Main Street – Springdale Corridor

Executive Summary

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Prepared For:
The City of Holyoke
536 Dwight Street
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Nitsch Project #14403.

Nitsch Engineering
Nitsch Engineering has prepared this feasibility study for the City of Holyoke to evaluate improving multi-modal use and incorporating traffic safety improvements through complete streets design elements along Main Street – Springdale Corridor (the project). The project location extends along Main Street from its southern terminus at Ingleside Street (Route 5) to Jed Days Landing near Springdale Park. The purpose of this project is to evaluate the feasibility and recommend improvements for the Main Street – Springdale Corridor, from Route 5 to Springdale Park. The complete street design evaluation will be inclusive of all modes and users of transportation including vehicles, bicycles, pedestrians, and transit.

The Massachusetts Department of Transportation (MassDOT) is currently designing a reconstruction project along Riverdale Street (Route 5) in the communities of West Springfield and Holyoke. MassDOT proposes to construct multi-modal accommodations via a shared use path along the east side of Route 5, terminating at Main Street in Holyoke. Aware of the MassDOT project along Route 5, the City of Holyoke recognized this as an opportunity to evaluate the possibility of extending a shared use path to one of City’s larger open space parks, Springdale Park. The City of Holyoke applied for and was awarded a MassTrails grant in 2020 to conduct a feasibility study to see if the multi-modal accommodations can be extended along Main Street from Route 5 to Springdale Park.

The project area is mixed land use of residential, school, open space/park, and commercial properties. Providing a complete street would enhance access to key destinations along the project and provide connections to points north and south of the project and would improve pedestrian accessibility, access, and mobility along the corridor. In order to limit potential impacts to adjacent private property, the concepts evaluated as part of this study were limited to those that could fit within the existing width from back of sidewalk to back of sidewalk. Based on available GIS data information, it appears existing sidewalks are within the City right-of-way and the need for permanent easements or takings would be limited.

Currently, Main Street has sidewalks along only portions of the project corridor. The sidewalk along Main Street is located along residential areas and there is a gap in the sidewalk along several commercial properties on the west side. Currently there are no pavement markings or signs designating bicycle use within the project limits. Bicyclists are expected to utilize vehicle travel lanes along this section of Main Street. The Pioneer Valley Transportation Authority (PVTA) services the Main Street corridor via the R24 and R29 bus routes.

Since the existing roadway lacks bicycle accommodations, providing bicycle accommodation was a major factor in the development of the alternatives. Typically, there are two types of bicycle accommodations that are implemented along roadways, a.) on-street bicycle lanes, and b.) separated shared used paths/bicycle lanes. On-street bicycle lanes are preferred by experienced cyclists as bicyclists utilize the same traffic rules as vehicles. On-street bicycle lanes are not preferred for families and less experienced bicyclists. Since the project will be utilized by families and school children, the traffic volumes, the new shared use path being constructed at the southerly limits by MassDOT, traffic volumes, and the high use of on-street parking, on-street bicycle lanes were not viewed as a preferred design alternative by most project stakeholders.

Due to the context of the area, improved safety, ages and abilities of users, and the integration to an existing shared use path at Route 5, the preferred design option is to provide a separated shared use path. A shared use path provides horizontal and vertical buffers from traveling vehicles and provides a safer environment for families, school children, and bicyclists of all experience levels using the corridor. The proposed shared use path will begin at the project limits of the MassDOT Route 5 reconstruction project and continue northerly along the east side through Springdale Park.

To meet the project’s complete street design criteria, traffic calming design elements are proposed to be implemented along the corridor. Curb extensions, Rectangular Rapid Flashing Beacons and raised crossings may be implemented as traffic calming elements while narrower vehicular travel lanes will promote slower vehicular speeds and narrower shoulders will provide additional space to be used to construct a shared use path within the existing roadway footprint. Mid-block crossings will be added along the corridor where they
are most useful and to minimize the distance between crossings throughout the corridor, while also encouraging slower vehicle speeds.

Existing Photos of Corridor

As part of the design of the Springdale Corridor, the existing infrastructure will need to be updated to align with the corridor design. Existing utilities and streetlights may need to be relocated to accommodate the design. The existing underground drainage system will need to be evaluated, and new utility structures may be required to accommodate new roadway geometry. The intersection of Main Street and Vernon Street will be reconstructed as part of the corridor design. The existing intersection has outdated signal equipment that is proposed to be replaced to meet current design standards for safety and Americans with Disabilities Act (ADA) requirements.

The proposed improvements provide opportunities for new landscaping along the corridor. Where the existing footprint allows, grass buffers are proposed to be installed along the sidewalk and shared use path. In areas where the buffers are wide enough, street trees can be planted along the corridor to improve the aesthetic look of the corridor, improve stormwater, reduce heat island effects, and contribute to traffic calming along Main Street. Trees and other plantings could also be planted in the curb extensions at intersection and mid-block crossings.

As part of this study, we conducted various forms of public engagement. Everyday users, stakeholders, and City officials provided valuable information regarding the existing use, deficiencies, and areas for needed improvements on this project. This public input ultimately guided us towards a preferred alternative that meets the needs of the users, abutters, and City. The City of Holyoke and Nitsch Engineering conducted three (3) major public outreach components to receive input and feedback on existing conditions and proposed alternatives. These components consisted of an online survey, a neighborhood site walk, and a virtual Public Information Meeting.

Throughout the public engagement process of this project, the team noticed consistent trends. The public consistently requested a project that improves safety and promotes slower vehicle speeds. The second main topic brought up was a desire for improved pedestrian and bicycle accommodations along the project. We found that nearly all respondents preferred a separated shared use path, and few were in support of on-street bicycle lanes. Many respondents were excited to see the City considering improvements to the corridor and were eager to learn how they could participate in the process.
If the City decides to advance the Main Street – Springdale Corridor to final design and ultimately construction, they will need to seek sources for funding. The City can apply for community development grant programs, such as MassWorks, through the State’s new One Stop for Growth grant application. Smaller value grants such as MassDOT’s Complete Streets Program or MassTrails grants could be utilized to fund portions of the project. Another funding program would be through MassDOT and their Transportation Improvement Program (TIP). This project has been evaluated to comply with MassDOT’s Complete Streets and Healthy Transportation initiatives. Under the TIP, MassDOT would fund the construction of the project. As the project proponent, the City would be required to fund the design, permitting, and Right of Way costs for the project.

Based upon the preferred design concept presented herein, an order of magnitude cost estimate has been developed for the proposed improvements with a total cost of approximately $9.1 Million Dollars. This conceptual cost estimate has been developed to include the construction cost utilizing MassDOT average unit prices with contingencies included and approximate design, permitting, and right of way/easement acquisition costs.

In conclusion, the Main Street – Springdale Corridor Complete Streets Improvement project is a project that will extend multi-modal accommodations within the area, improve safety, mobility, and access throughout the corridor for all users and modes of transportation.