- In South Deerfield the Route 5/10 corridor from the intersection of Route 116 (Sunderland Road) and Route 5/10 (Greenfield Road) to just north of the intersection of Route 5/10 (Greenfield Road) and Route 116 (Conway Road); and
- In Deerfield South Deerfield Center.

After a site visit to each of the eight locations, it was determined that the intersection of Federal and Pleasant Streets in Greenfield and the area on Route 5/10 in Bernardston near the Kringle Candle Store did not need further evaluation. These locations were already well adapted to accommodate multiple roadway users and additional improvements were not warranted at this time.

The intersection of Federal and Pleasant Street was in need of curb-cut and crosswalk improvements across Pleasant Street on the west side of Federal Street. There is not a designated crossing of Federal Street at this intersection. The designated crossing on Federal Street is to the south of this intersection. Therefore, other than curbcut improvements at the crossing of Pleasant Street at Federal Street, no other pedestrian infrastructure is needed at this location.

On Route 5/10 in Bernardston near the Kringle Candle Store a pedestrian activated beacon light was already installed as part of the sidewalk and roadway improvement completed for the Kringle Candle Store construction. Therefore, this crossing location is very well equipped to accommodate pedestrians.

In addition, South Deerfield center was considered for a complete streets analysis, but the Town is already working to facilitate a more detailed streetscape and pedestrian facility analysis as part of the U.S. Department of Housing and Urban Development Sustainable Communities Regional Planning Grant. This work will result in a Complete Streets and Downtown Livability Plan, and will seek to better connect the residential neighborhoods of South Deerfield with the downtown commercial district, surrounding schools, and the former Oxford Food Site. As part of this plan, an evaluation of vehicular, pedestrian, and bicycle circulation will be conducted in addition to a parking analysis and the development of streetscape improvement recommendations.

After the initial site visits and analysis it was determined that the other five locations are in need of improvements to make these locations better for all users. The following are detailed descriptions of the locations, the issues that were observed, the proposed improvements, and the next steps.

Colrain Center: Main Road, Jacksonville Road and Greenfield Road

Background

Colrain center is located at the intersection of Main Road (Route 112), Jacksonville Road (Route 112) and Greenfield Road. These three roads intersect at a three-legged intersection in the center of town. There are residences, civic uses such as the library, post office (all residents receive their mail at the post office), and a local pizza restaurant (closed during the project timeframe but the Town hopes that a new one will open at this location that has historically housed restaurants) near this main intersection. The Colrain Central School is located to the north on Jacksonville Road within walking distance of the main intersection at the center of town.

The study area for the complete street analysis includes the main intersection at the center of town in Colrain and the three intersecting roads leading up to the intersection. Initially, the study area included the section of Main Road (Route 112) from the main intersection west to the post office, but it was extended at the request of the Selectboard to include the section of Main Road extending to the Town

Hall (located approximately one mile west of the main intersection). Residences, multi-unit housing, a church, and the location of a commercial site (previously a pizza restaurant) within the project area. Additionally, the Town has discussed developing a senior center in the village center area at the main intersection.

Looking to the west at Main Road from the intersection of Main Road, Jacksonville Road and Greenfield Road in the center of Colrain.



The intersection of Greenfield Road, Route 112 (Jacksonville Road), and Route 112 (Main Road) has the highest traffic volumes in Colrain. Route 112 is a frequently travelled regional route. The high traffic volumes and speeds on Route 112 create safety concerns in the village center.

The intersection of Greenfield Road/Main Road/Jacksonville Road in Colrain had one reported crash between 2007 and 2009. The crash was a head-on collision involving two vehicles (one travelling south on Jacksonville Road and one travelling north on Greenfield Road). The crash occurred at 3:30 am under snowy, slushy winter weather and road conditions. There was property damage only and no injuries involved.

Two traffic counts were completed on Route 112 (Jacksonville Road) 3/10 mile north of River Street (just north of the elementary school). The average daily traffic count was 1,500 vehicles per day in 2003 and 1,600 vehicles per day in 2007.



A view to the north on Jacksonville Road (Route 112) from the center of Colrain.

Colrain Center was reviewed as part of the *Franklin County Regional Pedestrian Pan*. As part of the development of the *Pedestrian Plan* a detailed walkability assessment was completed. The following recommendations for Colrain Center were developed as part of the *Pedestrian Plan*:

- Create a unified and connected network of sidewalks, ramps and crosswalks within the village center which safely link popular destinations for pedestrians of various abilities and which is ADA compliant. Include curbing in any new sidewalk construction.
- Install crosswalks at locations to improve access and safety for pedestrian throughout the focus area.
- Remove non-compliant signs and replace faded or worn signage with highly reflective (MUTCD compliant) signs.
- Explore the possibility of adding way-finding signs to direct visitor to points of interest.
- Consider rural character when developing streetscape improvements and the installation of additional directional sign/way-finding signs.
- Enforce speed limits through the village center and compliance with the stop sign at the Route 112 and Main Road intersection. Investigate options for replacing the stop sign at this intersection for a more reflective stop sign.
- Repair pavement that is cracked and fix the sharp drops at the edge of the pavement.
- Sweep the roadway and clear the shoulder of debris.
- Install highly reflective pavement markings.
- Investigate ways to improve the sight distance at the primary intersection such as tapering or adjustments to speed limits.
- Consider ways to delineate driveways from the roadways and sidewalk areas.
- Consider adding streetscaping, landscaping, and pedestrian elements to enhance the pedestrian experience and encourage walking.
- Recommend Colrain Central School enrolls in the Safe Routes to School Program.

On February 14, 2012, a site visit was completed and a meeting was held with Joan Rockwell, Colrain Planning Board member, to get input on the transportation accessibility issues in Colrain Center. Ms.

Rockwell provided input on the town's traffic related concerns. She noted that traffic passes through the center (traveling on Jacksonville Road and Greenfield Road) en-route to and from Mount Snow, a popular ski area in Vermont. Because of the steep grades of these roads through the main intersection at the center of town, the vehicles travel at fast speeds. Additionally, it was noted that there is limited infrastructure for pedestrians and limited areas with sidewalks. She also expressed concern about access to a commercial business that is located on Main Road near the intersection of Main Road, Jacksonville Road and Greenfield Road. At that time this location was being as a restaurant, but it has since closed. There is limited parking on the site and the patrons used the parking lot that is next to the former church building on the other side of Jacksonville Road and Greenfield Road. Although the restaurant is now closed there is interest by the town in this location being operated as a restaurant in the future and having a place for patrons to park is important. Overall, providing safe access for pedestrians through the town center is a priority.

Observations

In general, the layout of the center is conducive to walking but the area reviewed is not pedestrian friendly. There are very limited sidewalks and crosswalks. The traffic that is approaching the center of town from Greenfield Road travels at a fast speed because of the very steep downward grade. Because of this steep grade it was difficult to determine the best location for a crosswalk across Greenfield Road.



This view of Main Road near the Colrain Public Library shows the lack of sidewalk on this primary route in downtown.

There is a notably absent crosswalk across Jacksonville Road/Greenfield Road to Main Road. Accommodating Americans with Disabilities Act (ADA) requirements for a crosswalk at this location poses a particular challenge because of the steep grade of Greenfield Road. Locating a crosswalk is also a challenge because of the curve of Jacksonville Road (Route 112) as it heads north and the resulting very short sight distance. Overall, the sight distance is very poor for pedestrians crossing from the east side of the road to the west at the center.



A view of Greenfield Road at the intersection with Jacksonville and Main Roads shows the steep grade upon which vehicles traveling north enter the center of town.

Additionally, there is a slip lane at the intersection of Route 112 (Jacksonville and Main Roads) and Greenfield Road that causes safety concerns for traffic conflicts. There is a memorial located in the middle of the intersection. The area that is inside of the green space in the center of the intersection is owned by the Town. This roadway configuration takes up a lot of space and does not have any sidewalks or crosswalks. There is a large multiple dwelling unit residence on the north side of the slip lane. These residences appear to use some of the area in the slip lane and right in front of the building for parking.

On Main Road there is no designated on-street parking for the commercial establishment (former pizza restaurant). A problem was noted because patrons park in the road and then run into the pizza restaurant to pick up take out orders. There was a concern that with a lack of designated space for on-street parking, someone may be hit by a passing car. The alternative area used for parking is the lot next to the former church, and then patrons cross Greenfield Road to the restaurant. This parking lot is also frequented by snowmobilers during the winter, because there is a hiking trail that is often used by people riding snowmobiles that connects to the parking area next to the former church. While still in business the pizza restaurant that was located on Main Road west of the intersection was frequented by snowmobilers.



A view of
Jacksonville Road
looking towards
the intersection at
the center of
Colrain
(encroaching
vegetation is visible
on the left).



The bridge (with no sidewalks) on Jacksonville Road to the south of the Colrain Central School.

The town considered converting the church building in the center of town to a Senior Center, but that proposal has since been dropped. Additionally, there are several buildings in the center of town that are proposed to be razed due to neglect issues. These buildings will dramatically change the streetscape in Colrain Center, and may open up some new options for addressing the pedestrian concerns. The "Tin Shop" located on Route 112 (Jacksonville Road) to the northwest of the intersection at the center of town, and the "Truck Stop" to the north of the "Tin Shop" are planned to be torn down.

Route 112 is part of the Franklin County Bikeway. It is part of a frequently used 11.3 mile route, "The Shelburne – Vermont Connector", that is classified as an intermediate level route on the Western Franklin County Bikeway Routes Map. The route connects western Franklin County to bike routes in Vermont using Route 112 beginning in the Town of Shelburne, traveling through Colrain and continuing to the Vermont border.

A meeting was held with MassDOT District I on July 11, 2012, to discuss issues, concerns and ideas for this area. The MassDOT District I engineers and planners agreed with the assessment and the need to develop pedestrian accommodations for this area. The ideas/solutions discussed at the meeting with MassDOT District I are incorporated into the following list of proposed solutions. MassDOT also suggested filling out a project need form in order to commence a project to design pedestrian oriented improvements.

Possible Solutions

- Install advance warning signals for vehicles traveling north on Greenfield Road (Route 112) to alert the vehicles that they are entering the village center and slow the traffic down.
- Consider installing some on-street parallel (not diagonal) parking in the center of town on Main Road (this section of Route 112 in the center of Colrain is not State Highway). There is a need for some on-street parking in front of the restaurant location on the south side Main Road. There is only room for a few spaces.
- Construct sidewalks on the road in the center of town where there are none, or reconstruct sidewalks that are in poor condition. There are currently extremely limited sidewalks (two very small sections) throughout the project area. There is a need for sidewalks throughout the project area. Sidewalks and other pedestrian oriented streetscape features would be aesthetically in keeping with the atmosphere and character of the village center. The area that is being examined is within the Colrain Center Historic District, a National Historic District. It is not anticipated that sidewalk improvements would adversely impact the historic district, but it is important to consider that a Section 106 review would be required.
- Construct a sidewalk on the south side of Main Road and on the school side of Jacksonville Road.
- Consider a possible solution to the ADA crossing/grade issue by closing off the slip lane and using that space for the ADA sidewalk through the area that is currently part of the median and the slip lane. The monument that is currently in the median would be relocated to an agreed upon location to the side of the road in the center of town. Further design work would consider the relocation of the monument, addition of a bench and the creation of a more accessible park area. Close off the slip lane to traffic, but create a driveway and space for the residences located to the north of the slip lane road to park. There are also utility poles that would need to be relocated.

- Consider reconfiguring the River Street intersection located at the southern end of the bridge on Jacksonville Road to better accommodate a sidewalk and to shorten the crossing distance for pedestrians.
- Construct a sidewalk on one side or both sides of the bridge on Jacksonville Road (Route 112) just south of the Colrain Central School. There is current no sidewalk on either side of the bridge. The bridge is classified as "structurally deficient" by MassDOT, and is scheduled to be reconstructed in the future. However, the reconstruction project will not be completed for 5 or 6 years. Maintenance work is scheduled to be completed in 2 or 3 years. When work is completed to reconstruct this bridge it is recommended that a sidewalk be added to one side, or if possible both sides, of the bridge. At the site visit FRCOG staff and MassDOT District 1 staff discussed which side of the bridge would be better for the sidewalk in the event that it is not possible to add a sidewalk to both sides of the bridge. It was determined that the side that the school is on (west side) would be the preferred location so that the children walking to school can easily access the school property. The school is right next to the bridge on the northwest side.



A view to the north of the bridge on Jacksonville Road (Route 112) with the Colrain Central School to the left of the bridge.

- Consider bicycle use during the design stage for any and all pedestrian improvements. In particular, bicycle accommodation should also be considered as part of the design work to accommodate pedestrian use on the bridge on Jacksonville Road.
- Consider bicycles using the road in any planned sidewalk construction and whether it is possible to also construct a shoulder for bicycles while adding a sidewalk to the roadway layout.
- Trim the vegetation along Greenfield and Jacksonville Roads to improve the sight distances. In
 particular, the site line on Jacksonville Road from the east side looking south towards the center
 intersection is obscured by vegetation that is on private property and encroaching into the right
 of way. The encroaching vegetation is obscuring the view of vehicles traveling north on
 Greenfield and Jacksonville Roads.
- Explore the future use of the parking area that is located next to the former church in light of the fact that this location is difficult to access on foot. The crossing from the parking area to Main

Road has poor visibility. If additional parking is needed, explore the use of the land where the buildings on Jacksonville Road are located that are proposed to be removed.

A meeting was held with the Colrain Selectboard on August 6th, 2012, and the proposed ideas outlined in this section were discussed. The Selectboard agreed with the preliminary proposed ideas, and endorsed the preparation and submission of a "Project Need Form" to MassDOT District 1. The Board also expressed an interest in extending the project area and sidewalk to the town hall (previously sidewalk construction was only specified to the post office).

Next Steps

A Project Initiation Form (PIF) and a Project Need Form were completed and are attached to this report as Appendix A.

Greenfield: Deerfield Street (Route 5/10) and Cheapside Street



A view of Route 5/10 (Deerfield Street) from Cheapside Street.

Background

The intersection of Deerfield and Cheapside Streets in Greenfield is a triangular intersection with the southbound incoming and outgoing traffic coming to a t-intersection, and the northbound incoming and outgoing traffic using a slip lane. This intersection was the focus of a road safety audit that was completed by Stantec Consulting Services for MassDOT in November 2011. The recommendations of the road safety audit included the study of the reconfiguration /consolidation of the Cheapside Street intersection with Route 5/10 in order to eliminate the slip lane and create a T-intersection with a left turn lane on Route 5/10. This would eliminate the split and discontinue the "long" side of the triangle (Cheapside Street) as a through way.

The draft road safety audit report commented that a follow-up design study also consider a roundabout as a possible reconfiguration option for this intersection in order to reduce the overall number of conflicting movements. At this time, MassDOT is moving forward with a study to redesign this intersection. It is included in the Fiscal Year 2015 element of the Franklin Regional Transportation Improvement Program (TIP).