

TRANSPORTATION TECHNICAL MEMO/REPORT

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OVERVIEW

Transportation is a critical aspect of any community, affecting the daily lives of residents in numerous ways. As a small town in Massachusetts, Montague faces unique challenges and has opportunities to create transportation systems that improve livability. According to the latest census data, Montague has approximately 8,565 residents, with a diverse mix of ages, ethnicities, and income levels. Montague is located in a rural region, with five Villages. Transportation plays a critical role in connecting residents to each of the villages, employment opportunities, social events, and essential services.

The town has aging infrastructure that is nearing or past its useful life. As the population ages and changes, demographic and economic trends also impact transportation needs. For example, the aging population may require more accessible and affordable transportation options, while the rise of remote work may reduce demand for traditional commuting. While Montague is better connected with public transit than the larger region, it is still very limited for those without vehicles.

Despite these challenges, Montague also has opportunities for transportation improvement. Technological advancements, such as electric vehicles, offer more efficient and environmentally-friendly alternatives to traditional single-occupied cars. The Town of Montague can invest or incentivize sustainable transportation methods, such as renewable energy sources. Furthermore, the town can leverage its unique character, including its pedestrian-friendly villages and scenic natural surroundings, to create a more livable community for residents and visitors.

This chapter provides an overview of existing transportation-related conditions and then examines future needs. This section builds on previous planning that the Town of Montague has already conducted, such as: the 2021 Town of Montague Culvert Assessment, 2020 Turners Falls Livability Plan, 2020 Town of Montague Hazard Mitigation Plan, 2020 Comprehensive Regional Transit Plan Update, 2018 ADA Self-Evaluation and Transition Plan, 2016 Sidewalk Inventory for Turners Falls, and the 2010 Montague Community Needs Survey.

Results of the input collected through public outreach conducted as part of this comprehensive planning process indicate that there is a need for additional public transit in town. Eighty-five percent of survey respondents said that they would use weekend and/or evening public bus services. The top three destinations survey respondents said they would utilize public transportation to travel to are downtown Greenfield, Northampton, and other shopping areas. A survey question about bicycle and pedestrian facilities received the most responses and recommendations. When asked for ideas to make walking and biking feel safer in town, the top responses were to increase sidewalks and bike lanes and to slow traffic speeds. Based on the

public input received, the following guiding principle was created to direct this plan's transportation element and recommendations:

Transportation Guiding Principle

Support a safe, accessible and climate resilient transportation network that connects residents to village centers, public amenities, jobs in town, natural areas, and surrounding communities and includes expanded options for travel.

INVENTORY & EXISTING CONDITIONS

Road and Bridges

The Town of Montague has an expansive road network connecting the five villages and its neighboring towns of Erving, Gill, Greenfield, Leverett, Sunderland, and Wendell. The entire western and northern boundaries of the town are created by either the Connecticut or the Millers Rivers, resulting in a high reliance on large bridges for transportation connections to the region.

The Town of Montague owns - and is responsible for maintaining - 103 miles of roads, whereas the Commonwealth of Massachusetts owns and maintains 6.2 miles of roads within town.¹ The town is served by State Routes 2, 47, and 63. There are two miles of roadways within town classified as unpaved or gravel. See Figure 1 for a map of Montague's roadway network.

Traffic Volumes

Traffic surveys are regularly conducted throughout Montague to assess the volume, types, and speeds of vehicles on the roadways.² The top three roads that experience the highest volumes of usage are Route 63, Route 47, and Millers Falls Road. These roads are used most commonly as commuting routes to the larger region. According to the 2020 US Census data, an average of 3,500 Montague residents commute out of Montague to work and approximately 2,000 people commute to work in Montague from other towns.

¹ MassDOT Roads Inventory 2023

² Detailed locations and information about traffic surveys in Montague can be found on MassDOT's Transportation Data Management website: MassDOT Data Transportation Management website
<https://mhd.public.ms2soft.com/tcds/tsearch.asp?loc=Mhd&mod=>

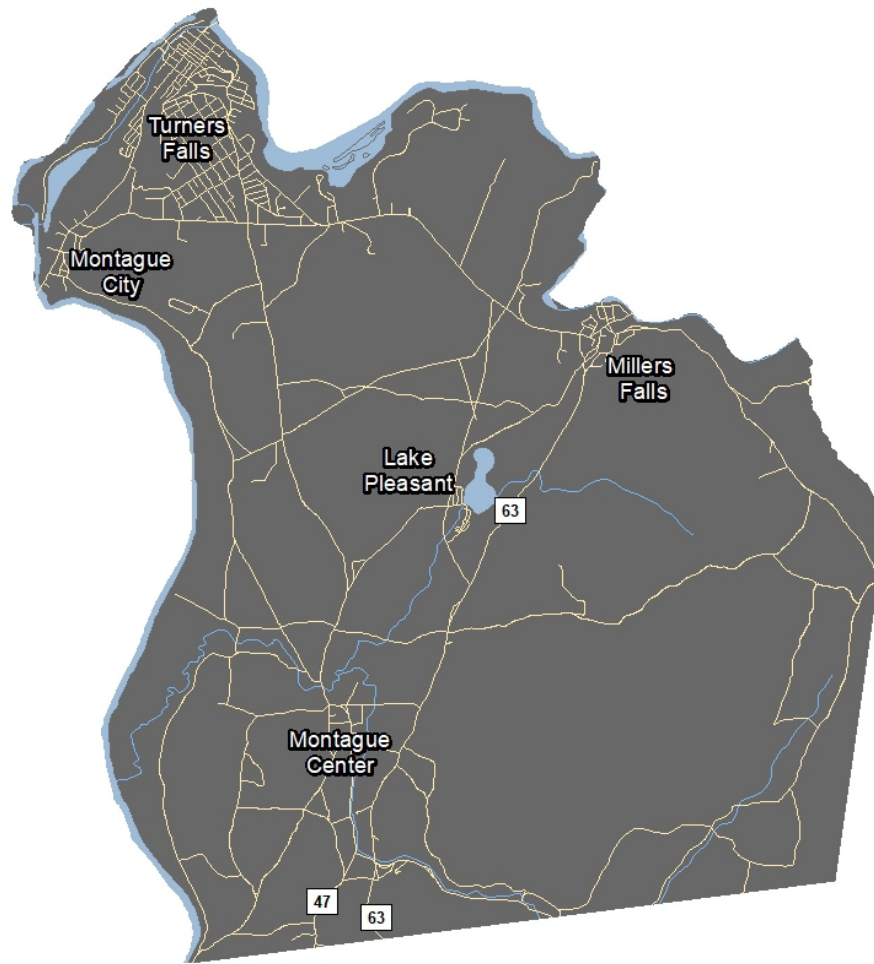


Figure 1: Map of Montague's five villages and road network.

Bridges

Bridges are a critical component of the Montague roadway network because more than two thirds of the town boundary is surrounded by rivers. Maintaining the safety and functionality of bridges in Montague is a top priority. There are twenty-five bridges located in Montague that have spans greater than 10 feet. Five bridges are currently considered structurally deficient as of September 2022.³ Bridges are considered structurally deficient if various components of them fall below specific thresholds for a variety of factors, but are not categorically unsafe for use. Posted weight limits may be needed to ensure safety, but are prioritized for state funding. Montague has six bridges scheduled to be rehabilitated or reconstructed between 2024 and 2026. Notable bridges in Montague include:

³ MassDOT GeoDOT

- **General Pierce Bridge, connecting Montague City with Greenfield, over the Connecticut River**
 - The bridge was rehabilitated in 2023 and a complete bridge replacement is in the preliminary planning phase.
- **11th Street Power Canal Bridge serving 11th Street and the Patch neighborhood, over the Power Canal**
 - This bridge connects the Turners Falls village to the Patch neighborhood and spans the power canal east of the intersection of 11th and G streets. It was most recently repaired in 1996. This bridge will need to be replaced in the near future to remain safe for residents to use.
- **Power Street and Canal Street Bridge serving Power Street and the Patch neighborhood, over the Power Canal**
 - This is a one lane bridge that connects Turners Falls to the Patch neighborhood from the North. This bridge was closed in late 2020 for structural repairs and reopened in the spring of 2021.
- **5th Street/Turners Falls Road Bridge/The Green Bridge, serving Turners Falls Road and Canal Street over the Power Canal**
 - This is commonly referred to as the Green Bridge or 5th Street Bridge and plays a crucial role in the inflow and outflow of people to Montague. Adjacent to this vehicular bridge is another pedestrian bridge, which was closed in 2017. The Green Bridge will be replaced in an upcoming 2023-2028 Canal District Redevelopment/Enhancement Project with pedestrian accommodations.⁴
- **The White Bridge serving Turners Falls Road, over the Connecticut River**
 - The White Bridge crosses the Connecticut River, connecting Turners Falls Road in Greenfield and 5th Avenue in Turners Falls. MassDOT has begun preliminary planning on the replacement of this bridge.
- **Gill-Montague Bridge serving Avenue A, over the Connecticut River**
 - This bridge crosses the Connecticut River where the Power Canal begins, and serves as an important access point for people driving into Montague from Route 2. This bridge was rehabilitated in 2013.
- **South Street and Center Street Bridges, serving South Street and Center Street, over the Sawmill River**
 - These two small bridges are located in the same neighborhood of Montague Center on roads that parallel each other as they cross over the Sawmill River. Both of these bridges are considered structurally deficient. The Center Street bridge has been reduced to one-lane use since spring 2018. As of 2022, the South Street Bridge was closed to all traffic and a replacement project is planned for 2024. This new structure is designed to more resilient to accommodate the

⁴ VISIONING PHASE REPORT FOR THE CANAL DISTRICT MASTER PLAN, 2023 https://www.montague-ma.gov/files/2023_Canal_District_Master_Plan_Study_Final_Report.pdf.

seasonal changes in the river size and will meet Massachusetts Stream Crossing Standards, providing terrestrial and aquatic wildlife passage/habitat improvements.

Commuters

Montague’s commuters use different modes of transportation to travel to their jobs including driving alone in a car, truck, or van; taking public transportation; carpooling; walking; or not commuting at all and working from home. When compared to Franklin County as a whole, Montague follows similar trends with regards to the number of commuters in each of these categories. Driving alone and working from home are the top choices by commuters. See Figure 2 below for commuting modes in town.

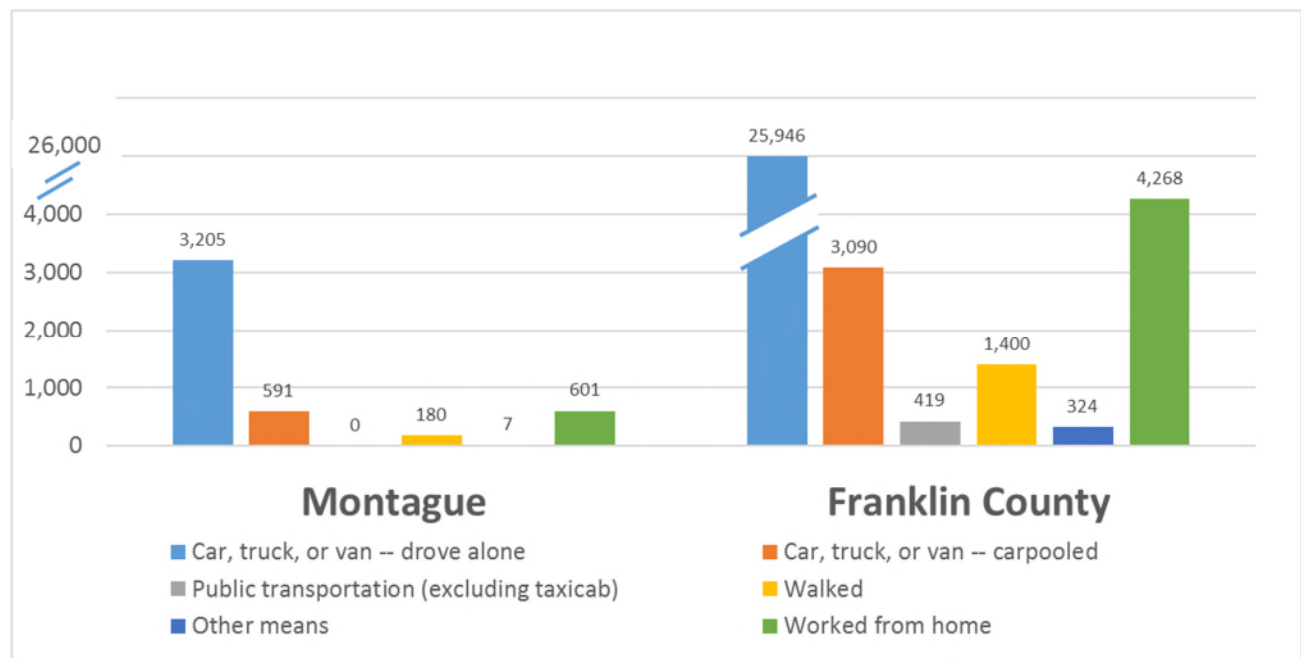


Figure XX. Different modes of transportation used by residents of Montague and Franklin County who commute to work.⁵

Pedestrian Network

Creating safe and accessible streets for pedestrians is a top priority for the Town of Montague. To this end, the town has completed many pedestrian-focused projects including: improvements at pedestrian-controlled crosswalks, reconstruction of targeted sidewalks, safety improvements of bicycle lanes, and installation of traffic calming measures. Montague adopted a Complete Streets Policy in 2017⁶ and participates in the MassDOT Complete Streets Funding

⁵ Unless otherwise noted, all socio-economic demographic data is from the U.S. Census Bureau, 2021 American Community Survey, Five-Year (2017-2021) Estimates Program.

⁶ montague-ma.gov/files/Montague_Complete_Streets_Policy_121117.pdf

Program, which provides technical assistance and construction funding to eligible municipalities.

The public outreach conducted for this plan highlighted that a priority issue for residents and the Town is safety improvements for pedestrians and bicyclists on Turners Falls Road connecting Montague to Greenfield. Turners Falls Road is located across the Connecticut River and is owned and maintained by the City of Greenfield. The route is frequently traveled by vulnerable road users, including pedestrians and bicyclists, but it does not have a sidewalk or a lane/shoulder to accommodate either. In the 2023 Franklin County Regional Transportation Plan, the safety concerns over the frequent and regular use of this route by pedestrians and the lack of supporting infrastructure was also one of the top comments received from the public.

The Massachusetts Safe Routes to School (SRTS) Program is intended to encourage walking and bicycling to school by providing technical assistance and support to schools. Both Montague elementary schools, Hill Crest Elementary and Sheffield Elementary, are enrolled in the Safe Routes to School Programs. Currently, bus transportation is not available for students who live within 1.5 mile radius of these elementary schools. Students face topographic (steep hill) challenges as they walk to the schools. The Gill-Montague School District has been working with the SRTS program to explore ways to make walking for these students easier and safer. This issue is also a priority for the Town of Montague to improve.

Sidewalks

Montague has a rolling topography in some places and is rather steep in others. This leads to many steep sidewalks and routes throughout town – particularly in Turners Falls and Millers Falls. Despite this challenge, there are sidewalks and street crossings connecting all major downtowns and neighborhoods.

Safe Routes to Schools

The Massachusetts Safe Routes to School Program works to increase safe biking and walking among elementary, middle, and high school students by using a collaborative, community-focused approach that bridges the gap between health and transportation. This approach is completed through infrastructure improvements, enforcement, tools, safety education, and incentives to encourage walking and bicycling to school.

An inventory and assessment of all sidewalks was conducted in 2018. This inventory found that while there are places throughout town in which the sidewalks are in poor condition, missing curb cuts, or had faded crossings; the majority of sidewalks and crossings leading to all municipal buildings and important civic/public sites are accessible and in good condition. As the existing pedestrian infrastructure continues to age, the Town will need to be proactive in reconstructing and maintaining the sidewalks and crossings. In addition to infrastructure maintenance, a well-connected pedestrian network includes cutting back vegetation encroaching into the pedestrian right-of-way, enforcing winter

snow/ice clearance, and ensuring well-lit street crossings. The 2018 Sidewalk Inventory and the 2018 Complete Streets Prioritization Plan identified a number of sites that should be prioritized for safety improvements.

ADA Accessibility

In the spring of 2018, the Town of Montague secured a grant from the Massachusetts Office on Disability and hired the Franklin Regional Council of Governments (FRCOG) to conduct an ADA Self-Evaluation and Transition Plan. The FRCOG assessed all Town-owned facilities including sidewalks and crossings. A common recommendation was the need to make sidewalks and door entrances to municipal facilities more accessible, as well as for all retail shops and restaurants. As the Town conducts streetscape upgrades throughout town, sidewalk projects can identify opportunities to include ADA improvements within the sidewalk right-of-way to also make private businesses accessible.

Bicycle Network

Bicycling has become an increasingly popular mode of transportation in Montague. The town has many biking assets such as the Canalside Rail Trail, owned by MA Department of Conservation and Recreation in Turners Falls downtown, two bike and pedestrian bridges, and the extensive bike routes and lanes throughout the town. Montague also has two local bicycle shops. With much of the town interconnected through the Franklin County Bikeway system, there is great potential for Montague to become a hub for biking enthusiasts, which could enhance economic growth through tourism. Maintaining the existing biking assets and working to connect the town's five villages will help continue to foster a strong bicycling community in Montague. Below is a description of the current bicycling assets in town:

- **Franklin County Bikeway**

The Franklin County Bikeway is a combination of bike path and shared roadway routes that are marked with Franklin County Bikeway trailblazing signs. There are several routes that pass through Montague connecting the town to the larger region, including the Northfield Connector, the Greenfield Montague Loop, the Connecticut River Route, and the Leverett-Amherst Route.

- **Canalside Trail**

The MA Department of Conservation and Recreation (DCR) Canalside Trail is a 3.27-mile off-road multi-use path that links the Connecticut River Great Falls Discovery Center and Unity Park in Turners Falls to McClelland Farm Road, located off of River Road, in northeast Deerfield. The path travels next to the Connecticut River Canal and along an abandoned rail corridor including a railroad bridge over the confluence of the Deerfield and Connecticut Rivers in Montague City and Deerfield. There is parking at each end of the Canalside Trail (in Turners Falls and in East Deerfield).

- **East Mineral Road Bridge**

The East Mineral Road Bridge was reconstructed for use as a bicycle and pedestrian bridge. The former vehicle bridge crosses the Millers River from East Mineral Road in Montague to River Road in Erving and provides an important link in the Franklin County Bikeway network by allowing bicyclists and pedestrians to travel north and south without having to cross Route 2 at grade. Route 2 is a challenging roadway to cross because of the high vehicle volumes and speeds.

- **Bicycle/Pedestrian Bridge on Greenfield Road**

Construction of the bicycle/pedestrian bridge on Greenfield Road was completed in the fall of 2017, and replaces a former vehicle bridge over the B&M Railroad that was removed. The bridge is on the Connecticut River Route of the Franklin County Bikeway, a shared roadway route that travels along the Connecticut River from Montague to Sunderland.

Public Transit

Because of Franklin County's rural nature, it is difficult to effectively meet all residents' transportation needs through traditional fixed route transit routes. The consequence is a limited public transit network and a region that is heavily dependent upon the personal automobile. This can be challenging for the estimated twelve percent of households in Montague that do not have access to a vehicle, or those who are limited in their driving, such as the elderly.

In Montague, public transit is available through the Franklin Regional Transit Authority (FRTA) which offers multiple routes through town every day. There are five days of fixed-service transit service per week with three routes passing through Montague. These fixed route buses are currently fare free. For those who plan ahead, the FRTA also offers a microtransit program, called the FRTA Access, which allows riders to book rides via a smartphone app up to one week in advance or same-day, similar to ridesharing services such as Uber or Lyft. All of the FRTA's vehicles have bicycle racks on the front of the buses. Weekend services to Montague is provided through the FRTA Access program. There is no transit service that runs later than 7:30pm in the evening.

Routes that connect or pass through Montague include:

- **Route 23: Sunderland/ Greenfield Route**

- Route 23 (Sunderland/Greenfield Route) connects Greenfield to Sunderland, via Turners Falls, Millers Falls, and Montague Center. This route is timed to make transfers at the Sugarloaf Estates to the PVRTA Route 31 that provides service to UMass Amherst. The schedule for this route currently consists of six round-trip

runs per day with the first run leaving the John W. Olver (JWO) Transit Center in Greenfield at 6:45 A.M. and the last leaving at 6:10 P.M.

- **Route 24: Crosstown Connector**
 - The Route 24 connects downtown Greenfield and Turners Falls throughout the day with runs occurring every hour. Major destinations along the route include Stop and Shop, Franklin Medical Center, Food City, and the JWO Transit Center. The route originates in Turners Falls at Avenue A and 11th Street, and takes approximately an hour roundtrip. The first run begins at 7:15 A.M. and ends at the JWO at 7:20 P.M.
- **Route 32: Orange/Greenfield Route**
 - Route 32 (Orange/Greenfield Route) connects several communities along Route 2 east, from Greenfield to Orange. The entire route takes approximately an hour and forty-five minutes roundtrip. The schedule for this route currently consists of seven round-trip runs per day with the earliest run leaving the JWO Transit Center at 5:00 A.M. and the latest returning at 6:45 P.M.
- **Demand Response**
 - The Demand Response program (also known as Dial-a-Ride) is offered Montague residents aged 60 years or older. This service is available at the same times as the Access program and is a curb-to-curb service.
- **Access Program**
 - The Access program currently operates in four zones in Franklin County and the fare is \$3.00 one way within a zone and \$4.00 between zones. The service is available on weekdays from 5:30 A.M. to 7:30 P.M and on the weekends from 9:30 A.M to 5:30 P.M. Users are able to book rides using an app on their mobile phones on the same day or up to one week in advance. This service has been extremely popular with riders. Currently, the program is at capacity and ridership growth is limited by the number of vehicles and availability of drivers.

Airport

The Turners Falls Airport is a general aviation airport, owned by the Town of Montague and managed by the Turners Falls Airport Commission. The property is bordered by an industrial park and the Franklin County Technical High School. Interstate 91 and Route 2 are both within a close distance to the airport.⁷ Most of the current users of the Turners Falls Airport are flight training students and instructors and recreational flyers. Students and families of students from the independent boarding schools in the region also use the airport to travel between school and home. There are also some business-oriented travelers that use the airport to transport personnel between a local plant and corporate headquarters.

⁷ Information about the airport and its services is available on their website at <https://fly0b5.com/>

In 2019, an Airport Master Plan Update was prepared and approved by the Federal Aviation Administration (FAA) and MassDOT. The comprehensive update examined historic trends and projected levels of use of the airport, and concluded with recommendations including extending the existing runway to allow for larger aircraft to use the airport, and acquiring the Pioneer Aviation property that has fueling and maintenance facilities. The Airport Master Plan Update evaluated several factors, including population and economic projections, to forecast future aviation demand at the Airport over the next twenty years. The forecast for total operations in 2022, 2027 and 2037 is expected to continue at current levels.

The update recommended an aviation demand forecast for planning purposes that assumes a continued level of operations and aircraft based at the airport. However, if demand required, more tie-down spaces and/or hangar space could be constructed. Given that the property is constrained by environmentally sensitive areas, the Update recommended that the Airport acquire some of the developed adjacent property. In 2019, the Airport Commission expanded operations and acquired Pioneer Aviation, which included the property and fueling station, and constructed a new hangar on the site.

The Airport has also leveraged access to the Franklin County Technical School to host an intern/co-op student position to provide additional staff capacity to benefit airport operations. A new program with the Franklin County Technical School will be launched in the next few years that will enhance the aviation industry for the region. The School will offer an aviation mechanics program at the Airport, funded by a \$4.2 million state grant. It was reported that this program will seek certification from the Federal Aviation Administration (FAA) to be an approved Aviation Maintenance Technical School. Currently, there only seven certified programs in New England.

Table XX. Turners Falls Municipal Airport Operations by Type

Type of Operations	% of Total Operations
Itinerant General Aviation	27%
Air Taxi	1%
Local General Aviation	72%
Military	0%

Source: FAA Terminal Area Forecast, February 2023.
<https://taf.faa.gov/>

Passenger and Freight Rail

State Senator Jo Comerford introduced legislation in 2019 to study the feasibility of restoring east-west passenger rail service between North Adams, Greenfield and Boston. The rail corridor runs along Route 2 in the Northern Tier of Massachusetts and supported passenger rail service

until 1968. The study will look at the costs and economic opportunities of establishing rail services between eastern and western Massachusetts along this northern route. The costs to be studied include projected capital costs, operating costs, and revenue estimates. Projected ridership levels, community impact and benefits, and environmental impacts will also be evaluated. Montague has the potential to experience a significant boost in tourism and economic development if a rail stop is established in town or even in nearby Greenfield. Surveys and public outreach for the latest Franklin County Regional Transportation Plan Update show strong demand for passenger rail service from Western Mass to Boston.

For freight rail service, there are two rail lines that are located in Montague – one travels east-west and one north-south. During the 2018 Montague Municipal Vulnerability Preparedness (MVP) planning process, rail lines were seen as a category of concern, especially the Millers Fall rail yard, located adjacent to residences and businesses. Hazardous spills in Millers Falls, as well as ongoing problems with idling which cause air quality issues have been voiced as concerns for this village. A hazardous spill on the rail line as it passes through the Montague Plains would also pose a serious hazard to the town’s public water supply, which is directly adjacent to the rail line in that location. In general, rail lines throughout town were also identified as a potential hazard in the event of sparks causing a fire which could be intensified in the event of drought or high temperatures.

RESILIENCE

The Transportation chapter of the Climate Resilient Comprehensive Plan is focused on identifying the challenges and opportunities the town has for implementing sustainable and resilient transportation improvements throughout the entire town. Climate change and its effects on transportation are a concern for Montague residents and town officials. By investing in resilient transportation modes, the town can accommodate the needs of both its residents and visitors alike while looking ahead to prepare for the future.

Certain areas of Montague face increasingly disruptive situations to transportation and its infrastructure due to climate change. These are often areas of low elevation close to major rivers and in floodplains, such as the Sawmill River corridor or along Montague City Road. Many of town’s bridges and drainage culverts are over 50 years old and are in need of repair or replacement to prevent transportation disruption and risks to public safety due to flooding.

Apart from the vulnerabilities of Montague's transportation infrastructure due to flooding, there are other climate change impacts on the transportation network. These can include extreme heat and rapid freeze/thaw cycles which may cause an increased frequency of repairs and weakening of road surfaces and associated infrastructure; high winds which can down

power lines and poles adjacent to roads rendering them inaccessible; and prolonged heat waves that hinder residents' ability to walk, bike, or wait for public transit.

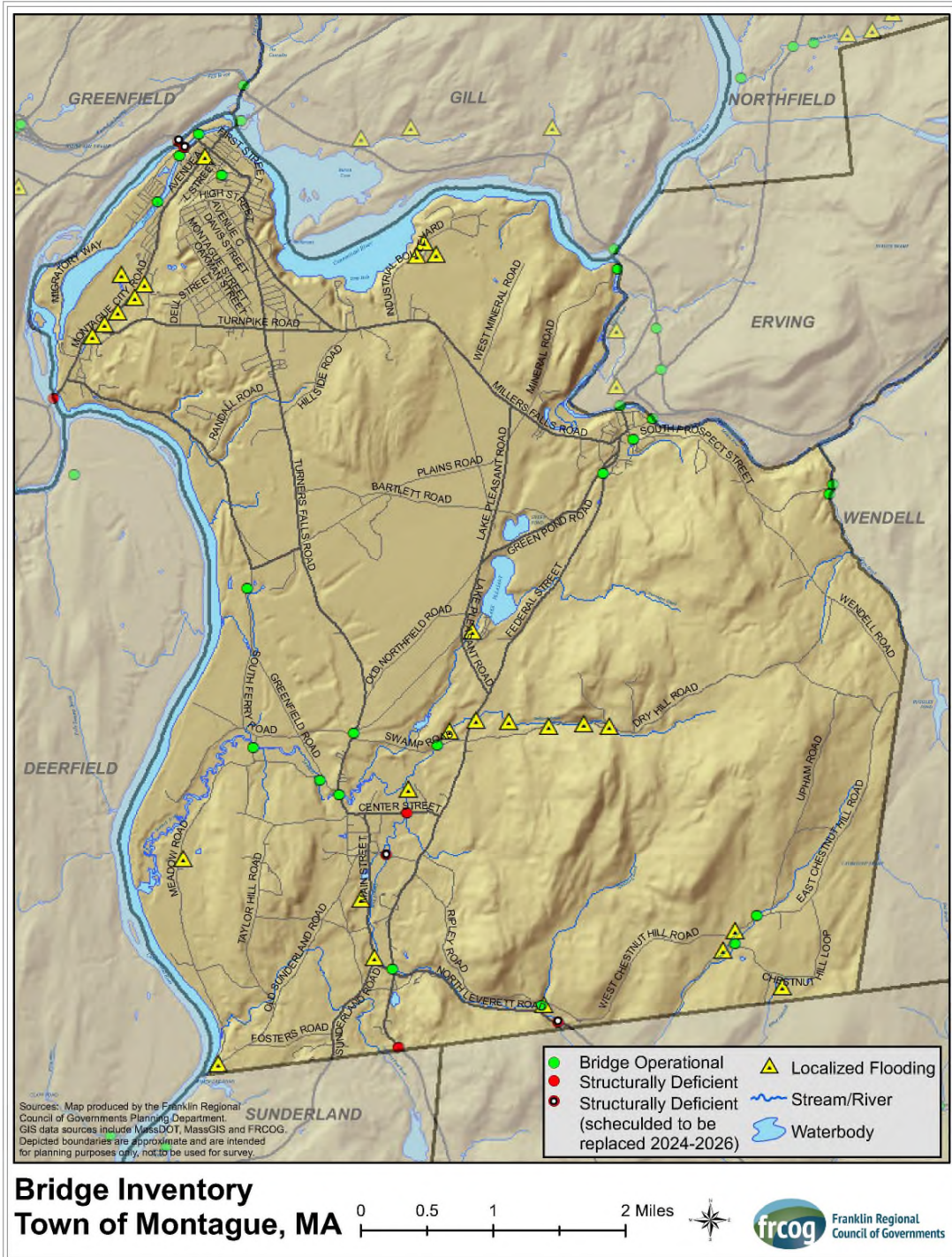


Figure XX. Map of Montague bridges and their current structural conditions as of September 2022. Problem areas of flooding/erosion/drainage identified in Montague Municipal Vulnerability Preparedness Plan and Hazard Mitigation Plans are shown in the “localized flooding” symbol.

OPPORTUNITIES AND CHALLENGES

Montague’s transportation sector presents a unique set of opportunities and challenges that both enrich and impact the local economy and community. One of the biggest opportunities is the recent increase of funding at both the state and federal levels for alternative forms of transportation such as bicycling and pedestrians. Grants for planning, implementation, and construction of safety improvement projects focused on the needs of non-vehicular users of the transportation networks is now more available than ever. In addition, there is a new funding focus on increasing the resiliency of transportation infrastructure to mitigate and protect from the impacts of climate change. Many of these new sources of funding also includes an emphasis on environmentally-friendly solutions such as green infrastructure and nature-based solutions. Montague has already been proactive in applying and securing this funding and the recommendations of this plan and other recent studies provides the Town with clear directions and support for additional funding applications.

Another opportunity for the town is the possibility of east-west passenger rail service stopping in or near Montague. The Northern Tier Passenger Rail could connect the town to other cities in Commonwealth, making it easier for commuters to reach their destination and increasing tourism in the town. Even if a rail stop is sited in nearby Greenfield and not Montague, the proximity of the station would benefit Montague due to its easy connection via roads, bike path, and transit to Greenfield.

A continuing challenge for Montague is the limited public transit system. While there are transit services that connects Montague with the larger region, it is not as frequent and efficient for residents, especially those without vehicles, as it should be to make transit a viable and reliable alternative to driving. Currently, a bus ride from Turners Falls to the UMass Amherst campus takes 1-2 bus transfers and easily over an hour compared to the thirty minute drive in a private vehicle. To expand public transit options, the FRTA will need support and funding from both local and state sources.

Another ongoing challenge facing Montague is its aging infrastructure that includes many different assets such as: sidewalks, bridges, roads, staircases, crosswalks, lighting, culverts, and more. Upgrading this infrastructures is essential and may require a considerable amount of money and effort. The Town has been very proactive in conducting assessments of its

sidewalks, culverts, and pavement in recent years to begin the planning and budgeting of this endeavor.

RECOMMENDATIONS

Developing sustainability and resilience in transportation infrastructure throughout an entire town requires a complete approach. Climate-resilient transportation solutions encompass mitigation, adaptation, and regeneration strategies that are integrated into other sections of this plan. By addressing these topics, we can create transportation systems that are both sustainable and resilient in the face of climate change.

The recommendations presented below reflect an analysis of current and future conditions and the feedback gathered through the public outreach phase of the Montague Comprehensive Plan. High priorities identified by public feedback include the need: to improve public transportation systems; focus on sustainability and Nature-Based Solutions (see text box); and continue to maintain and expand bike and pedestrian infrastructure. Addressing these recommendations will require collaboration, innovation, and leadership from key stakeholders, including local and state governments, non-governmental organizations and the private sector. These recommendations have also been identified and analyzed through the lens of climate change and resiliency.

The Transportation chapter of the Montague Comprehensive Plan incorporates the findings of the 2020 Hazard Mitigation Plan, 2021 Culvert Inventory and Assessment, 2018 Municipal Vulnerability Plan, as well as other related studies and plans.

Nature-Based Solutions

Nature-Based Solutions (NBS) are adaptation measures focused on the Protection, Restoration and/or Management of ecological systems to safeguard public health, provide clean air and water, increase natural hazard resilience, and sequester carbon. Incorporating NBS in local planning and design projects produces long-term solutions that benefit human and natural systems.

NBS offer numerous co-benefits that address challenges faced by communities:

- **Climate resilience**
- **Cost-effective alternatives**
- **Supporting ecosystem services**
- **Spurring economic activity**
- **Enriching human health and well-being**

Resilient Massachusetts

PUBLIC TRANSIT

- Support public transportation
 - Increase public transportation frequency and services in Montague through increased local funding and advocacy at the state level
 - Advocate for transit routes to Amherst and Hadley through improved connections between the FRTA and PVTA
 - Advocate for fixed route bus service on weekends
 - Support keeping basic public transit services affordable (or free)
 - Conduct public outreach to support new transit services
 - Increase services for elders with disabilities
 - Support the transition of public buses to an electric fleet
- Advocate for the implementation of the Northern Tier east-west passenger rail with service to Boston

ROAD AND BRIDGE INFRASTRUCTURE

- Take a Complete Streets approach to all road improvements/maintenance
 - Implement road diets and traffic calming in village centers and residential neighborhoods
- Work with MassDOT to improve the safety of state-maintained roads
 - Improve intersection of Route 47 and 63
- Proactive planning for infrastructure improvement
 - Proactively plan and budget for the rehabilitation and replacement of bridges and culverts as they age and face deterioration
 - Implement a pavement management program and planned management of sidewalks and culverts
 - Implement "no jake-brake zones" at key locations in Montague (Since Montague has industrial activity, but all routes to highways go through a village center)

CLIMATE RESILIENT & SUSTAINABLE INFRASTRUCTURE

- Assess stormwater management throughout town and evaluate nature-based solutions
 - Create climate resilient design standards for stormwater drainage systems including parking lots, new roads in housing developments, new and replacement infrastructure (culverts)
 - Identify roadway erosion vulnerability areas, especially around stormwater outflows from steep embankments off Millers Falls and Turners Falls Road and develop an action plan to address the issues
- Improve flood resiliency

- Watershed-scale fluvial geomorphic assessment and climate resilient projects that provide flood resiliency
- Increase culvert size where needed to deal with increase of severe rain events
- Support and incentivize electric vehicle modes throughout town
 - Install charging stations throughout town in both public and private spaces
 - Promote electric vehicles and electric bikes
- Consider replacing select four-way stop intersections with roundabouts to decrease greenhouse gases with more efficient traffic flows

ACCESSIBILITY

- Update ADA Transition Plan
 - Develop outdoor spaces so that they are universally accessible
 - Improve winter snow and ice management on sidewalks and bike paths for safer pedestrian access
 - Continue to improve sidewalks to ADA standards, specifically prioritizing those that connect to services and amenities in town
 - Make sidewalks and door entrances to Town facilities, retail shops, and restaurants in downtown Turners Falls accessible to the extent possible
- Improve parking management to increase accessibility for all
 - Implement parking management recommendation of the 2022 Downtown Parking Study

BIKE & PEDESTRIAN

- Improved management of Complete Streets concept
 - Create a consistent and responsive snow clearing program for sidewalks
 - Generate a Line Painting maintenance program
 - Implement a bi-annual cleaning of street shoulders
 - Replace public shade trees 1:1 in the municipal right-of-way when removed and plant additional shade trees near bus stops and sidewalks
 - Update Complete Streets Plan
- Improve safety for bicyclists and pedestrians throughout town
 - Advocate for safety improvements on Turners Falls Road
 - Prioritize improved bike/pedestrian connections to and between the schools in Montague
 - Provide more visible and safer accommodation for bicycles on town roadways
 - Consider installing flashing beacons as a Millers Falls Road/Cross Street near the Turners Falls High School

- Increase lighting in areas where there are many pedestrians and bicyclists, such as on bike paths and at crosswalks
- Create additional biking and pedestrian infrastructure
 - Install additional bike racks, as needed, particularly near public facilities, parks, restaurants and retail stores.
 - Consider creation of a multi-use trail in the Montague Plains to connect villages
 - Evaluate the possibility of re-routing the Canalside Rail Trail onto the former Farren Hospital property and off of Rod Shop Road/ Solar Ave/Depot St. (0.3 miles).
 - Support multi-modal access to river access points

AIRPORT

- Continue to support the Turners Falls Municipal Airport
 - Support the fiscal sustainability of the Turners Falls Municipal Airport as it implements its Master Plan
 - Support the FCTS Aviation Program and construction of a new hangar on the north end of the airport
 - Support multi-modal connections to the Airport and ancillary amenities that will make OB-5 a desirable destination for aviators