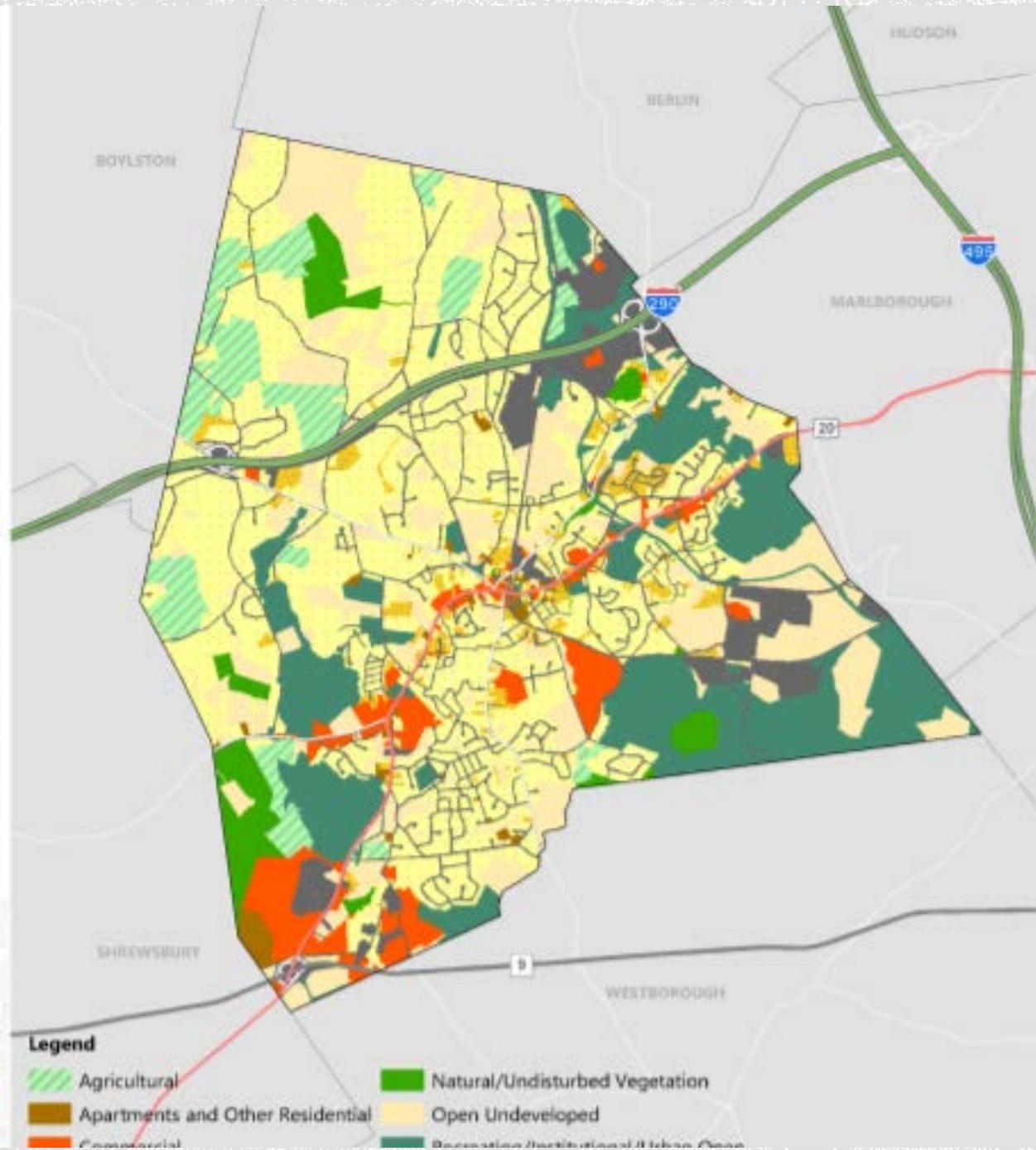
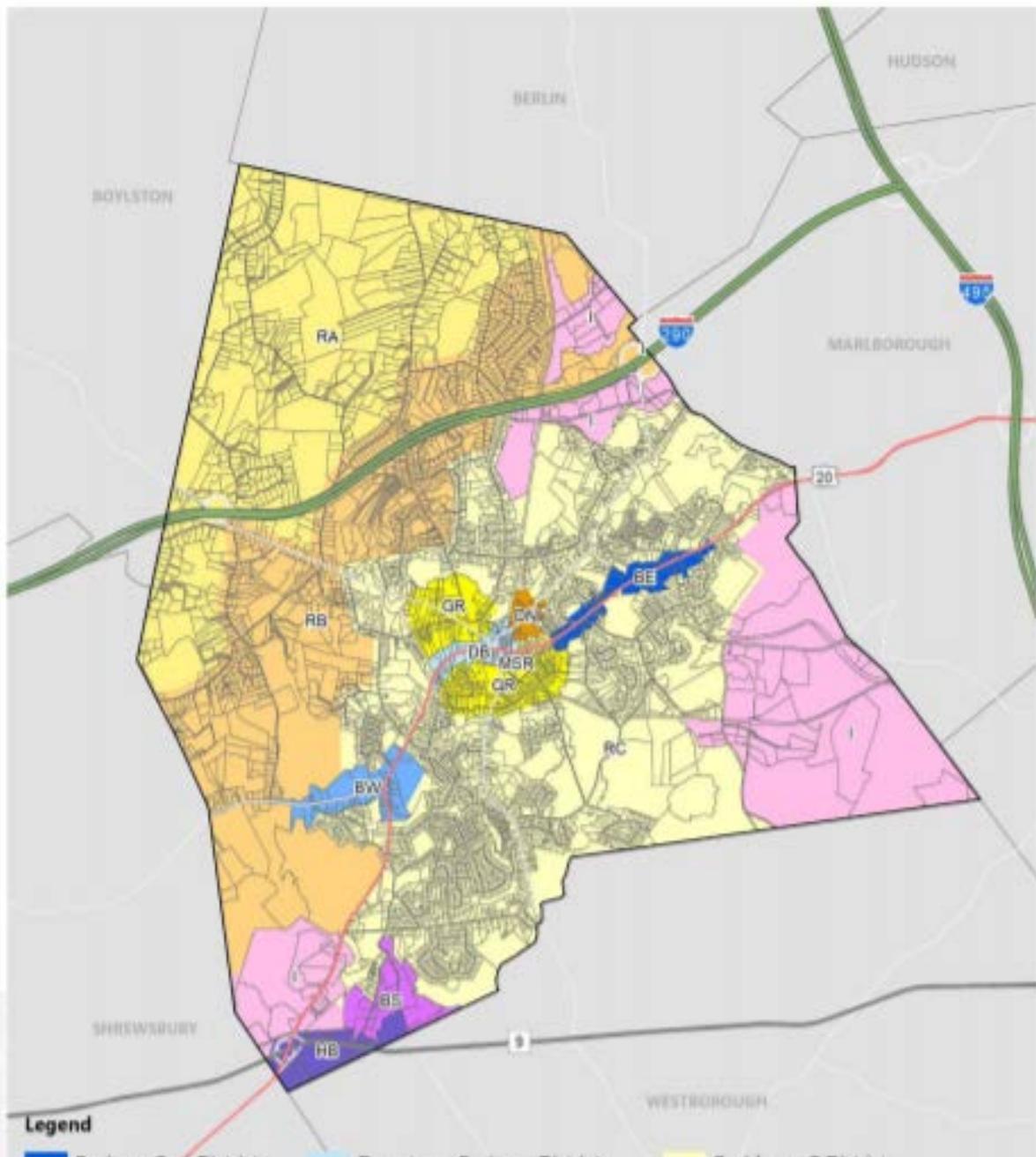
BARTLETT ST./FOREST ST./WILLIAMS ST.

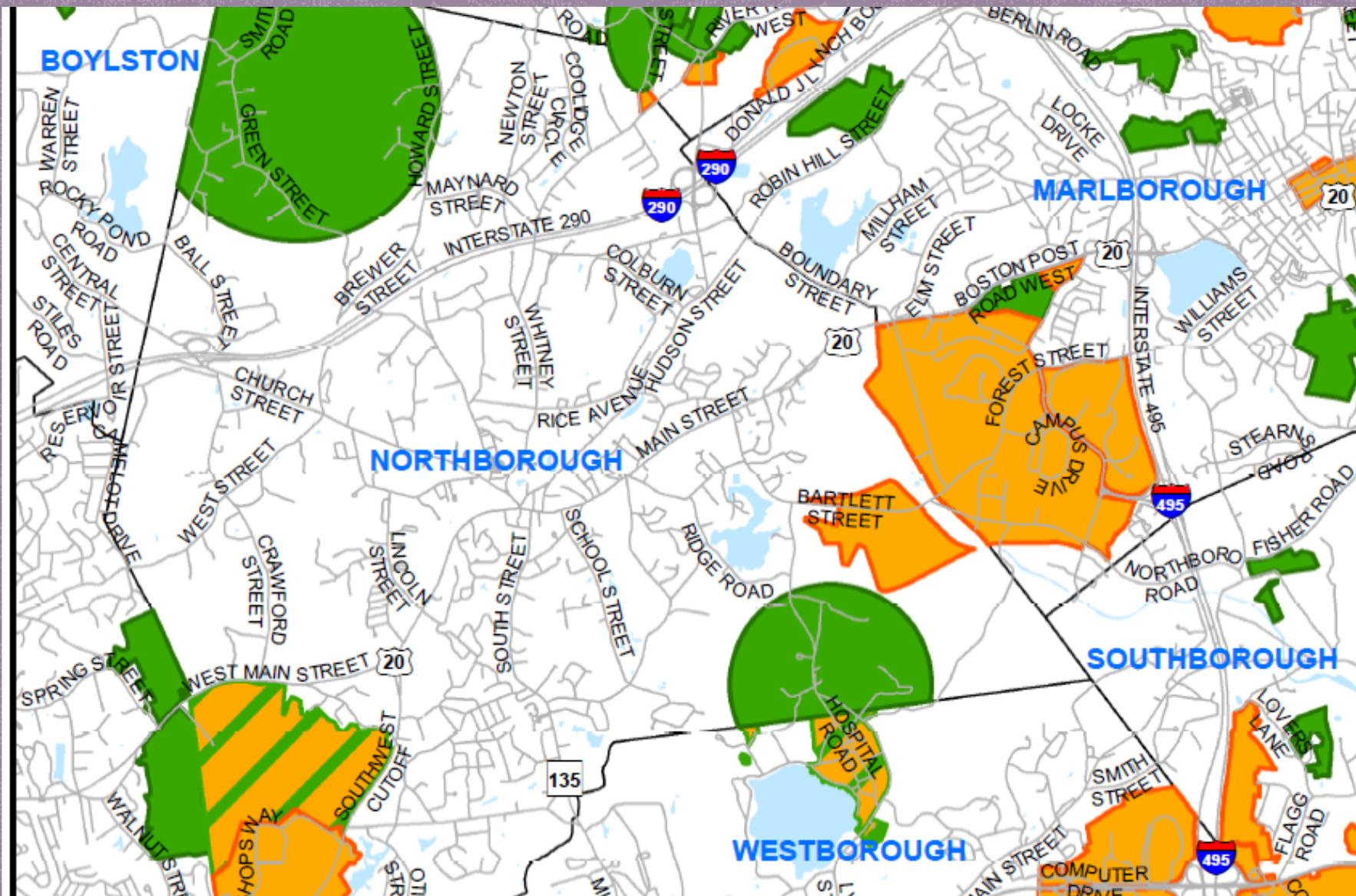


LAND-USE AND ZONING

- **Zoning**
- **Land Use**
- **Priority Development Area**

Figure 2-6 Zoning Districts





- Development
- Preservation
- Preservation/ Development
- Preservation/Transport

0 0.275 0.55 1.1 Miles

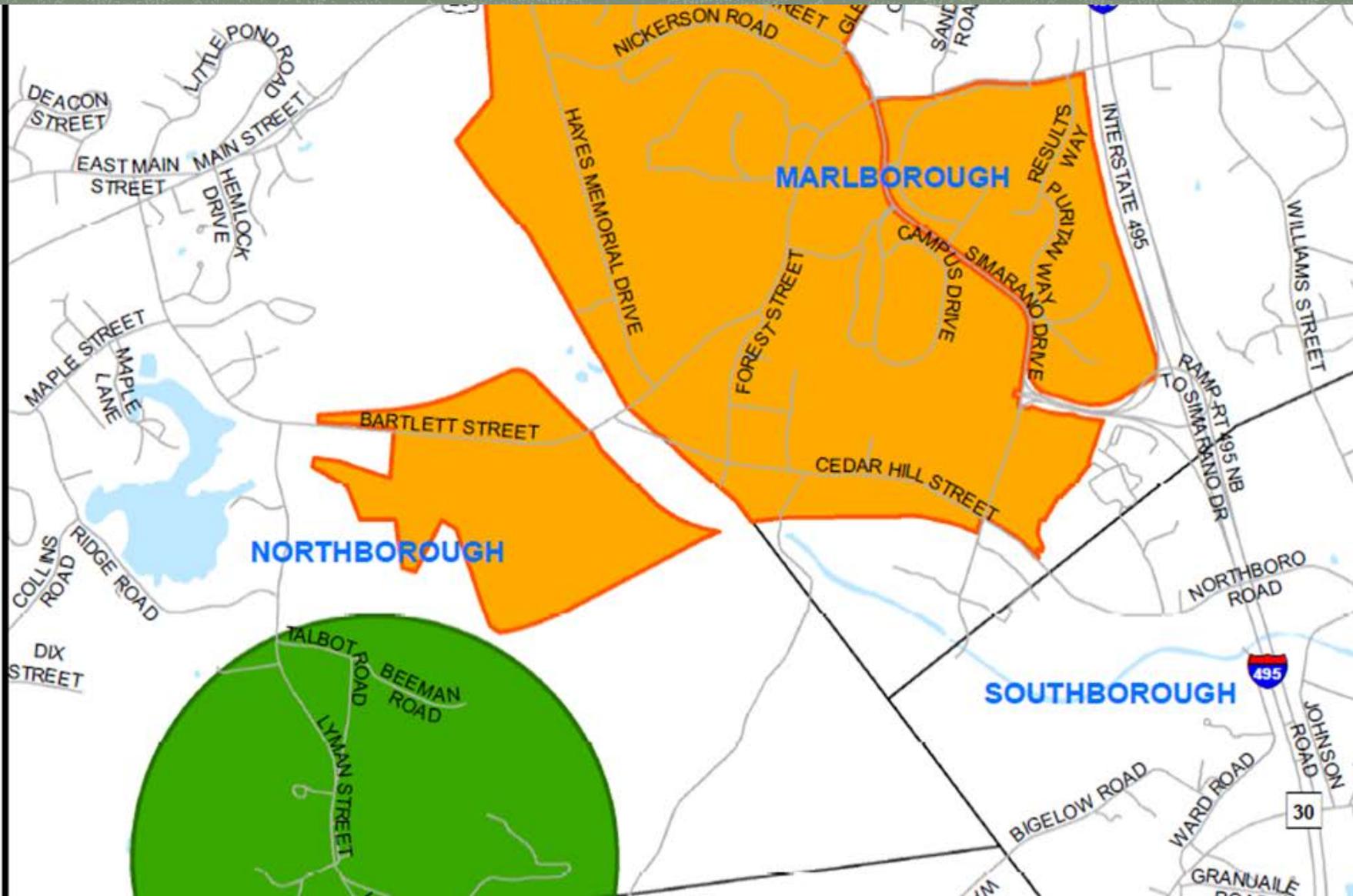


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- Development
- Preservation
- Preservation/ Development
- Preservation/Transport

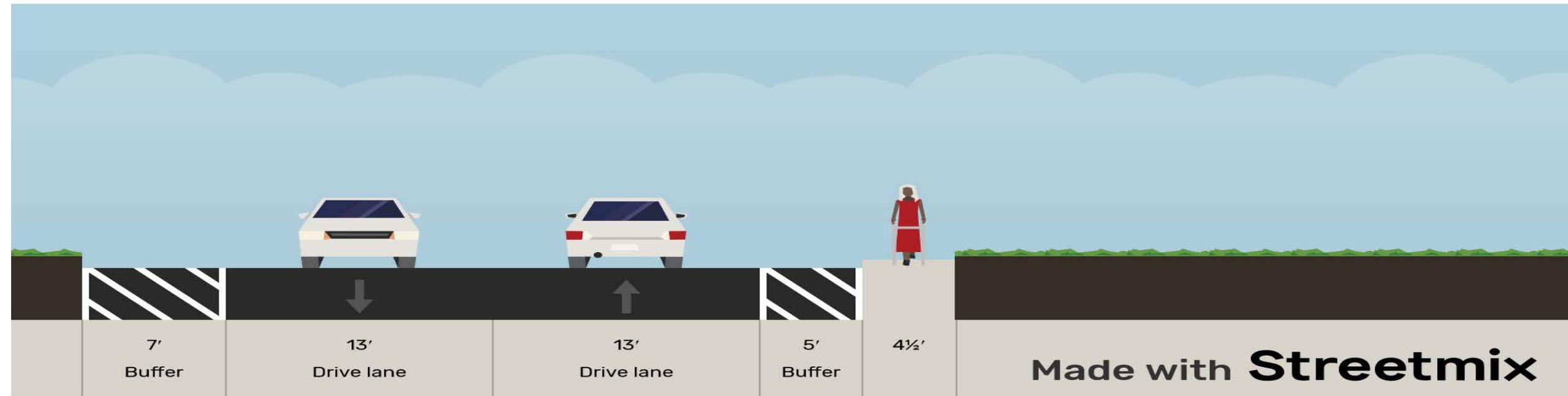
0 0.1 0.2 0.4 Miles



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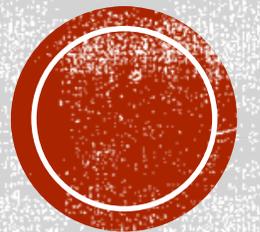


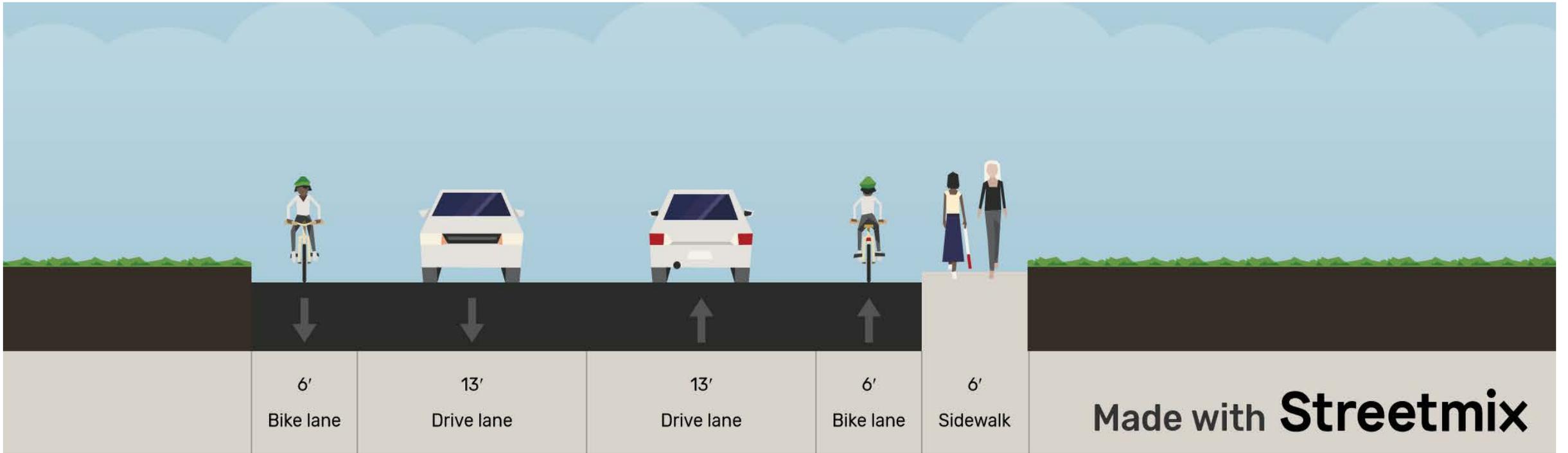
BARTLETT ST. (WEST OF ARHS)





**BARTLETT ST. (NORTHBOROUGH)
WEST OF ARHS.**





FOREST ST (MARLBOROUGH)





FOREST STREET





LYMAN STREET





BARTLETT / HAYES





BARTLETT ST AND CEDAR HILL



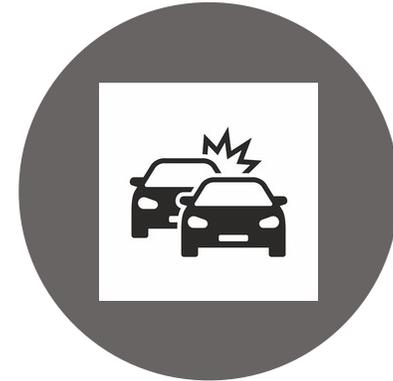
TRAFFIC EXISTING CONDITIONS



TRAFFIC COUNTS

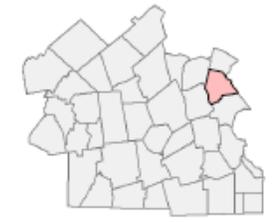
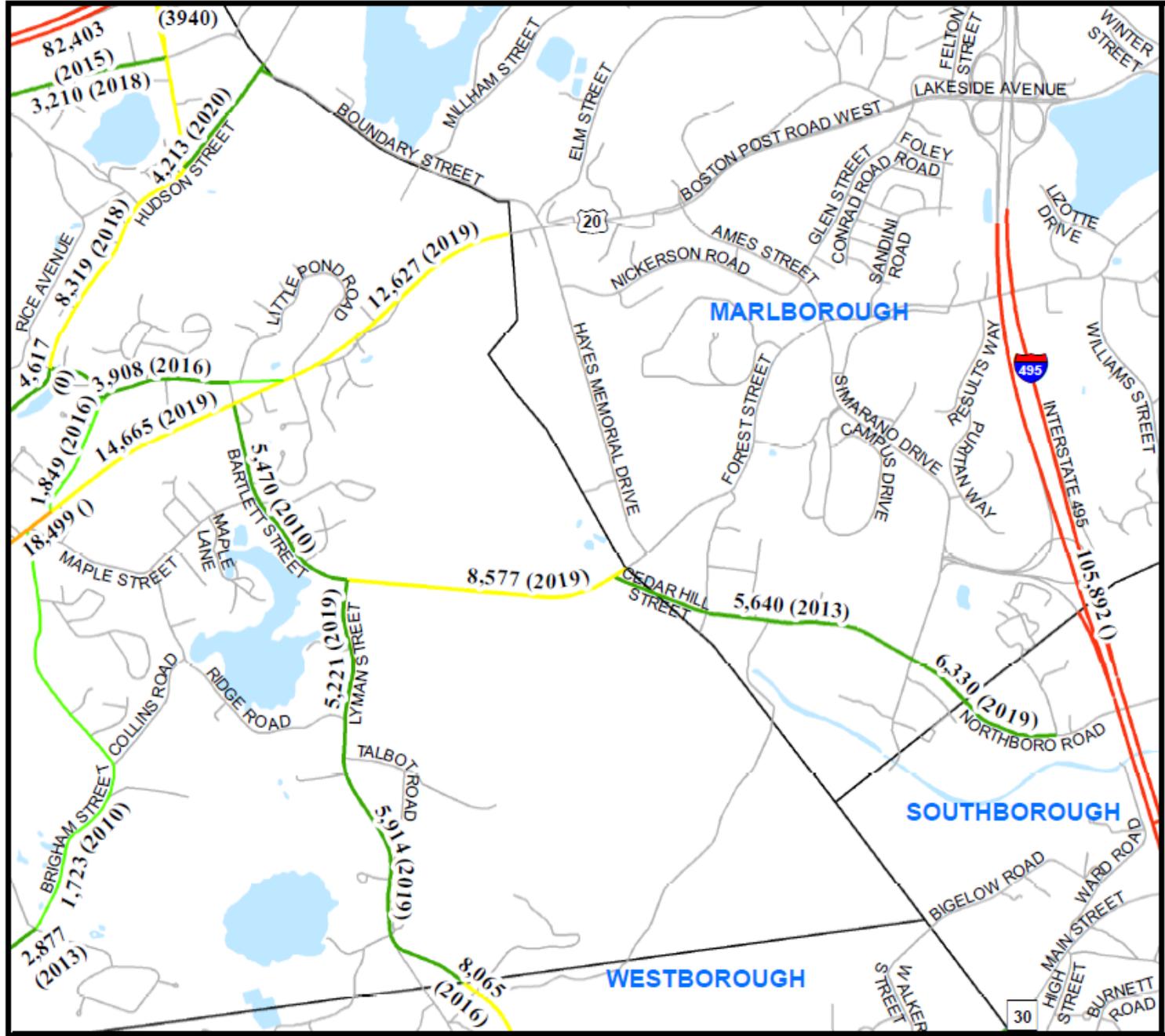


TRUCK COUNTS



CRASH DATA





Traffic Volume (CMRPC)
MR Total Volume

- < 2500
- 2500 - 7499
- 7499 - 14999
- 14999 - 30000
- > 30000

0 0.125 0.25 0.5 Miles



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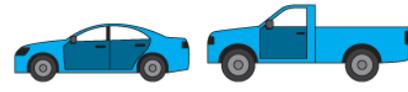


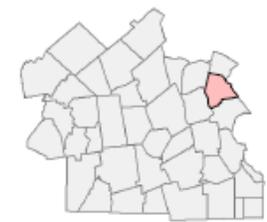
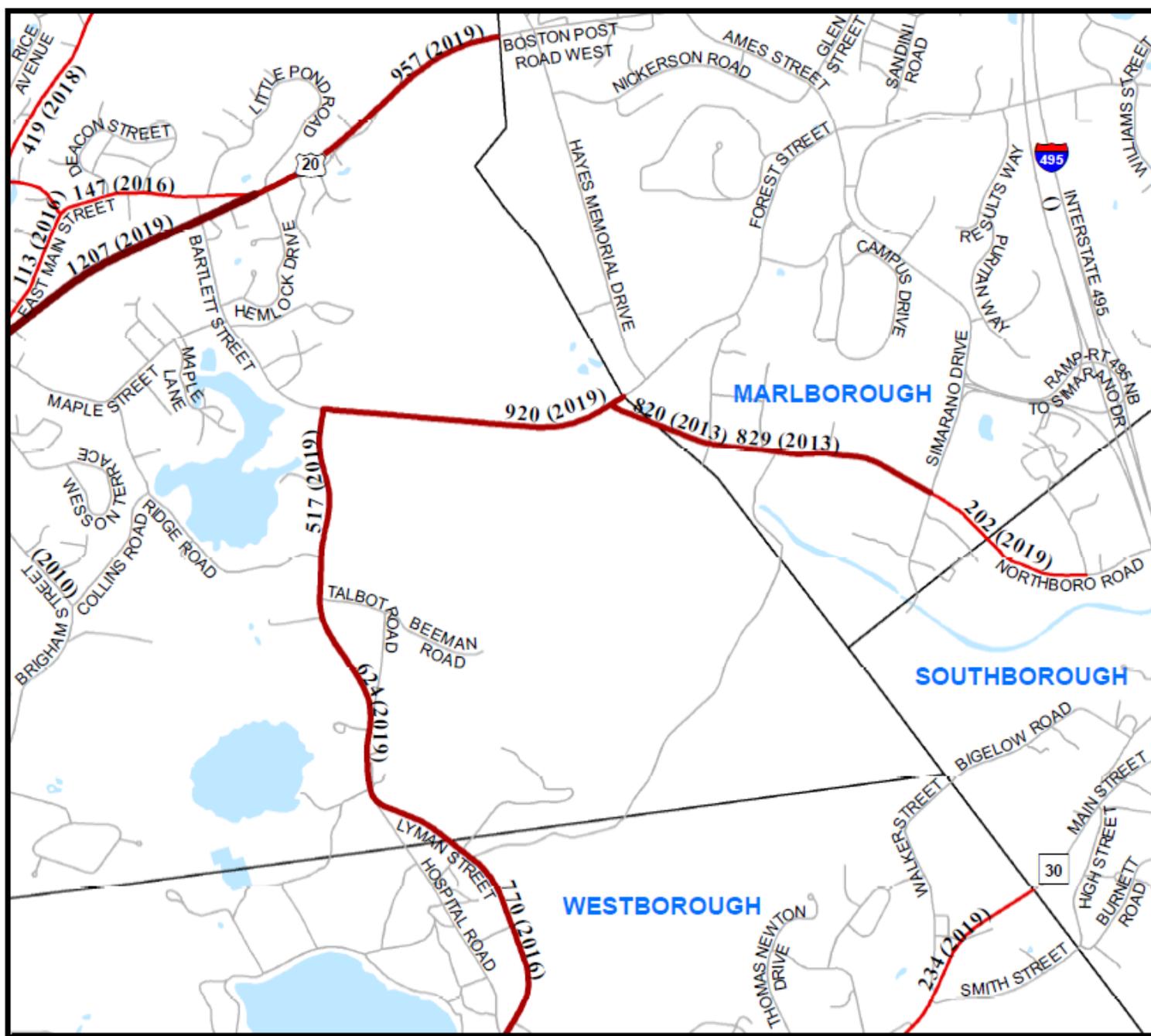
CMRPC Traffic Counting Volumes

Date: 2/16/2021



Heavy Vehicles Class 4 and above

FHWA Vehicle Classifications			
1. Motorcycles 2 axles, 2 or 3 tires 	2. Passenger Cars 2 axles, can have 1- or 2-axle trailers 	3. Pickups, Panels, Vans 2 axles, 4-tire single units Can have 1 or 2 axle trailers 	4. Buses 2 or 3 axles, full length 
5. Single Unit 2-Axle Trucks 2 axles, 6 tires (dual rear tires), single-unit 	6. Single Unit 3-Axle Trucks 3 axles, single unit 	7. Single Unit 4 or More-Axle Trucks 4 or more axles, single unit 	8. Single Trailer 3- or 4-Axle Trucks 3 or 4 axles, single trailer   
9. Single Trailer 5-Axle Trucks 5 axles, single trailer  	10. Single Trailer 6 or More-Axle Trucks 6 or more axles, single trailer  		
11. Multi-Trailer 5 or Less-Axle Trucks 5 or less axles, multiple trailers 	12. Multi-Trailer 6-Axle Trucks 6 axles, multiple trailers  		
13. Multi-Trailer 7 or More-Axle Trucks 7 or more axles, multiple trailers 			



**Heavy Vehicle Information
Heavy Vehical Volumes**

- 1 - 100
- 101 - 500
- 501 - 1000
- 1001 - 5000

0 0.1 0.2 0.4 Miles



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Worcester, MA 01604



Bartlett Street South of Main Street

Year	Source	Volume
1985	CMRPC	4,841
1989	CMRPC	5,260
1995	CMRPC	7,655
1998	CMRPC	7,718
2004	CMRPC	6,263
2007	CMRPC	5,380
2010	CMRPC	5,470

Lyman Street South of Bartlett Street

Year	Source	Volume	Heavy Vehicle Percent
2019	CMRPC	5,221	9.11%

Cedar Hill Street South of Bartlett Street

Year	Source	Volume	Heavy Vehicle Percent
2013	CMRPC	5,640	14.70%

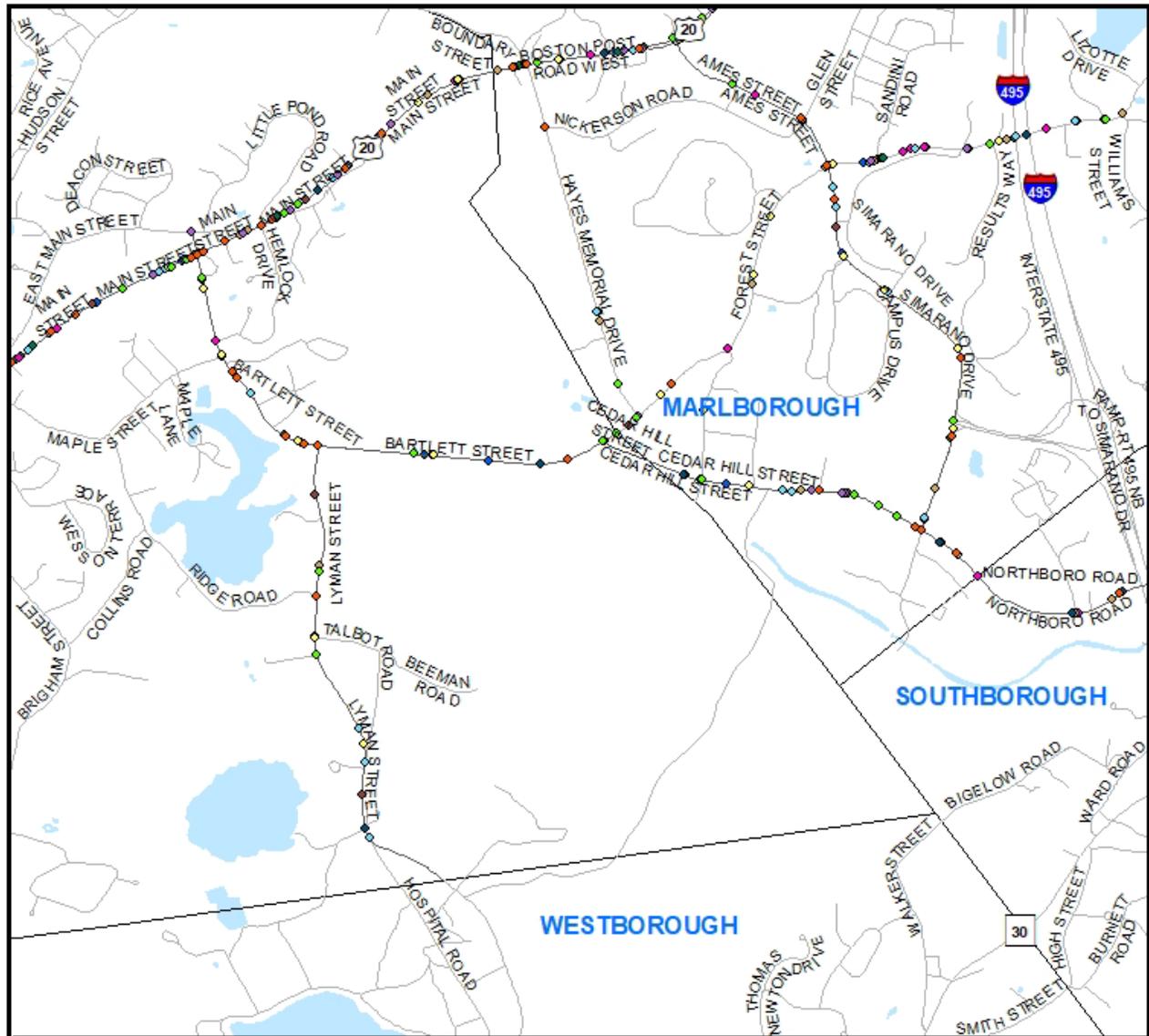
Bartlett Street East of Lyman Street

Year	Source	Volume	Heavy Vehicle Percent
1985	CMRPC	3,975	
1989	CMRPC	6,913	
2013	CMRPC	6,084	8.30%
2014	VHB Study 330 & 350 Bartlett St	7,878	8.33%
2019	VHB Study 0 Bartlett St	8,577	10.73%

Route 20 East of Bartlett Street

Year	Source	Volume	Heavy Vehicle Percent
1995	CMRPC	14,400	
1996	CMRPC	12,383	
1998	CMRPC	13,748	
2001	CMRPC	14,328	
2004	CMRPC	8,881	
2007	CMRPC	11,615	
2011	CMRPC	11,425	
2019	CMRPC	12,627	7.58%





Year of Crash

- ◆ 2010
- ◆ 2011
- ◆ 2012
- ◆ 2013
- ◆ 2014
- ◆ 2015
- ◆ 2016
- ◆ 2017
- ◆ 2018
- ◆ 2019
- ◆ 2020

0 0.1 0.2 0.4 Miles



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Vehicle Crashes - 2010:2020 - Study Area

Date: 2/12/2021

Document Path: Z:\GIS Library\GIS Workspaces\Gmap\line_E\Northboro_Annzon\Metric_H symbolized crash.mxd

CRASH MAP





Contiguous corridor



Narrow width of travel lanes (Road diet)



Sidewalks, Bikelane, shoulders



Wayfinding, Island to force right turn



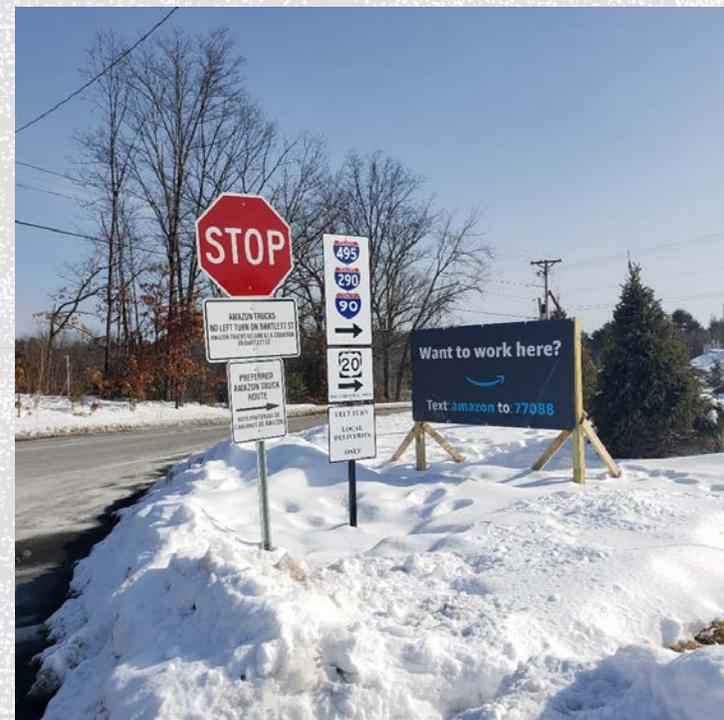
Work with google and other mapping companies



Post Occupancy Monitoring Study

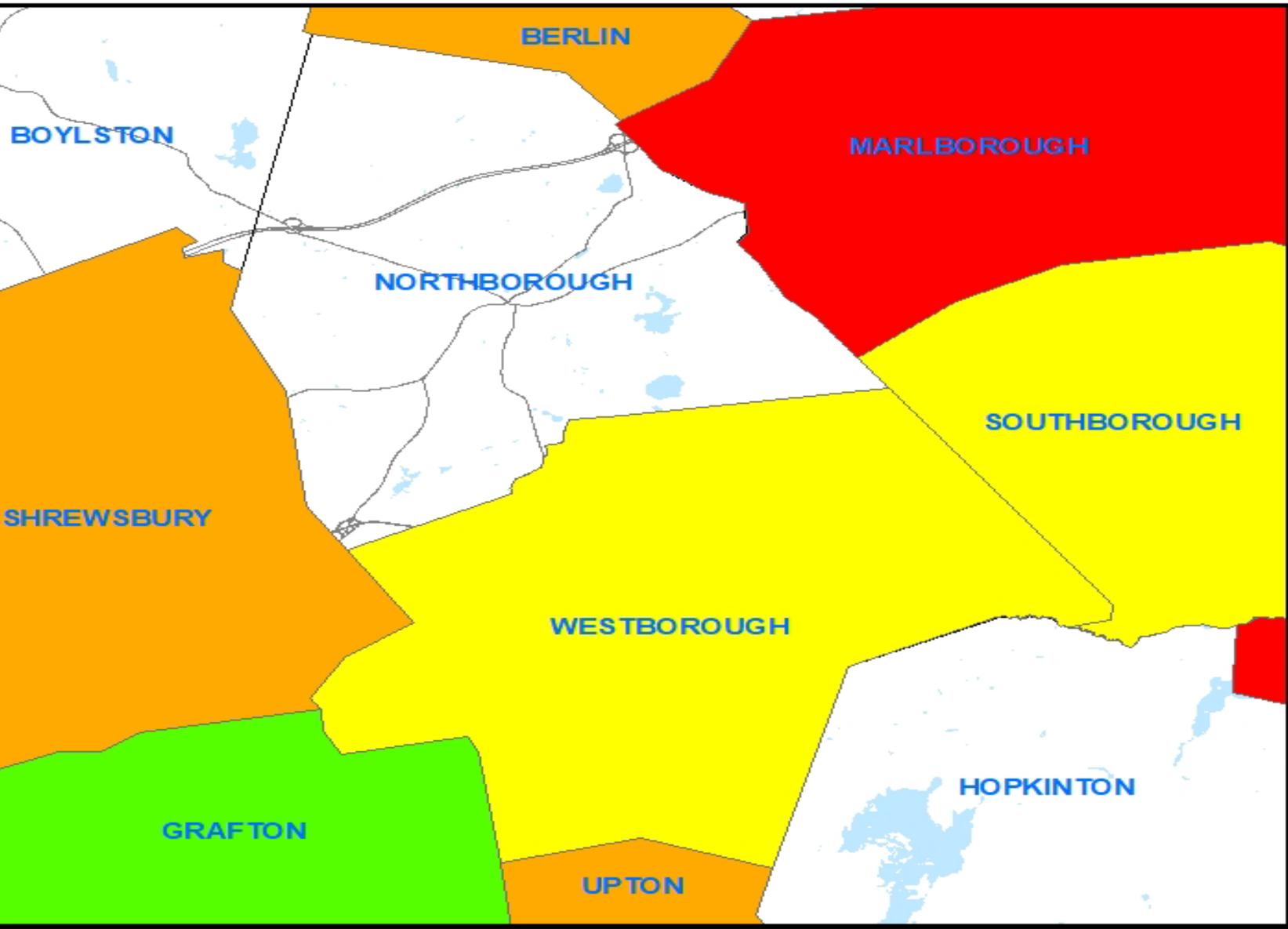


Neighborhood Walk Audit/Road Safety Audit



**POTENTIAL
CORRIDOR LEVEL
SOLUTIONS**





0 0.5

Information depicts
This information is
regulatory interpretation
interpreting position

Source: Data provided by
Planning Commission
Transportation Planning
Office of Geographic
Information Systems
of Massachusetts, 1

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Regional Planning
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Worcester, MA 016

MassDOT Complete Streets Program Status

COMPLETE STREET COMMUNITIES



****See Instructions on Sheet one for important changes and definitions. The order and information has changed from the Prioritization Plan format.**

Municipality	Marlborough	Date:	9/11/2017	Total Request:	\$388,710	(Must match total of Exhibit B, Preliminary)
MassDOT District	3	Name/Title	Tom DiPersio, City Engineer	Municipal Contact		
Below Median Household Income (US Census Bureau)	NO	Previous Application?	No	Previous Award Year?		

Project Details			Complete Streets Location			Project Origin and Type		
Rank	Project Name	Project Description (include brief narrative about the project need, and what is being accomplished. What network gap or safety issue will be addressed.)	Project Limits	Project Start Location: X,Y Coordinates (MA State Plane meter)	Project End Location: X,Y Coordinates (MA State Plane meter)	Complete Streets Project Origin (planning documentation or supporting analysis)	Complete Streets Project Type (refer to the Eligible Projects Worksheet)	HC - Does the project address safety at a High Crash location or address a systemic high crash need? Indicate data source.
1	Forest Street & Bartlett Street Bike Lanes	Bike Accessibility improvements. Project consists of repurposing the existing roadway width to provide on-road bike lanes for a length of 9,600 feet connecting the southwest portion of the Town to downtown. Improvements consist of micro surfacing the roadway, and installing pavement markings and signage.	Forest Street and Bartlett Street from Cedar Hill Street to Williams Street	194237, 898127	191926, 896688	CS Needs Assessment	B2, B8, B9	
3	D'Angelo Drive - Sidewalk Improvement	Pedestrian Improvements - New Sidewalk providing pedestrian access where there is currently no sidewalk.	D'Angelo Drive from Cedar Hill to Townline	193337, 896297	193249, 896005	Conceptual Plan	P1, P2, P3, P5, S14, S15	

- Complete Streets Policy
- Master Plan Implementation Committee
- Zoning Bylaws Diagnostics
- Roadway Advisory Committee/Economic Development Committee

**POTENTIAL
TOWN WIDE
SOLUTION**

THANK YOU!

Contact:

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Sujatha@cmrpc.org

Trish Settles

tsettles@cmrpc.org