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Massachusetts Department of Transportation

Framingham & Natick – Route 9 and Speen Street Bicycle and Pedestrian Access Planning Study

MassDOT Office of Transportation Planning

Executive Summary

December 2023

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1.0 EXECUTIVE SUMMARY

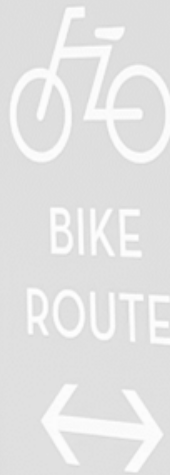


Study Context & Goals

The MassDOT Office of Transportation Planning (OTP) conducted a Bicycle and Pedestrian Access Planning Study for the Route 9 and Speen Street corridors and surrounding roadways in Natick and Framingham's Golden Triangle. This study evaluated the current multimodal accessibility in the study area and produced recommendations to improve roadway network connectivity for all users.

The Route 9 and Speen Street Bicycle and Pedestrian Access Planning Study seeks to strengthen and improve the multimodal experience for all users visiting, frequenting, and traveling within the Golden Triangle. Specific goals for this project include:

- Create a vision for a **welcoming and inclusive environment** for those who **walk, bike, and take transit** within and around the Golden Triangle
- Understand **existing gaps and challenges** in the bicycle, walking, and transit networks, particularly between existing and future development
- Identify **opportunities and leverage existing trail networks, projects, and multimodal infrastructure**
- Develop solutions that are **high impact, low cost, and actionable**, while keeping in mind **potential long-term improvements**
- **Collect & present** information in a **useful and helpful format** that makes the case for **safe and comfortable places to bike and walk**



Study Process

The Golden Triangle is a local and regional destination, within an extensive collection of retail and large-scale campuses. Considering this area handles a significant amount of vehicular travel—in part because the existing land use demand requires car use—it is important to understand the conditions and experiences for those who would like to get to their destination by walking, biking, or taking transit.

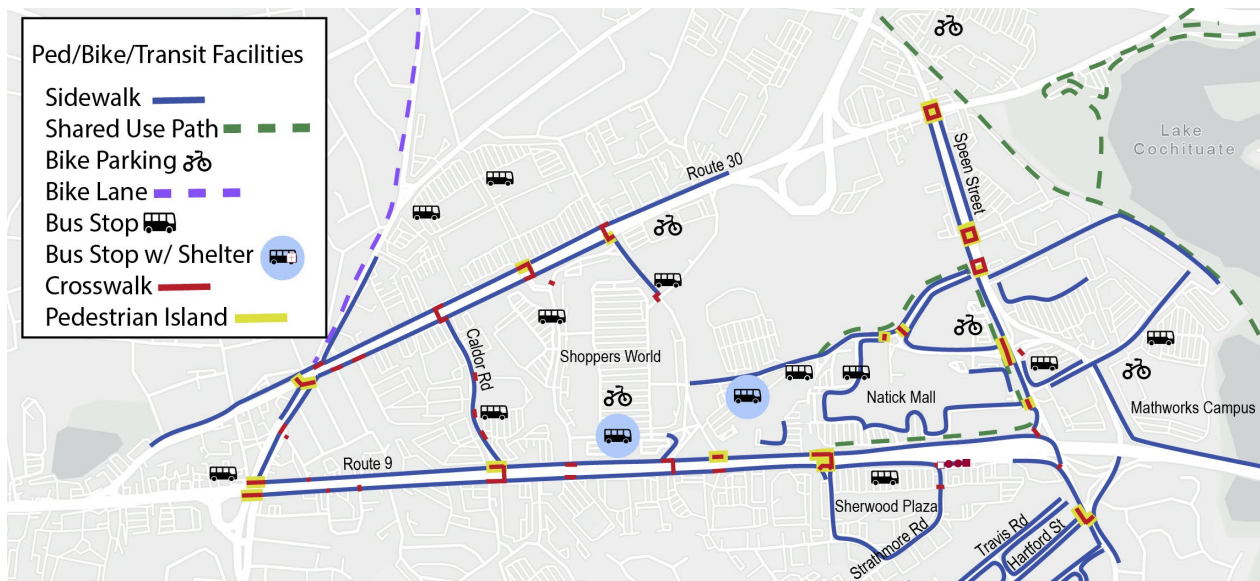
Keeping in mind that over the next five to ten years, commercial and residential development is expected to rise substantially within and around this economic hub, it is critical to address accessibility and connectivity challenges for the residents, retailers, companies, employees, and commuters in the study areas.



The Framingham & Natick – Route 9 and Speen Street Bicycle and Pedestrian Access Planning Study Team worked together to collect key vehicular and multimodal data from publicly available sources along with site visits to understand the existing network within the Golden Triangle. As a part of the study, the team, along with key stakeholders, identified existing connectivity challenges for their community, which greatly informed the final recommendations. Through this effort, the team created a dynamic animation to illustrate the findings and proposed recommendations for the Golden Triangle community.

Understanding Existing Conditions

A network of sidewalks, crosswalks, shared use paths, and pedestrian facilities exist within the study area, however, there are multiple areas where sidewalks are disconnected, crosswalks are missing, conditions of the sidewalks are poor, safe buffers are lacking along high trafficked roadways, and pedestrian signals do not properly function. This creates a general feeling of a lack of safety as a pedestrian or cyclist and encourages visitors to use their vehicle or transit in the study area.



The study team collected existing multimodal assets and vehicular patterns and operations on major Golden Triangle corridors such as Route 9 and Route 30. All information collected during this site visit included sidewalks, transit stop infrastructure, bicycle facilities, crosswalks, pedestrian islands, and pedestrian signals. They were evaluated based on observed safety/comfort, modes served, and asset conditions.

What Did We Hear from Stakeholders?

The study team worked with representatives from the MassDOT District 3 Office, the Town of Natick, and the City of Framingham through a series of monthly meetings during the project. Key takeaways from the stakeholder engagement process included:

- Pedestrian accessibility is critical along major roadways within the Golden Triangle, including Route 30, Route 9, Spenn Street, Superior Drive, and Shopper's World Drive.
- Proposed improvements should connect to existing assets (Cochituate Rail Trail (CRT), Natick Mall Shared Use Path, etc.)
- Vehicular congestion is a concern, especially during peak hours on major roadways such as Route 9, Route 30, and Spenn Street.
- North-south connections for multimodal users are lacking.
- Getting from your origin to destination for a multimodal user is difficult and unclear.

Highlighting Key Multimodal Findings

Existing Multimodal Assets Need to be Upgraded to Connect the Gaps

- Multimodal assets within the western area of the Golden Triangle require significant upgrades/rehabilitation
- Key paths connected to Natick Mall's internal network need to be improved
- There is potential to improve the connectivity between Strathmore Road/Sherwood Plaza through minor improvements
- Multimodal facilities within the Beetleback roadway configuration are difficult to access



Route 9/Shoppers World Drive Intersection, missing pedestrian signals and accessibility infrastructure



Sidewalk and Crosswalk along Caldor Rd

Walking, Biking, or Taking Transit in the Golden Triangle is Uncomfortable

- Most of Route 30 is uncomfortable for those who bike, walk, or take transit
- Shoppers World Drive is a critical north-south connector that does not prioritize bike/pedestrian movements
- Route 9, particularly around the Beetleback and Shoppers World Drive, is unsafe for pedestrians and bicyclists
- Most north/south roadways are uncomfortable for non-vehicular movements



Walmart bus stop on Caldor Road missing a shelter and accessibility infrastructure



Narrow & unprotected sidewalk along Route 30

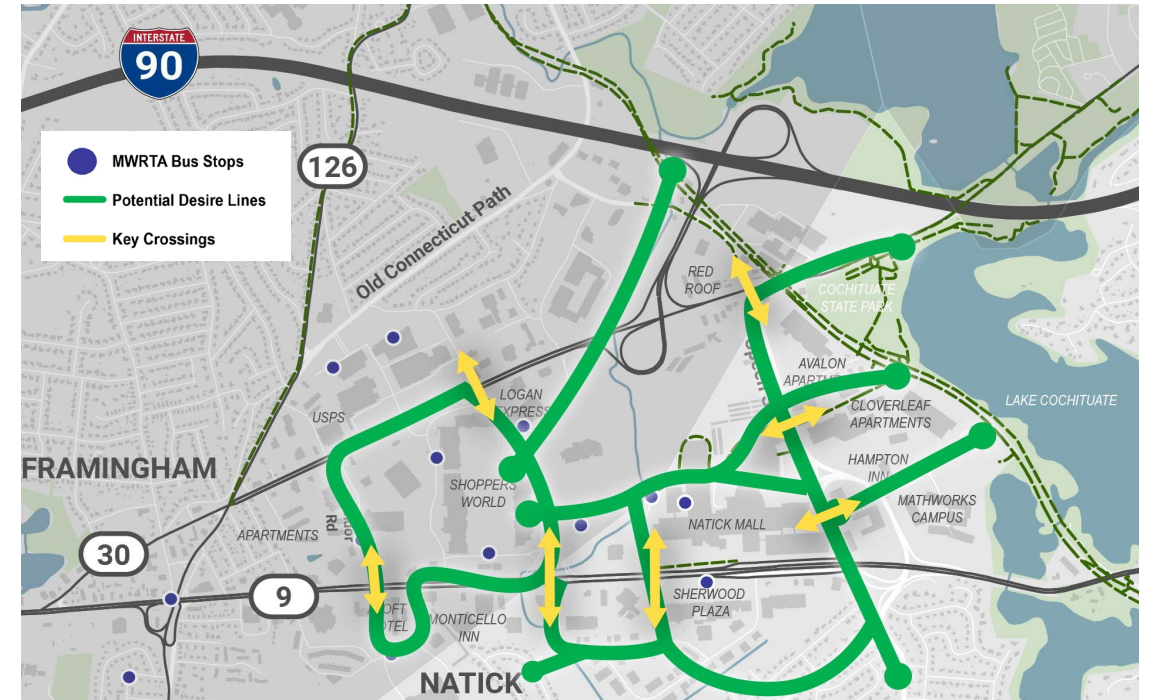
Establishing a Framework for the Recommendations

The Challenges



Prior to identifying key desire lines and future connections, it is important to understand specific segments and areas within the Golden Triangle that are uncomfortable for those who walk and bike, as well as identify the missing links in the multimodal network. The areas of concern highlighted in the map above were identified by the study area and stakeholder teams and illustrate the locations in the study area where pedestrians and cyclists currently undergo a negative or unsafe experience while traveling.

The Opportunities



The desire lines and key crossings are areas where if refined to safely accommodate pedestrian and bicycle travel, multimodal connectivity within the Golden Triangle would significantly improve. Prominent desire lines and crossings within the study area include the Cochituate Rail Trail (CRT) to Shoppers World and Logan Express, the CRT to Speen Street and the Natick Mall, and Sherwood Plaza across Route 9 to the Natick Mall. Currently, most connections do not safely or comfortably accommodate pedestrian or bicycle travel.

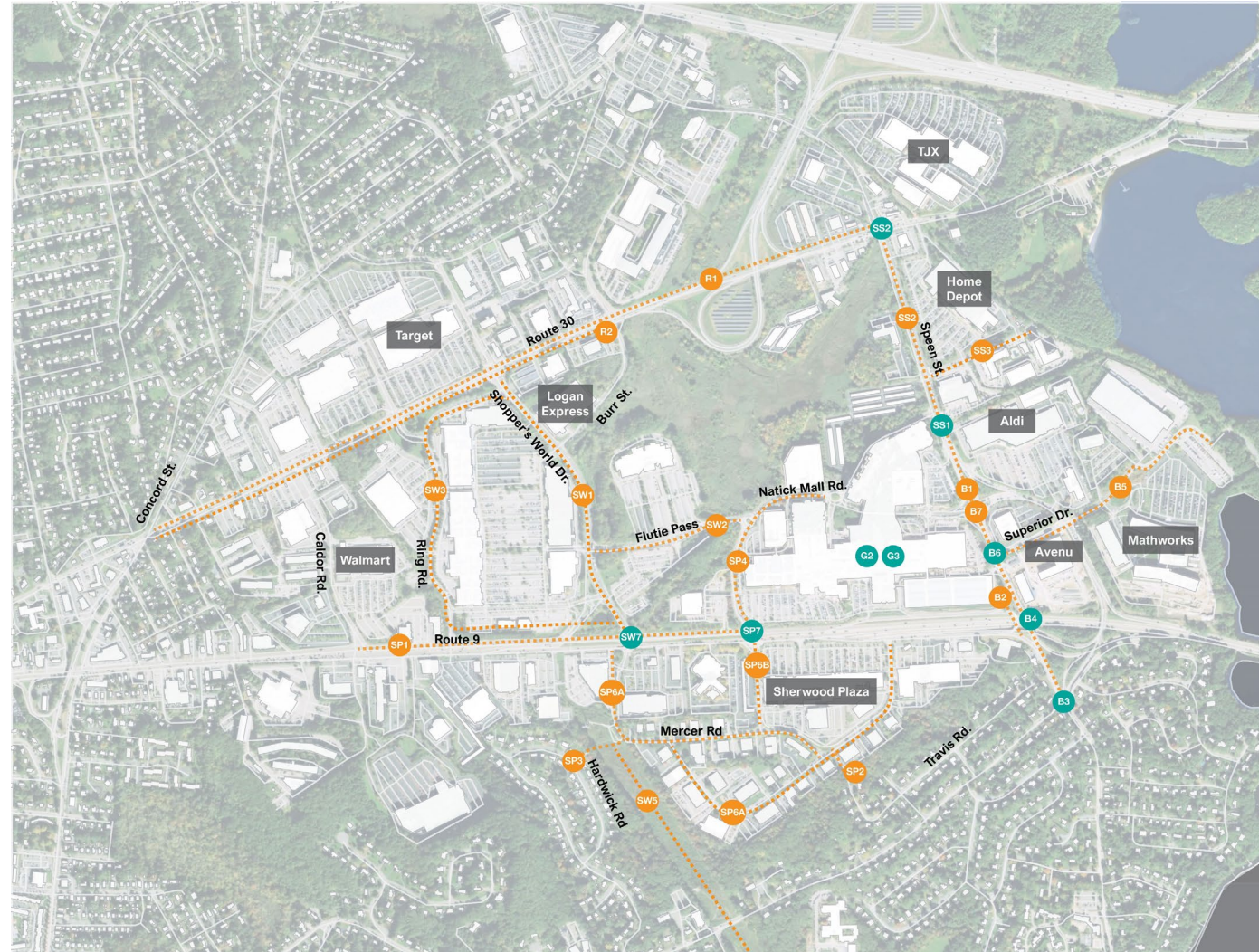
Creating the Recommendations

This study provides the Town of Natick and City of Framingham with information on the key multimodal obstacles and implementable improvements that can significantly improve the experience for those who walk, bike, or take transit within the study area.

The study proposes recommendations that prioritize accessible and safe pedestrian and bicycle facilities and infrastructure, with the ultimate goal of creating a connected and cohesive multimodal network within the Golden Triangle.

To develop a comprehensive list of varying improvements in strategic locations, the study team identified four types of recommendations, incorporating the study goals into the recommendation framework:

- Intersection Accessibility and Safety
- Multimodal Roadway Safety
- Right-of-Way (ROW) Transformation
- User Experience



The Recommendations: Intersection Accessibility and Safety



The study proposes recommendations across the Golden Triangle that address critical infrastructural gaps at key intersections, including Route 30 and Speen Street, the Natick Mall, and Hartford Street, and Shoppers World Drive and Flutie Pass. These recommendations propose new accessibility infrastructure that prioritize pedestrian safety and connectivity.

Recommendation ID	Name	Cost	Implementation Timeline
B.3	Speen Street & Hartford Street Intersection Improvements	\$\$ (\$1M-\$5M)	Medium (1-3 years)
B.4	Speen Street & Route 9 Formal Intersection	\$\$ (\$1M-\$5M)	Medium (1-3 years)
B.6	Superior Drive & Speen Street Southbound Pedestrian Accessibility Improvements	\$ (<\$1M)	Short (<1 year)
G.2	Golden Triangle Pedestrian Signal Assessment	\$ (<\$1M)	Short (<1 year)
SP.7	Route 9, Dean Road, & Natick Mall Road Intersection Improvements	\$\$\$ (>\$5M)	Medium (1-3 years)
SS.1	Nouvelle Way, Speen Street, & Wonderbread Spur Connectivity Improvements	\$\$ (\$1M-\$5M)	Medium (1-3 years)
SS.2	Route 30 & Speen Street Intersection Realignment	\$\$\$ (>\$5M)	Medium (1-3 years)

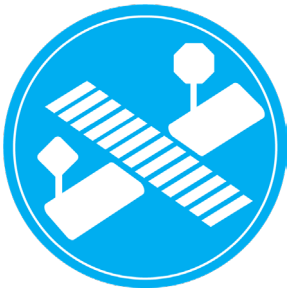
The Recommendations: Multimodal Roadway Safety



A key goal of the study includes identifying opportunities to leverage existing multimodal infrastructure and assets, such as the Cochituate Rail Trail and the Natick Mall shared use path. In tandem with this, it was important to recognize the existing gaps in the multimodal network, including creating north-south connections between Natick and Framingham's neighborhoods to the Natick Mall and other commercial destinations.

Recommendation ID	Name	Cost	Implementation Timeline
B.2	Speen Street Bridge Multimodal Improvements	\$\$\$ (>\$5M)	Long (> 3 years)
B.5	Superior Drive & Cochituate Rail Trail Connection	\$\$ (\$1M-\$5M)	Medium (1-3 years)
R.1	Sidewalk & Crosswalk Connections between Route 126 and Speen Street	\$\$\$ (>\$5M)	Long (> 3 years)
R.2	Corridor Wide Protected Multimodal Facilities between Route 126 and Burr Street	\$\$\$ (>\$5M)	Long (> 3 years)
SP.1	Corridor wide Protected Multimodal Facilities from Caldor Road to Natick Mall Road	\$\$\$ (>\$5M)	Long (> 3 years)
SP.4	Natick Mall Road Sidewalk Connections	\$\$ (\$1M-\$5M)	Medium (1-3 years)
SP.5	Power Line Shared Use Path	\$\$\$ (>\$5M)	Long (> 3 years)

The Recommendations: Roadway Transformation



Most roadways in the study area prioritize vehicular travel, leaving little space for those who walk, bike, and take transit. Through the “Roadway Transformation” recommendations, key roadways including Speen Street and Superior Drive will have the opportunity to reallocate portions of the road to non-motorists, creating a safe, dedicated, and protected path to connect Golden Triangle neighborhoods to the commercial hubs.

Recommendation ID	Name	Cost	Implementation Timeline
B.1	Speen Street Two-Way Conversion	\$ (<\$1M)	Short (<1 year)
B.7	Superior Drive Multimodal Shared Street Conversion	\$\$\$ (>\$5M)	Medium (1-3 years)
SP.2	Travis Road Walking Path	\$\$\$ (>\$5M)	Long (> 3 years)
SP.3	Hardwick Road/Essex Road Walking Path	\$\$\$ (>\$5M)	Long (> 3 years)
SS.3	Speen Street Shared Use Path (between Route 30 & Nouvelle Way)	\$\$\$ (>\$5M)	Medium (1-3 years)
SS.4	Speen Street & Cochituate Rail Trail Connectivity	\$ (\$1M-\$5M)	Medium (1-3 years)

The Recommendations: User Experience



The study proposes a set of recommendations that will create a vision for a welcoming and inclusive environment for those who walk, bike, and take transit within and around the Golden Triangle. This improvement category encompasses a range of solutions, including establishing a wayfinding system across the Golden Triangle, developing a north-south multimodal corridor on Shoppers World Drive, and creating a calm street network at Sherwood Plaza.

Recommendation ID	Name	Cost	Implementation Timeline
G.3	Golden Triangle Wayfinding Assessment	\$ (<\$1M)	Short (<1 year)
SP.6	Mercer Road, Strathmore Road, & Dean Road Multimodal Connectivity Improvements	\$\$ (\$1M-\$5M)	Medium (1-3 years)
SW.1	Shopper's World Multimodal Network & Amenities	\$\$\$ (>\$5M)	Long (> 3 years)
SW.2	Flutie Pass Park & Ride, Mid-Block Crossing, & Sidewalk/Improvements	\$\$ (\$1M-\$5M)	Medium (1-3 years)
SW. 3	Ring Road Shared Use Path	\$\$\$ (>\$5M)	Long (> 3 years)

Understanding the Benefits and Implementation Considerations

Each recommendation was developed with the intention of providing municipal, state, and private entities with the necessary resources and details to understand key responsibilities and successfully implement. The study provides detailed information on key implementation considerations, such as levels of effort, jurisdictional details, and implementation timelines.



What existing challenges do non-motorists face in this area?



What is the implementation timeline?

Short (<1 yr), Medium (1-3 yrs), Long (>3 yrs)



What does this look like and what does it consist of?



What does this cost?*

\$ (<\$1M), \$\$ (<\$1M-\$5M), \$\$\$ (>\$5M)



Who will benefit from this recommendation?



What level of effort is required to implement this and who would be involved?



What implementation & contextual challenges exist?



The study team developed a combination of improvements that enhance the experience for all non-motorists, through a series of phased recommendations ranging from short-term, tactical urbanism-style pavement markings to long-term protected shared-use paths.

**The cost ranges reflected in this report reflect Rough Orders of Magnitude cost estimates for the large-scale, long-term recommendations as documented in the Recommendation Matrix.*