



ECONOMIC VITALITY

The MRPC is committed to the goal of improving economic vitality in the Montachusett Region by focusing on improving the transportation infrastructure that services the diverse economic drivers within the Region. The *Economic Vitality Needs* dialog below provides a snapshot of the existing transportation infrastructure critical to the economic vitality of the Montachusett Region that should be the focus of future improvement.

Economic Vitality Needs

One of the ten federal requirements for the Massachusetts 2018 Freight Plan, as well as for all state freight plans across the United States, was to develop two freight corridor listings:

- **Critical Rural Freight Corridors (CRFCs):** Public roads not in an urbanized area which provide access and connection to the *Primary Highway Freight System* (PHFS) and the Interstate with other important ports, public transportation facilities, or other intermodal freight facilities.
- **Critical Urban Freight Corridors (CUFCs):** Public roads in urbanized areas which provide access and connection to the PHFS and the Interstate with other ports, public transportation facilities, or other intermodal transportation facilities.

Purpose and Implications of CUFCs and CRFCs

MRPC Highways that Facilitate Regional Freight Traffic for the MRPC Region (Regional Freight Corridors):

Massachusetts highways that facilitate inbound and outbound freight traffic in Massachusetts:

- Five major Interstate corridors: Interstates 84, 90, 91, 93, and 95;
- Seven auxiliary routes: Interstates 190, 290, 291, 391, 295, 395, and 495;
- Seven major non-Interstate corridors include US-3, US-6, MA-2, MA-3, MA-24, MA-128, and MA-146

Of the above Highways, the following are Regional Freight Corridors:

- I-190 and MA-2



- I-190 and MA-2 form an interchange in Leominster at MA-2 Exit 33 and I-190 Exit 8

The following highways provide access and egress for the Regional Freight Corridors from outside the MRPC Region:

- For MA-2 - I-495 at MA-2 at Exit 29 in Littleton, I-91 at MA-2 at Exit 27 in Greenfield;
- For I-190 - I-290 at I-190 at Exit 19 and Exit 20 in Worcester

I-91 also provides freight traffic access and egress for the MRPC Region at Exit 16 for Route 202

I-495 also provide freight traffic access and egress for the MRPC Region at the following Exits:

- I-495 Exits - Exit 26 for Route 62; Exit 27 for Route 117; Exit 28 for Route 111; Exit 30 for Route 2A/110; and Exit 31 for Route 119

Regional Freight Corridors, CRFCs and CUFCs and National Highway Freight Network Funding

- The FHWA defines the National Highway Freight Network (NHFN) for the purpose of prioritizing through routes critical to interstate commerce;
- The Regional Freight Corridors are included in the NHFN;
- The MRPC Region CRFCs and CUFCs (listed below) provide connectivity to the NHFN for manufacturers and consumers in the MRPC Region;
- The Montachusett MPO used its own analysis and discretion to designate their mileage allotment to develop MRPC Region CRFCs and CUFCs to address the greatest regional freight needs;
- The CRFC and CUFC designations increase NHFN in Massachusetts allowing expanded use of National Highway Freight Program (NHFP) formula funds and FASTLANE Grant Program funds for eligible projects that support identified national goals (23 U.S.C. 167(b), 23 U.S.C. 117(a)(2));
- MassDOT directs resources (funds) toward projects that will improve system performance and the efficient movement of freight on the NHFN in Massachusetts;
- By programming these projects using a mix of NHFP and other funds, MassDOT will advance projects on the roadway segments deemed most critical to freight needs by the MPOs;



- Additionally, each project is screened to make sure it meets at least one statutory requirement before NHFP funds are applied;
- After the development of the STIP and CIP, the project list is updated annually

The following CRFC and CUFC freight corridors received MPO endorsement in 2017:

- 1) **Jackson Road (CUFC)** in Harvard/Devens connects Route 2 to the developing industrial and freight centers at Devens and indirect access to the railroad freight terminal
- 2) **Barnum Road (CUFC)** in Ayer/Devens provides indirect access to the developing industrial and freight centers at Devens and direct access to the railroad freight terminal
- 3) **Princeton Road (Route 31) (CUFC)** in Fitchburg allows direct access to the multi-modal facility at Wachusett Station north of Route 2. South of Route 2 it provides access to Pine Tree Power, a biomass power plant.

Figure 4-46 Route 31 Railroad Bridge in Fitchburg



- 4) **Lunenburg/Fort Pond Road (Route 70) (CUFC)** in Lancaster/Lunenburg allows access from Route 2 to mining facilities at P.J. Keating, a manufacturer of construction earth products and installer of hot mix asphalt, and its mines and truck terminals.
- 5 & 6) **Route 2 (CRFC)** segments in Harvard, Phillipston and Templeton. Route 2 is the main east-west corridor in the MRPC region. It is parallel to significant freight and commuter rail infrastructure as well as connecting the regional industrial centers of Devens, Leominster, Fitchburg and Gardner. Route 2 connects to interstates I-495, I-190 within the region and I-91 to the west.



The *Montachusett Region Comprehensive Economic Development Strategy* (MRCEDS) provides a description of the federal *Opportunity Zone* program and the *Opportunity Zones* that are within the Montachusett Region. Opportunity Zones are census tracts generally composed of economically distressed areas. Ten census tracts were approved within five communities in the Region. The Opportunity Zones are distributed evenly (two each) among the following communities – Athol, Clinton, Fitchburg, Gardner, and Leominster (Figure 4-47).

This map displays the locations of Opportunity Zones within Worcester County, Massachusetts. The zones are highlighted in orange and are distributed across several towns, including Athol, Gardner, Leominster, and Clinton. The map also shows major roads, including Interstate 495 and Interstate 290, and various state routes. A legend at the bottom identifies the orange-shaded areas as Opportunity Zones.

The MRPC road network constraints are a land use conflict that impact, or potentially impact, economic vitality. The constraints include:

- Working Towards the Future
MPO Endorsed: July 17, 2019



- Economic vitality is hindered by the same congested roads and bottlenecks that affect all traffic in the Montachusett Region. Refer to the *Systems Preservation* section of this document for a more detailed description of the congested roads and bottleneck constraints.
- Railroad at-grade crossings also present a potential congested road and bottleneck problem in several municipalities throughout the region.
- Roadway safety, include safety at at-grade railroad crossings.
 - Economic vitality is hindered by the same fatal crash corridors and high crash locations that affects all traffic in the Montachusett Region. Refer to the Safety Needs section of this document for a more detailed description of the safety constraints.
 - Railroad at-grade crossings also present a potential safety problem in several municipalities throughout the region.

The MRPC will continue to work with the Montachusett Region Trail Coalition (MRTC) to improve the transportation infrastructure that services the regional recreational destinations. Refer to the *Bike & Pedestrian* section of this document for a more detailed description of the transportation infrastructure constraints of the regional recreational destinations.

Future Economic Vitality Improvement Projects and Activities

- Improve freight truck access on the four CUFCs and three CRFCs
- Improve external and internal freight truck access for the 10 Opportunity Zones
- Improve congested roads and bottleneck locations
- Improve safety on fatal crash corridors and at high crash locations
- Improve external and internal access to the regional recreational destinations
- MRPC will continue conducting freight corridor analyses

See the *Financial Analysis* chapter for the estimated cost of the projects listed above.



Guidance Plans

The following plans provided guidance for the completion of this Economic Vitality document.

Massachusetts 2018 Freight Plan (MFP):

The MRPC will seek to apply the MFP recommendations to the Montachusett Region. The MFP (4/18) follows a “scenario-based analysis” model which recognizes that many plausible futures exist. The MFP identifies drivers of change in the world and the range of ways in which they could progress, and combines these into multiple plausible futures and presents strategies which will allow Massachusetts to thrive across the widest range of outcomes. The MFP is a companion plan to the **Massachusetts State Rail Plan** discussed below.

Massachusetts 2018 State Rail Plan (MSRP):

The MRPC will seek to apply the MSRP recommendations to the Montachusett Region. The purpose of the MSRP is to guide the future of the rail system and rail services in Massachusetts. The Goals of the MSRP are:

1. Maintain existing rail system in a state-of-good-repair, expand accessibility, and preserve railroad rights-of-way
2. Support economic growth throughout Massachusetts and enable the State to compete in the changing global economy
3. Improve the safety and security of the rail system
4. Provide a rail system that is environmentally and financially responsible
5. Improve intermodal connectivity for both passenger and freight rail facilities by stronger coordination between rail system users to promote system use and efficiency
6. Maximize the return on public dollars towards rail investment by maximizing the use of existing rights-of-way



Montachusett Region Comprehensive Economic Development Strategy (MRCEDS):

The MRPC will seek to apply the MRCEDS (2019) roadway infrastructure recommendations to the MMPO Region. The Economic Development Administration (EDA) administers the *Comprehensive Economic Development Strategy* (CEDS) program. The CEDS program was established as an economic development planning tool to assist communities, regions and states to advance economic development activities, programs, and projects. Through CEDS, a qualifying economic development organization works to identify a region's flexibility to adapt to the everchanging global economy, persistent economic distresses and learn to utilize the region's assets to maximize economic opportunity that fosters growth and job creation and retention for the region's residents.

Athol Route 2 Interchange Study

The purpose of this ongoing study is to assist Athol in evaluating the feasibility of a new interchange project on Route 2 at South Athol Road where Athol is seeking to initiate an interchange project. The study is evaluating the potential effects of converting the existing grade separated roads into an interchange on the existing transportation system and on the surrounding environment as well as providing ramp alternatives.

The Interchange project was first identified in the Montachusett 2016 RTP. Since these roads are already grade separated, only ramps would be needed to connect them to create the Interchange. The proposed Interchange project is based on the following comments received from the Town:

- Freight movement in Athol is limited due to railroad bridge height restrictions that results in heavy trucks using side streets and driving through residential areas;
- The North Quabbin Commons commercial development on Templeton Rd (Route 2A) has the potential of producing traffic backups on Route 2 at Exit 18;
- The Interchange would improve heavy truck access and egress to Route 2 for South Athol Road;



- The Interchange would promote economic growth in Athol primarily along the South Athol Road Corridor;
- Heavy truck traffic on smaller local roads would cease thus creating a safer roadway environment in neighborhoods, extending the pavement life of neighborhood roads, and healthier neighborhoods through decreased vehicle exhaust emissions;
- The interchange would improve South Athol Road access and egress to essential community and regional services that includes the following:
 - Athol Fire Department;
 - Athol Hospital;
 - MA State Police Barracks in Athol;
 - Athol High School
- The Interchange would improve school bus transportation

Trends

The Economic Vitality section reveals two existing issues that are facilitating an increasing trend in hindering economic vitality growth in the Montachusett Region:

- Aging railroad bridges, most of which were constructed approximately 100 years ago, are narrow and many have bridge height restrictions. Also, the bridge alignment geometry of many railroad bridges is not aligned with the geometry of the intersecting road creating dangerous S- shaped horizontal curves with poor sight distance
- Many Route 2 interchanges, including their ramps, do not have the capacity to meet traffic volume demand. One new interchange is being proposed

The MRPC recognizes that the transportation network plays an important role in the economic growth of the Region. Many sectors of the economy depend heavily on safe and efficient movement of goods and services by truck.



Recommendations

Future Economic Vitality Projects and Activities

- Improve freight truck access on the four Critical Urban Freight Corridors CUFCs and three Critical Rural Freight Corridors
- Improve external and internal freight truck access for the 10 Opportunity Zones
- Improve congested roads and bottleneck locations
- Improve safety on fatal crash corridors and at high crash locations
- Improve external and internal access to the regional recreational destinations
- MRPC will continue conducting freight corridor analyses

See the *Financial Analysis* chapter for the estimated cost of the projects listed above.