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Bicycle and Pedestrian Facilities

2011

REGIONAL TRANSPORTATION PLAN

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options of walking, bicycling, and public transit; and support smart growth development. GreenDOT calls for MassDOT to incorporate sustainability into all of its activities, from strategic planning, to project design and construction, to system operation.

Global Warming Solutions Act

The Global Warming Solutions Act, signed by Governor Patrick in 2008, mandates ambitious greenhouse gas reduction targets. Recognizing that the transportation sector generates more than one-third of the total greenhouse gas emissions produced in Massachusetts, the GreenDOT initiative will achieve these reductions through a range of measures. Working in cooperation with regional planning agencies, MassDOT has set a statewide greenhouse gas reduction target of 25 percent below 1990 levels for 2020. The state plans on meeting these targets by balancing highway system expansion projects with other projects that support smart growth development and promote public transit, walking, and bicycling.

Healthy Transportation Compact

As part of the 2009 Transportation Reform Legislation, the Commonwealth of Massachusetts also launched the Healthy Transportation Compact. The Healthy Transportation Compact is an inter-agency initiative designed to facilitate transportation decisions that balance the needs of all transportation users, expand mobility, improve public health, support a cleaner environment, and create stronger communities. MassDOT views the Compact as an opportunity to strengthen its commitment to public health and increased access for bicyclists and pedestrians.

2006 MassDOT Project Development and Design Guide

A significant step in recognizing bicycling and walking as viable means of transportation came with the 2006 release of the MassDOT's *Project Development and Design Guide* (referred to as the *Design Guide*). This guide redefines how new projects are designed, and also serves to ensure that MassDOT's transportation investments encourage projects that are context sensitive while

meeting the needs of all system users. The *Design Guide* treats non-motorized transportation modes as equal users of the roadway network. Through this comprehensive approach to roadway design, the guide mandates the development of "complete streets." The concept of complete streets refers to roadways that are designed to accommodate all users, including bicyclists and pedestrians. The 2006 *Design Guide* and the new design process provide opportunities and flexibility in the design of bicycle and pedestrian facilities in Massachusetts based on each specific situation.

Another important guide has been MassDOT's design directive, "Bicycle Route and Sharing the Road Signing Policy," issued in 1998. This policy applies to all projects where the proposed design includes a bicycle route component and also when bicycle routes are proposed on state highways whether or not a construction project is involved.

Bicycle Facilities Planning Efforts

Statewide Planning Efforts

Massachusetts Bicycle Transportation Plan

In 2008, the Massachusetts Executive Office of Transportation and Public Works (now the MassDOT Office of Transportation Planning) completed an update of the *Massachusetts Bicycle Transportation Plan*. The 2008 Plan provided a complete inventory of existing on-road and off-road facilities, projects in the pipeline, and long-term facility proposals.

The Plan also recommends a 740-mile, seven corridor Bay State Greenway (BSG) network consisting of on-road and off-road statewide facilities. The seven corridor BSG network includes two recommended routes that travel through Franklin County. The Connecticut River Valley Corridor (West) is an on-road route that travels from the Vermont border to the Connecticut Border. The second route is the Connecticut River Valley Corridor (East) that travels from the New Hampshire border to Chicopee. This route is also an on-road route. In addition, the plan identifies twenty-two secondary network routes. These

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routes are intended to be a secondary part of the BSG network and provide connections between the primary system and key population and activity centers. Two of these secondary routes travel into Franklin County. These routes were incorporated into FRCOG's 2009 *Franklin County Bikeway Plan Update*.

In addition to identifying this statewide bicycling network, other *Massachusetts Bicycle Transportation Plan* recommendations include general steps to promote bicycling:

- Better identify state roads and bridges where bicycles are legally permitted, but do not accommodate bicycles today;
- Expand the "Share the Road" signs and outreach programs;
- Develop bicycle tourist publications through the Massachusetts Office of Travel and Tourism (MOTT);
- Improve safety through education and enforcement initiatives and facility performance measurement; and
- Further quantify the benefits of investments in projects and programs that improve bicycling conditions.

Franklin Regional Planning Efforts

The FRCOG supports the use of bicycles as a viable transportation alternative to the automobile. In addition, the accommodation of bicycles and the construction of bicycle facilities are viewed as an integral part of the promotion of livable and green communities. The FRCOG, through its transportation planning program, has worked to plan and develop facilities locally, regionally, and inter-regionally which will increase the use of bicycles for transportation.

The FRCOG recognizes that there are challenges associated with the use of bicycles for transportation. The varied geography and topography of Franklin County can be an obstacle to bicycling for transportation. The rural landscape of the county generally means that individuals are traveling longer distances to work and to run routine daily errands. In addition, the hilly topography in some locations means that bicycling can be very physically challenging as well. In order

to plan effectively for the region, these challenges are taken into account when bicycle routes and facilities are developed.

At the same time, these geographic conditions and topographic features also greatly contribute to the appeal of bicycling and walking in Franklin County. There are many rural roads with low traffic volumes and picturesque rural landscapes that are pleasant for riding. The *Franklin County Bikeway Plan Update* considers the draw of the region as a location for bicycle touring and tourism related to bicycling. Generally, planning for bicycle facilities in the region, although primarily focused on transportation, also includes considering potential recreational and tourism-related bicyclists' needs and interests. Increased resources to promote bicycle tourism are also a goal of the *Massachusetts Bicycle Transportation Plan*.

In addition, it can be difficult to plan routes and separate facilities for the varying skill levels of the individuals who may be bicycling in Franklin County, all of whom have different and sometimes conflicting needs and goals. These potential bikeway users include novice bicyclists (including children), intermediate bicyclists, expert recreational/racing bicyclists, and commuters. During all planning exercises, the specific bicycle routes or facilities take into account the skill level and experience of the potential user.

2009 Franklin County Bikeway Plan Update

In 2009, the FRCOG completed an update of the *1993 Franklin County Bikeway Plan*. The 1993 Plan identified the route of the original Franklin County Bikeway network which travels through the central section of the county along the Connecticut River Valley. As of 2010, this approximately 44-mile network has been completed.

The *2009 Bikeway Plan Update* expands this original bicycle network to cover the entire county and to link to neighboring regions. The 2009 Bikeway Plan Update identifies bicycle links to the south to Hampshire County, to the west to Berkshire County, to the east to Worcester County, and to the north to Vermont and New Hampshire. The Update also

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expands and diversifies the regional objectives to include recreation, tourism, and quality of life related bicycling issues. Additionally, the Update considers the needs of those who are bicycling for different purposes including commuters, students, store patrons, outdoor enthusiasts, and visitors to the region. The recommendations and future projects of the Update are included in this chapter in the next section.

Existing and Planned Bicycle Facilities

The Original Franklin County Bikeway Network

Until recently, the focus of bicycle transportation planning activities has been on the design and establishment of the original section of the Franklin County Bikeway. The initiative to design and construct this 44-mile regional bicycle network began thirty years ago. The project had continuous and unwavering support throughout the development, design, and construction process. This original section of the Franklin County Bikeway consists of both on and off-road bicycle routes centered along the Connecticut River. The Connecticut River valley is the more populated area of the county and is also the easiest for bicycling due to the relatively flat nature of the topography in the valley. At this time, the original sections of the Franklin County Bikeway have been constructed. The components of the original Franklin County Bikeway include the following off-road facilities: the Riverside Greenway, the East Mineral Road Bridge, and the Canalside Trail; and the following shared roadway facilities: the Northfield Connector, the Greenfield-Montague Loop Route, the Connecticut River Route, and the Leverett-Amherst Route. Below are descriptions of the off-road facilities that have been constructed. A map of all of these routes can be found in at the back of this chapter.

The Riverside Greenway (Greenfield)

The Riverside Greenway was completed in the Fall of 2004. It is a one-mile off-road bikepath located in the Town of Greenfield. This path connects a densely populated residential area with a heavily used public recreation facility. It also connects to nearby Greenfield Community College and

downtown Greenfield. The path is owned and maintained by the Town of Greenfield and includes a bicycle and pedestrian bridge over the Green River.

East Mineral Road Bridge (Montague and Erving)

The East Mineral Road Bridge was a closed vehicle bridge that was redesigned and reconstructed for use as a bicycle and pedestrian bridge. The reconstruction was completed in the Summer of 2005. The 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. The East Mineral Road Bridge crosses the Millers River below Route 2 and provides access north and south of Route 2 without having to cross at grade. Route 2 is a heavily traveled road that is not recommended for bicycle travel because of the high vehicle speeds, lack of shoulder, and narrow travel lanes. The East Mineral Road Bridge allowed the bikeway to be moved off of Route 2 and onto less heavily traveled roads, while still providing access to the Connecticut River, as well as the Northfield Mountain Recreation and Environmental Center, and downtown Northfield.

Canalside Trail (Deerfield and Montague)

The Canalside Trail is located in the Towns of Montague and Deerfield. The Canalside Trail travels from the Connecticut River Great Falls Discovery Center and Unity Park in the Village of Turners Falls in Montague, to McClelland Farm Road (located off of River Road) in northeast Deerfield. This section of the bikeway is a 3.27-mile off-road paved multi-use path which travels adjacent to the Connecticut River Canal in Turners Falls and along an abandoned rail corridor (including a railroad bridge over the confluence of the Deerfield and Connecticut Rivers) in Montague City and Deerfield. The Connecticut River Great Falls Discovery Center is considered to be the start and terminus of the Franklin County Bikeway and includes ample public parking at this location. The Discovery Center is a visitors' center and conservation education facility for the 410-mile Connecticut River Valley Linear Park that was developed by the Massachusetts Department of Conservation and Recreation, Massachusetts Department of Environmental Protection, and the

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U.S. Department of Fish and Wildlife. The construction of the Canalside Trail was completed in the Fall of 2007 and officially opened at a ribbon cutting ceremony on May 30, 2008.



Former railroad bridge over the Connecticut River on the Canalside Trail

Other Existing Facilities

There are a few other limited bicycle facilities in the county including: an approximately ½ mile path on the Greenfield Community College (GCC) campus from Colrain Road; a shared, signed shoulder along Route 112 in Buckland; and an approximately ½ mile bikepath along Turnpike Road in Turners Falls providing access to the Turners Falls High School.

2009 Expansion to the Franklin County Bikeway Network

The *2009 Franklin County Bikeway Plan Update* identified additional shared roadway routes and potential off-road facilities throughout Franklin County. The shared roadway routes connect different parts of Franklin County and neighboring regions and states. These routes have been included in the 2009 Franklin County Bikeway Route Maps. A future project is to identify locations for Franklin County Bikeway logo signs and to install the signs along these routes and link to other signed sections of the bikeway. Because of the greatly varying topography of the areas outside of the original Franklin County Bikeway, the newly recommended routes have been classified based on levels of riding experience. The routes received the following classifications: novice, intermediate, and

advanced, and can be seen in the map at the end of the chapter. The expanded planned routes of the Franklin Bikeway now include the following new shared roadway routes:

- West Franklin County Routes: Buckland/Ashfield Loop, Western Franklin County Loop, West County-Greenfield Connector, Shelburne-Vermont Connector, and the Ashfield-Williamsburg Connector.
- Central Franklin County Routes: River Road Loop, River Road Connection to Hampshire County, Deerfield Upper Road-Deerfield Lower Road Loop, Greenfield Leyden-Plain Field Loop, Whately-Conway Loop, and the Deerfield Route.
- East Franklin County Routes: Shutesbury Loop, Franklin County to Vermont Loop, Orange-Greenfield Route, Northeastern Franklin County Route, and the New Hampshire Connector.

The *2009 Franklin County Bikeway Plan Update* also recommended several off-road bicycle facilities. The off-road projects described in the section below are proposed bicycle infrastructure improvement projects that are in varying stages of planning. The work that has been completed to date on each project and the stage of development is described in the following summary.

Millers River Greenway (Orange and Athol)

The Towns of Orange and Athol have identified the development of a bikeway/greenway along the Millers River as a priority, and have taken the initial steps towards completing a design. In 2000, a preliminary feasibility study and route assessment was completed for a potential off-road bicycle facility. Initially, the proposed project was to create a greenway along the Millers River connecting Orange and Athol. However, after an assessment of the right-of-way and environmental impacts, this concept was determined to be infeasible and the idea of an on-road bicycle facility was established. Another feasibility study was then prepared.

During 2004 and 2005, the FRCOG worked with the Montachusett Regional Planning Commission (MRPC), the Town of Athol, and the Town of Orange to complete additional conceptual design work for the Millers River Greenway. Further analysis of the

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on-road route that had been recommended as a result of the feasibility study was completed. A revised route was developed which included much of the on-road route identified in the 2000 study, but also incorporates an off-road bicycle path section in Athol.

The proposed route is approximately 6 miles long, beginning at the Orange Riverfront Park located on the south side of the Millers River in downtown Orange. The route continues east on East River Street to its intersection with Daniel Shays Highway (Route 202). The route then turns north and follows Daniel Shays Highway to an abandoned road that is located just south of the intersection of Daniel Shays Highway and Route 2A. The proposed route travels along this abandoned road (Procter Avenue), across 3 privately owned parcels and then through land that is publicly owned. The route reconnects with residential neighborhood streets (Jones Street, South Street and onto Canal Street) and then terminates in Athol at the Millers River Environmental Park, which opened in the Summer of 2006. At this time the design of the Millers River Greenway is conceptual, although it appears to be feasible. Further conceptual design work is needed in order to determine the most appropriate and feasible solutions to some existing design issues. While much of the off-road section of the route travels over land that is publicly owned, the proposed route does cross three privately owned parcels. There is also a location along the off-road section of the route in which a crossing of the Millers River is required. At this time, funding is needed for the design/engineering of the path. Once the design is completed, it is anticipated that state/federal funds would be sought for construction.

Erving – Wendell Path

During the development of the Erving Master Plan (2002) and also the public participation process for the Route 2 Safety Improvement Project, the lack of alternatives that accommodate bicycling on Route 2 in Erving was noted as a community concern. It was recognized that Route 2 is not ideal for bicyclists and pedestrians because it has a narrow and winding layout, lacks sidewalks and roadway

shoulders in many locations, and has high traffic volumes.

The FRCOG reviewed potential bicycle and pedestrian links in Erving as a work task in the Fiscal Year 2002 3C Transportation Unified Planning Work Program (UPWP). Possible bicycle and/or pedestrian connections, other than the use of Route 2, to link the areas of Erving known as Farley and Erving side to Erving Center were explored. The high traffic volume on Route 2, which is both a National Highway System road and Erving's Main Street, makes it difficult and dangerous for individuals to access Erving Center by bicycle from one of the adjacent residential neighborhoods or from other villages within the Town of Erving. Several possible alternatives were identified and a preliminary assessment was completed. Considered routes included potential connections from Mountain Road to the east, and a potential route through the town-owned cemetery on Cemetery Road to Flagg Hill Road.



Old Farley Road in Wendell

Another option that was identified as a potential off-road walking/bicycling route is an existing dirt road that is located to the south of the Millers River in Wendell and referred to as Old Farley Road. The route is accessible from Arch Street off of Route 2 in Erving Center. Old Farley Road travels west along a dirt road for approximately 2 miles and connects to Posk Place in the Farley section of Wendell. Much of this route travels on land within the Wendell State Forest, which is owned by the Massachusetts Department of Conservation and Recreation (DCR). The intention is to consider the development of a

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soft surface trail instead of a paved surface due to the natural setting and proximity to the Millers River. In Farley, the trail terminus at Posk Place is located near the Metacomet-Monadnock-Mattabesett (M-M-M) Trail hiking trail and also a popular fishing location.

There is also a possibility that this route could continue west to Farley Road and Mormon Hollow Road which links to Wendell Road in Montague and connects to the Village of Millers Falls. Another possibility is this route linking to the east to Wendell Depot. These two extensions were not examined as part of the 2002 UPWP task but were noted as possible extensions during field work and mapping work. Further exploration of this Wendell bikeway option has been included in the 2010-2011 Franklin Regional Unified Planning Work Program.

Deerfield Route (Route 5/10 Bypass)

The Deerfield Master Plan (April 2000) identified a specific route that would provide an alternative to bicycling on Route 5/10 in Deerfield. The plan recommended the construction of an off-road bike path to the south of the Cheapside Bridge and to the west of Route 5/10. The proposed route travels near the Deerfield River to Pine Hill Road (or Old Ferry Road which is an old 1732 county road), and would provide a connection for bicyclists into Historic Deerfield. There is currently a dirt road along a portion of this route that could potentially serve as the bike trail. However, there are a number of obstacles to the implementation of this proposed bike path that require further investigation prior to determining whether this route is feasible. There are wetlands between Route 5/10 and Pine Hill Road that are a potential obstruction to the development of this bike path. In addition, this route travels over private property and it is not known whether a legal right-of-way or access to this route could be secured. A thorough study of the feasibility of this route will need to be completed to determine if an off-road bicycle path could be developed.

Bicycle/Pedestrian Bridge on Greenfield Road

The existing shared roadway Connecticut River Route is a spur that travels along the Connecticut River from Montague to Sunderland. This route

uses Greenfield Road in Montague, but currently detours onto Hatchery Road because of the absence of a bridge over the railroad tracks. The bridge was removed and has not yet been replaced. A new bicycle and pedestrian bridge is currently in the early stages of design for this location. MassDOT is overseeing the design and it is anticipated that 25 percent design plans will be prepared by late 2011 or early 2012.

Promotional Projects to Encourage Traveling by Bicycling

In addition to the bicycle facilities that have been completed or planned during the past few years, a number of promotional programs have been implemented to educate the public about the existing facilities and encourage people to bicycle instead of drive.



Filming of the "Enjoy the Ride: Share the Road in the Connecticut River Valley" Video (photo credit: Kathleen Miller Photography)

Development of Video, Audio and Internet Promotional Materials

The FRCOG worked in conjunction with the Pioneer Valley Planning Commission (PVPC) with funding provided through the Fiscal Year 2002 Transportation Demand Management Program (TDM) called *Share the Road in the Connecticut River Valley: An Infrastructure Improvement Project and Campaign to Promote Traveling by Bicycle* to develop promotional materials to encourage traveling by bicycle instead of by car. The goal of the project was to increase accessibility and awareness for commuting by bike in Franklin, Hampshire, and Hampden Counties. The project

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included the development of video, radio, and internet-based media/publicity tools. These media tools were shared with PVPC and made available throughout the Connecticut River Valley.

There is interest in developing a map for the tri-state (Massachusetts, New Hampshire and Vermont) area of the Connecticut River Scenic Farm Byway. The intention is for the regional planning agencies to work together to develop and print a bicycle facility map and other tourist-oriented bicycling information for the tri-state area of the Connecticut River Scenic Byway. This map and materials will highlight the bicycling resources in the greater byway area and the wealth of off-road and shared roadway bicycling facilities. The intent is to provide byway travelers and community residents with a greater knowledge of the bicycling resources that exist in this area. There are many bicycle facilities that are located within reasonable bicycling distance; however, at this time there is no coordinated map that provides information on these resources.

Bicycle Parking

The *Share the Road in the Connecticut River Valley* project also included funds to purchase bicycle parking racks which were distributed to the towns in Franklin County. Twenty-two of the twenty-six towns in the county accepted the bicycle racks for installation at public facilities. The bicycle racks were purchased and distributed during the Fall of 2005.

Franklin County Bikeway Maps

In June 2008, the FRCOG released an official map of the Franklin County Bikeway network. The map highlights the original Franklin County Bikeway routes (both off-road bike paths and shared roadway sections), the services along the way, and other information that may be helpful to cyclists. This map includes the network of approximately 39 miles of shared roadway and 5 miles of off-road facilities designed to provide alternative transportation connections to many destinations throughout Franklin County and the adjoining regions. The maps were available at a number of locations in Franklin County including the Chambers

of Commerce, Visitor Centers, local bike shops, or by request from the FRCOG Planning Office.

In November 2009, the FRCOG released an update of the *Franklin County Bikeway Map* and three new bicycling maps for Franklin County. The three new maps, *Western Franklin County Bikeway Routes* map, the *Central Franklin County Bikeway Routes* map, and the *Eastern Franklin County Bikeway Routes* map, highlight routes that are good for bicycling within the respective areas of Franklin County. The routes highlighted on the maps were identified during the process of updating the *Franklin County Bikeway Plan (2009)*. The maps show loops as well as point-to-point routes that access many of the town centers throughout the county. The maps classify each route as novice, intermediate, or advanced in order to help prospective bicyclists to determine the most suitable route to ride given their ability and physical fitness level. The maps also include information on the services that are available along the routes, and other information that may be helpful to cyclists, such as locations to get water and elevation changes along the various routes.

All four of the maps were made available at the Chamber of Commerce, Visitor Center, local bike shops, or upon request from the FRCOG Planning Office. In addition to the paper maps, low resolution versions of the maps were made available on the FRCOG's website (www.frcog.org). These maps are intended for viewing on-line but are generally not of a high enough resolution for printing.

Bikes on Buses

All Franklin Regional Transit Authority (FRTA) and Pioneer Valley Transit Authority (PVRTA) buses that operate in Franklin County are equipped to carry bicycles. This allows the opportunity for a commuter to travel a portion of their trip by bus and a portion by bicycle. Future public transportation system expansions, as well as the future development of commuter rail services through the region, should consider the feasibility of allowing bicycles in order to encourage the use of bicycles as a viable form of transportation.

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implementing pedestrian-related improvements. It is also intended that the plan be updated on a regular basis. The specific goals of the *Regional Pedestrian Plan* are to:

- Encourage and promote walking as a viable mode of transportation.
- Improve safety for pedestrians in the region.
- Enhance connectivity between residential areas, village centers, commercial centers, schools, recreation areas, and other destinations.
- Identify gaps in the pedestrian network.
- Identify pedestrian-related infrastructure improvements projects that could be incorporated into future related projects.
- Identify resources for maintaining and repairing existing pedestrian infrastructure, and provide towns with information on implementing pedestrian improvements projects.
- Encourage walking as a recreational activity.
- Educate the public about the benefits of walking and encourage programs that promote walking.
- Identify walking routes that connect destinations and that could promote recreation and tourism in the region.
- Promote a regional multimodal transportation system by safely facilitating pedestrian connections with other modes of transportation including transit, biking, and driving.
- Identify candidate schools for inclusion in the Safe Routes to School Program.

An important part of the *Franklin Regional Pedestrian Plan* was looking at connectivity within the towns and the region in order to identify locations where walking is a viable transportation alternative. In order to determine locations within the region where walking could be considered viable, FRCOG completed a survey about facilities and needs in all of the towns. The results of the surveys were compiled into a Summary Page for each town and contains information on existing conditions and current needs.

The connectivity and pedestrian issues at schools and senior centers were also reviewed in the *Plan*. The results of this review led to a more in-depth

analysis of the facilities for nine focus areas. Specific recommendations were proposed for these focus areas and are described in the following sections.

Existing Pedestrian Facilities

In many cases, the sidewalks and streets that exist in the communities of Franklin County were laid out hundreds of years ago. Downtown Greenfield, Orange, Millers Falls, Turners Falls, Deerfield, Shelburne Falls, Northfield, the Sunderland Village Center, and Montague Center are all examples of historic town centers that were laid out in a manner that is pedestrian friendly. While these town centers are very amenable to walking, the infrastructure in these locations has required updating to adjust to modern transportation demands. In other instances, activity centers have developed in areas that were previously not conducive to walking and improvements are required for them to function safely and effectively for pedestrian activity. Funding is needed to pay for updated infrastructure that better accommodates the modern demands and to retrofit areas that are not presently conducive to walking. Opportunities to provide sidewalks, pedestrian level lighting, safe crosswalks, and connections to shops, services, and residences are pursued whenever possible and appropriate.

Recently Completed Pedestrian Improvements

The following sidewalk and streetscape areas are examples of areas that have been updated recently to include pedestrian facilities improvements.

Greenfield Intersection Improvements

During 2010, intersection improvements were completed in downtown Greenfield at the intersections of Silver and Federal Streets; Silver and High Streets; and Main Street and Bank Row/Federal Street. These improvements included upgrading the traffic signals including pedestrian crossing phases, sidewalk reconstruction, cross-walk reconstruction, and ADA compliant curb-cuts.

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Pedestrian improvements completed at the intersection of Silver and Federal Streets in Greenfield

Sidewalk and Streetscape Improvements in Shelburne Falls in Buckland

Sidewalk and streetscape improvements were completed on Conway Street in the Buckland section of Shelburne Falls. The improvements included the installation of pedestrian level lighting and other streetscape elements. Benches and trash receptacles appropriate to the historical character of the village were provided. The improvements matched those made in other areas of the village in order to create a cohesive image for the entire downtown.

Sunderland Route 116 Sidewalk and Crosswalk Improvements

Route 116 in Sunderland is an area of heavy traffic and pedestrian volumes that has been of concern regarding pedestrian safety over the last several years. Numerous corrective actions have been taken during the past six years in order to improve the visibility of pedestrians to automobile operators. These include the installation of a traffic signal, improved crosswalk markings, in-pavement warning lights, flashing yellow pedestrian roadside beacons at the crosswalks, "Tyregrip" high friction surfacing system to act a lane marking and/or median, relocated bus stops, improved lighting, new sidewalks, and protected left turn lanes. The improvements that were completed are further detailed in the FRCOG *Evaluation and Monitoring of Safety Improvement Sites* (October 2009) and in Chapter 13, Transportation Safety, of this RTP. The

Town, MassDOT, and the FRCOG continue to monitor this high volume location.

Northfield Main Street Historic Restoration Project

During 2009 and 2010, sidewalks and streetscape improvements were constructed along Route 10/63 (Main Street) in the Town of Northfield. The project begins approximately 250 feet south of the intersection of Lorita Lane and Main Street and terminates at the intersection of Moody Street and Main Street. The total length of the project is 9,600 feet or 1.77 miles. Besides the reconstruction of sidewalks, the work also includes: improving safety at the Parker Avenue intersection, repairing sidewalks on several adjacent roadways, restoring the town common, enhancing surrounding areas, and addressing traffic and pedestrian safety concerns. The project incorporates sidewalk and streetscape elements to restore historic town character.

Mahican-Mohawk Trail

The Mahican-Mohawk Trail is a walking trail that follows the route along the Deerfield River corridor which Native Americans, and later early American settlers, used to cross between the Connecticut and Hudson River Valleys. Previously, Transportation Enhancements funding was used to reopen a 10-mile section of the trail along the Deerfield River that connects from Deerfield to Shelburne, and to conduct preliminary planning to extend the trail 100 miles to the Hudson River. During 2009, a bridge was constructed over the South River in the Town of Conway, two miles from the eastern end of the trail. The Deerfield River Watershed Association (DRWA) worked to advocate for the design and construction of this important trail link. The bridge was installed with a large portion of the construction funding from TransCanada Hydro Northeast Power Company - the owner of the land. The Massachusetts Department of Conservation and Recreation (DCR) holds a conservation restriction on the property, which ensures that it will be permanently protected for public use.

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A view of the new pedestrian bridge that was installed over the South River on the Mahican-Mohawk Trail in Conway (photo credit: Whitty Sanford)

Existing Advocacy Programs and Promotional Campaigns

Walk Franklin County – for the health of it!

The FRCOG partnered with the YMCA in Greenfield, Baystate Franklin Medical Center, Greenfield Community College, and the Franklin County Chamber of Commerce to develop and launch *Walk Franklin County – for the Health of It!* This cooperative program works to promote walking for transportation, reduction of air pollution, and physical fitness and health. The *Walk Franklin County – for the Health of It!* project is a free program that allows participants to measure and record their walking progress and receive rewards for reaching their walking goals. The FRCOG has completed sets of walking maps for each town in Franklin County. The maps are pocket-sized for easy transport and are available at the YMCA in Greenfield, Franklin County Chamber of Commerce, and other locations throughout Franklin County. Downloadable maps are also available at <http://www.ymcaingreenfield.org/>.

Future Pedestrian Projects

The FRCOG recognizes that there are challenges to planning for walkable communities within a rural region. The distance that individuals who live in Franklin County must travel to work or to run errands can make walking an impractical and

inefficient transportation option under many circumstances. The topography of Franklin County also varies greatly - in some areas, walking can be physically challenging because of steep slopes.

In rural areas like Franklin County, walking along scenic country roads is considered by many residents to be one of the advantages of living in a less developed area. Therefore, while ensuring pedestrian safety is important, it is also critical to do so in a manner that does not alter the characteristics that make it enjoyable in the first place. Due to the low volume and low speed of vehicles on many rural roads, walking safely along the roadway edge is possible. Roadway improvements such as widening, shoulder paving, or adding curbing are not necessary or desirable in these circumstances. On roadways with a heavier volume of traffic the vehicular counts, composition, and speed should be considered when determining pedestrian safety improvements and how they will fit into the area's landscape and character. If measures such as shoulders, curbs, or guardrails for separation seem to be appropriate, every effort should be made to use alternative materials and designs that blend into the area. Such examples may include granite curbs rather than concrete, steel-backed timber guard rails rather than steel, and narrow or grass shoulders that provide a walking area without creating the appearance a significantly wider road.

There are several pedestrian infrastructure projects in the region that are currently being constructed, in final design or have already received funding for design. The following are brief descriptions of these longstanding projects.

Buckland State Street Reconstruction Project

State Street in Buckland will be reconstructed starting in the Spring of 2011. The project includes sidewalk reconstruction and new sidewalks where needed. The project extends from Clement Street to Route 2 - a distance of 4,000 feet. The existing sidewalk on the west side of State Street, which varies from 2.5 feet to 4 feet, wide will be replaced by a 5 feet wide sidewalk. Curbing in the project area will be reset or replaced with granite.

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Crosswalks throughout the project area will be reconstructed to ADA (American's With Disabilities Act) compliance. New pavement markings will be applied and signs will be updated. Bump outs will be added in the village. The plans include pedestrian-oriented improvements at the intersections of State Street and North Street, and State Street, and Old State Street.

Charlemont Village Center Pedestrian Facility Improvements

The Town of Charlemont is interested in implementing traffic calming measures on Route 2 (Main Street) through Charlemont Center. The intention is for the traffic calming/pedestrian safety improvements to be part of a larger Route 2 reconstruction project. This phase of the project, currently being designed by MassDOT, is planned for construction in 2013. The 0.9 mile project begins approximately 600 feet west of where Route 8A crosses the Deerfield River and ends just east of South Street. Traffic calming measures currently under consideration for the village center could include colored shoulder treatments, sidewalk and crosswalk enhancements, gateway treatments, improved signage, landscaping, and improved bicycle accommodation.

Ervingside Streetscape Improvements

The Ervingside Streetscape Improvement Project has been awarded funding to complete the design and construction of sidewalk and streetscape improvements along the Connecticut River Scenic Farm Byway (Route 63) in Erving. The project is intended to improve pedestrian access and safety on a one mile section of Route 63 in Erving. The project area spans from the bridge over the Millers River on Bridge Street (at the Erving/Montague town border) to just north of the Erving Elementary School (also the proposed site of a Senior Center). The project area includes the Erving section of Millers Falls and the adjacent residential neighborhood known as Ervingside. Comprehensive plans for sidewalk and streetscape elements will be developed as part of the project. The improvements will link the previously completed Millers Falls Streetscape improvements with residential neighborhoods, the Erving Library,

Veterans Memorial Park, the Erving Elementary School, and the business that are located along Route 63 in Erving. The improvements to be considered for inclusion in the project are pedestrian level lighting, landscaping elements, signs, benches, trash cans, other street furniture and fencing.

Greenfield City-Wide Sidewalk Improvements

The City of Greenfield has prioritized a number of pedestrian improvements throughout the city. Federal Street is an ongoing project, and intersection improvements are currently being completed. During 2010, a number of sidewalk repaving or reconstruction projects were completed citywide including: Hope Street, Pond Street, East Cleveland Street, Conway Street from Allen Street to Silver Street, Lincoln Street, Walnut Street, Russell Street, James Street, Prospect Street, Quincy Street, Holly Avenue, and Haywood Street. In addition, proposed future sidewalk improvement projects include Beacon Street, Pierce Street, Silver Street, Columbus Avenue, Wells Street, and Washington Street.

Phase II of the Northfield Streetscape and Safety Improvements

Phase II of the Northfield Main Street Improvement Project involves intersection and pedestrian safety improvements on Main Street (Routes 10/63) in the Town of Northfield. The work will include replacement of raised medians and relocation of flashing traffic signals; various crosswalk upgrades; new sidewalk construction; and other incidental work. The length of the project is approximately 2.65 miles, beginning at the intersection of Route 10 and 63 and extending to Moody Street. The project is currently in the preliminary design stage and is slated for construction in 2012.

South Deerfield Streetscape Improvements

South Deerfield center is a historically pedestrian friendly area. A number of streetscape design elements have been considered conceptually for further pedestrian enhancements. In 2001, a review of the implementation of possible traffic calming techniques within the South Deerfield center was completed by the FRCOG. Several conceptual

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designs were developed after discussions with town officials, residents, and business owners. Recently, there has been a renewed interest in completing streetscape enhancements in South Deerfield center. Funding has been secured to develop design plans and guidelines under a HUD Sustainable Communities grant. These plans will be completed by 2014.

Promoting Safety While Walking

There may be other opportunities to work with towns and public safety officials to promote safe walking practices. During the development of the *Franklin Regional Pedestrian Plan*, a situation on Route 116 in the Town of Sunderland was described where jaywalking is a common occurrence at an area of dense college housing and commercial activities. A town official expressed concern over the minimal fine (a \$1 penalty) that is allowed by State law for ticketing jaywalkers on the state highway. At this location, there are newly installed crosswalks and safety features which are intended to improve the safety for those crossing the street. It would be helpful for the police to have the option of imposing a fine that would discourage individuals from jaywalking. Interest was also expressed in mounting an educational campaign to encourage safe pedestrian practices in this area of concern.

Ongoing Activities with both Bicycle and Pedestrian Components

There are a number of federal and state programs that provide funding to encourage walking and bicycling instead of driving. The programs, projects and activities listed below focus strongly on both bicycle and pedestrian transportation facilities. There are some opportunities in Franklin County to become involved and take advantage of these programs to promote walking and bicycling.

Safe Routes to School Program

As a part of the SAFETEA-LU federal transportation legislation, a Safe Routes to School Program was created. The program is intended to: (a) enable and encourage children, including those with disabilities, to walk and bicycle to school; (b) make

walking and bicycling to school safe and more appealing; (c) to facilitate the planning, development, and implementation of projects that will improve safety; and (d) to reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

In Massachusetts, the Safe Routes to School Program is coordinated through MassRides, a statewide program to promote transportation options for commuters, employers, students, and others. Safe Routes to School includes two main components. The first component involves MassRides partnering with individual schools by providing technical support and assistance in carrying out activities to encourage walking and bicycling to school. The second component of the program involves the identification and construction of potential infrastructure improvements to encourage bicycling and walking to the partnered schools. At this stage, a consultant is hired to implement and construct the improvements. The program funds infrastructure-related planning, design, and construction projects that will improve the ability of students to walk and bicycle to school. Eligible projects include: sidewalk improvements, traffic calming and speed reduction improvements, pedestrian and bicycle crossing improvements, on-street bicycle facilities, off-street bicycle, and pedestrian facilities, secure bike parking, and traffic diversion improvements. Such projects may be carried out on any public road or any bicycle or pedestrian pathway or trail in the vicinity of schools (within approximately 2 miles).

The program works with the specific needs of each school and provides tailored services. It is currently only offered to elementary and middle schools. Interested schools must apply directly to the program to receive services. The fee for partnering with the program varies depending on the funding level of that school. Some schools can be eligible for free services. The funding for engineering improvements is limited and a consulting engineering firm makes the decision regarding which schools should receive improvements.

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As part of the *Franklin Regional Pedestrian Plan*, a survey of the schools within the region was completed in order to determine if there are schools that would be good matches with the program. These schools were chosen because there were already children walking to school; the location of the school in relation to residential areas made walking a viable option; and/or school officials expressed an interest in the program. The following schools are recommended as good candidate schools:

- Bernardston Elementary School, Bernardston
- Mohawk Trail Regional Middle School, Buckland
- Colrain Central School, Colrain
- Deerfield Elementary School, Deerfield
- Four Corners School, Greenfield
- Federal Street School, Greenfield
- Newton Street School, Greenfield
- Greenfield Middle School, Greenfield
- Leverett Elementary School, Leverett
- Sheffield Elementary School, Montague
- Dexter Park School, Orange
- Butterfield Elementary School, Orange
- Shelburne-Buckland Elementary School, Shelburne

Transportation Enhancements Program

The Transportation Enhancements Program funds non-traditional transportation-related projects such as bikeways and pedestrian improvements. In Franklin County, the majority of past Transportation Enhancement projects that have been implemented were either bicycle or pedestrian/streetscape improvements. In recent years, the Transportation Enhancements Program has been in transition and it was recently streamlined and improved. As a result, there is a renewed interest in the program and opportunities to put new projects forward in the coming years. Bicycling and pedestrian projects are an especially high priority for the Massachusetts Transportation Enhancements program.

A potential project that would fit well with this program is the construction of a sidewalk to Mohawk Trail Regional High School & Middle School along Route 112 and North Street in the Town of Buckland. Currently, students walk along the shoulder of these busy streets to school. Route

112 is a state highway with high speeds (45mph) traffic volumes, and narrow shoulders.

National and International Walking and Bicycling Events

There are a number of well established national and international walking events that provide a framework and schedule for planning events to encourage walking. International Walk to School Day (held in October) and Walk to Work Day (held in May) are events organized to promote walking and bicycling for transportation. There is information on the internet about both of these annual events and suggestions for organizing local activities. International Walk to School Day has been occurring in communities around the United States since 1997. The website www.walktoschool.org provides information and an opportunity to register a local Walk to School event. Walk to School events are a way for schools and communities to build enthusiasm for walking to school, promote the benefits of walking and bicycling, and bring visibility to any safety concerns.

Mass in Motion Program

Massachusetts has also launched a program called Mass in Motion aimed at promoting wellness and preventing obesity with a focus on the importance of healthy eating and physical activity. Mass in Motion features a multi-faceted approach that includes regulations to promote healthy eating and physical activity, grants to cities and towns to make wellness initiatives a priority, and a new website, <http://www.mass.gov/massinmotion/>, to give Massachusetts' residents tips on how to integrate healthy eating and physical activity into their daily lives. Towns interested in promoting walking for transportation and fitness could find assistance and resources through this program.

Ongoing FRCOG Technical Assistance to Towns

The FRCOG provides technical assistance to towns interested in implementing bicycle and pedestrian facilities. The FRCOG will provide technical information about design standards or funding opportunities that allow towns to secure money to plan and construct projects. It is very important that

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towns initiate and advocate for bicycle and pedestrian facilities in their communities, and then use their Metropolitan Planning Organization (MPO) as a technical resource.

Future Plans

During the past five years, progress has been made to improve bicycle and pedestrian facilities in Franklin County. The FRCOG has demonstrated its strong support for the development of these alternative modes of transportation through the prioritization of the construction of infrastructure improvements, as well as the implementation of promotional programs. The next steps are to continue these efforts by building on the systems that are in place. The *Franklin County Bikeway Plan Update (2009)* and the *Franklin Regional Pedestrian Plan (2010)* outline initiatives to build on the groundwork that has already been laid. The FRCOG will continue to provide technical assistance to towns pursuing new facilities and improvements and applying for funding to do so. This continued commitment to bicycle and pedestrian infrastructure improvements also support the national and state level commitments to green and sustainable transportation initiatives.

Bicycle Planning

In terms of bicycle planning, the FRCOG is committed to the continued development of a region-wide bikeway network. The next stage is the installation of bikeway logo signs along shared roadway routes that were identified in the *Franklin County Bikeway Plan Update (2009)*. These routes are region-wide, connect to routes outside of Franklin County, and are outlined on the Franklin County Bikeway Maps that were published and distributed during 2010.

In addition, some preliminary conceptual design work is already underway for new off-road trails or bicycle path facilities. The Millers River Greenway and the Erving/Wendell Trail need to be further developed. The development of preliminary design plans is the next step in evaluating the feasibility of bringing these projects to construction. The construction of a bicycle/pedestrian bridge on Greenfield Road in Montague at the location where

the former bridge over the railroad line existed is also a priority. Although this project is currently in design, there may be additional resources needed to see this project to construction.

Pedestrian Planning

Opportunities exist throughout Franklin County for improving and expanding current pedestrian facilities. The *Franklin Regional Pedestrian Plan (2010)* contains a number of specific pedestrian infrastructure improvements. It outlines town-specific pedestrian improvement project in the Town Summary Pages section. In addition, nine focus areas were identified and analyzed. Within these areas, specific recommendations were identified for implementation. The *Regional Pedestrian Plan* also recommends a number of schools within the region that would be good candidates for enrollment in the Safe Routes to School Program. The further promotion and provision of assistance to the local towns in becoming involved and active in this program is also a recommendation.

Recommendations for Bicycle and Pedestrian Facilities

- Oversee the implementation and installation of additional **Franklin County Bikeway Logo signs**, on the newly identified segments of the Franklin County Bikeway as outlined in the *Franklin County Bikeway Plan Update (2009)*.
- Update and distribute **Franklin County Bikeway Maps** to help promote bicycling in Franklin County.
- Further identify and evaluate the viability of **potential extensions of the Franklin County Bikeway** and potential connections to other bicycle trails and paths in the greater regional area.
- Pursue funding to complete the **design work for the Millers River Greenway** in Orange and Athol.
- Pursue funding to complete the **design work for the Erving-Wendell Bike Path**.

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- As opportunities arise, continue to **improve appropriate roads for bicycle use**.
- Continue to work with the Pioneer Valley Planning Commission to distribute the video and other media/publicity tools that were developed through the **Share the Road in the Connecticut River Valley** project to promote the use of bicycles for transportation in Franklin, Hampden, and Hampshire Counties.
- Work with partner regional planning agencies to create a **bicycle map for the tri-state** (Massachusetts, New Hampshire, and Vermont) area of the Connecticut River Scenic Farm Byway.
- Continue to provide technical assistance, as needed and requested by individual towns, for **pedestrian improvement projects**.
- Advocate for needed **pedestrian facilities improvements** and funding opportunities.
- Include **pedestrian infrastructure improvements** when appropriate into the scope of road construction projects.
- Work to complete pedestrian infrastructure improvement projects that **enhance safety for pedestrians** including: crosswalk installation and upgrades, safe separation of walkers and vehicle traffic, installation and improvement of curb-cuts, and installation of pedestrian warning signs.
- Follow-up on the findings and recommendations of the **Franklin Regional Pedestrian Plan** by prioritizing and advocating for needed pedestrian facilities improvements.
- **Implement improvements** identified in the focus areas analysis section of the *Franklin Regional Pedestrian Plan* (2010).
- Assist towns to secure funding, as appropriate and as available, for **pedestrian improvement projects** and particularly those identified as needs and priorities in the town summary section of the *Franklin Regional Pedestrian Plan* (2010).
- Advance participation of Franklin County schools in the Massachusetts **Safe Routes to School Program**. In particular, encourage and assist the schools that were identified in the *Franklin Regional Pedestrian Plan* as good candidates for the program to complete the steps necessary to enroll and become active in the program.
- Work to **improve pedestrian network** by filling in the gaps where sidewalks and crosswalks are needed. In particular, **construct a sidewalk to Mohawk Trail Regional High School & Middle School** along Route 112 and North Street.
- Prioritize needed improvement to meet compliance with the **Americans with Disabilities Act (ADA)** regarding pedestrian facilities and work to correct deficiencies.
- Identify **best practices** for maintenance and/or installation of sidewalks, crosswalks, and pedestrian-related signs.
- Implement **traffic calming measures** and locations where it would be effective to help reduce vehicle speeds in areas of pedestrian activity as appropriate and effective.
- Research the issue of the insignificant (\$1) **fine imposed for jaywalking** on the state highway and the possibility of updating the fee structure to allow towns to punish for poor pedestrian practices.
- Develop and implement a campaign to **educate the public about safe pedestrian practices**.
- Encourage employers to institute programs to **promote walking** by their employees.
- Explore ideas and opportunities to work with **local downtown businesses** to encourage their patrons to walk instead of driving when feasible.