massDOT Office of Transportation Planning

Route 128/I-95
LAND USE & TRANSPORTATION STUDY

Public Informational Meeting #1

Project Framework & Existing Conditions

Tuesday March 15, 2022, 6:00 PM

Public Meeting Notes and Procedures

Notification of Recording

- This virtual public meeting will be recorded. The Massachusetts Department of Transportation may choose to retain and distribute the video, still images, audio, and/or chat transcript. By continuing attendance with this virtual public meeting, you are consenting to participate in a recorded event.

- If you are not comfortable being recorded, please turn off your camera, keep your microphone muted, and refrain from chatting in the Q&A box. Else you may choose to excuse yourself from the meeting.

Other Important Notes

- Your microphone and webcam are automatically disabled upon entering this meeting.

- The meeting will be open to questions and answers at the end of the formal presentation.

- Please take time to respond to our survey! Your feedback is important.

It is important to note all comments are welcome and appreciated, however we do request that you refrain from any disrespectful comments.

Zoom Controls

- Ask a question and share comments
- Drop down menu to check microphone and speakers
- Raise your hand
- If you cannot access the internet or have technical problems, please call into the meeting at 301-715-8592, Webinar ID: 883 4425 6875

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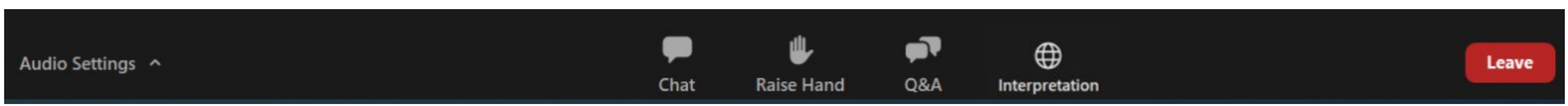
*****Closed captioning automatically generated by Zoom**



Agenda

- **Project Overview**
  - **Process**
  - **Public Involvement**
  - **Study Area**
- **Goals, Objectives, & Evaluation Criteria**
- **Existing Conditions**
- **Next Steps**
- **Public Comment**

Route 128/I-95
LAND USE & TRANSPORTATION STUDY

Project Team

massDOT Office of Transportation Planning

vhb

KARP STRATEGIES
URBAN PLANNING ADVISORS

Karp Strategies, LLC *(DBE)*

Economic development/
business impacts

FHI studio

FHI Studio *(DBE)*

Equity/EJ, shuttles/transit
planning, TDM

CITY POINT PARTNERS

City Point Partners, LLC *(DBE)*

Cost estimating
and scheduling

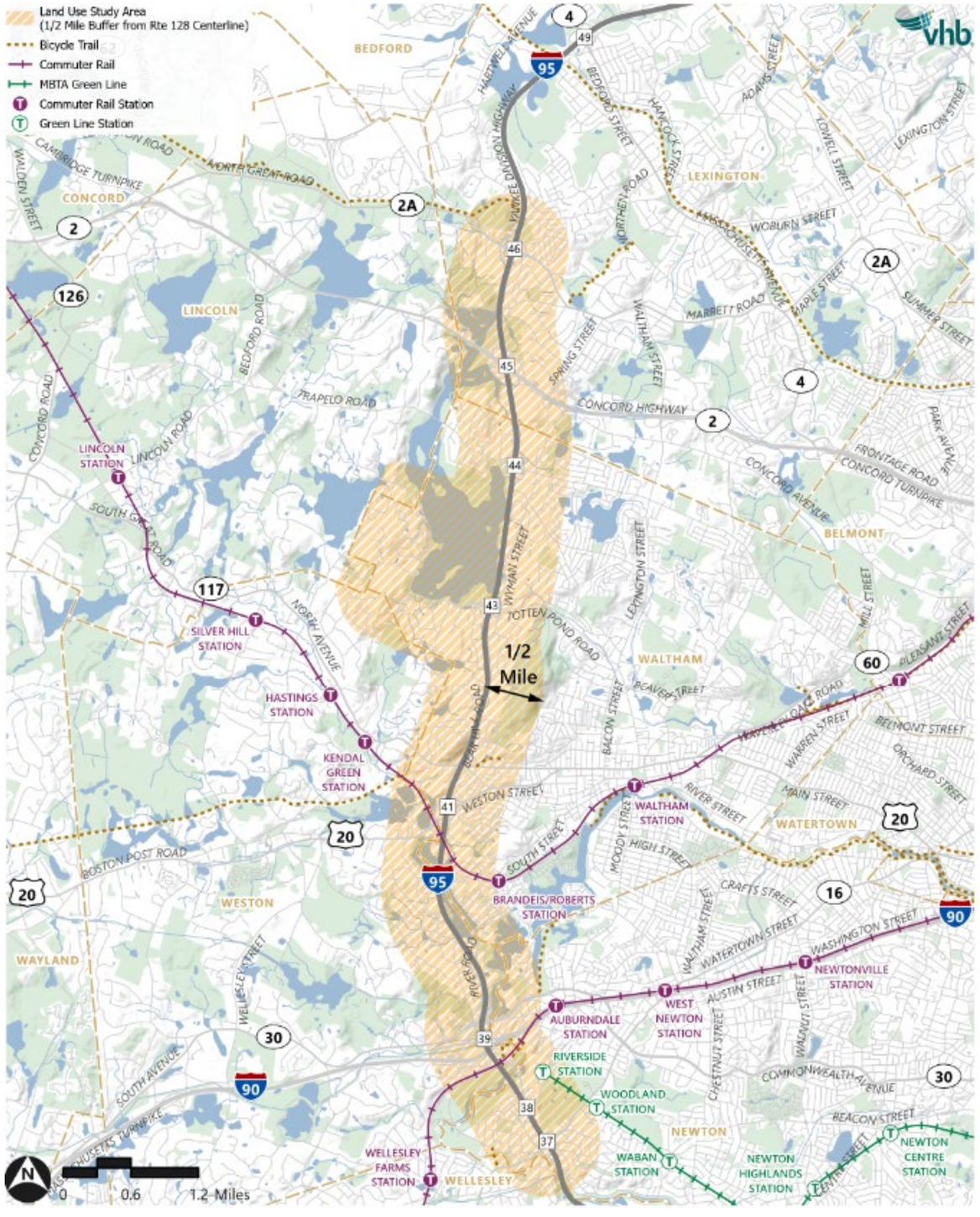
Project Overview

Project Overview

The Route 128/I-95 Land Use and Transportation Study will establish the future land use, housing, and economic development assumptions.

The study area includes Route 128/I-95 between Newton and Lexington.

The study will develop and analyze alternatives, present recommendations and develop an implementation plan.



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Study Process

Task 1: Study Area Goals and Objectives, Evaluation Criteria, Public Participation Plan

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Task 2 - Existing Conditions & Documenting Relevant Efforts

← We are here

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Task 3 - Future Year No-Build Conditions & Issues Identification

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Task 4 - Alternatives Development

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Task 5 - Alternative Analysis

↓

Task 6 - Recommendations & Implementation Plan

↓

Task 7 - Draft and Final Report

Study Process & Outreach Phases

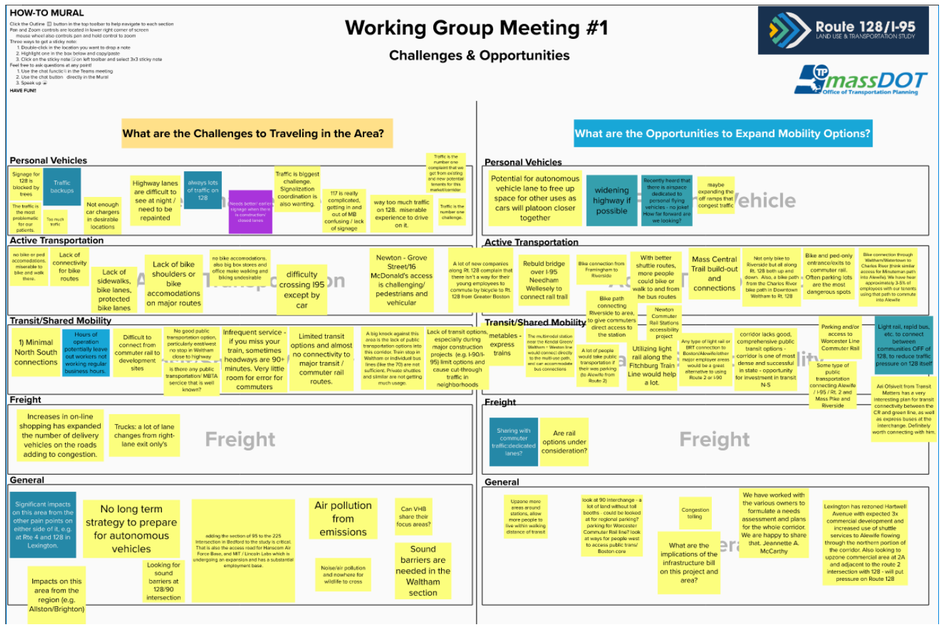
Reflect

Explore

Confirm

Public Involvement

- Working Group – 6 meetings
  - The studies Working Group is comprised of elected officials, municipal leaders, and business community representatives from the five municipalities included in the study area: Lexington, Lincoln, Newton, Waltham, and Weston.
  - The Working Group will provide valuable insight to the needs of the region and their constituents and will help inform and shape the study.
- Public Informational Meetings – 3 meetings
  - The public will be invited to learn about the progress of the project and provide feedback on the study analysis and alternatives. Three public information meetings will be scheduled according to major project milestones.



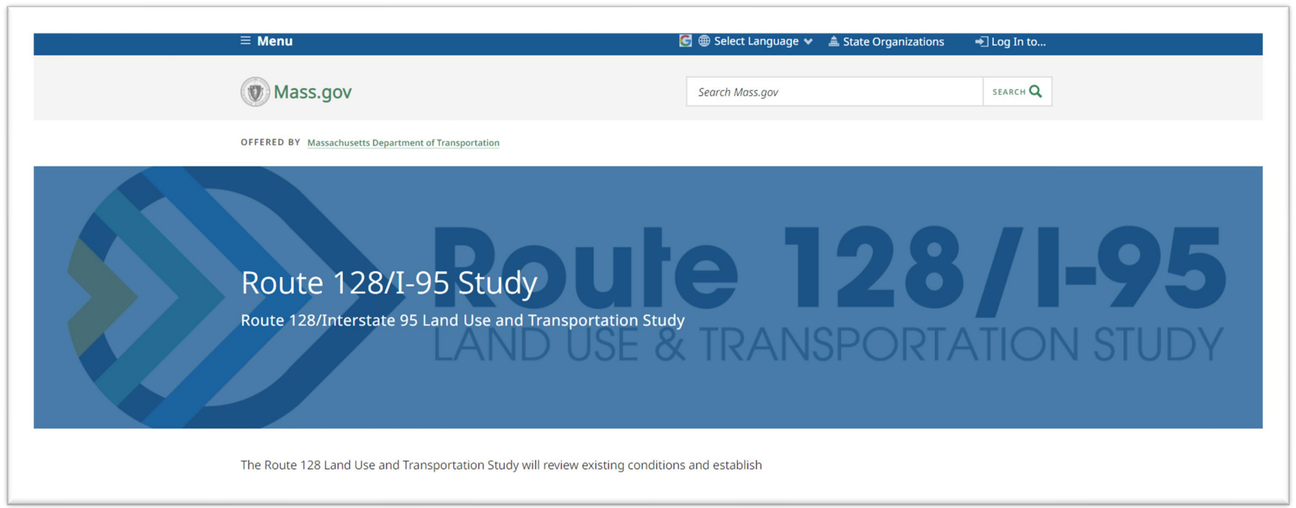
Online Engagement

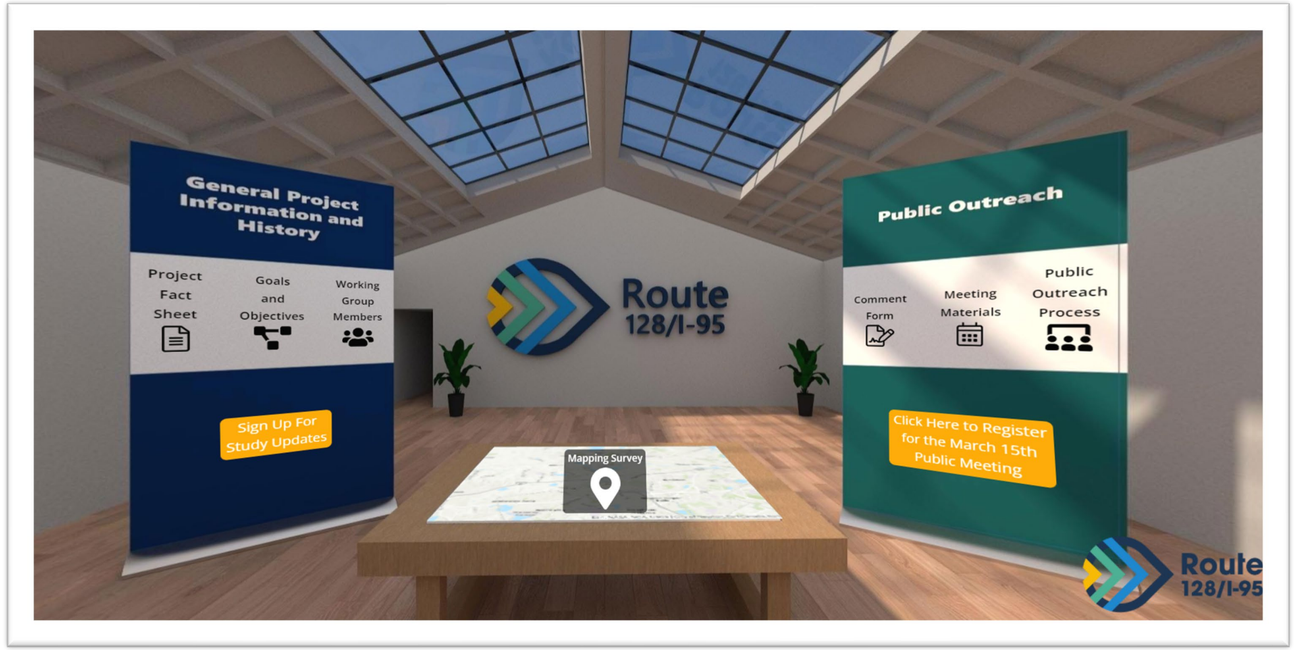
- MassDOT Project Website

  https://www.mass.gov/route-128i-95-study

  - Sign up for Study updates
  - General project information

- Virtual Room for online engagement
  - Linked from MassDOT Project Website
  - Comment form and mapping survey
  - Project information, documents, and materials

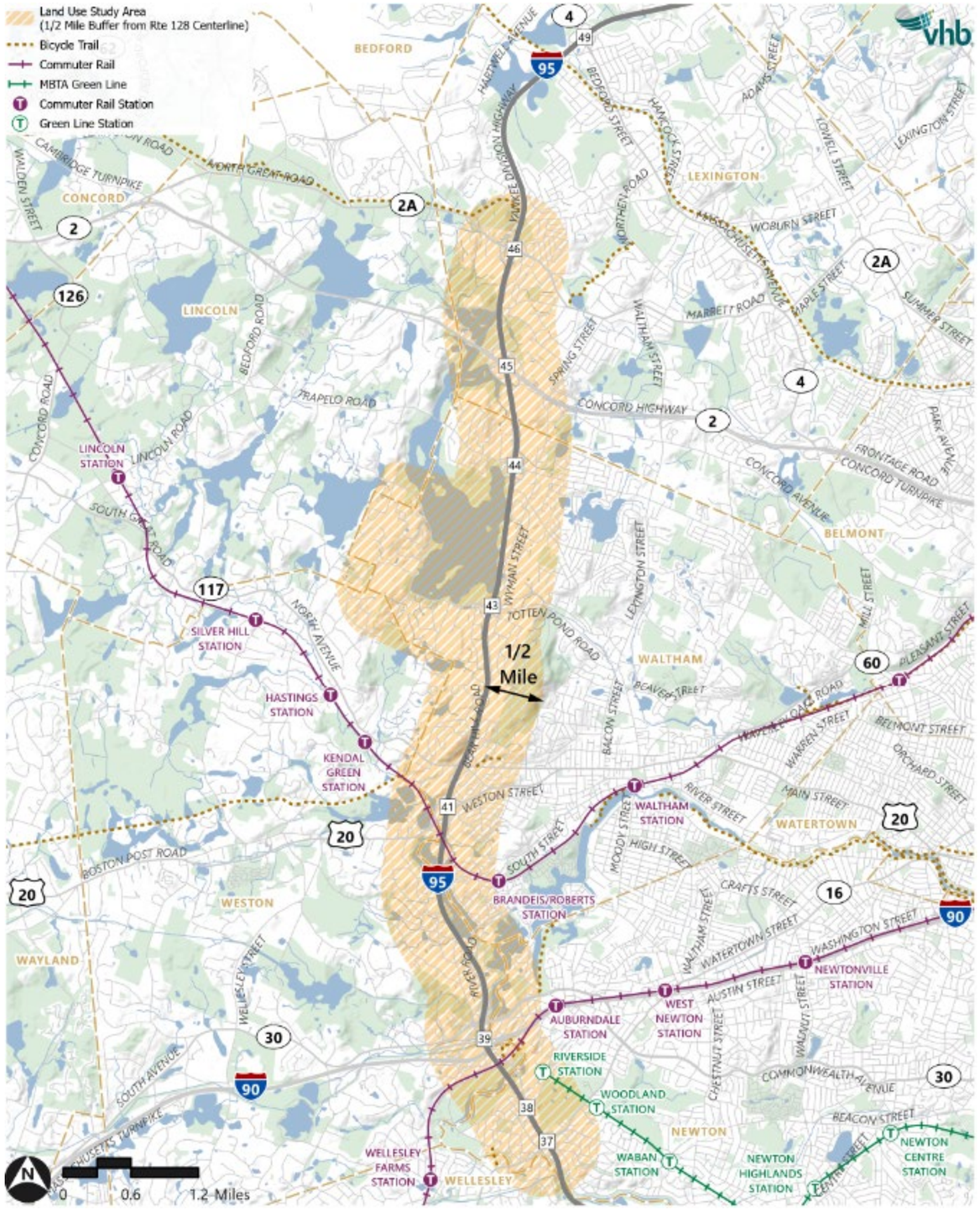




Study Area

Land Use & Environmental Study Area

- ½ mile from Route 128/I-95 Center Line
- Captures development along Winter Street with primary access via Exit 43 (old Exit 27)



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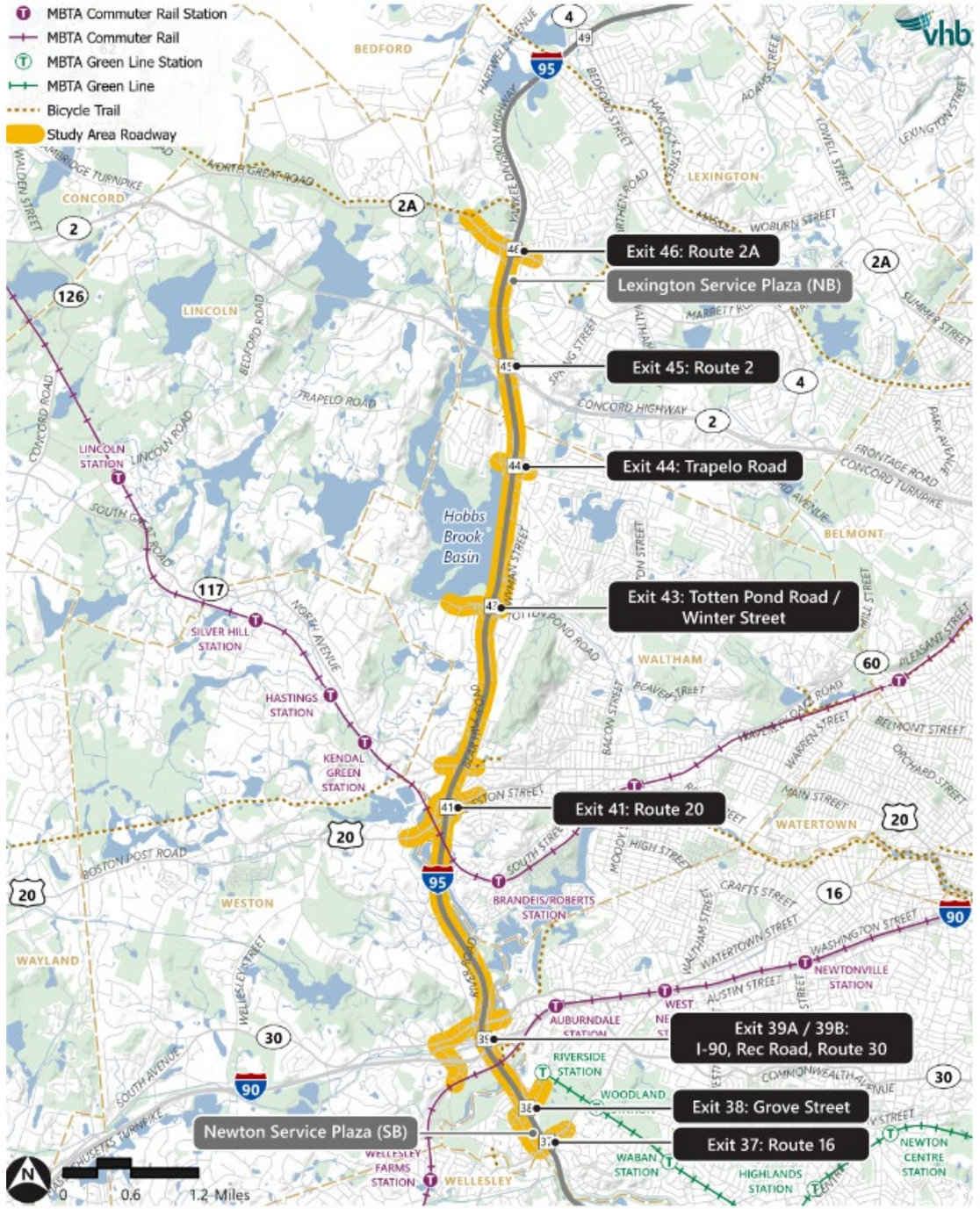
Transportation Study Area

- Route 128/I-95 mainline & ramps
- 42 study area intersections
- Transit – commuter rail, rapid transit, bus/shuttle, paratransit
- Active Transportation facilities
- Safety



Source: MassGIS, MassDOT

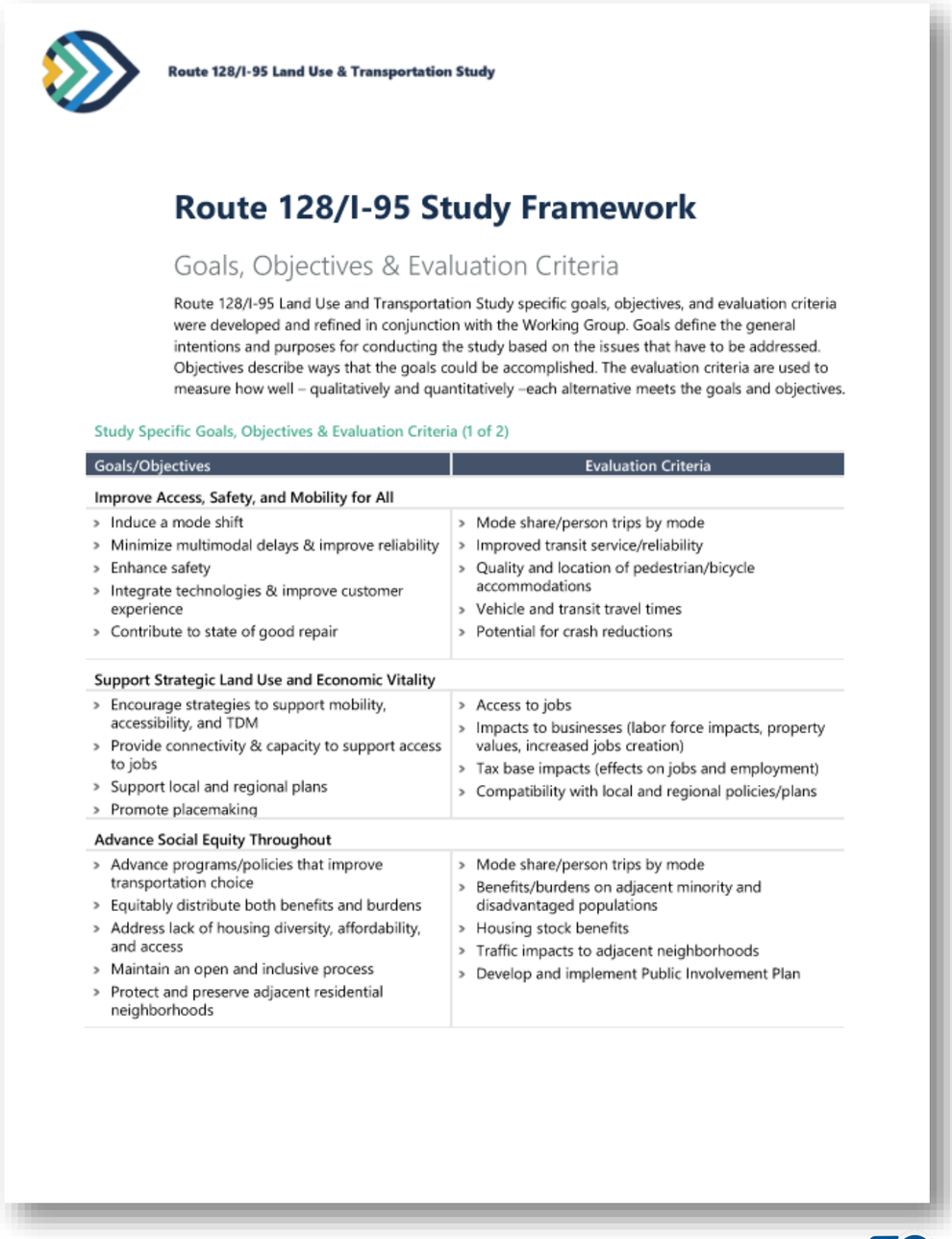
Goals, Objectives & Evaluation Criteria

Goals, Objectives & Evaluation Criteria

Goals define the general intentions and purposes.

Objectives describe ways that the goals could be accomplished.

Evaluation criteria are used to measure how well alternatives meets the goals and objectives which **drives study recommendations**



Route 128/I-95 Land Use & Transportation Study

Route 128/I-95 Study Framework

Goals, Objectives & Evaluation Criteria

Route 128/I-95 Land Use and Transportation Study specific goals, objectives, and evaluation criteria were developed and refined in conjunction with the Working Group. Goals define the general intentions and purposes for conducting the study based on the issues that have to be addressed. Objectives describe ways that the goals could be accomplished. The evaluation criteria are used to measure how well – qualitatively and quantitatively –each alternative meets the goals and objectives.

Study Specific Goals, Objectives & Evaluation Criteria (1 of 2)

Goals/Objectives	Evaluation Criteria
Improve Access, Safety, and Mobility for All	
› Induce a mode shift › Minimize multimodal delays & improve reliability › Enhance safety › Integrate technologies & improve customer experience › Contribute to state of good repair	› Mode share/person trips by mode › Improved transit service/reliability › Quality and location of pedestrian/bicycle accommodations › Vehicle and transit travel times › Potential for crash reductions
Support Strategic Land Use and Economic Vitality	
› Encourage strategies to support mobility, accessibility, and TDM › Provide connectivity & capacity to support access to jobs › Support local and regional plans › Promote placemaking	› Access to jobs › Impacts to businesses (labor force impacts, property values, increased jobs creation) › Tax base impacts (effects on jobs and employment) › Compatibility with local and regional policies/plans
Advance Social Equity Throughout	
› Advance programs/policies that improve transportation choice › Equitably distribute both benefits and burdens › Address lack of housing diversity, affordability, and access › Maintain an open and inclusive process › Protect and preserve adjacent residential neighborhoods	› Mode share/person trips by mode › Benefits/burdens on adjacent minority and disadvantaged populations › Housing stock benefits › Traffic impacts to adjacent neighborhoods › Develop and implement Public Involvement Plan

Study Goals & Objectives (1 of 2)

Improve Access, Safety, and Mobility for All

- Induce a mode shift
- Minimize multimodal delays & improve reliability
- Enhance safety
- Integrate technologies & improve customer experience
- Contribute to state of good repair

Support Strategic Land Use and Economic Vitality

- Encourage strategies to support mobility, accessibility, and transportation demand management (TDM)
- Provide connectivity & capacity to support access to jobs
- Support local and regional plans
- Promote placemaking

Advance Social Equity Throughout

- Advance programs/policies that improve transportation choice
- Equitably distribute both benefits and burdens
- Address lack of housing diversity, affordability, and access
- Maintain an open and inclusive process
- Protect and preserve adjacent residential neighborhoods

Study Goals & Objectives (2 of 2)

Contribute Environmental and Health Benefits

- Reduce air/noise pollution, GHG emissions, & energy consumption
- Protect the cultural and natural environment
- Promote improvements resilient to climate change impacts
- Address local environmental concerns
- Contribute to improving public health outcomes

Develop Recommendations with Lasting Benefits

- Prioritize projects that are implementable and address needs
- Establish organizational capacity to advance recommendations
- Leverage various funding sources to finance improvements
- Identify cost-effective solutions

Interactive Poll #1

» Which of the study goals are most important to you?

- Improve Access, Safety, and Mobility for All
- Support Strategic Land Use and Economic Vitality
- Advance Social Equity Throughout
- Contribute Environmental and Health Benefits
- Develop Recommendations with Lasting Benefits

Existing Conditions Review - Context

Previous Planning Documents

2021 Project Kick-off
Route 128/I-95
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2021

Statewide/ Regional Planning & Investments

2011
MAPC Route 128 Central Corridor Plan

2011
MAPC Central Massachusetts Joint Trail/Busway Right of Way Study

2018-2019
MassDOT Statewide Modal Plans

2019
MBTA Focus40 Plan

2019 and on-going
Congestion in the Commonwealth Report & Follow-on Studies

2020
MBTA Rail Vision

2022*
MBTA Bus Network Redesign

2022*
Future of Telework

Local Planning & Investments

2015
Town of Weston Housing Production Plan

2015
South Lexington Transportation Study

2017
Newton Leads 2040 A Transportation Strategy for Newton

2017
Town of Weston Open Space and Recreation Plan

2017
City of Waltham Transportation Master Plan

2018-2020
Lexington Trends Reports

2019
Riverside Vision Plan

2020
Town of Weston Community Preservation Plan

2022*
Bedford/Hartwell Complete Streets Transportation Project

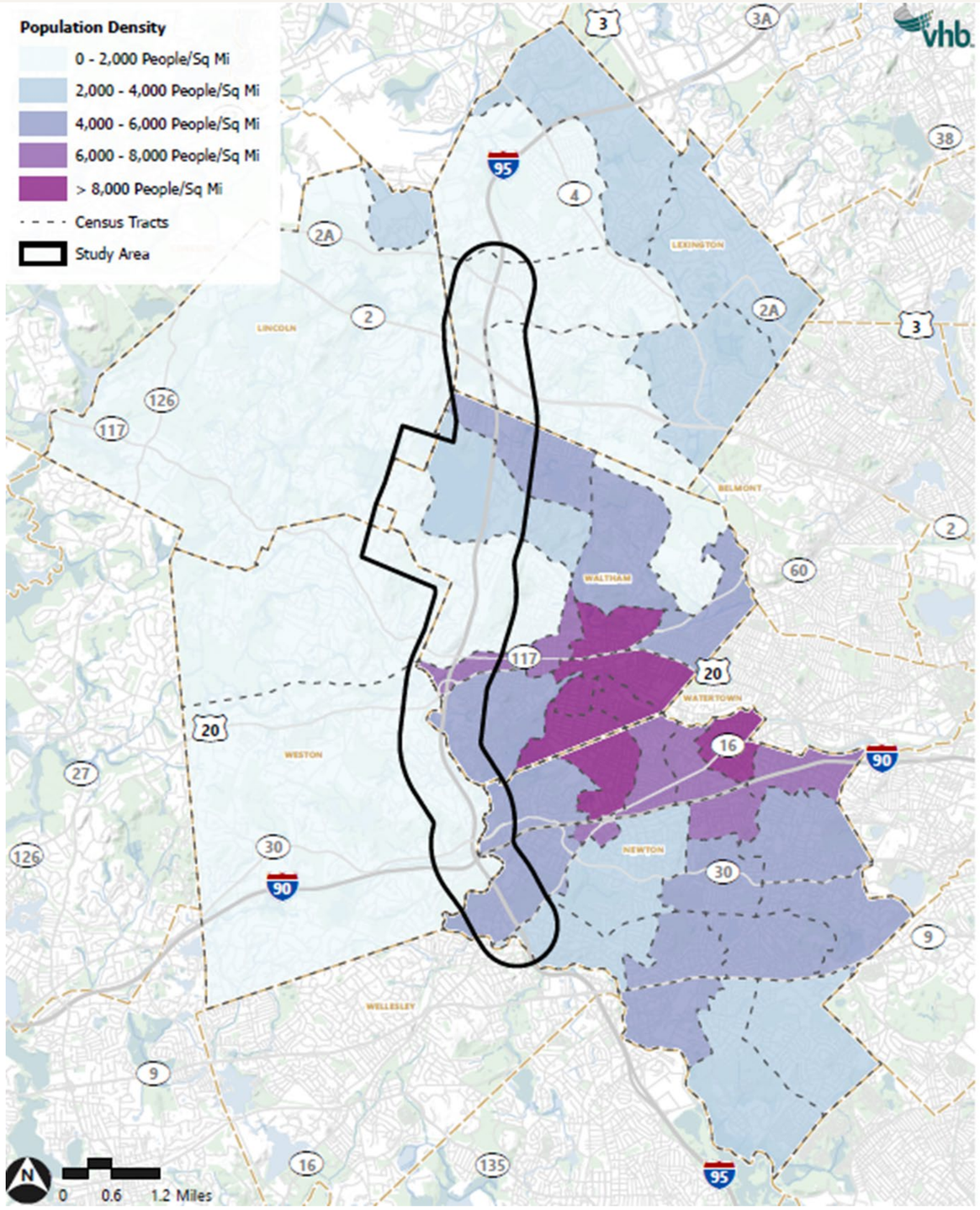
* Expected completion date
Studies completed prior to 2011: 2007 Waltham Community Development Plan & 2009 Lincoln Comprehensive Plan

Route 128/I-95: What defines our baseline?

- We reviewed and evaluated:
  - **WHO** makes up Study Area residents and employees?
  - **HOW** do people move around today?
  - **WHAT** are the conditions driving these decisions?

Population & Housing

- The Route 128/I-95 corridor, in general, has a low residential density. Almost all residences are single-family detached.
- Directly along the corridor, multifamily housing is sparse, as is rental housing, and affordable housing in general. Most housing is not attainable to low-income buyers/renters.
- There has been little residential construction in the corridor over the past twenty years, even as the population has steadily increased throughout the study area.



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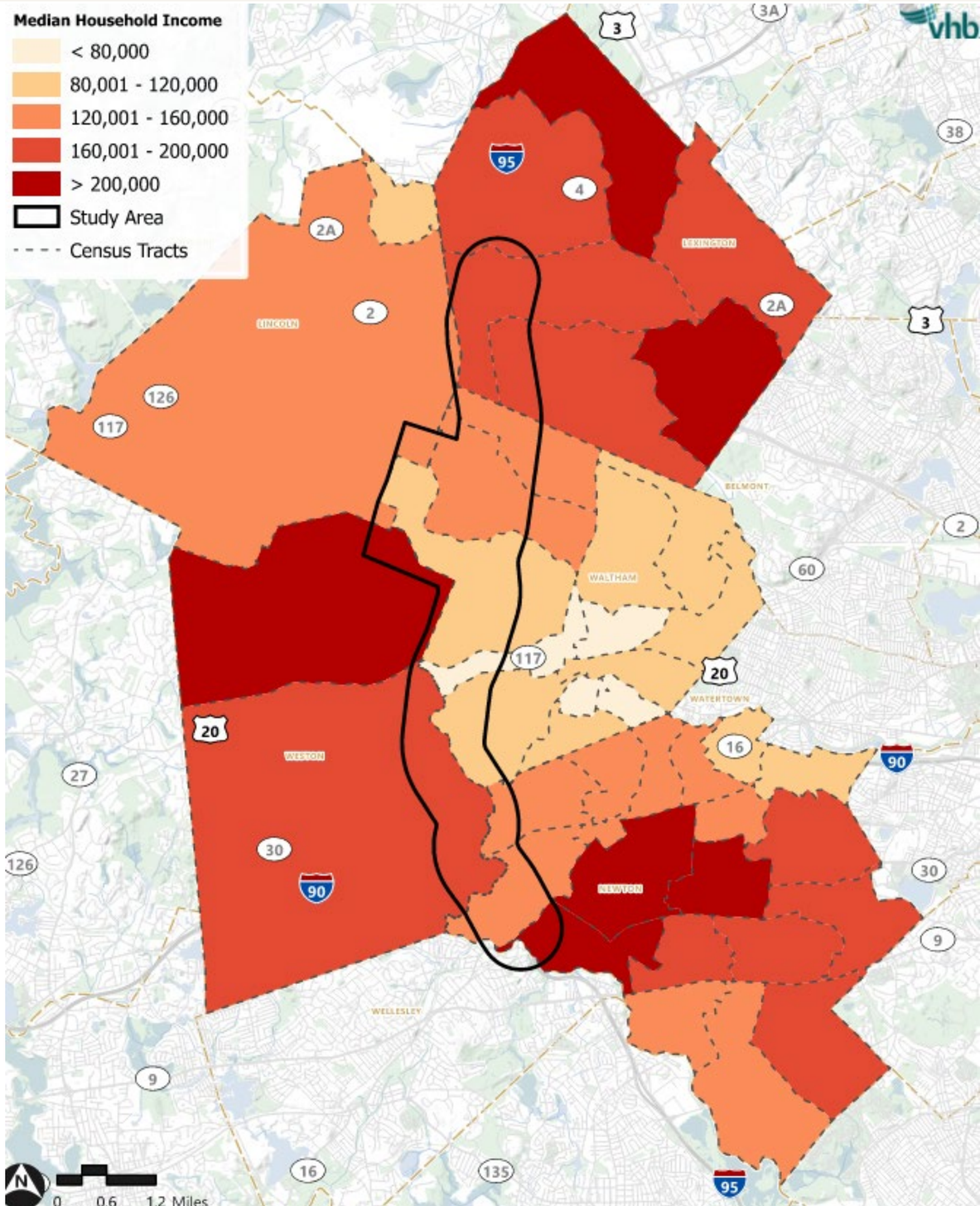
Educational Attainment & Income

- There is a high rate of householders with a Bachelor's Degree or higher, ranging from 54% in Waltham, to 85% in Lexington. This is notably higher than the statewide rate of 44%.
- Income levels are also high. Whereas the median household income in Massachusetts was $81k in 2019, many study area tracts earned significantly higher.
- However, this shouldn't mask the fact that the study area also contains low-income tracts, particularly in western Waltham, within the corridor.



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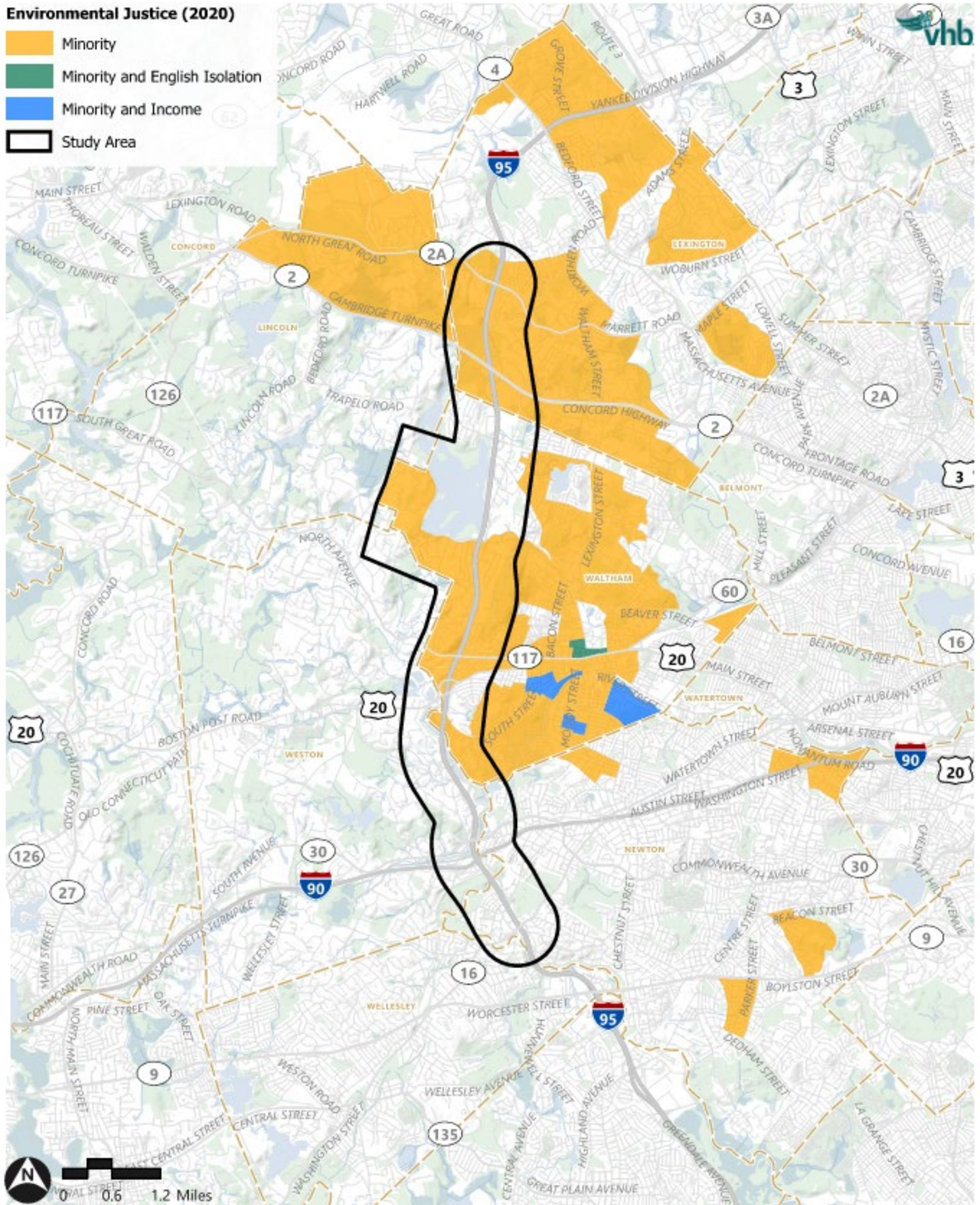
Environmental Justice

- With the exception of Weston, each of the municipalities have some Census Tracts that meet at least one environmental justice threshold
- Consider these populations through alternatives analysis for fair distribution of benefits or impacts



EJ Thresholds

1. The annual median household income is not more than 65 percent of the statewide annual median household income
2. Minorities comprise 40 percent or more of residents
3. At least 25 percent of households have limited English proficiency
4. Minorities are 25 percent or more of the population and the annual median household income of the municipality is less than 150 percent of the statewide annual median household income

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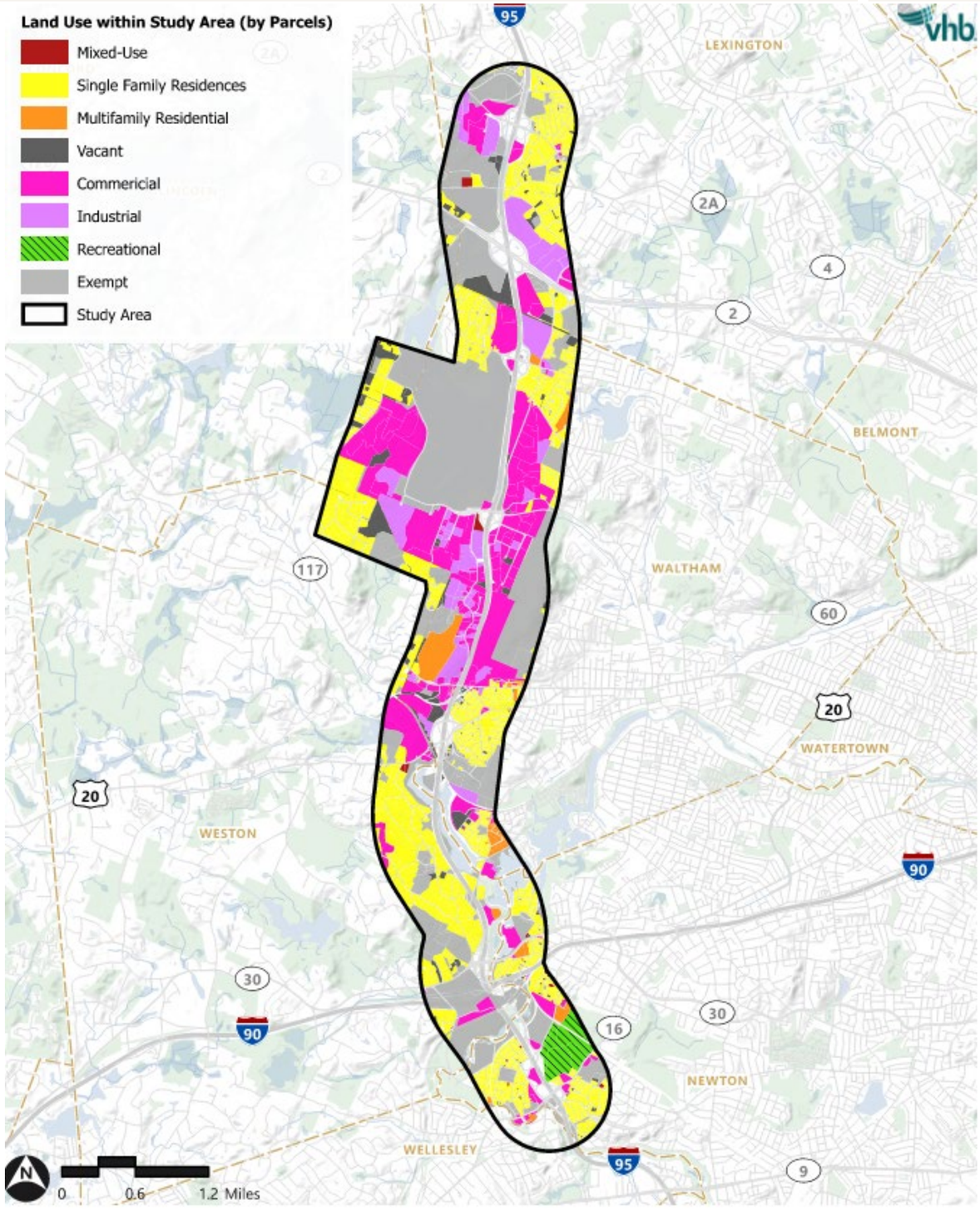
Land Use & Economic Conditions

- The Study Area is a strong jobs center. The corridor is home to over 15 million SF of office space, with 10% growth from 2011 to 2021.
- The Study Area is also home to 795k SF of retail space, with almost 30% growth from 2011 to 2021.
- Industrial space is limited in the corridor (679k SF) and has decreased over the ten-year period.
- During the 20-year period between 2001 and 2021, the Boston metro area increased multifamily inventory by almost 40%; in the Route 128/I-95 corridor, there was zero growth in multifamily inventory.



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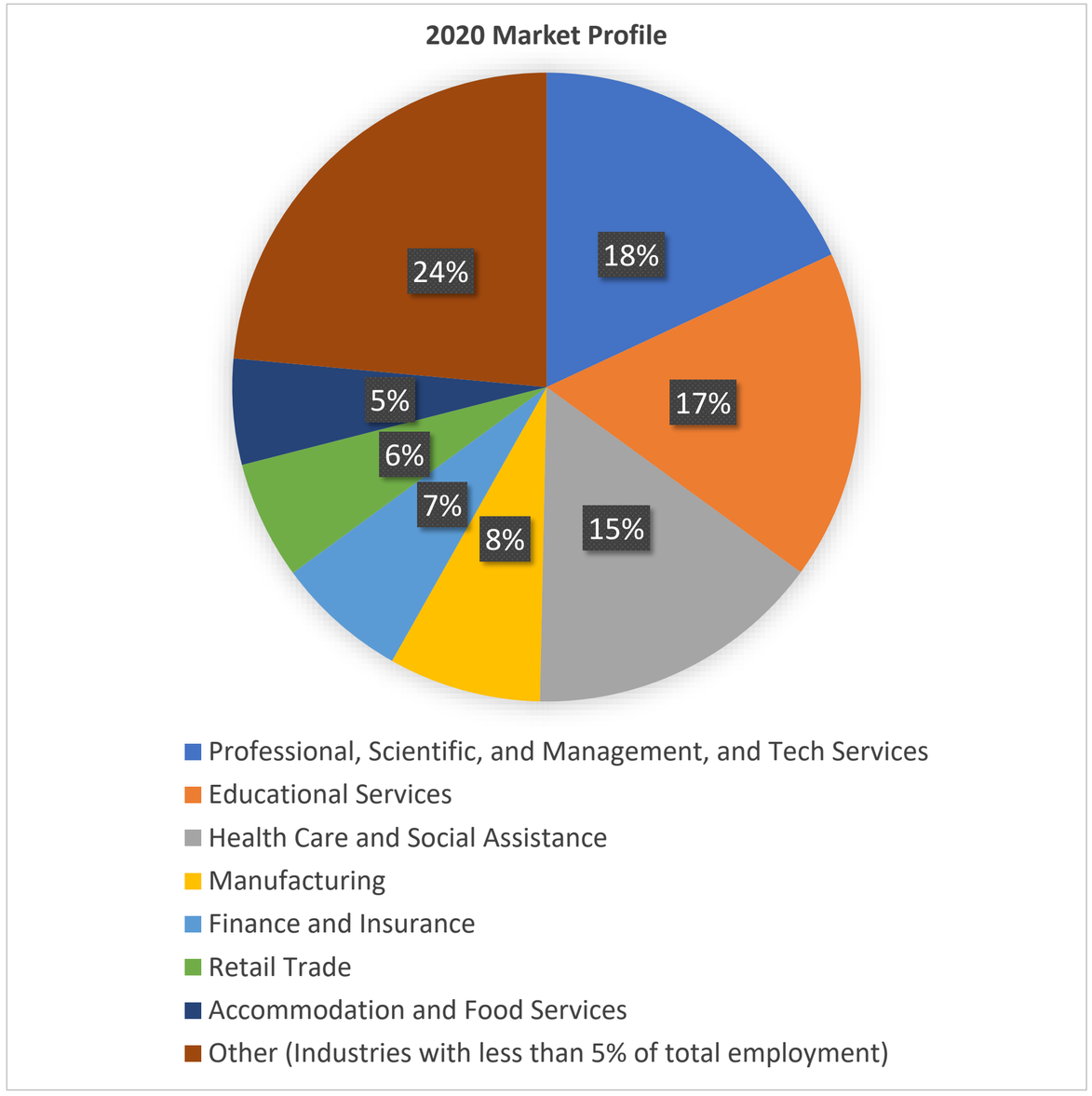
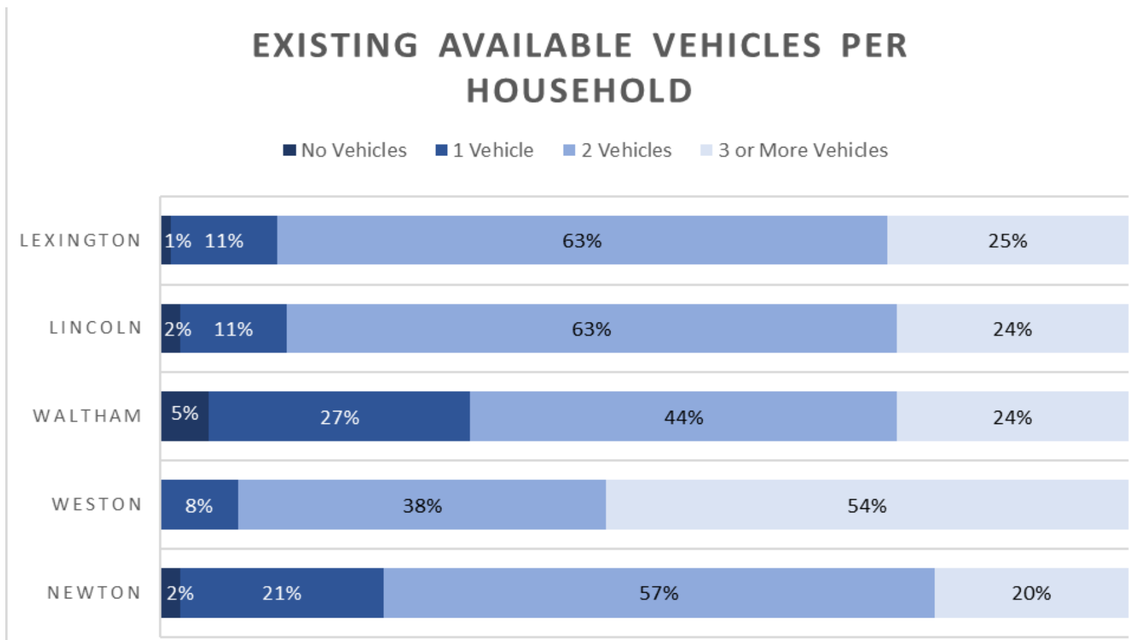
Employment

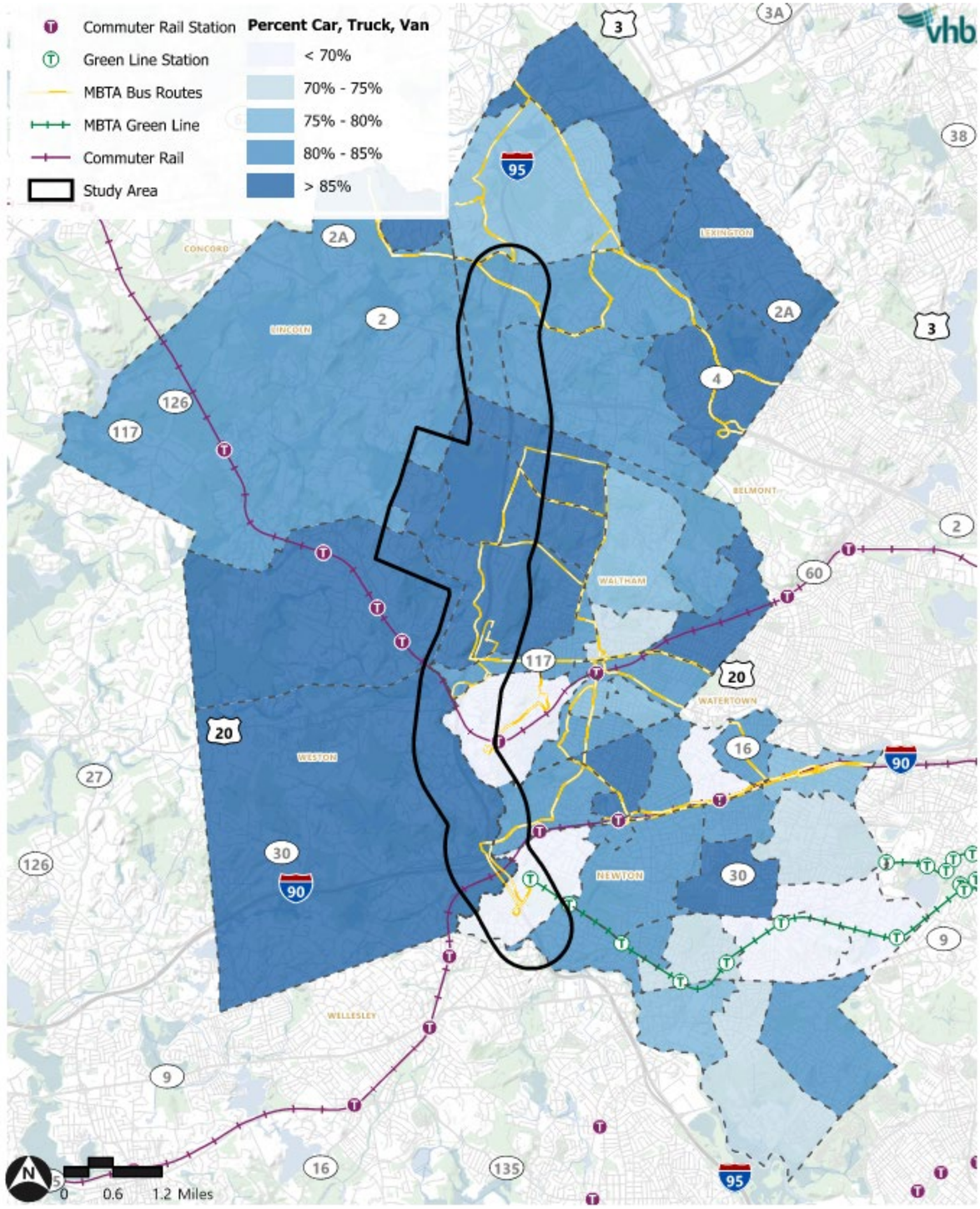
- There are over 39,000 employees across the study area tracts.
- No single industry comprises more than 20% of the total employees. The highest share of workers are in the *Professional, Scientific and Management, and Tech Services* industry, with over 7,000 employees.
- This number grew by over 14% between 2011 and 2021, signaling strong continued growth in this job base.
- These are typically high-paying jobs, so this growth contributes directly to inflation in the local economy and housing market.



Mode Share & Vehicle Ownership

- Mode shares differ significantly between municipalities - related to development density and availability of transit and active transportation facilities
- Less than 2% of households do not own a vehicle





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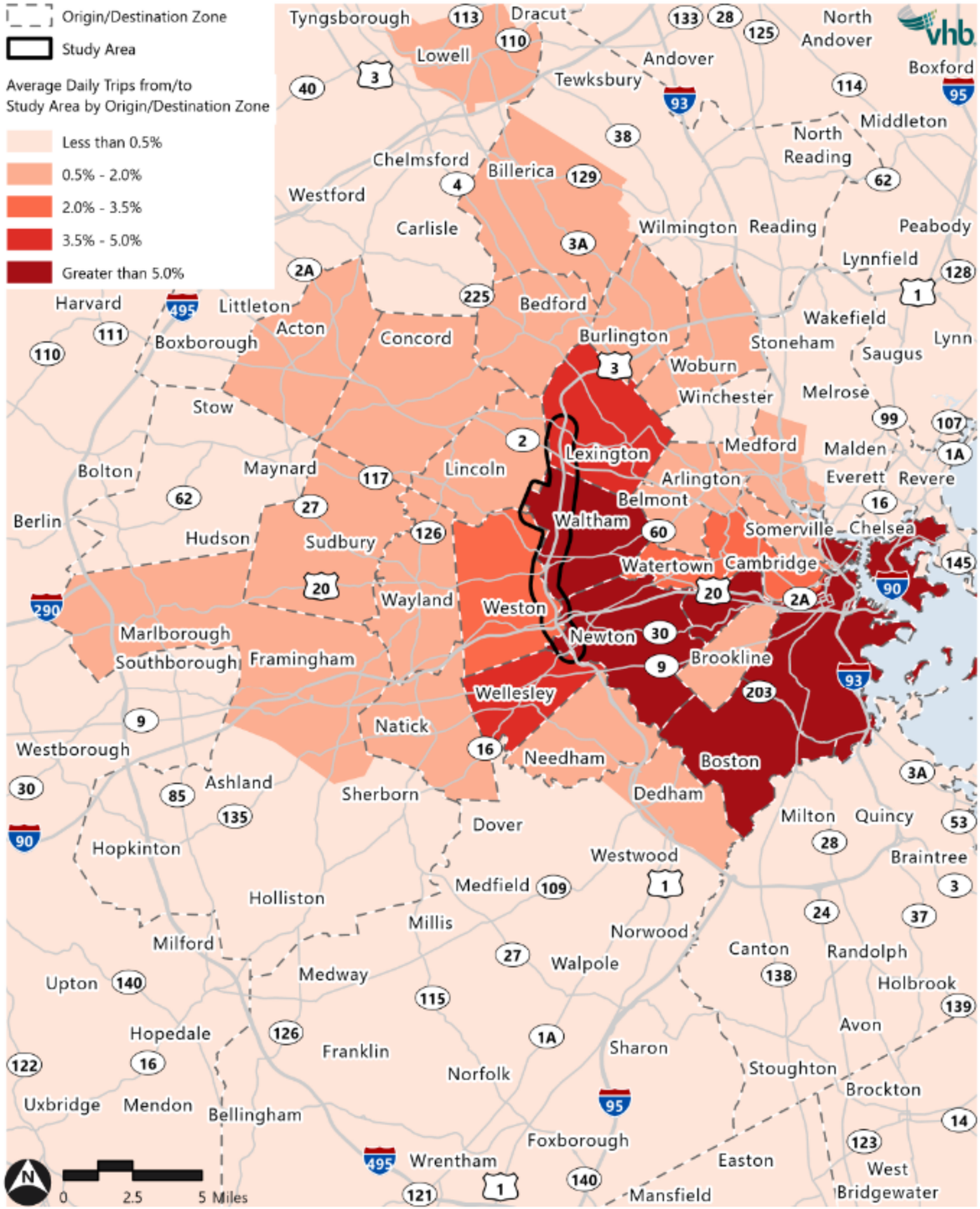
Existing Travel Patterns

- Many trips among study area municipalities (45%)
  - Shorter trips that conducive to walking or biking
- Majority of worker trips (65%) outside the study area
  - Regional study area workforce driven by a lack of local housing options
- Over 50% of resident trips among study area municipalities
  - Connection of high-income earners working/living within the study area
- Between 8-10% of trips from/to Boston
  - Significant O-D pair served by limited transit options



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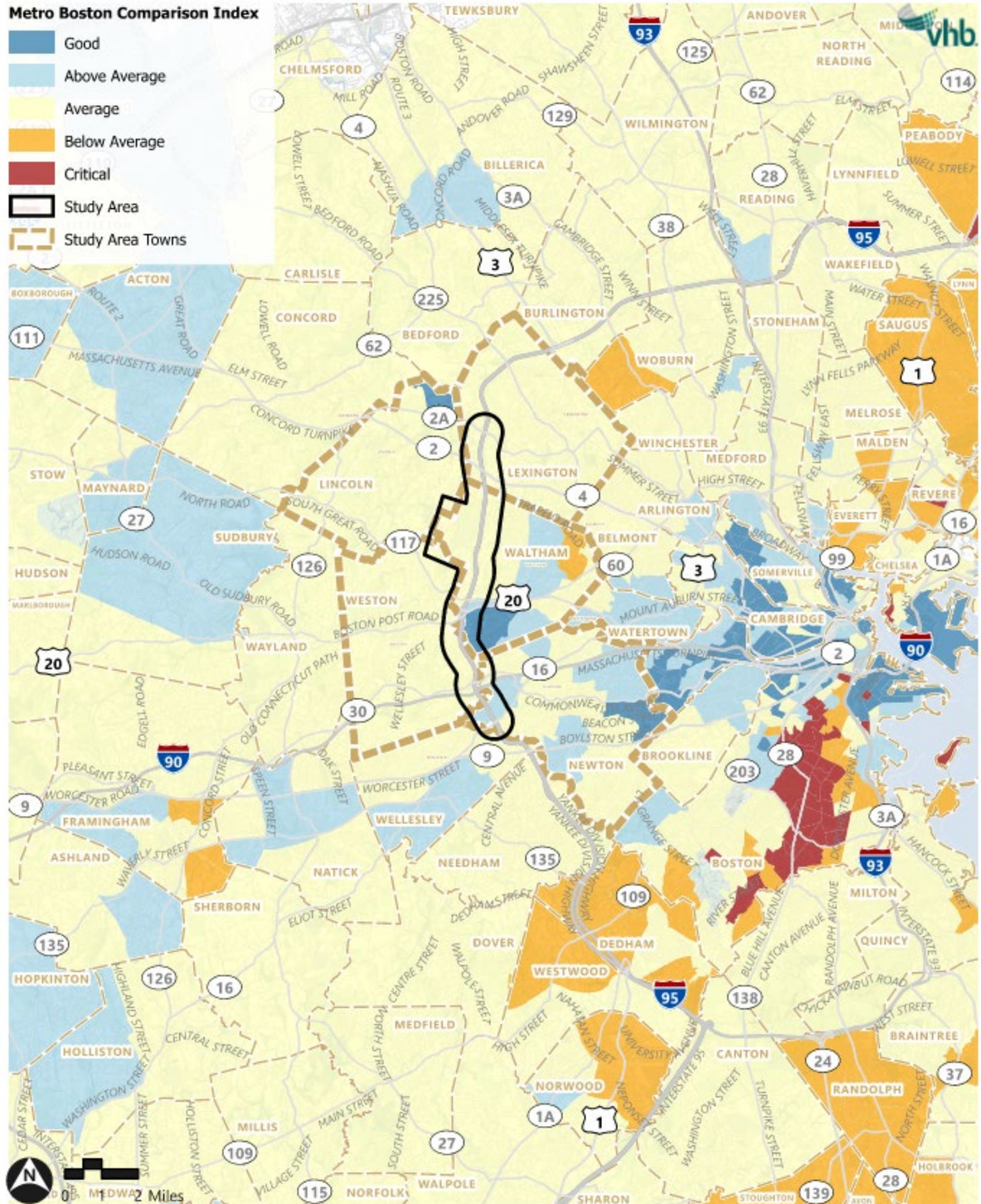
Public Health

- Study area has a similar average risk for chronic diseases to the surrounding study area municipalities and Boston Metro Area
- Commuting time and commute mode were found to have a strong correlation with all of the chronic diseases except for asthma
- Asthma prevalence is greater than it is nationally→ focus improved walkability and decreased vehicle miles travelled/emissions.



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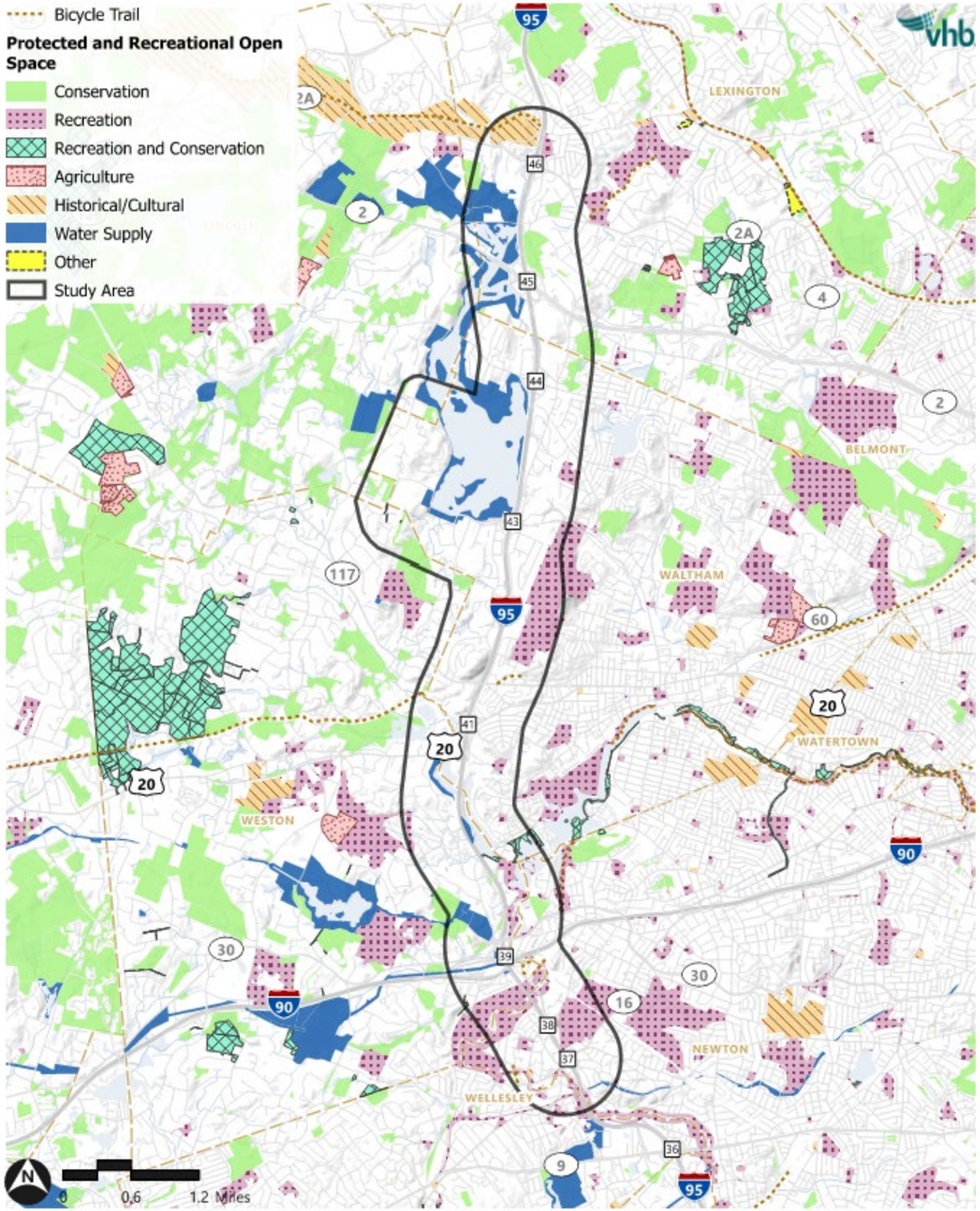
Environmental Conditions

- An inventory of study area environmental conditions was conducted to set the stage for Alternatives Development/Analysis:
  - Natural Resources
  - Historic and Archaeological Resources
  - Oil and Hazardous Materials
- The study area contains a variety of environmental resources that are important to the health and quality of life of the intersecting municipalities and the region more broadly



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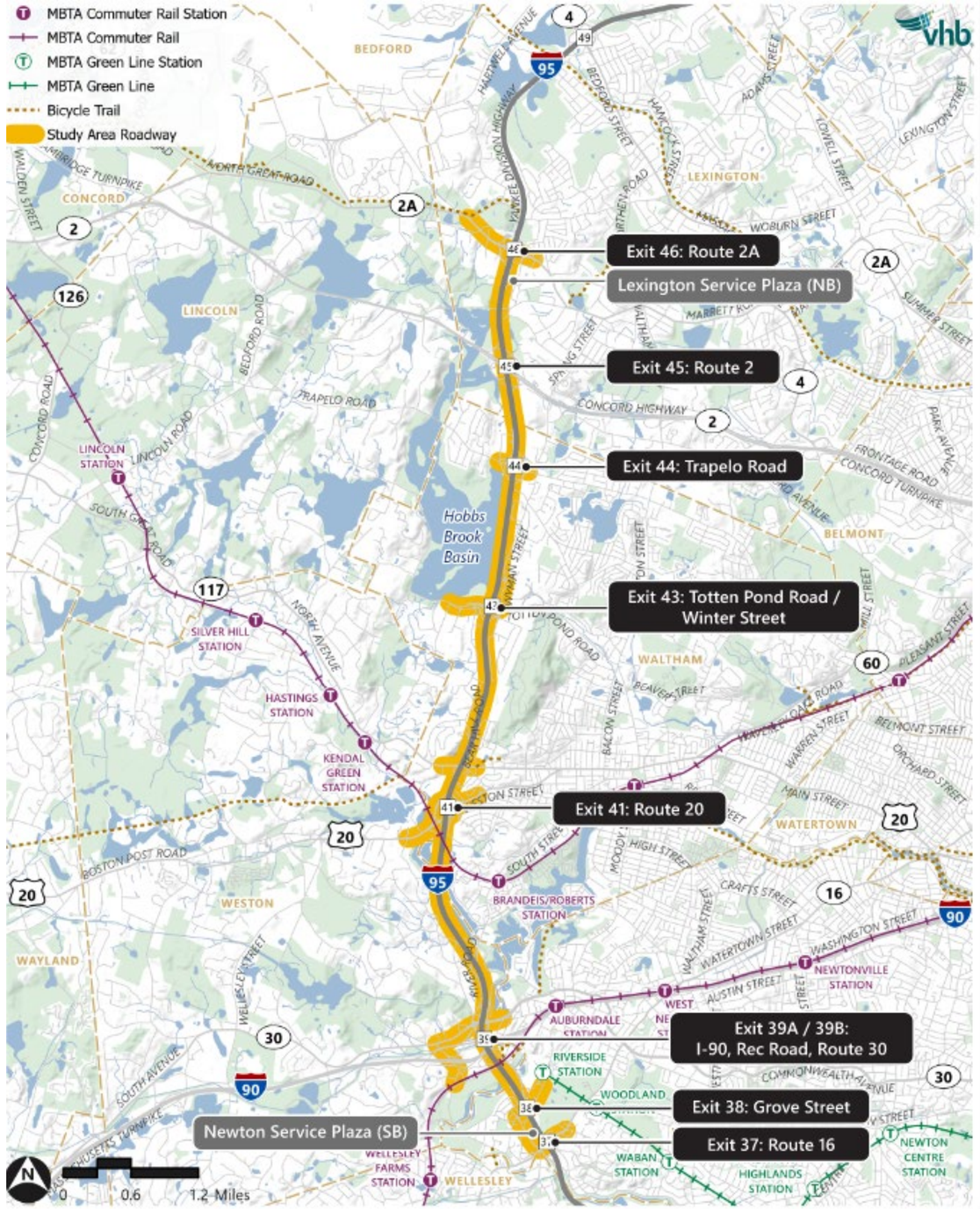
Existing Conditions Review - Transportation

How does the context relate to transportation conditions?

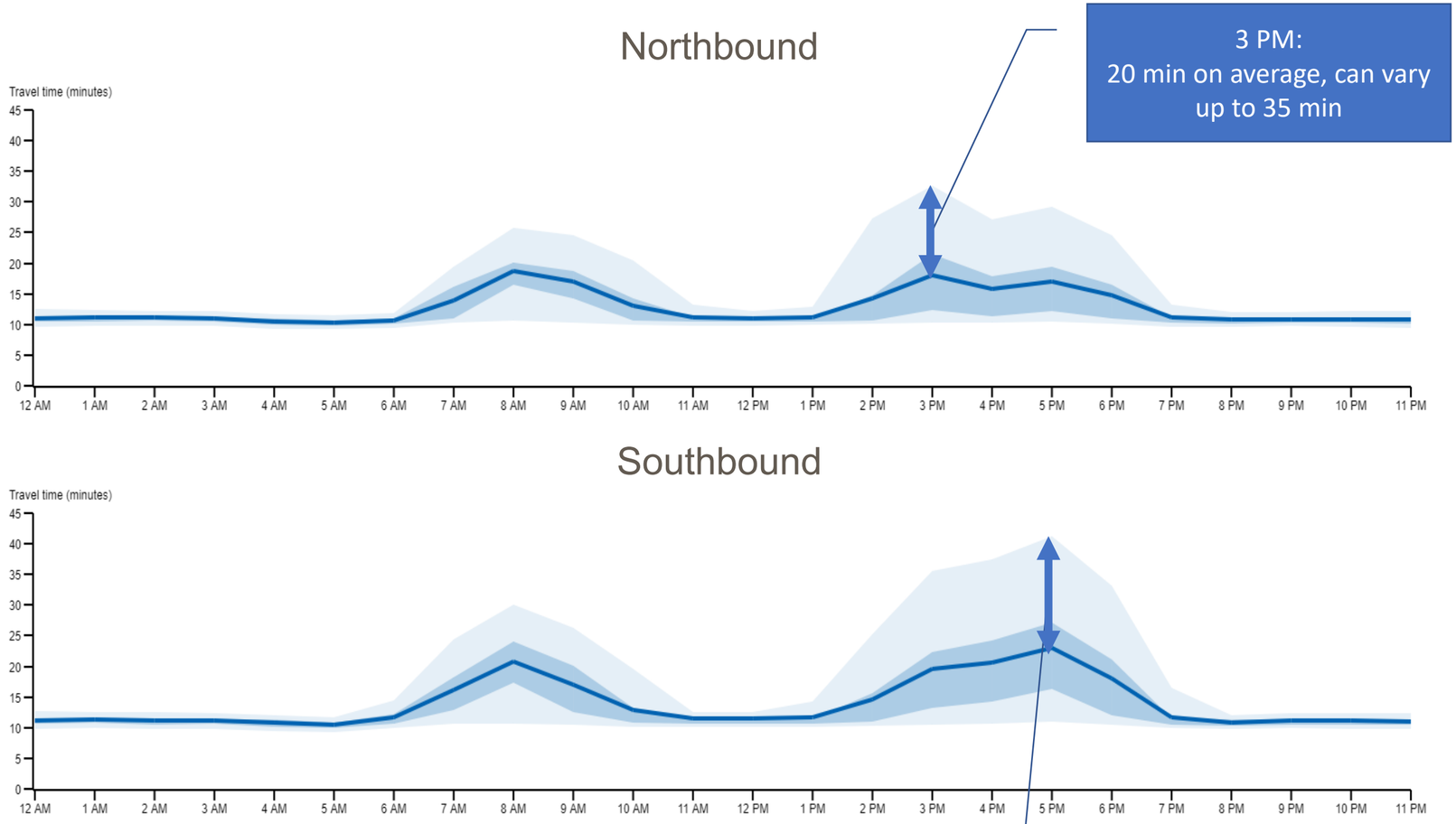
- We reviewed and evaluated existing transportation conditions:
  - Roadways & Intersections: Route 128/I-95 and study area intersections
  - Transit – commuter rail, rapid transit, bus/shuttle, paratransit
  - Active Transportation
  - Safety



Source: MassGIS, MassDOT

Route 128/I-95

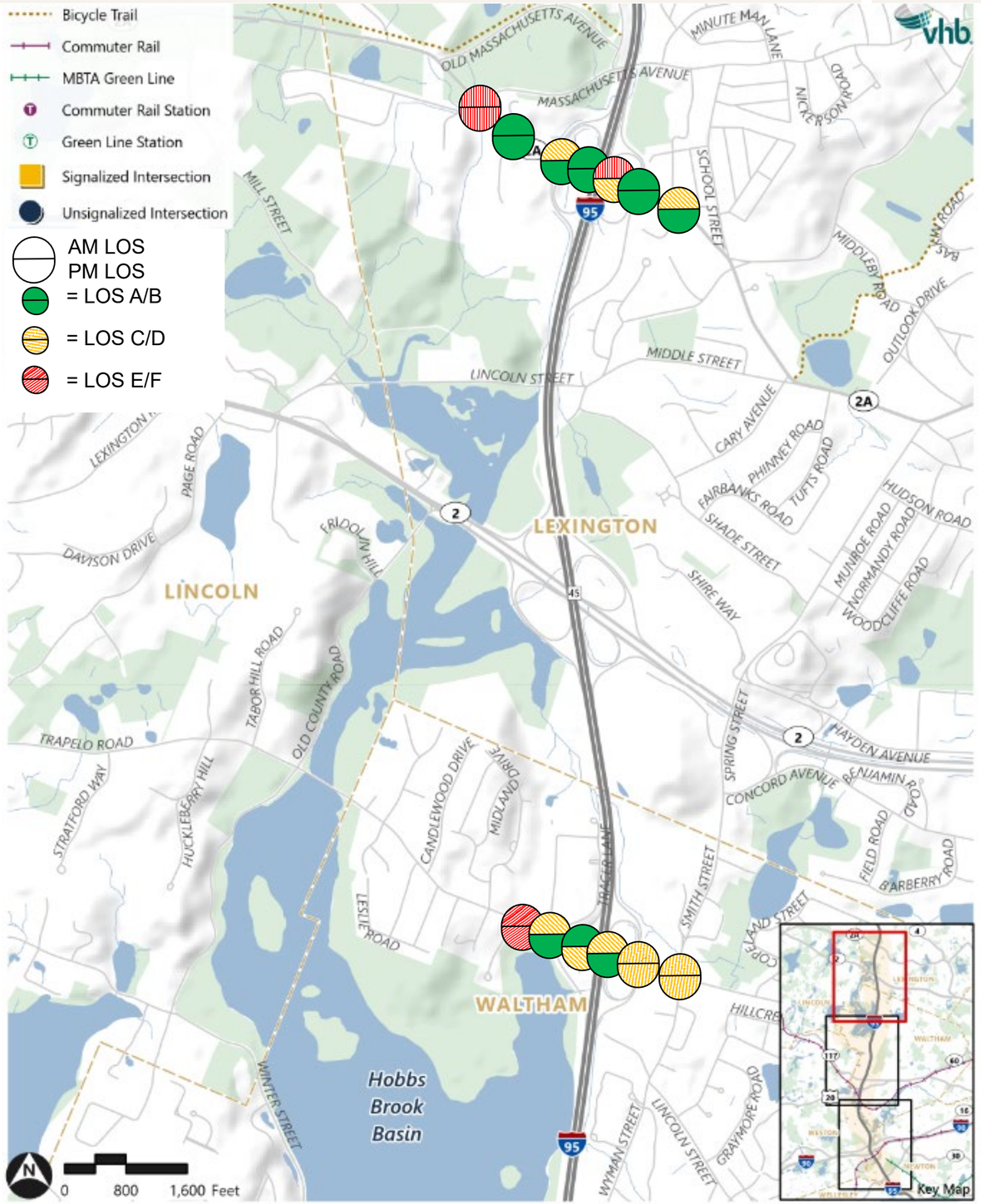
- Route 128/I-95 Traffic Patterns
  - 184,000 daily vehicles
  - Extended “rush hour” periods
  - 2% average growth per year
  - During the pandemic, daily volumes dropped 29%
- Completed HCS analysis of average annual condition and reviewed Inrix data to understand reliability
- Level of Service (LOS) E/F conditions on several mainline segments, ramps and weave areas during both peak hours
- Travel times vary widely and in some hours of the day nearly double – resulting in unreliability for travelers



Source: INRIX. Jan-Dec 2019 Tues-Thurs average.

Study Area Intersections (North)

- Intersection operations are tied closely with mainline operations – in some cases, queues spillback to adjacent intersections
- Several intersections with operational deficiencies
  - Route 2A/Mass Ave
  - Route 2A/128 NB ramps
  - Trapelo Road/Data Drive/128 SB on-ramp



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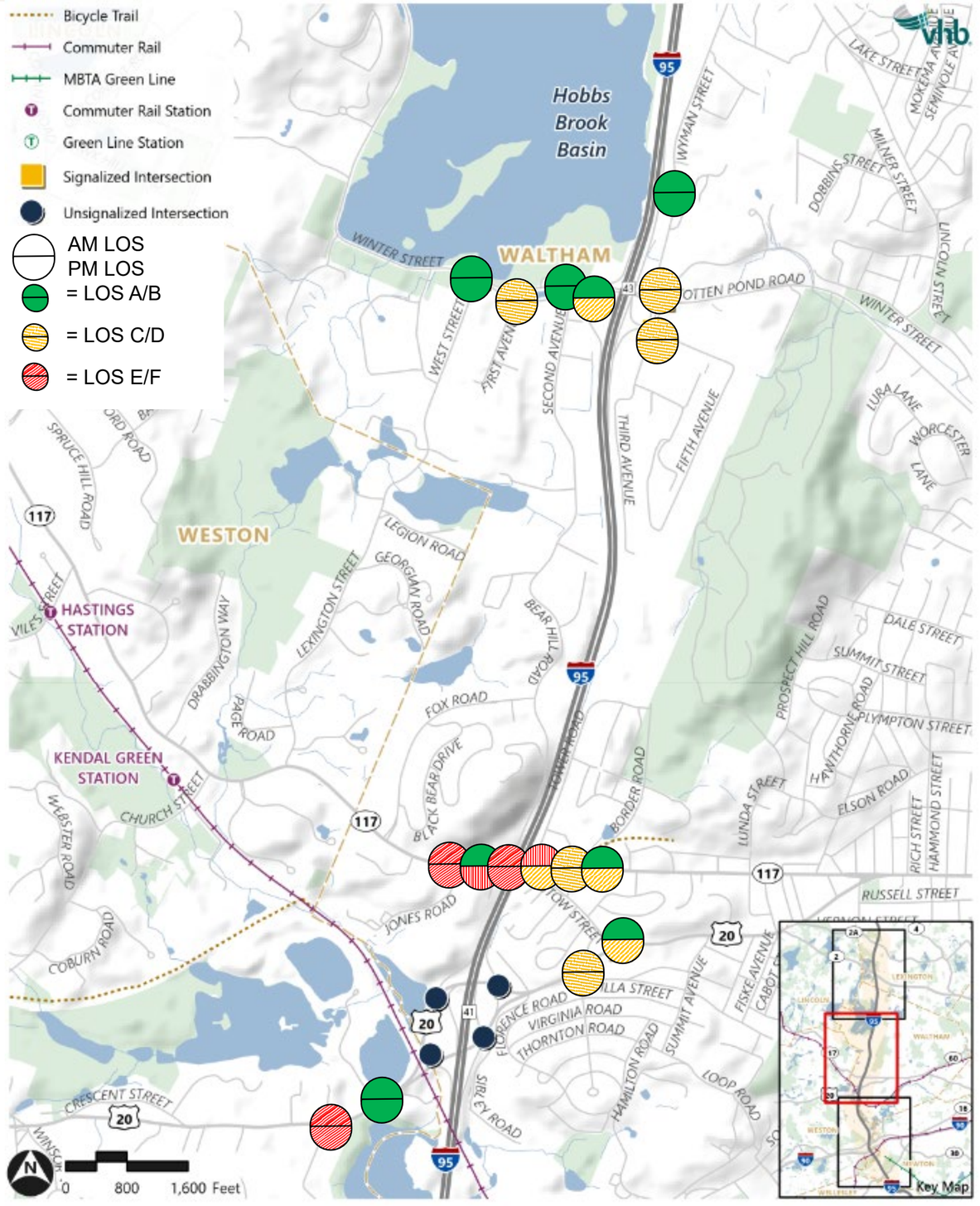
Study Area Intersections (Center)

- Intersection operations are tied closely with mainline operations – in some cases, queues spillback to adjacent intersections
- Several intersections with operational deficiencies
  - Route 117/Jones Road
  - Route 117/Green Street
  - Route 117/Bear Hill Road
  - Route 117/Stow Street
  - Route 20/Summer Street



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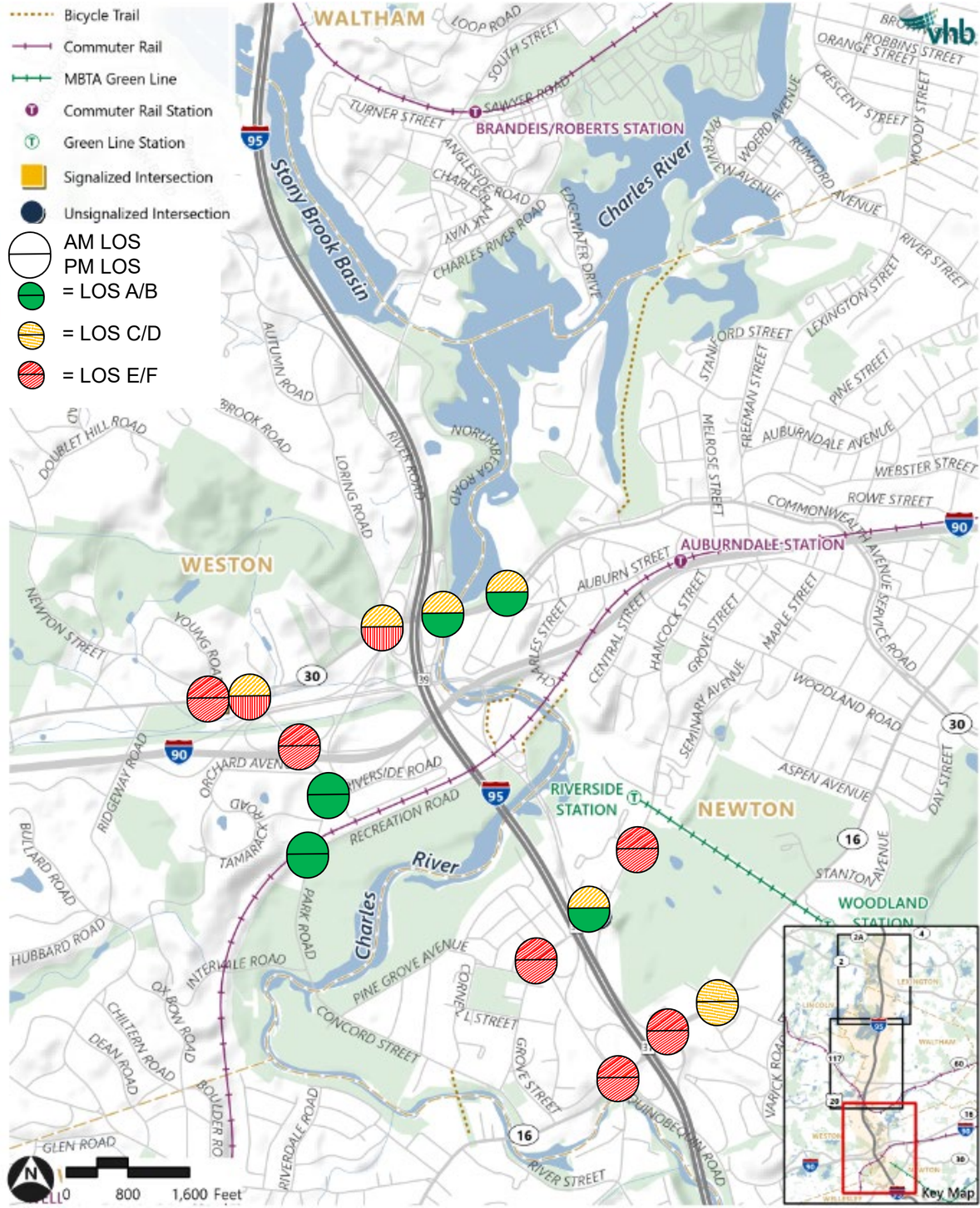
Study Area Intersections (South)

- Intersection operations are tied closely with mainline operations – in some cases, queues spillback to adjacent intersections
- Several intersections with operational deficiencies
  - Route 30/Newton Street
  - Route 30/Park Road
  - Route 30/128 SB ramps
  - Park Road/90 EB ramp
  - Grove Street/Asheville Road/Quinobequin Road
  - Grove Street/MBTA driveway
  - Route 16/ Quinobequin Road
  - Route 16/128 NB ramps



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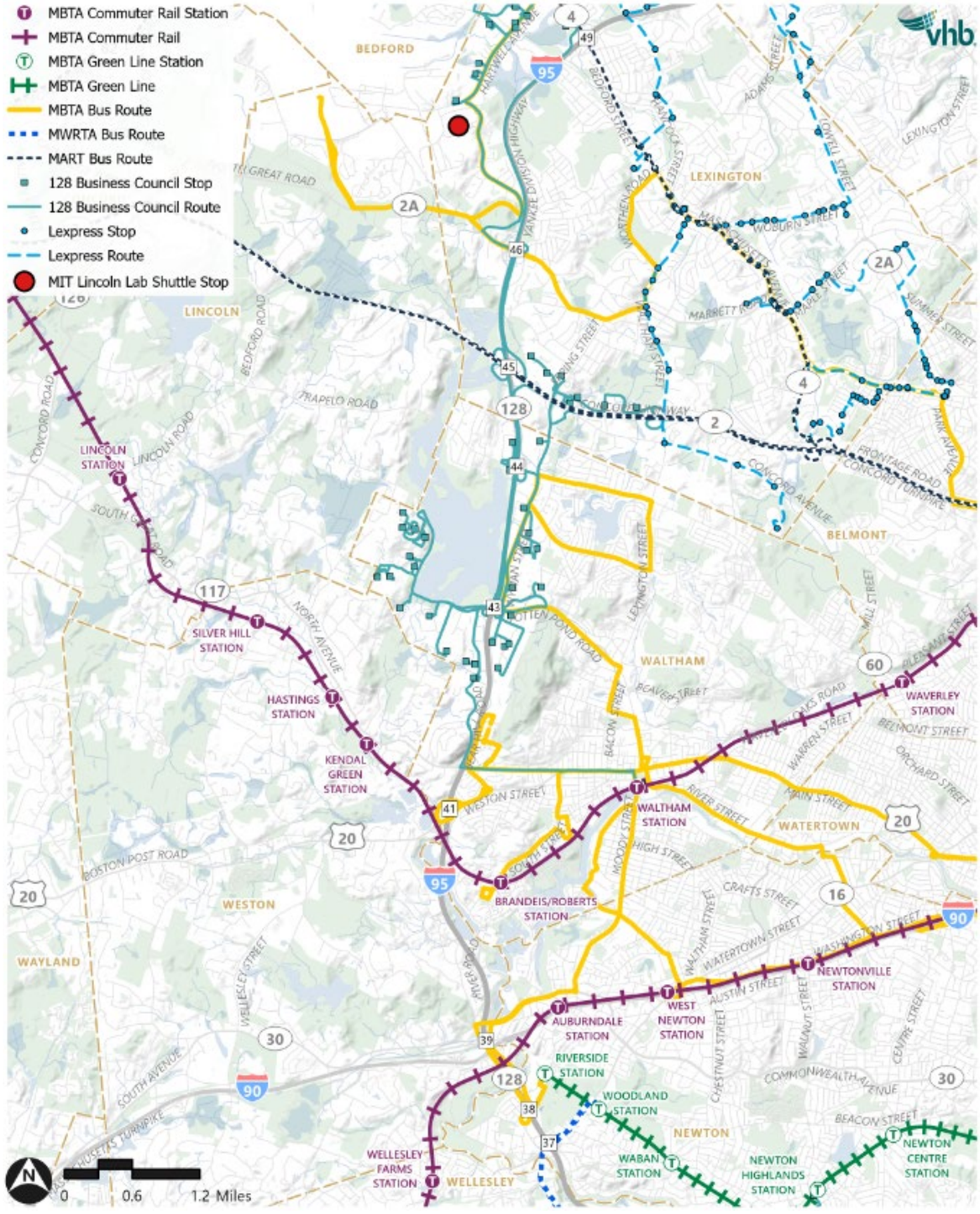
Transit - Rail

- MBTA Commuter Rail – 2 lines, 6 stations in/near the study area
  - 60 min headways
  - Approximately 1,800 daily boardings
  - Nearly 600 parking spaces
- MBTA Rapid Transit – Green Line D Branch, 2 stations in/near the study area
  - 7 min headways
  - Approximately 650 daily boardings
  - Riverside has the highest number of boardings of D Branch surface stations
  - Nearly 1,500 parking spaces



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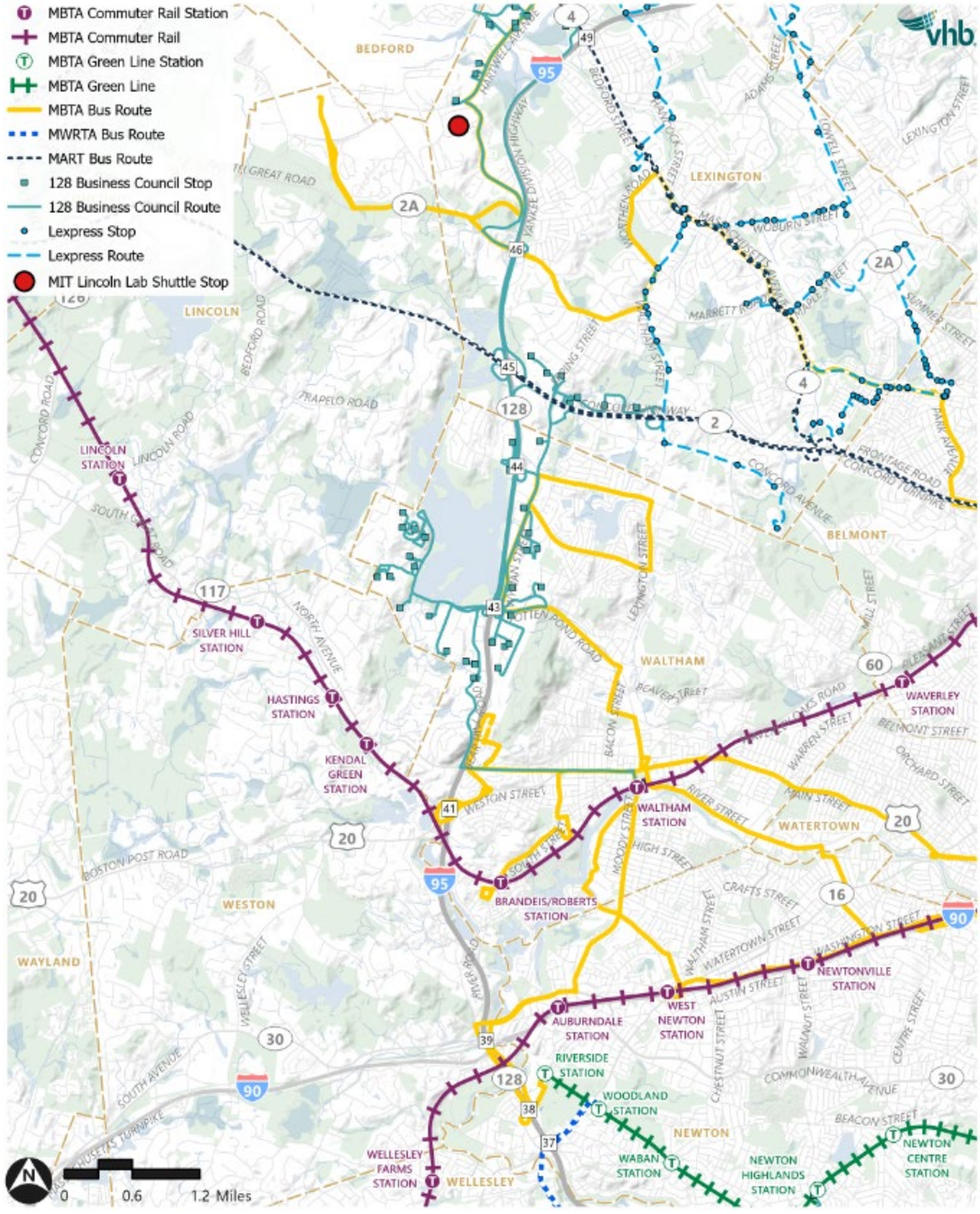
Transit - Bus

- MBTA Bus – 5 routes in/near the study area
  - Headways range 10-90 min
  - Approximately 10,300 daily boardings on routes serving the study area
  - Route 70 is a high-ridership route
  - Route 558 is the only MBTA bus route to travel on Route 128/I-95 in the study area
- 128 Business Council - 6 routes stop within the study area
  - 30-60 min headways
  - Approximately 500 daily boardings
  - Routes stopping in the study area carry approximately 70% of 128 Business Council ridership
- RTAs, Lexpress, MIT Shuttle – 5 routes in/near the study area
  - Headways every 60 minutes or less
- The RIDE – MBTA paratransit service



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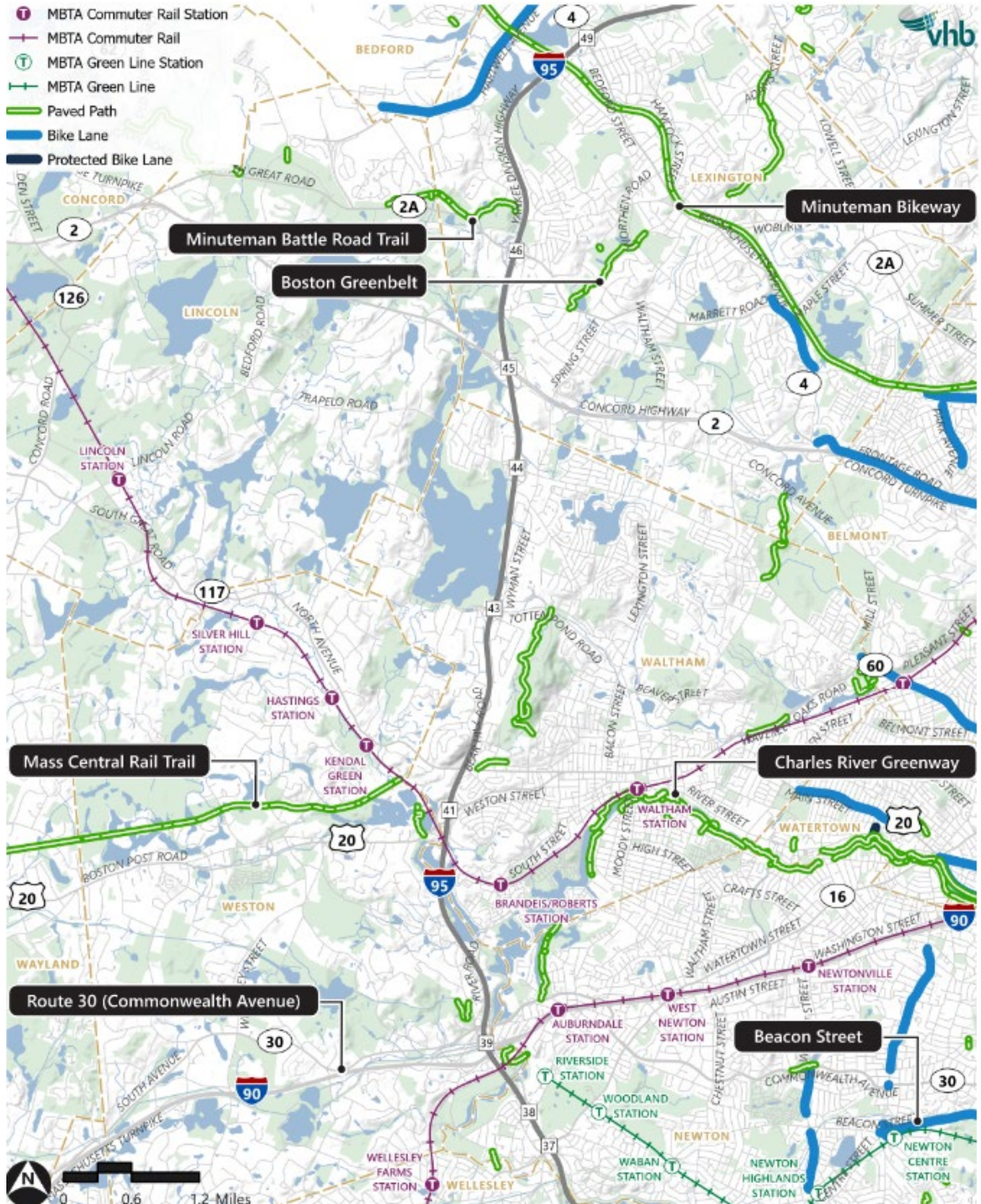
Active Transportation

- 5 trails/paths in close proximity to the study area
- Intermittent sidewalks and on-street bike accommodations
- Limited north-south connections



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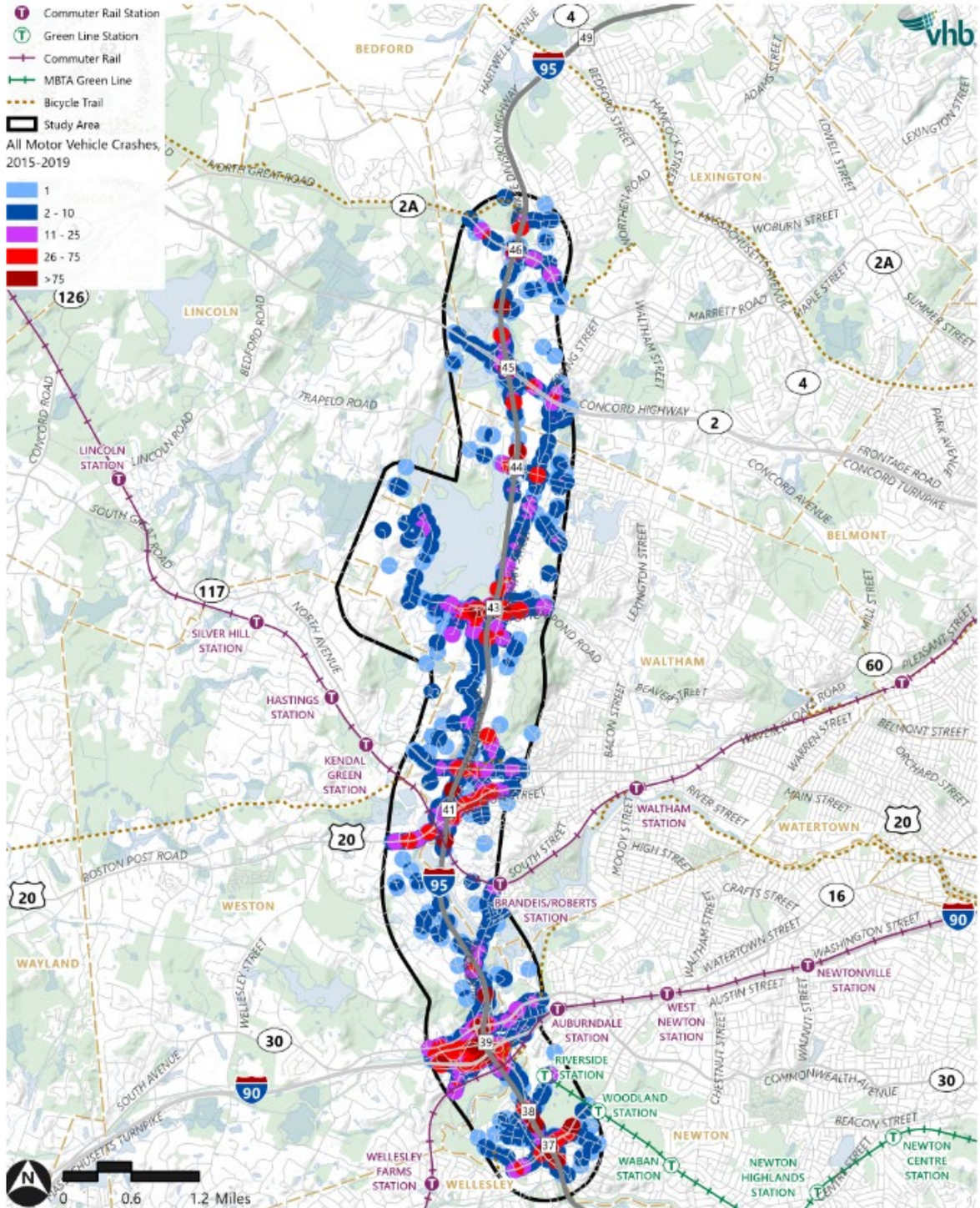
Safety

- Hot spots at interchanges correlates to congestion and influenced by entering and exiting traffic maneuvers
- Crash trends (2015-2019)
  - Fatalities = 3 occurred along Route 128/I-95
  - Ped/Bike = 60 within study area
- Risk sites identified by MassDOT as locations that can be improved to help reduce fatal/injury crashes
  - Ped/bike – segments of Totten Pond Road, Route 117, Route 20
  - Large Vehicle – along Route 128/I-95 and I-90



Route 128/I-95
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Interactive Poll #2

» What is the biggest challenge to traveling in this area?

- Limited transit options
- Lack of pedestrian/bicycle facilities
- Traffic congestion on the highway
- Traffic congestion on the local roads/ramps to the highway
- Unreliable travel times
- Safety concerns
- Other

Look Ahead

Our next steps

1

Incorporate stakeholder input

2

Advance Future Conditions analysis

Summarize issues, opportunities, & constraints

3

Working Group Meeting #3:

Future Conditions Review & Alternatives Development

(Spring 2022)

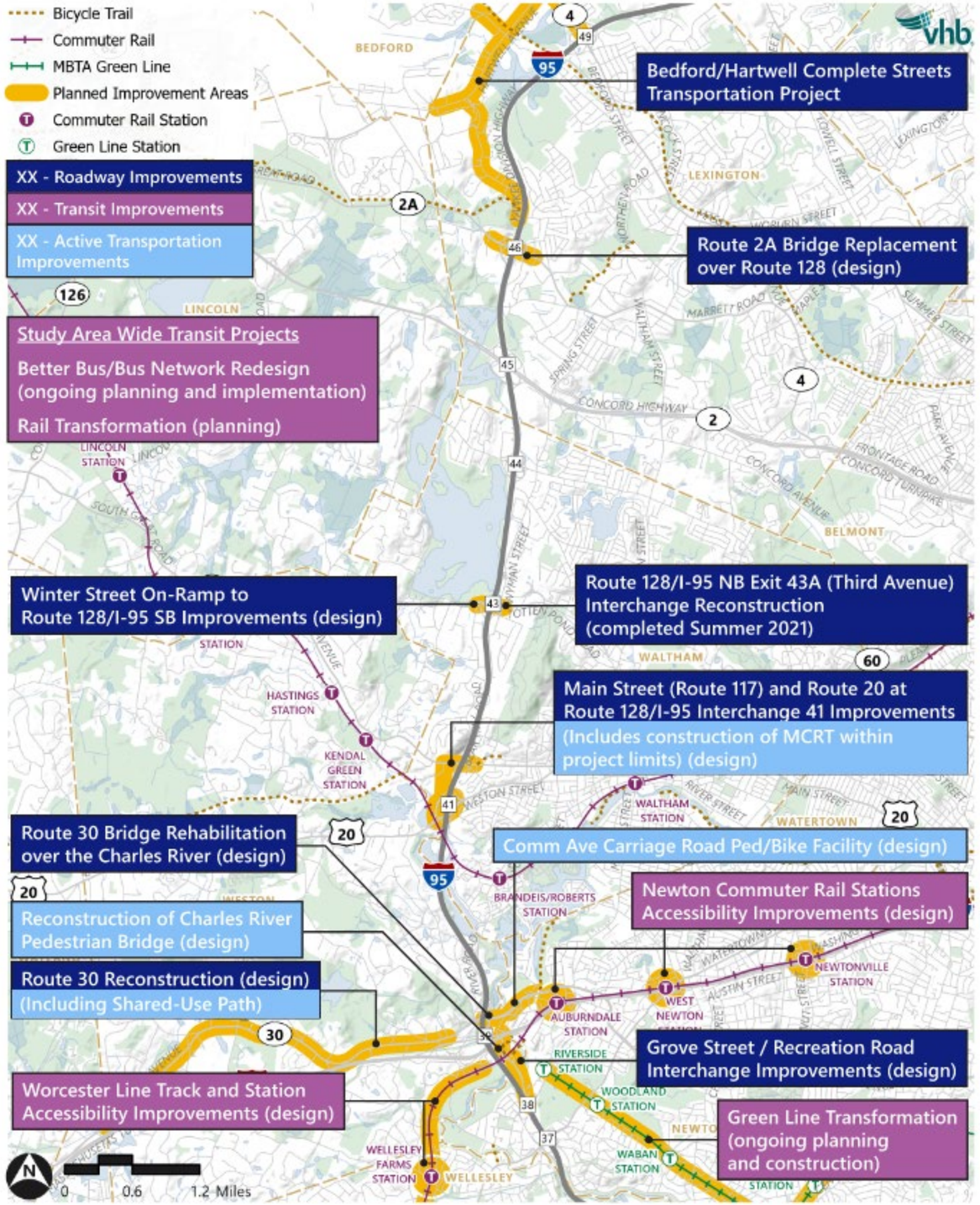
4

Refine issues, opportunities, & constraints

2040 Future Conditions

Under development based on:

- Statewide Travel Demand Model employment & population projections
- Known developments in the pipeline
- Planned infrastructure improvements



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Schedule

Project Framework
Summer/Fall 2021

Existing Conditions
Fall/Winter 2021/2022

Future Conditions
Winter 2022

Alternatives Development
Spring 2022

Alternatives Analysis
Summer/Fall 2022

Recommendations
Fall 2022

Draft & Final Report
Winter/Spring 2023

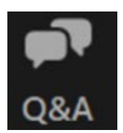
WG *Working Group Meeting*

Public *Public Meeting*

Public Comment

Share Your Questions and Comments

- “Raise your hand” to be unmuted for verbal questions

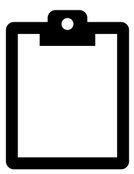


- Submit your questions and comments using the Q&A button

- Please state your name before your question

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

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



- You will receive a survey after the meeting. Please take a few minutes to let us know how we did and can improve.

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

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Route 128/I-95
LAND USE & TRANSPORTATION STUDY

Thank You

Project Website
https://www.mass.gov/route-128i-95-study

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