

Road Narrowing on Shawsheen Street – Tewksbury, MA

Site and Treatment Description

Shawsheen Street in Tewksbury, MA serves as a minor arterial that serves as a connection between East Street to the Town of Andover to the north, and to Whipple Road and the Town of Billerica to the south. The traveled way is separated in each direction by a double-yellow centerline, with an average daily traffic (ADT) of 9,100. This roadway primarily serves residential use, with some industrial use to the north and an Elementary School to the south.



A sidewalk was installed and the roadway was resurfaced on Shawsheen Street between Main Street (Route 38) and East Street in 2022. The road narrowing project was 2.2 miles in length, affecting nearly 700 homes with this new design. Additionally, the sidewalk project also included a redesign of several intersections along the corridor. Given the new sidewalk design, this construction allowed for T-intersections to be realigned to improve sightlines, intersection conspicuity and access.

Design Specs and Cost

The sidewalk project on Shawsheen Street was initiated to effectively assist in lowering the speeds on the corridor. Along the 2.2-mile corridor, there was approximately 40ft right-of-way. Curbing was added to both sides of the roadway and in some segments, nearly 2ft of narrowing was achieved. A five-foot-wide sidewalk was installed on the west side of the street, along the southbound lane, with accessible ramps installed at each curb cut.

The road narrowing aspect of this project included mainly pavement markings. While this was part of a much more expensive roadway improvement project, the road narrowing was completed through the resurfacing and restriping of Shawsheen Street. In certain sections, the roadway was narrowed by 2ft by adding the new edge lines and center lines.

Support Story

A visioning study was conducted in 2015/2016 throughout Tewksbury which asked residents to identify their preferences of traffic calming funding townwide. As part of a “vision cloud” exercise, the residents highlighted the focus around *schools* and *sidewalks*. Thus, the town was tasked with producing a plan to establish a mobility planning master plan. An overview of that plan can be found at the [Tewksbury Pedestrian Mobility Master Plan](#). The town and residents were hopeful to

initiate more complete streets projects and with support funding. During a public input session, the Shawsheen Street corridor was brought up for discussion and was a popular choice among constituents for redesign.

Following the development of the pedestrian mobility master plan, a speed study was initiated to include Shawsheen street. Ultimately, the sidewalk project was constructed as a result of this study. Local officials state that the sidewalk along this corridor has been actively utilized as residents now have the ability to safely walk along this corridor. Some residents have noticed the increased activity of pedestrians along Shawsheen Street, which has provided more access to Route 38 shops and stores.

Maintenance Tips

During the design phase, the sidewalks were planned to be 5ft wide along the 2.2-mile corridor. However, the town had to address the United States Postal Service (USPS) mailbox location standards. In proximity to the traveled way, resident mailboxes had to be placed within 6 inches to 8 inches from the curb face. In certain parcels this became a challenge, and therefore the sidewalk was narrowed in some locations; however, the sidewalk corridor still remained compliant with accessibility requirements. The angled plow became a challenge; however, this slight challenge could have been avoided with the wider sidewalks.

Other Lessons

While many of the town constituents were wondering why sidewalks were needed on Shawsheen Street, the town took the “Field of Dreams” approach in the motto: “if you build it they will come.” As a result, the sidewalk has seen regular use, and residents have realized the value in this new design.

Additionally, the town decided to utilize asphalt curbing instead of granite curbing along this corridor - providing significant cost savings and serving as a model for other locations. There were town constituent concerns for this being the “cheap” option; however, this was preferred for plowing, as their blades are able to traverse these curbs easier.

Speed Impacts

The Shawsheen Street sidewalk project derived from an existing challenge with speed limit setting throughout town. The posted speed was incorrect in certain locations throughout Tewksbury, as per the existing MassDOT speed regulations. When the town had to raise speed limits on certain sections of Shawsheen Street, the town initiated a plan to design for lower speeds. A speed study was conducted across town by a traffic engineering consultant, which resulted in final posted speed limits on the corridor. In certain sections of Shawsheen Street, based on the speed study the speed limits were adjusted to 35mph; however, had they remained with the speed regulations this section would have been posted at 40mph. As a result, the sidewalk project was constructed in an effort to provide context, particularly in the newly marked 35 mph section of Shawsheen Street. A final speed study was completed and found that most vehicles traveled within 5 mph of the newly posted speed limits.

Further Plans

The town continues to update their Traffic Calming strategies, and adapt the findings from the Pedestrian Mobility Master Plan. The town is focused on identifying other corridors and intersections around town and implementing safer street initiatives.

Appendix – Shawsheen Street Speed Data Analysis

