

SECTION 2: STRATEGIC PLAN

TRANSPORTATION

planning for the transportation system

Barre City recognizes that the city's transportation system contributes significantly to economic vitality and community well-being. To achieve our vision for a healthy future, Barre City needs a transportation system that enables all residents to conveniently and safely travel around the community, accessing homes, jobs, schools, parks, shopping and services.

The transportation system directly affects health through traffic accidents, air pollution, and reduced physical activity. It also has indirect impacts on health as a result of economic factors such as access to employment opportunities, transportation costs, and the vitality of the local economy. Not only does the transportation system provide for the mobility of people and goods, it also influences patterns of growth and economic activity by providing access to land.

Barre City's transportation system is more than just roads. It includes:

- Sidewalks and paths traveled by pedestrians and bicyclists;
- Public transit;
- The rail line; and
- The connections between these modes of transport within the city and to transportation systems in the larger region.

Barre City has more potential for - and need for - effective and efficient transportation alternatives than most Vermont communities due to our relatively high density, compact development pattern and large percentage of residents who do not drive or own a vehicle.

key points

1. **Downtown Traffic.** Almost 17,000 vehicles per day travel on North Main Street, a large percentage of which is through traffic. Traffic creates both a significant challenge and potential opportunity for downtown revitalization efforts. The North Main Street Reconstruction Project from 2011 has improved both traffic flow and the appearance of the downtown streetscape. The project has mitigated some of the negative impacts of heavy traffic and created a more pedestrian-friendly downtown. This effort needs to be continued with the planned Merchants Row and the North Main to Summer Street projects.
2. **Downtown Parking.** The city is the principal provider of downtown parking with more than 500 parking spaces in several municipal lots in addition to on-street parking. Generally, Barre City has an ample supply of public parking, but improvements are needed to provide safe pedestrian access within parking lots, to maximize use of and direct drivers to available parking, and to make parking areas a more attractive part of our downtown. A more pedestrian-friendly downtown and near-downtown will also encourage people to park and walk from place-to-place, rather than driving to and parking at each destination.

3. **Pedestrians and Bicyclists.** There is demand for an improved sidewalk/path network in Barre City for pedestrians and bicyclists. Sidewalks and paths provide opportunities for exercise and a healthy, low-cost transportation alternative for those who cannot or choose not to drive. There are numerous challenges to overcome to construct sidewalks and paths including obtaining rights-of-way and securing funding. The city struggles to pay for the maintenance of existing sidewalks and paths, raising concerns about whether we should build more sidewalks and paths. The City has completed portions of the City Bike Path, and needs to finish those segments that will interconnect the completed ones.
4. **Public Transit.** Barre City has a large transit-dependent population – people who do not/cannot drive or do not own a vehicle – and many households that are burdened by increasing transportation costs. There are private taxi companies that operate within the City, as well as Uber and Lyft. While GMTA (Green Mountain Transit Authority) does provide public transit service in the city, a more robust public transit system is needed to fully meet the transportation needs of our residents. Improvements to the current public transit system could encourage more people to choose transit over driving to destinations within the city and region, thus reducing traffic and parking congestion. Expanding the number of people living or working downtown will expand the base of potential public transit riders, which should help support improved service in Barre City.
5. **Road Maintenance Costs.** Road maintenance costs consume a significant portion of the city’s budget. Road maintenance costs continue to rise with energy costs due to dependence on petroleum products (asphalt, vehicle fuel, etc.) making the challenge of keeping up with road maintenance needs more difficult for the city over time.

issues & challenges

Barre City has identified the following transportation challenges and issues that need to be addressed to achieve our vision for a healthy future:

1. **Facilities for Pedestrians and Bicyclists.** Barre City residents regularly identify improved walking and biking routes within the city and to neighboring communities as an important goal. However, given the city’s limited resources and other priorities, it continues to be a challenge to focus on this issue. The Semprebou bequest renewed efforts to complete the multi-use path between Barre City and Barre Town, and only certain segments have been constructed to date. If that project is successfully completed, it may spur further efforts to make the city a more walkable and bikeable place.
2. **Public Transit.** There is a recognized need to expand public transit service within the city, but additional city funding would likely be needed to improve public transit service. City residents and workers are currently limited in their transportation choices by public transit service location and frequency, and commuting destinations and distances. Through changes in land use, urban design, street design, and public transit services, our city can improve the viability of public transit service while also becoming more walkable and bikeable. Improving our public transit service by studying the impacts of rail service between Barre City and Montpelier would particularly benefit lower-income residents who are more heavily burdened by transportation costs and could expand their access to employment opportunities.

3. **Aging Infrastructure.** The City of Barre, like municipalities around the state and country, faces the challenge of aging infrastructure. With declining federal and state dollars available, the city will have to finance a larger share of the upgrade, replacement and repair costs. The cost-per-mile of repaving, other road repairs and regular road maintenance are significantly affected by rising energy costs. Unlike many communities, Barre City has recognized the need to address the issue of aging infrastructure. For more than two decades, the city has been engaged in an on-going street reconstruction program. The challenge in future years will be finding the funding needed to keep that program going at the level needed to keep the city's transportation infrastructure in adequate condition.
-

strengths & opportunities

Barre City has already acted to address transportation issues, and there remain many strengths and opportunities we can build upon to continue those efforts as we strive to achieve our vision for a healthy future:

1. **Proximity and Quality of Interstate Access.** Route 62, a five-mile long, four-lane, limited-access state highway, provides a direct link between downtown Barre City and Interstate 89 at Exit 7. Route 63 is 3 ½ mile long three-lane, limited access state highway that also provides a direct link to Barre City from Exit 6.
2. **Highways.** Routes 14 and 302 bring many travelers into Barre City and bring many potential customers into our downtown. Traveling between downtown Barre City and Montpelier via Route 302 is a 20-minute trip, which made by more than 12,000 vehicles per day.
3. **Traffic.** While there is considerable traffic on North Main Street, downtown Barre City is less congested than most urban areas in Vermont. Vehicles flow with limited delay into and out of the city. Transportation studies have determined that none of our intersections will fail to meet level of service standards, even after City Place was constructed and approximately two hundred more people are working downtown. Except for the intersection in front of the library (Route 302, Route 14 and Elm Street), all other intersections in the city have a level of service of C or better, which is outstanding for an urban area.
4. **Public Parking.** There are more than 500 public parking spaces available downtown. The availability of public parking has allowed the city to eliminate on-site parking requirements for downtown businesses.
5. **Rail.** With rising fuel costs, the ability to ship and receive freight via rail is again becoming a competitive advantage and a factor that businesses will consider when selecting where to locate. Many of Barre City's industrial areas have direct rail access. In 2019, a grant was awarded to the City of Montpelier to study the use of the rail service between them and Barre City. This may conflict with the "granite train" that runs in Barre City delivering grout.
6. **Airport.** Downtown Barre City is four miles from a regional airport, the Edward F. Knapp State Airport just across the city line in Berlin.

goals & strategies

Barre City has established the following transportation goals and strategies in order to achieve our vision for a healthy future:

- 1. For Barre City to optimize and maintain its transportation infrastructure as needed to support economic vitality and quality of life in the city.**
 - A. Invest in improvements to transportation infrastructure needed to attract and retain businesses in the city.
 - B. Improve the appearance and function of existing arterial roads in the city.
- 2. For Barre City to accommodate future transportation needs primarily by improving the quality and use of existing infrastructure rather than by building additional infrastructure.**
 - A. Optimize existing traffic configurations and traffic lighting to provide for the efficient movement of existing and future vehicular traffic.
 - B. Promote and improve safe vehicular access with new development and redevelopment.
 - C. Incorporate Complete Street elements such as sidewalks, crosswalks and curb ramps into street reconstruction and repair projects.
- 3. For Barre City residents and workers to have viable alternatives to driving a personal vehicle to destinations within the city and region.**
 - A. Maintain current public transit service, and expand that service as warranted by demand and as can be sustained financially.
 - B. Maintain and improve the city's sidewalk network so more city residents can safely walk from their homes to jobs, schools, parks, shopping and services.
 - C. Complete construction of the planned bike path through the city.
- 4. For Barre City to provide a pedestrian- and bicyclist-friendly environment.**
 - A. Maintain and construct new sidewalks that serve areas of existing or anticipated high volumes of pedestrian use.
 - B. Maintain neighborhood sidewalks within the financial constraints approved by the city voters.
 - C. Make improvements when streets are being repainted, repaired or reconstructed to better accommodate safe walking and biking throughout the city (ex. narrowing travel lanes/widening shoulders, bike lanes, sharrows (road marking in the bike lane), sidewalks, cross-walks, curb ramps, traffic calming, signage, etc.).

- D. Improve the connectivity of existing walking and biking routes.
-

next steps

Barre City should pursue the following actions in order to achieve our vision for a healthy future:

1. Develop and adopt a Complete Streets policy.

Status: No action has been taken to date.

Timing: 2024

Partners: City Planner, City Engineer, Planning Commission, City Engineer, Transportation Advisory Committee, City Council, Paths, Routes & Trails Committee

Notes: The website of the National Complete Streets Coalition provides information about developing a local Complete Streets policy and links to policies adopted by municipalities around the country. In Vermont, Montpelier, the City of Rutland and the City of Burlington have developed Complete Streets policies.

2. Investigate demand for and establish additional scheduled stops as needed along the City Route, City Commuter and Hospital Hill bus routes.

Status: Action has begun in 2018.

Timing: discussions and changes by GMTA have had them reviewing polices on off-route pickups, larger busses and added stops with additional shelters.

Partners: CVRPC, City Planner, Planning Commission, City Engineer, Transportation Advisory Committee, City Council, GMTA

Notes: Opportunities to provide bus service to the high school should be explored, which could reduce downtown traffic generated by students driving or being driven to/from school. Attention should be given to the changes that GMTA is making, and the City should participate in their work.

3. Encourage and support Barre City Elementary and Middle School's (BCEMS) involvement in the Safe Routes to School program.

Status: No action has been taken to date.

Timing: 2022.

Partners: BCEMS, City Planning Commission, City Planner, City Engineer, City Council

Notes: This state/federal program helps to generate enthusiasm around biking/walking to school and can provide financial resources to improve city infrastructure. More information is available online at <http://saferoutes.vermont.gov> .

4. Identify and take appropriate action with regard to paper streets, particularly those that are limiting the use and development of otherwise suitable lots.

Status: No action has been taken to date.

Timing: 2022

Partners: City Planner, City Engineer, City Attorney, City Council, Paths, Routes & Trails Committee

Notes: Paper streets are strips of land that were designated for use as a street when a subdivision was initially laid out, but the street was never constructed as planned. The ownership of some of these strips has become uncertain over time. This limits the ability of adjoining land to be developed because the city cannot grant the right to install a street or infrastructure on the strip of land (as originally intended) without the approval of the owner. The city would need to identify the owners of paper streets or institute a legal process to municipal ownership of these strips if no owner can be determined to facilitate development of the adjoining land.

5. Develop and adopt road standards.

Status: The city has a set of road standards, but have not been formally adopted and are very old.

Timing: 2024

Partners: City Engineer, City Planner, Transportation Advisory Committee, City Council

Notes: Having an adopted set of road standards would enable the city to qualify for transportation grants. The existing set of road standards should be reviewed to assure that new roads will be accessible to emergency vehicles and that they will incorporate appropriate stormwater infrastructure before being formally adopted. All street segments in Barre City should be classified as arterial, connector or neighborhood streets, and adopted standards for each classification should reflect the appropriate planned usage as described in Section 3. This will also entail revisiting the Streets and Sidewalks Ordinance. This project should take into consideration National Association of City Transportation Officials design guides.

6. Complete a citywide Pedestrian Environment Quality Index (PEQI) and Complete Streets assessment.

Status: No action has been taken to date.

Timing: 2021

Partners: City Planner, Planning Commission, City Engineer, Transportation Advisory Committee, Paths, Routes & Trails Committee, City Council

Notes: More information about conducting a PEQI assessment is available from the UCLA Center for Occupational and Environmental Health at www.peqiwalkability.appspot.com . There are a number of Complete Streets assessment tools available and examples of assessments completed in communities around the country. Trained volunteers can conduct these assessments, which examine both the physical infrastructure available to pedestrians and whether the overall environment is safe and pedestrian-friendly.

7. Review access management¹ provisions in the city’s land use regulations and update as needed.

Status: No action has been taken to date.

Timing: 2022

Partners: City Planner, Planning Commission, City Engineer, Transportation Advisory Committee, City Council

Notes: Vermont Agency of Transportation has published an Access Management Guidebook and Best Practices document that include recommended access management provisions. This could be incorporated into the revision of the city’s commercial and industrial zoning districts recommended in the land use chapter.

8. Develop a citywide long-range bicycle and pedestrian plan.

Status: No action has been taken to date.

Timing: 2024

Partners: City Planner, Planning Commission, Paths, Routes & Trails Committee, City Engineer, Transportation Advisory Committee, City Council

Notes: This could build upon the bike path planning work already completed, as well as the PEQI and Complete Streets assessments recommended above. The plan would be tool to help the city prioritize bike and pedestrian improvements, and to coordinate small sidewalk or path projects into an interconnected system that would be completed over time.

9. Complete construction of the bike path through the city.

Status: Final engineering for the path is on-going.

Timing: 2022

Partners: City Engineer, City Planner, Transportation Advisory Committee, City Council

Notes: Supported by the Semprebon funding, the city should come up with a schedule to complete the Depot-to-Museum segment and the Depot-to-Barre Town segment by 2022.

¹ Access Management is utilizing tools and techniques to manage vehicular access to businesses, homes and other land uses without sacrificing safety and efficiency.

10. Re-engineer the railroad trestle on Vanetti Place to mitigate flood hazards.

Status: No action has been taken to date.

Timing: 2022

Partners: City Engineer, Transportation Advisory Committee, City Planner, VTrans, City Council

Notes: This project falls to the responsibility of VTrans. The railroad is using this bridge for the use by the granite train, and city departments have made arrangements to regularly inspect the trestle for debris buildup.

11. Construct Barre's first traffic circle.

Status: No action has been taken to date

Timing: 2022

Partners: City Engineer, Transportation Advisory Committee, City Planner, VTrans

Notes: This project will be considered a text for replacing further uncontrolled or signaled intersections with traffic circles. Candidate locations include Washington and Hill Streets, or North Main and Berlin Streets. Traffic circles should always be considered as a lower maintenance alternative to a signaled intersection.

benchmarks

Barre City should measure progress towards achieving our vision for a healthy future against the following benchmarks:

1. **Miles of sidewalk in Barre City.** Walking contributes to minimum requirements for physical activity, does not contribute to noise or air pollution emissions, and reduces transportation energy consumption and costs. A vibrant pedestrian environment contributes to economic vitality and social interaction within the community. *Source: Barre City GIS Mapping*

In 2010: 22

Target for 2024: 25

2. **Miles of multi-use paths in Barre City.** A multi-use path network can help encourage people to increase their daily activity by providing a convenient and appealing place to walk or bike that is separated from vehicles and that can provide a safer, quieter and more relaxing environment. *Source: Barre City GIS Mapping*

In 2010: <1

In 2019: 0.3 miles

Target for 2023: 4

- 3. Percentage of Barre City residents who walk, bike or take transit to work.** Environments that support walking, biking and transit trips as an alternative to driving have multiple potential positive health impacts. Studies have shown that around 30% of people using transit to get to work meet their daily requirements for physical activity from walking between destinations and transit stops. *Source: US Census Bureau, American Community Survey*

In 2010: 5%
In 2017: 13%
Target for 2023: 20%

PUBLIC UTILITIES

planning for public utilities

Public utilities greatly affect the city's economic vitality, our residents' health and quality of life. To achieve our vision of a healthy future, Barre City needs a system of public utilities that is reliable and well maintained, that has affordable rates, and that is capable of supporting growth.

The pipes and wires that run beneath city streets, inside building walls and overhead provide the basic necessities of modern life – clean drinking water, sanitation, electric power and communications. The city is directly responsible for providing some public utilities, while utility and private companies or regional entities provide other services. While the city no longer directly provides solid waste facilities, it is still involved in planning how that essential service is provided in the region and where any future solid waste facilities may be located.

A large part of the city's role as a utility provider relates to managing water. An adequate supply of potable water is one of our most basic needs with every person requiring two liters of clean drinking water each day. Sanitary sewers that properly collect and treat wastewater are essential for protecting the health of all city residents and the natural environment to which our wastewater is returned. Stormwater also needs to be effectively managed to prevent flooding hazards and pollution. Collecting, processing and pumping water are energy intensive activities, which result in both financial and environmental costs.

key points

1. **Aging Infrastructure.** Barre City has a well-developed system of public utilities with public water, public sewer, electric and broadband telecommunications services available throughout the city. Some components of these systems, however, are aging and need to be replaced and/or upgraded to modern standards. With little state or federal financial assistance for infrastructure projects, the city and utility providers look primarily to rate payers to fund needed improvements, requiring a careful balance between the goals of maintaining quality service and affordable rates for customers.
2. **Capacity to Support Growth.** Barre City's water and wastewater systems have capacity available to support growth and development. The water filtration plant is operating at less than one-third of its capacity and the wastewater treatment facility is operating at less than three-quarters of its capacity. This infrastructure capacity provides the city with an advantage over other communities in the area that do not have further capacity to support growth.
3. **Stormwater.** Barre City's storm drainage infrastructure is less developed than municipal water and wastewater systems and will likely need to be expanded over time. To continue efforts to minimize flooding damage and improve water quality, the city will likely need to construct additional infrastructure to collect, treat and manage the discharge of stormwater. The completed North Main Street Reconstruction project addressed a number of stormwater problems in downtown Barre City. The city's hazard mitigation plan identifies a number of

additional infrastructure improvement projects that would improve stormwater management and reduce flood hazards.

4. **Telecommunications.** Access to state-of-the-art telecommunications infrastructure is critical to the city's future economic success. Just as Barre City needed a connection to the railroad to spur industrial development in the late 1800's, today the city needs to be connected to the digital information networks that are the catalysts for economic development in the 21st century. Barre City has complete broadband service, but given the rapid pace of change in the telecommunications sector, the city will need to remain vigilant to ensure infrastructure is upgraded as technology evolves and to improve the ability of all city residents to use and have affordable access to these technologies. CV Fiber is a non-profit organization made up of 16 Central Vermont towns, including Barre City whose goal is to get fast, dependable and affordable internet to every single person in our community. They are in the planning stages for initial deployment that will include a targeted deployment location.
5. **Solid Waste.** On average every Vermont resident currently generates one ton of waste per year, two-thirds of which is landfilled either in state or out of state. Central Vermont Solid Waste Management District (CVSWMD) has adopted a goal of working to achieve "zero waste" in our district. The "zero waste" goal should help create new businesses and jobs through waste-based economic development, strengthen existing businesses, and protect public health and the environment. By the end of the next decade, we anticipate that a much larger percentage of our waste will be reused, recycled, composted or otherwise diverted from the waste stream.

issues & challenges

Barre City has identified the following challenges and issues related to our public utilities that need to be addressed to achieve our vision for a healthy future:

1. **Water and Wastewater Infrastructure.** Barre City's drinking water and wastewater treatment plants are modern, but our distribution system still has some pipes that more than 90 years old. The city is actively working to upgrade the distribution system, but it will take time and sustained funding to modernize underground pipes throughout the city. The city has identified approximately \$2.5 million worth of improvements needed to the water transmission and distribution system, and \$8 million in improvements to the wastewater collection system. Most of these projects have been planned for at least a decade.
2. **Safe Drinking Water.** Barre City's water supply is an open reservoir in the Town of Orange, which is susceptible to contamination whether accidental or intentional. While there have never been any contamination problems, there have been incidents that could have caused contamination such as a plane that landed on the reservoir and a car that crashed into it.
3. **Stormwater Infrastructure.** Similar to the water and wastewater distribution system, much of the city's stormwater infrastructure was built prior to modern engineering standards. The pipes and culverts designed to transport stormwater out of the city are undersized in many places. Much of the flooding damage that has occurred in recent years is related to the inability of the stormwater system to handle the amount of run-off being generated. There are nearly \$1 million in stormwater-related projects included on the city's list of planned infrastructure improvements.

4. **Stormwater Management.** During the 2000's, federal and state stormwater regulations became more stringent and were applied to smaller development projects. More communities around the country are establishing stormwater management utilities, whereby property owners pay a fee to the municipality based on the amount of additional runoff from their site in return for the municipality taking responsibility for maintaining and/or providing a stormwater management system. The city may need to consider establishing a stormwater management utility fee if the costs for complying with stormwater regulations exceed the ability to fund required improvements through regular property taxes, or if meeting state and federal regulations becomes too burdensome for individual property owners and coordinated action is required. Alternatively, the city can use various regulatory techniques to help reduce stormwater run-off such as requiring development to limit new or reduce existing impervious surfaces.
5. **Landfill Siting.** The possibility of the need to site a new landfill in the region is always a matter of concern, although the only landfill in Vermont was granted an expansion in 2019. The city was satisfied with CVSWMD's 2005 landfill siting criteria and it is the city's policy that the criteria requirements should not be made any less stringent in the future. Further, it is the city's position that when reviewing a proposed landfill site, the impact of additional vehicles hauling regional waste on Barre City's arterial roads should be closely evaluated. Route 302, which serves as a major arterial through Barre City runs through the downtown business district. Downtown already suffers from the problems associated with truck traffic and additional truck traffic resulting from a regional landfill should not travel through downtown on a regular basis. In addition, Route 14 runs mostly through high-density residential areas and is also not suitable for the amount of additional truck traffic that could be generated by a regional landfill.
6. **Yard Waste.** Barre City residents have the ability to utilize the special yard waste days set aside for disposal of yard waste (grass clippings, branches, leaves, etc.) in Barre Town, and the City trucks will pick up the remaining piles left at the ends of driveways after the last day of the planned events. Some residents continue to dispose of their yard waste by dumping it over a river bank or on nearby undeveloped land. The resulting debris left in drainage ways has and will continue to become a hazard during storms as it can create blockages that lead to flooding of nearby property when water cannot flow through a channel. Yard waste can become a potential resource if properly collected, and then composted or chipped.
7. **Property Maintenance.** Barre City has increased its enforcement of property maintenance ordinances in recent years. The result has been a noticeable decrease in the number of properties where trash, junk vehicles and vehicle parts, appliances, furniture and similar household items have accumulated, creating unsightly, unsanitary and unsafe conditions for residents and neighbors. Continued enforcement of property maintenance ordinances and providing convenient, affordable options for proper disposal of large household items will be needed to keep this problem in check.

strengths & opportunities

Barre City has already acted to improve our public utilities, and there remain many strengths and opportunities we can build upon to continue those efforts as we strive to achieve our vision for a healthy future:

1. **Capacity to Support Growth.** Barre City’s water and wastewater systems have excess capacity available to support growth and development. The city is currently using less than one-third of the capacity of the water filtration plant and the wastewater treatment facility is operating at less than three-quarters of its capacity. There is also three-phase power throughout downtown and in many other parts of the city. This infrastructure capacity provides the city with an advantage over other communities in the area in attracting new businesses. The economic development implications of extending infrastructure further outside the city or selling additional capacity to outlying towns should be carefully considered.
2. **Upgraded Infrastructure.** Unlike many communities, Barre City has recognized the need to address the issue of aging infrastructure. The city has spent the past decade upgrading our water and sewer distribution system. This effort has been coordinated with the street reconstruction program so that old pipes are upgraded at the same time as the street – an efficient and cost-effective approach that avoids digging up a new street in order to repair an old pipe. The challenge in future years will be finding the funding to keep this program going at the level needed to keep our infrastructure in adequate condition. In recent years, the city has invested more than \$7 million in our water, sanitary sewer and storm sewer systems.
3. **Phosphorus Removal.** The city’s treated wastewater effluent is released into the Steven’s Branch, which is part of the Lake Champlain watershed. There is a cap on how much phosphorus the wastewater treatment plants within the watershed are allowed to send into the lake. The Barre City wastewater treatment plant has been upgraded to improve its ability to remove phosphorus from the effluent and is currently discharging less than 25% of its limit, providing ample capacity to accommodate growth.
4. **Well-Mapped and Inventoried Utilities.** Barre City has also mapped and inventoried underground infrastructure more accurately and completely than most communities. This information allows for more efficient repairs when a line breaks or other problem occurs, and it improves our ability to effectively plan for improvements to the distribution systems.
5. **Source Water Protection Plan.** Barre City has a Source Water Protection Plan and inventories the properties adjoining the reservoir that provides the city’s drinking water every three years to prevent potential contamination.
6. **Waste-Based Economic Development.** ReSOURCE completed a project to restore the historic granite shed at 30 Granite Street, and is an example of waste-based economic development and adaptive reuse of the city’s industrial buildings. The project’s retail component, the ReSTORE which opened in December 2008, is a reuse operation offering household goods, appliances, building materials, and art supplies. The former granite shed serves as a learning site for at-risk youth and unemployed workers called youthBuild, provides creative materials for artists and educators, and give families in crisis access to basic household goods and services.

goals & strategies

Barre City has established the following goals and strategies for public utilities in order to achieve our vision for a healthy future:

1. **For Barre City’s Public Works Department to provide business and residential customers with reliable and affordable utilities services as needed to support economic vitality and quality of life in the city.**
 - A. Maintain public water and sewage systems that meet state and federal standards, and that support the city’s goals for economic and residential growth.
 - A-1. Continue upgrading aging water and sewer pipes in coordination with the city’s street reconstruction program.
 - B. Continue to actively pursue a new Public Works Facility.
 - C. Continue efforts to improve stormwater drainage infrastructure within the city.
 - C-1. Adopt a policy to guide the sizing of culverts to ensure that new or replacement infrastructure will be better able to carry stormwater out of the city during heavy storms.
 - C-2. Implement the stormwater improvements identified in the city’s hazard mitigation plan.
 - D. Continue to actively participate in the Central Vermont Solid Waste Management District and advocate for regional solid waste management practices, policies and facilities that will benefit Barre City residents and business.
 - D-1. Support CVSWMD’s “zero waste” goal and assist in its implementation.
 - D-2. Oppose solid waste projects that would re-direct more of the region’s waste hauling truck traffic through the city’s downtown business district or residential neighborhoods.
 - D-3. Review the regional Solid Waste Implementation Plan (SWIP) each time it is revised and re-adopted.
-

next steps

Barre City should pursue the following actions in order to achieve our vision for a healthy future:

1. **Prepare and adopt a Capital Improvement Program, which would incorporate the capital improvements needed by city-owned utilities into a municipal capital planning and budgeting process that would include all city departments/services.**

Status: A Plan for city vehicles is currently managed through the City.

Timing: 2021

Partners: City Finance Director, City Manager, City Planner, Planning Commission, Department Heads, Council

Notes: The city could apply for a Municipal Planning Grant to prepare a capital plan & budget.

2. Install guard rails around the city’s reservoir.

Status: No action taken to date.

Timing: 2025

Partners: City Engineer, City Manager, City Council

Notes: This project is listed in the city’s 2017 Hazard Mitigation Plan as a low priority action. It may be eligible for partial funding from the EPA.

3. Pursue further waste-based economic development, expanding and building upon the success of ReSOURCE’s project at 30 Granite Street.

Status: The solid waste district’s “zero waste” policy and Act 148, which established universal recycling and composting statewide, create an opportunity for economic growth in this sector.

Timing: Work currently underway and continuing in subsequent years.

Partners: City Manager, City Planner, Barre Area Economic Development

benchmarks

Barre City should measure progress towards achieving our vision for a healthy future against the following benchmarks:

- 1. Annual number of water quality violations.** The quality of drinking-water is a critical determinant of health. Clean drinking water is a foundation for the prevention and control of waterborne diseases. *Source: Vermont Agency of Natural Resources, Drinking Water and Groundwater Protection Division*

In 2010: 1
Target for 2025: 0

- 2. Annual number of sewer overflows.** Untreated sewage carries pathogens that can be spread to surface waters, drinking water supplies and swimming areas. It can also kill aquatic life and create algal blooms. *Source: Vermont Agency of Natural Resources, Wastewater Section*

In 2010: 1
In 2011: 1
In 2015: 1
In 2016: 2
Target for 2021 and beyond: 0