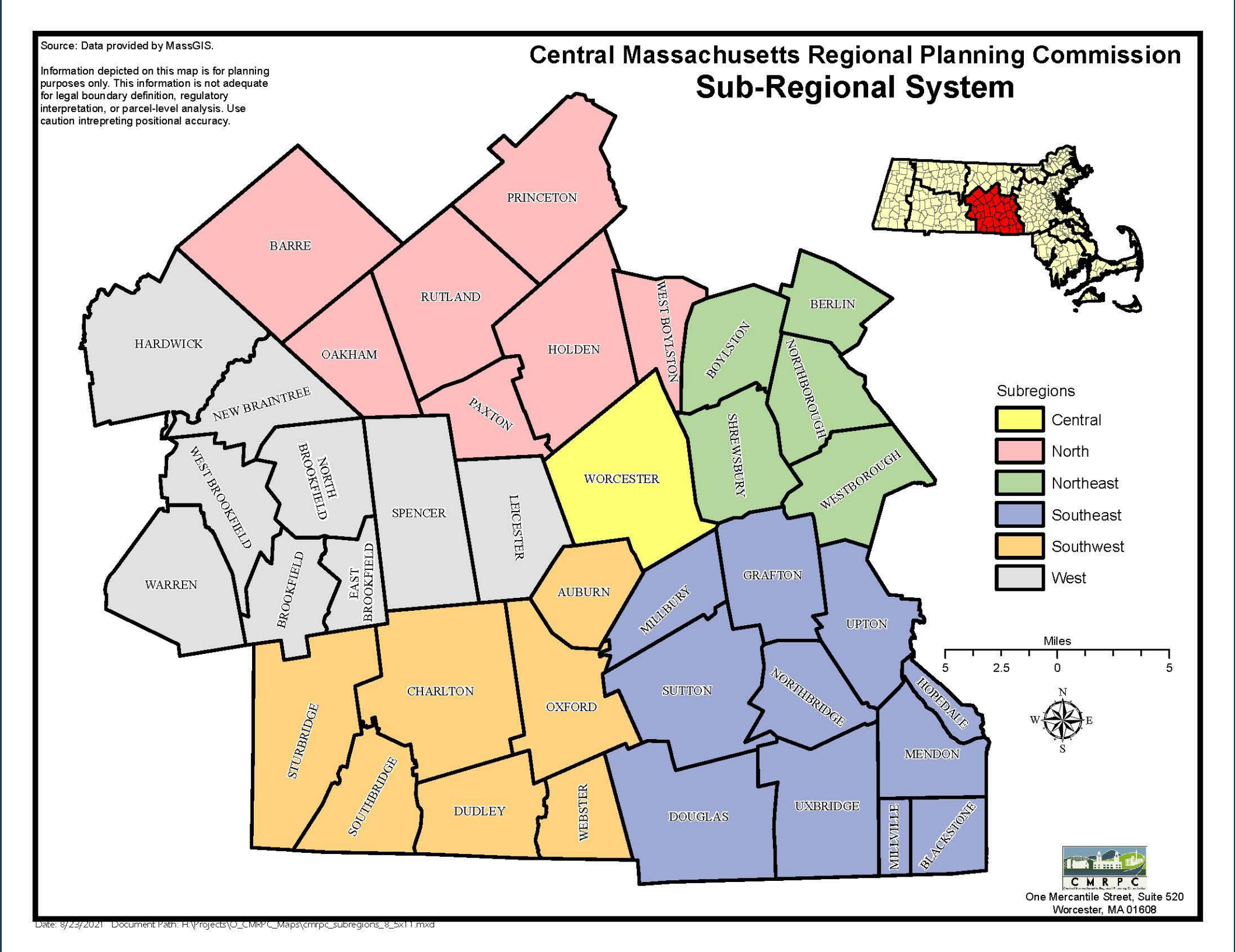




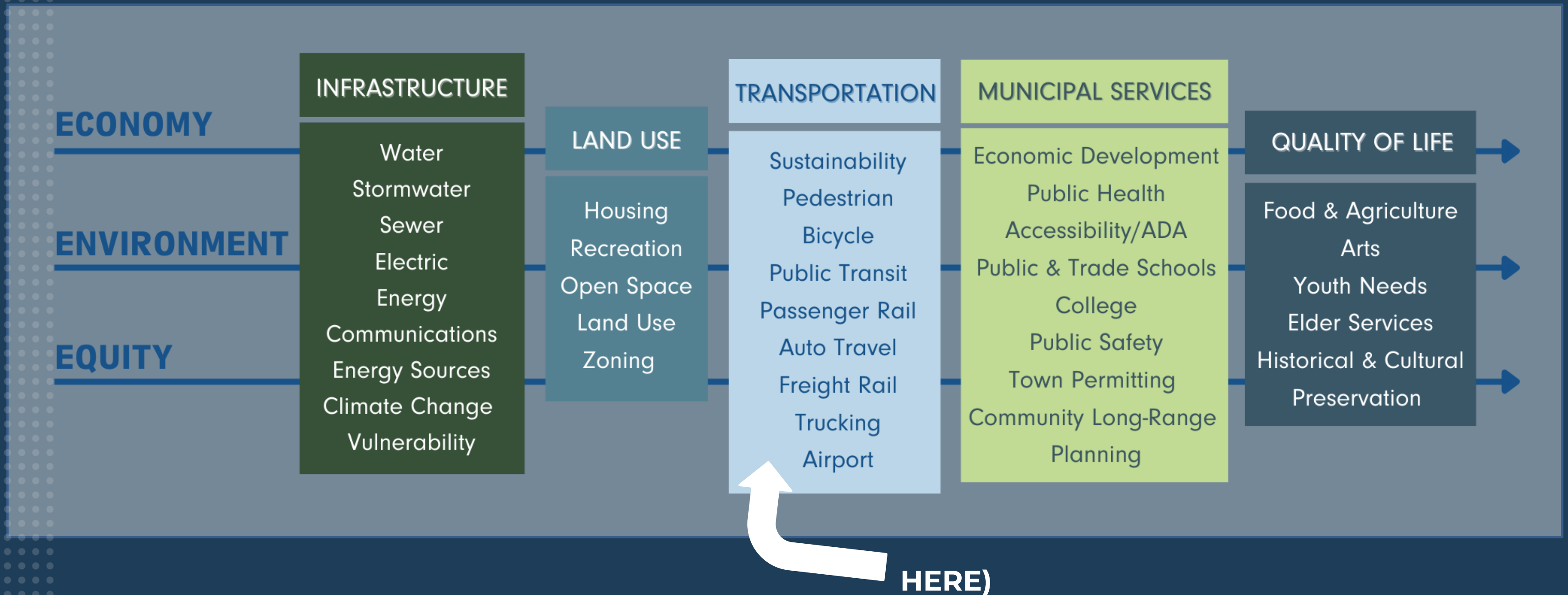
2050 CONNECTIONS

495 METROWEST PARTNERSHIP
TRANSPORTATION COMMITTEE
NOVEMBER 30, 2022

Central Massachusetts Regional Planning Commission



IMAGINE 2050



2050 Connections

The region's long-range
transportation plan



What is the purpose of the LRTP?

The purpose of the LRTP is to identify the multi-modal transportation needs and priorities of the southern central Massachusetts region.

MPO's must create a plan every four years.

The span of 2050 Connections covers 25 years.

HOW THE LRTP IS DEVELOPED?



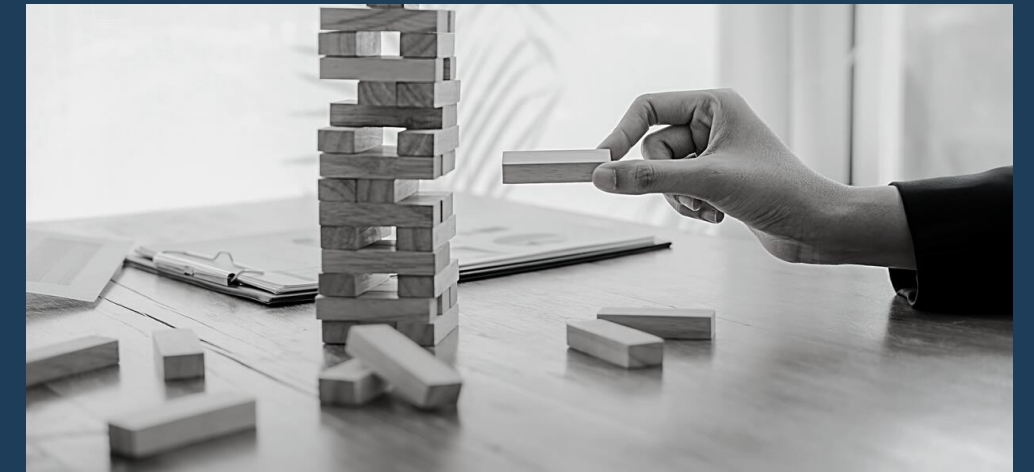
PLANNING

Many factors are taken into consideration:
Management Systems
Performance Measures
Land Use
Economic Development



PARTICIPANTS

Public-at-large
Planners and Town Officials
Interest Groups
Organizations
MassDOT, FHWA, FTA



IMPLEMENTATION

Future work related to the studies, initiatives and projects identified in the plan within the region's financial constraints.

THE PROCESS

PUBLIC OUTREACH

Approach, methods and tools used to engage the public

PERFORMANCE MANAGEMENT

Presentation of national and regional goals and their relationship with Federal and regional metrics

EQUITY CONSIDERATIONS

Geographic equity and the region's demographic characteristics

FEDERAL, STATE & COMMUNITY

BIL, Beyond Mobility, Master Plans and locally identified priorities

PROJECTIONS



POPULATION
PROJECTIONS



EMPLOYMENT
PROJECTIONS



FUTURE GROWTH

TRANSPORTATION MODES



Freight



Transit



Non-Motorized



Highways



Airports

Existing Conditions

Current Challenges or Issues

Vision for the Future

Identified Needs and Priorities



- 2023-27 TIP
- About \$25M annually
- Corridor Profiles
- Major Infrastructure Projects
- Accommodation for all users

- Freight Accommodation Assessment Study
- Rest areas and truck parking
- Bottlenecks on highways
- Freight railroads
- Freight Corridors
- Distribution Centers



- WRTA Fixed Route
- WRTA Paratransit Service
- WRTA VIA On-demand
- Elder Bus
- Ready Bus
- Council on Aging
- Quaboag Connector

- Regional Pedestrian Plan
- Regional Bicycle Plan
- Bicycle Compatibility Index
- Bike Sharing Study
- Microprojects
- Complete Streets
- Trails



Check the CMRPC Multi-Modal Hub:
<https://sites.google.com/view/cmrpcbikeblog/home>

PLANNING AREAS

①

Safety Planning

②

Congestion Management

③

Asset Management

④

Environment

⑤

Emerging Technologies



Safety

- Pedestrian and Bicycle Safety
- Crash data
- Road Safety Audits
- Safe Routes to School
- Highway Improvement Safety Program (HSIP)

Top Crash Locations among the Top 200 Statewide (2017-2019)

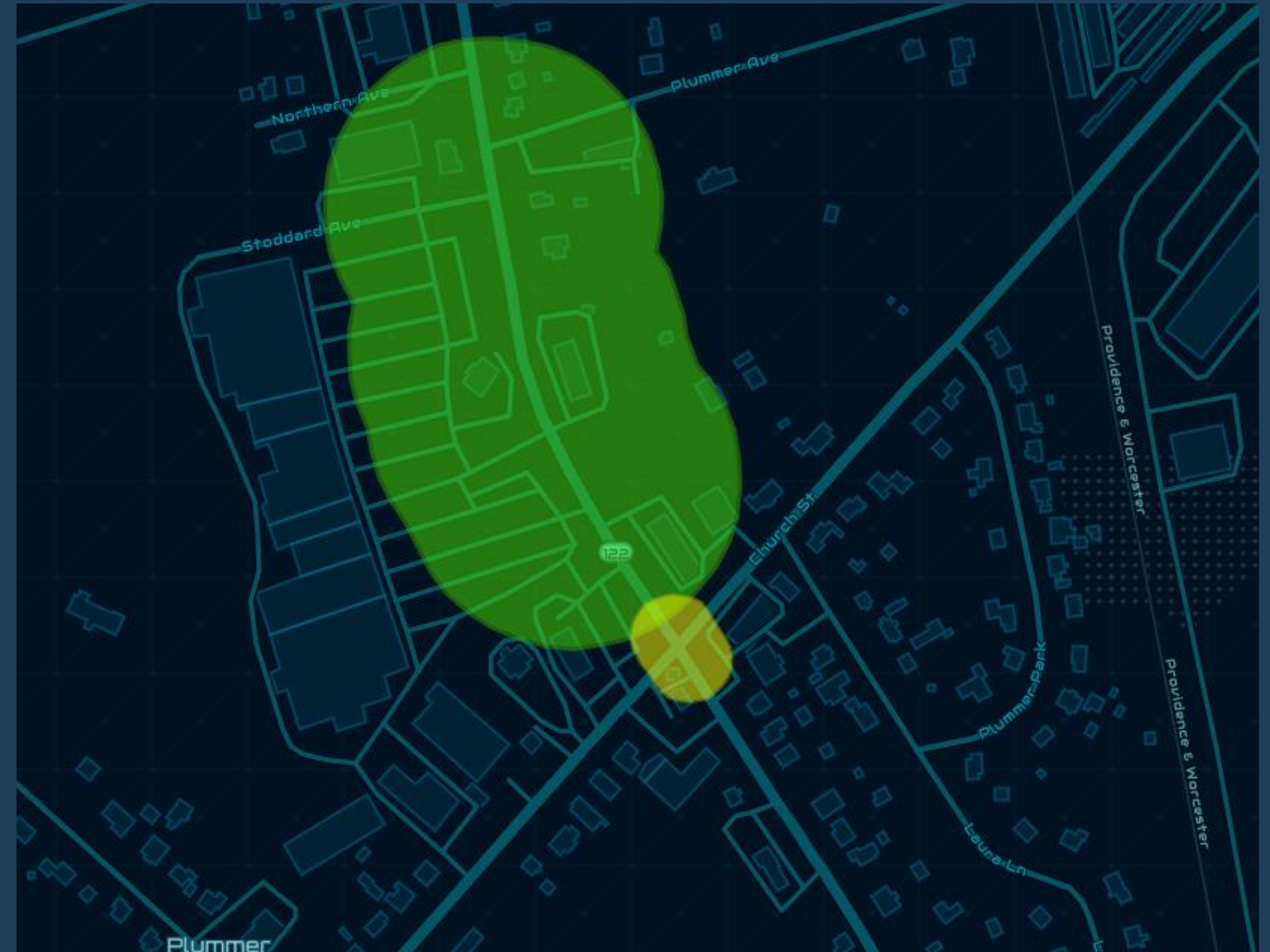
Charlton: Stafford Street / Center Depot Road

Top Crash Location for bridge strikes (30)

Westborough: West Main Street

Top Pedestrian & Top Bicycle Crash Clusters

Worcester: Main Street / Chandler Street



MassDOT Online Crash Portal:

<https://apps.impact.dot.state.ma.us/cdp/dashboard-view/26>

Congestion

- Congestion Management Process (CMP)
- Data collection: travel time and delays
- List of critical intersections
- Park –N – Ride database and utilization rate
- Transit on-time performance
- Travel Demand Model
 - to identify bottlenecks in the region
 - to project future congested locations

TOP 5 CRITICAL INTERSECTIONS (DELAYS)

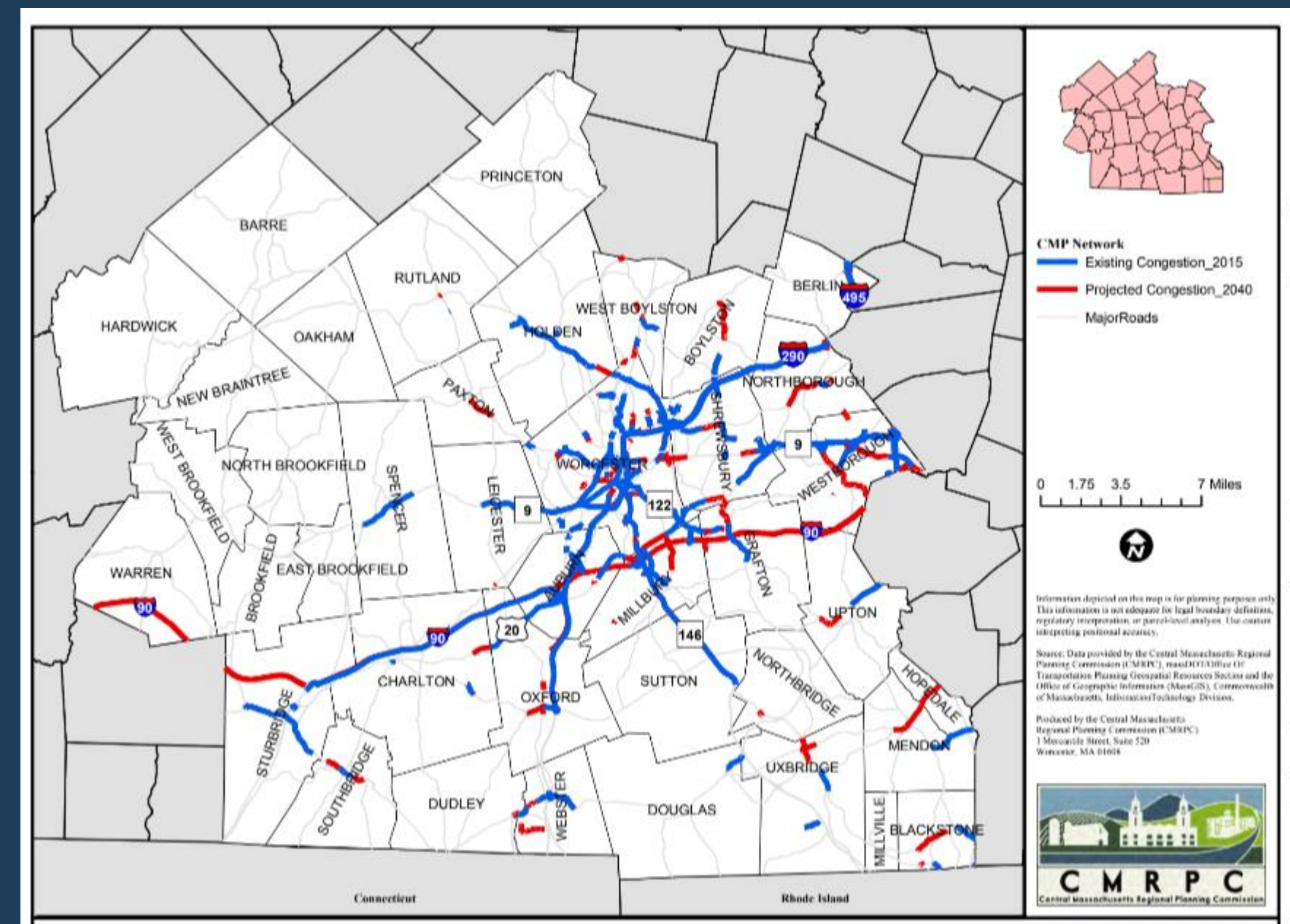
#1 Millbury – Route 122 / Mass Pike

#2 Worcester – Foster St / Francis J. McGrath/Franklin St / Green St

#3 Shrewsbury – Route 140 / Main Street

#4 Westborough – Route 9 / Lyman Street (FYI - this ranking was before the TIP improvement project, the analysis after improvements is not yet completed)

#5 Auburn – Route 12 / Swanson Rd / Brotherton Way



Asset Management

- Data collection
- Pavement condition
- Sidewalk condition
- Traffic counts
- Turning movement counts
- Data available on the online dashboard

Westborough: Parking Study (2019)

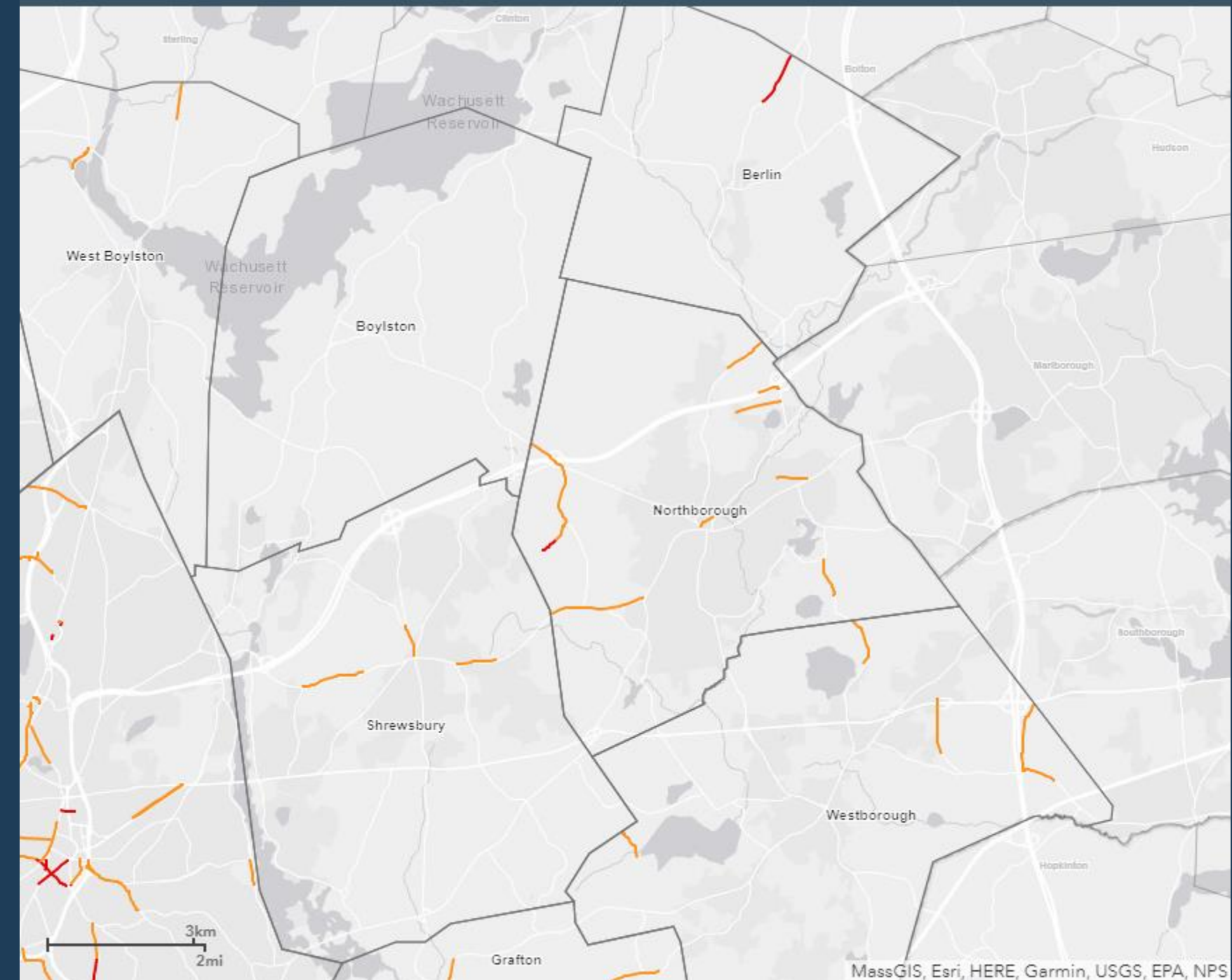
Shrewsbury: Sidewalk Plan (2022)

Douglas: Traffic Signal Warrant Analysis (2022)

Shrewsbury: MA-140 Corridor Profile Study

Berlin: MA-62 Corridor Profile Study

Poor (Orange) and Very Poor (Red) Pavement Condition



Resiliency

- Climate change means more heavy rain downpours and flash flooding
- More than 5 thousand culverts in the region
- Culvert Assessments to identify degree of barrier to waterways
- Integral piece of roadway infrastructure
- Online culvert dashboard

Berlin: Double culvert at Randall Road and West St.

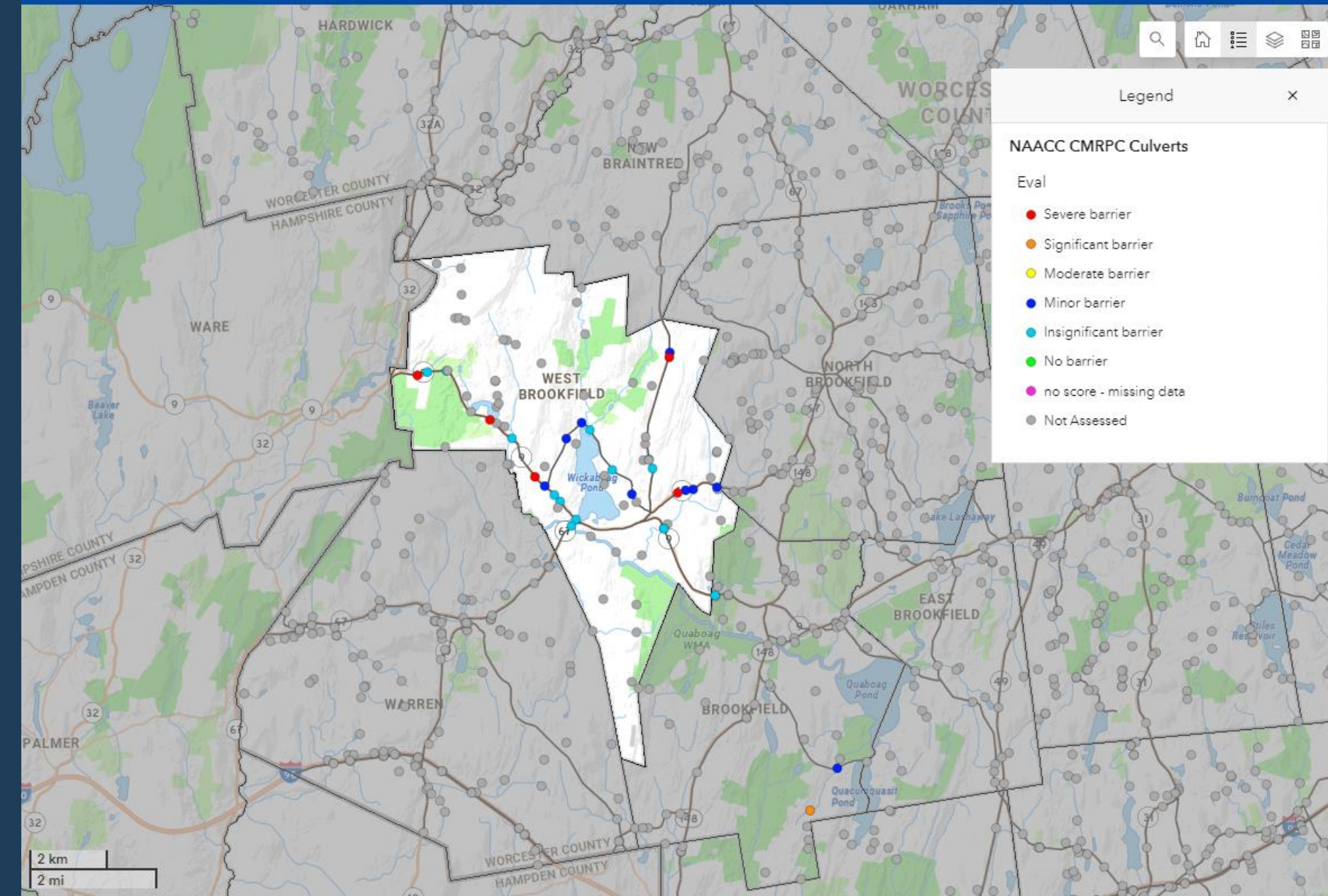
Westborough: Bowman Lane culvert replacement in design

Sutton: Two culverts with significant barrier status

Upton: Culvert Replacement Milford St. (2026 TIP over \$1M)

West Brookfield: Stream Crossing Assessments

West Brookfield Stream Crossing Assessments Results

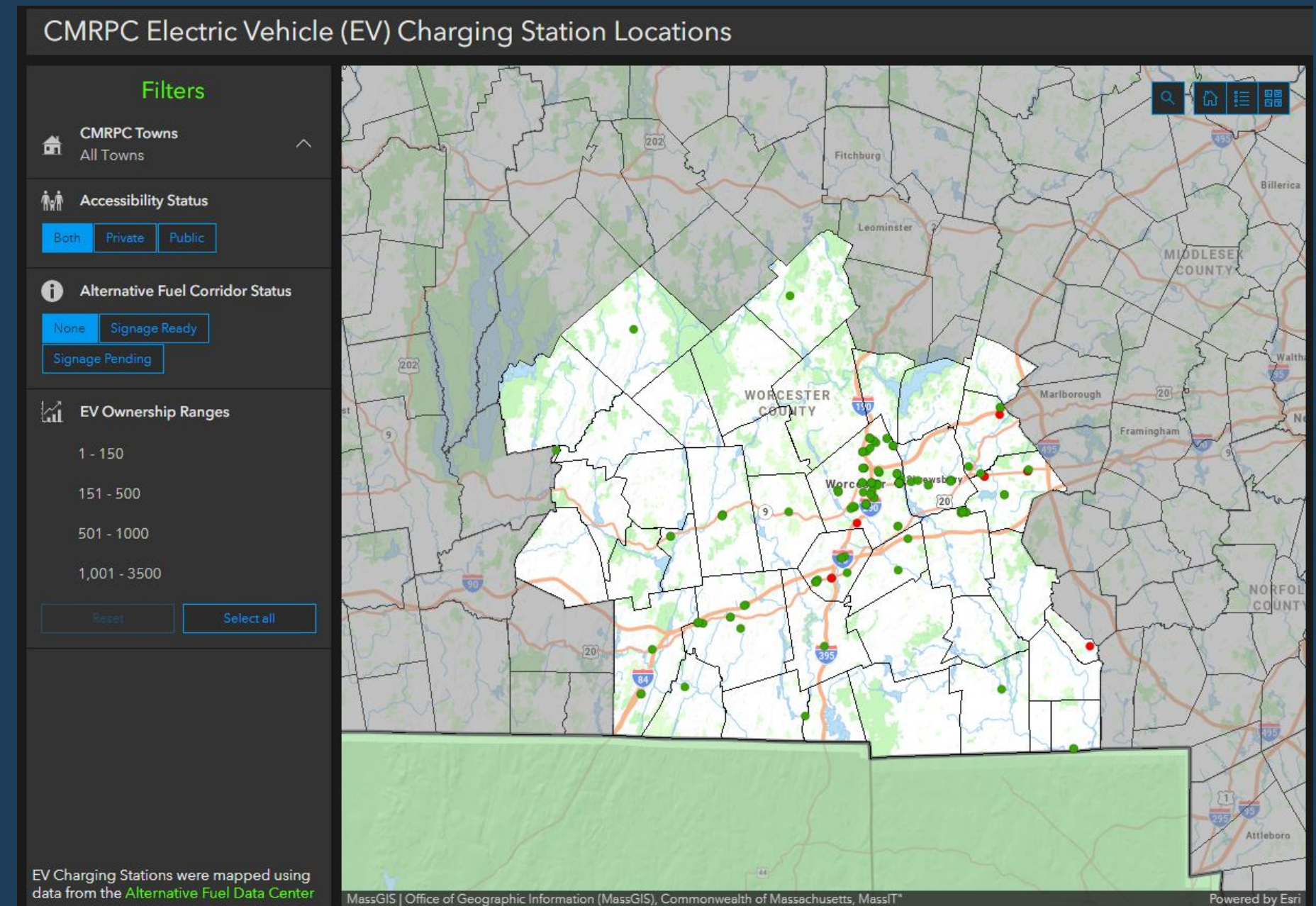


Decarbonization

- Massachusetts 2050 Decarbonization Roadmap
- Electric Vehicle Charging Stations – multiple opportunities and grant programs
- New type of infrastructure
 - Total of 142 charging station in the CMRPC region
 - Locations where charging stations are needed.
- Online EV charging station dashboard

Most of the communities have one or more charging stations.

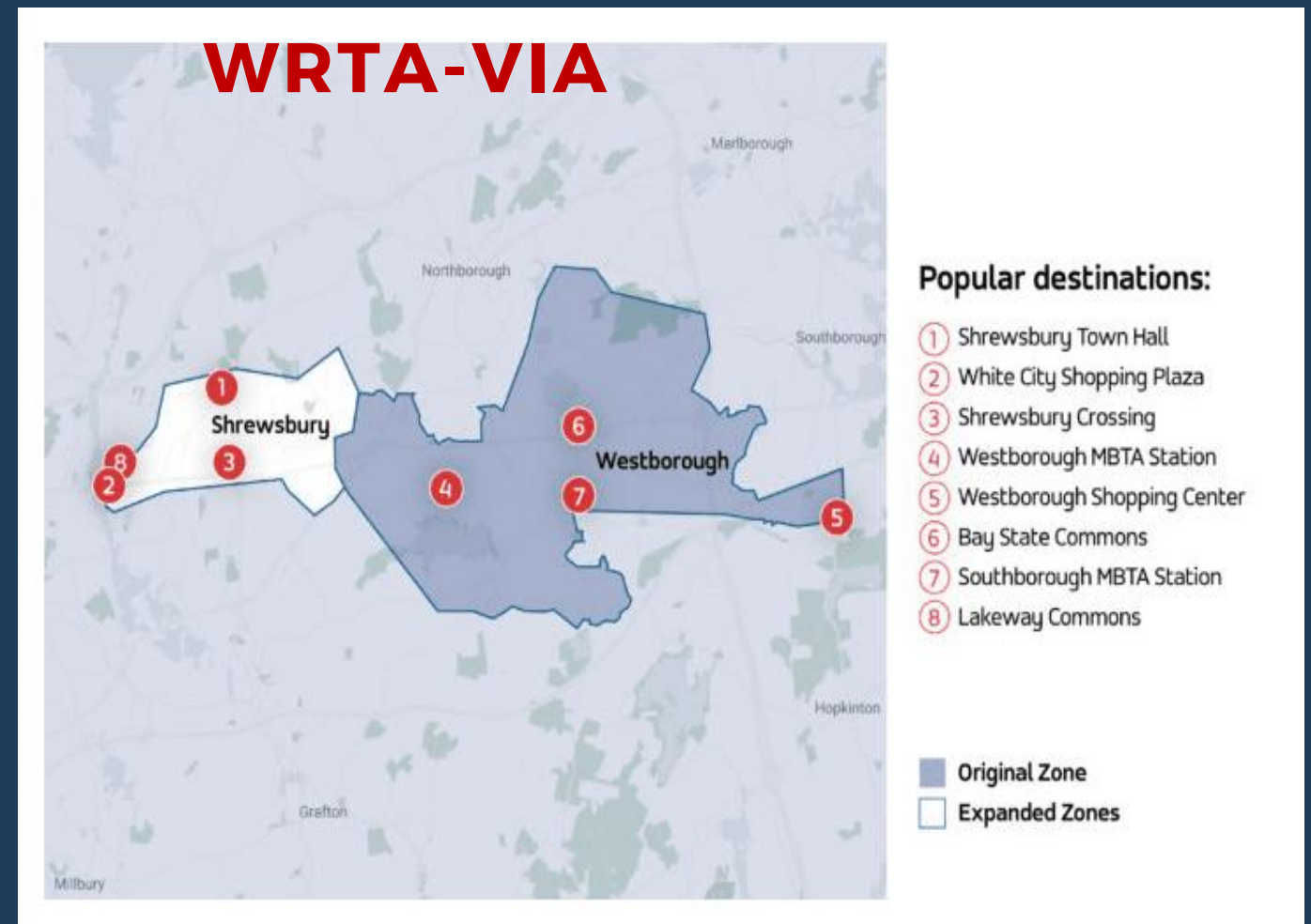
Major concerns related to the capacity of the grid to sustain the future demand in peak hours.



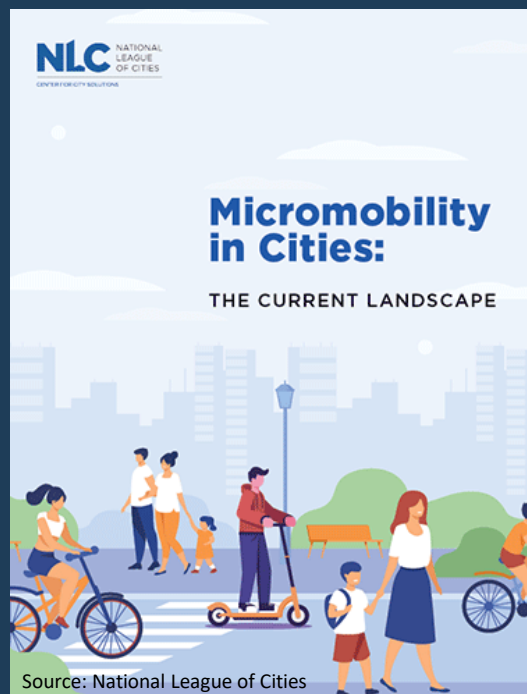
Emerging Technologies

Technology has changed the way we interact with transportation.

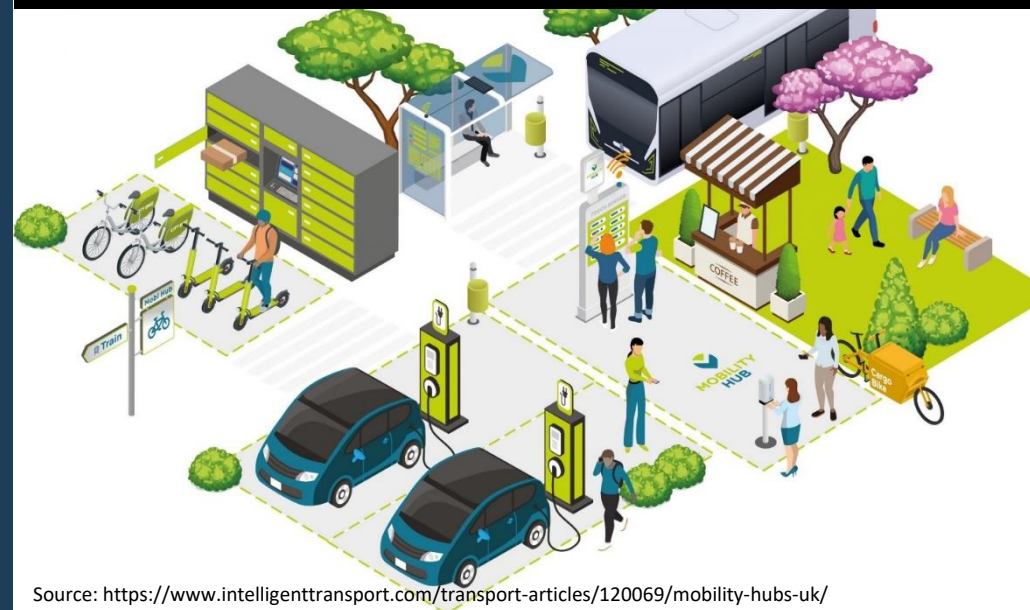
Transportation planning has been experiencing a transition from an auto-centric approach to a human-centered transportation network.



Example of a micromobility station



Example of a Mobility Hub



Mobility Hubs are the transfer stations of the future. They combine access to transit, micromobility, car-sharing and bike-sharing services, EV charging stations, kiosks with real time information, wayfinding information, among other amenities. Perfect scale for community Transit Oriented Development (TOD).

2023-2027 TIP

North

5 Projects
\$26,439,417 M

Southwest

18 Projects
\$188,015,744 M

Northeast

2 Projects
\$22,202,113 M

Southeast

15 Projects
\$87,202,755 M

West

7 Projects
\$42,702,954 M

Central

8 Projects
\$66,976,803 M

- A total of 143 TIP projects, advertised and programmed, between 2012 and 2027, 96 projects located in EJ areas.
- From 2012 to 2027, there are 11 communities that had no target projects, 8 communities with no statewide projects, and 3 communities had neither target nor statewide projects.
- The Northeast Subregion had the fewest number of target projects with a total of 3.
- Federal-aid target funds programmed by the CMMPO since 2012: Over \$290 M
- Statewide funds applied to the region since 2012: \$582 M (aprox)



Funds Awarded in the Region

Complete Streets

20 Communities with
approved/completed projects

Investment of \$6.5M since
2018

MassTrails

CMRPC & 8 communities
17 projects funded

Investment of \$1.8M since
2019

Shared Streets

25 communities
47 projects funded

Investment of \$5.2M since
2019

MassWorks

10 Communities
12 Projects

Investment of \$19.6M since
2018

DER's Culvert

7 active projects
2 projects using ARPA
funds

Green Communities

Awarded \$3.4M
20 communities
2021 & 2022



Funding Opportunities

Bipartisan Infrastructure Law (BIL)

Climate Change and Resilience Funding Opportunities:

- Carbon Reduction Program
- PROTECT Grants (formula and discretionary)
- Charging and Fueling Infrastructure
- National Electric Vehicle Formula Program
- Congestion Relief Program
- Other Climate and Resilience Provisions

Statewide Funding Programs

- **MassDOT:** Complete Streets, Local Bottleneck Reduction Program, Community Transit Program
- **MassDEP:** Mass EVIP: Fleet Electrification, Workplace & Fleet Charging, Multi-Unit Dwelling & Educational Campus Charging
- **MA DCR:** MassTrails
- **DER:** Culvert Replacement Program
- **Massachusetts Clean Energy Center:** Accelerating Clean Transportation for All (ACT 4 All)

For more information: https://www.fhwa.dot.gov/bipartisan-infrastructure-law/grant_programs.cfm

Northeast Regional Summit



2023-2027 TIP
2 Projects
\$22,202,113 M

- Trails
 - BWALT – each community working on their own
 - Statewide trail map for bicyclists / commuters
- Issues with stormwater from the MassPike
- Culverts
- Projects' requirements & right of way
- ITS – reroute freight to major corridors
- Funding
 - Management of multiple grant programs
 - Chapter 90 funds are not enough

Southeast Regional Summit

Grafton, MA



2023-2027 TIP
15 Projects
\$87,202,755 M

- Distribution Centers
 - Trucks parked along Route 146
 - Trucks using local roads (ITS needed/GPS updates)
 - Need to capitalize on freight rail instead
- Intersection of Route 146 & Boston Road (alternatives to eliminate traffic light)
- Future traffic impact in Upton (MA-16) as a result of I-90/I-495 interchange construction
- On-demand transit service (some communities are not part of the WRTA service area)
- Towns do not have any oversight power over commercial charging stations, neither receive funds from it
- Blackstone Valley Heritage Corridor
 - Unsuccessful to secure funds from neither MassTrails grants nor MassDOT through the TIP
 - Connections to the SNETT

Items of Discussion

Major infrastructure efforts

- I-495 @ I-90 MassPike (poised for construction)
- I-495 @ State Route 9 (conceptual improvement plan, funding needs to be identified)
- I-495 southbound to I-290 westbound ramp improvement (poised for construction)
- Route 9/Route 135 interchange reconstruction, substandard geometry
- Route 9/US 20 interchange reconstruction, narrow bridge cross-section for Route 20, nearing 100 years in age.
- Westborough Center and the truck traffic from the garbage removal company.
- MBTA Commuter Rail service in the area
- Shuttle services
- EV proliferation
- Bicycle and Pedestrian facility progression
- Regional trails such as the proposed/planned Boston-Worcester Air Line Trail (BWALT)

CMRPC Legislative Affairs Forum: Trails



Trails

Tuesday, December 6, 2022
9:00 AM to 11:00 AM

MA Fisheries & Wildlife Headquarters
1 Rabbit Hill Road
Westborough, MA 01581

Join fellow community leaders and legislators at CMRPC's Legislative Affairs Forum. Learn about and discuss the benefits, goals, and difficulties of creating and sustaining a robust pedestrian and bicycle trail system here in Central Massachusetts.

*Requires reservation



Thank You

WWW.CMRPC.ORG/2050CONNECTIONS

FOLLOW US ON SOCIAL MEDIA



#2050 CONNECTIONS

