



# Complete Streets Funding Program Project Prioritization Plan DRAFT

Municipality  
MassDOT District

Needham  
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Project Details		
Rank	Project Name	Project Description
	Hillside Street / West Street Intersection Reconstruction	Remove the brick inlay area located to the west of the intersection. Construct a new, high-visibility crosswalk across West Street to the east of the intersection to improve visibility of the crosswalk and construct ADA-compliant wheelchair ramps. Construct ADA-compliant wheelchair ramps at existing crosswalks across Hillside Avenue. Install in-road warning light system, and flashing beacons, such as RRFBs at the West Street crosswalk to alert vehicles to crossing pedestrians especially when solar glare is present. Install sign warnings of expected solar glare.
	Highland Avenue / Memorial Field Access	Stripe new midblock crosswalk between the north and south access stairways to the Memorial Field with curb extensions, or bump-outs. Install solar-powered flashing beacons, such as RRFBs, at the new crosswalk to alert vehicles to crossing pedestrians. Add ADA-compliant ramps at the new crossing location. Remove on-street parking spaces to provide for proper alignment of the new crosswalk and sufficient landing area. Consider a highly-visible crosswalk treatment, such as colored and stamped pavement.



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Rank	Project Name	Project Description
	Central Avenue / Newman Elementary School Pedestrian Accommodations	<p>Reconfigure the existing sidewalk across Central Avenue at the Newman Elementary School Driveway to provide a pedestrian refuge island, to reduce pedestrian crossing widths and divert vehicles from their straight-line path to reduce vehicle speeds. Relocate the crosswalk across Central Avenue to align with the walkway to the school entrance and construct ADA-compliant wheelchair ramps. Replace illuminated pedestrian signage with flashing beacons, such as RRFBs, to better alert vehicles to crossing pedestrians.</p>
	Central Avenue Bicycle and Pedestrian Accommodations	<p>Bicycle lanes have been recently striped in the vicinity of the Sunita L. Williams Elementary School on Central Avenue. Enhance existing shoulder striping along Central Avenue to the north of the existing bicycle lanes to approximately Cedar Street and south to approximately Great Plain Avenue to include 5' wide bike lanes and gore-striped buffer areas up to 3' in width to visually narrow roadway width. Install bicycle-safe drainage grates as necessary. Refresh all existing side street crosswalks to provide new striping and ADA-compliant wheelchair ramps to promote safe routes to school for the three elementary schools located along Central Avenue.</p>



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	Great Plain Avenue at Hersey Station	Construct curb extensions, or bump outs for the existing crosswalks across Great Plain Avenue at Broad Meadow Road and Hillcrest Road. Reset or reconstruct the existing curb along the gas station frontage to better define the pedestrian storage areas and reduce the Broad Meadow Road crossing distance. Reconstruct existing sidewalk along the east side of Great Plain Avenue between Broadmeadow Road and Hillcrest Road to provide a consistent 5-foot width and ADA-compliant cross slope. Relocate the flashing beacons to the improved crosswalks across Great Plain Avenue to alert vehicles to crossing pedestrians and improve access to the Hersey MBTA rail station and Pollard Middle School. Construct ADA-compliant wheelchair ramps for the crosswalks across Broad Meadow Road, Ridgeway Avenue and Hillcrest Road.
	Dedham Avenue / Harris Avenue / Warren Street Intersection Improvements	Tighten the Harris Avenue and Warren Street corners at Dedham Avenue to shorten the pedestrian crossing distances and reduce vehicle turning speeds. Extend the existing median on Harris Avenue to create a pedestrian refuge island. Construct ADA-compliant wheelchair ramps at the reconfigured crosswalk. Install a flashing beacon, such as an RRFB, at the existing crosswalk across Dedham Avenue to the south of Harris Avenue to alert vehicles to crossing pedestrians.



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Rank	Project Name	Project Description
	Harris Avenue Pedestrian and Bicycle Accommodation - Phase 1 (Pollard Middle School)	<p>Stripe buffered bicycle lanes along both sides of Harris Avenue between Dedham Avenue and Pinewood Road. Extend existing median on Harris Avenue at Stevens Road and Pinewood Road and relocate crosswalks to provide pedestrian refuge areas, while ensuring to maintain necessary school bus access to the Pollard Middle School. Construct ADA-complaint wheelchair ramps at the modified crossing locations and consider high-visibility crosswalks. Construct ADA-compliant wheelchair ramps at the signalized intersection with Webster Street and add bicycle detection symbols. Construct ADA-compliant ramps and restripe crosswalks at all side street approaches within the project limits. Install bicycle-safe drainage grates as necessary. Replace existing bicycle route signage.</p>
	Harris Avenue Pedestrian and Bicycle Accommodation - Phase 2	<p>Construct buffered bike lanes along both sides of Harris Avenue between Pinewood Road and Great Plain Avenue. Restripe crosswalks and construct ADA-compliant wheelchair ramps at all side street approaches within the project limits. Install bicycle-safe drainage grates as necessary. Replace existing bicycle route signage.</p>



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Rank	Project Name	Project Description
	South Street Sidewalk Link	<p>Reduce eastbound travel lane width along South Street (Scenic Route) between Edgewater Drive and Dedham Avenue to construct new 5-foot sidewalk with granite curbing to close an existing network gap. Stripe new crosswalks with ADA-compliant wheelchair ramps across Edgewater Drive, the west approach of South Street and the north approach of Dedham Avenue at this signalized intersection. Add new pedestrian signal equipment, including pedestrian signals and detection. <i>An Alternative could extend new sidewalk to the east to Livingston Circle.</i></p>
	Needham High School and Webster Street Bicycle Accommodations - Phase 1	<p>Stripe new bike lanes along both sides of Webster Street between Great Plain Avenue and Rosemary Street to reduce vehicle travel lane widths and slow vehicle speeds. Construct ADA-compliant wheelchair ramps at all existing cross-street crosswalks within the project limits and at the three existing mid-block crosswalks at the Needham High School. Replace the two existing flashing pedestrian crossing signs at the High School access with flashing beacons, such as RRFBs, to improve visibility of pedestrians. Install a flashing beacon, such as an RRFB, at the crosswalk across Webster Street at May Street. Install bicycle-safe drainage grates as necessary.</p>



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Rank	Project Name	Project Description
	Webster Street Bicycle Accommodations - Phase 2	Stripe new bike lanes along both sides of Webster Street between Rosemary Street and Central Avenue to reduce vehicle travel lane widths and slow vehicle speeds. Construct ADA-compliant wheelchair ramps at all existing cross-street crosswalks within the project limits. Install bicycle-safe drainage grates as necessary.
	Central Avenue / Reservoir Street Intersection Reconstruction	Remove the existing Central Avenue eastbound channelized right turn lane onto Reservoir Street to create a landscaped area, reduce pedestrian crossing distances and minimize conflict points. Reconstruct the northeast corner of the intersection to reduce the corner radii to reduce crossing distances and slow turning vehicle speeds. Relocate existing bus stop (MBTA Bus Route 59) from the parking lot to the new landscaped area and install a bus shelter at this location. Restripe the existing crosswalks at the intersection subsequent to the roadway geometry to reduce crossing distances and provide clear and appropriate crossing locations. Add ADA-compliant wheelchair ramps.



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Rank	Project Name	Project Description
	Central Avenue / Gould Street Intersection Reconstruction	Relocate existing crosswalk across the east approach to the intersection to the east to remove the crossing from a driveway and mid-intersection location. Relocate the existing westbound MBTA Bus Route 59 bus stop to the east from the driveway access. Construct ADA-compliant wheelchair ramps at both crosswalks at this intersection. Reconstruct the existing sidewalk along the south side of Central Avenue between Gould Street and Hampton Avenue and along the north side of Central Avenue between Gould Street and 165 Central Avenue to provide curbing and improve the separation between pedestrians and vehicles.
	Greendale Avenue / Great Plain Avenue Pedestrian Accommodations and Intersection Improvements	Remove channelized right turn lanes to reduce crossing distances and eliminate additional pedestrian and vehicle conflict points. Replace the pedestrian signal heads and pedestrian detection to current ADA-compliant standards, including countdown heads and audible detection. Reconfigure existing crosswalks and extend sidewalks to provide full access to crossing areas. Construct ADA-compliant wheelchair ramps at all crosswalk locations. Revise signal timings to ensure sufficient crossing times. In conjunction with Projects #14 and #15, add bicycle detection and turn boxes. <i>An alternative would include a roundabout installation.</i>



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Rank	Project Name	Project Description
	Great Plain Avenue Bicycle Accommodations	Restripe Great Plain Avenue between Greendale Avenue and Broad Meadow Road to provide 5-foot bicycle lanes in both directions to improve multi-modal access to the Hersey MBTA Rail Station. Install bicycle-safe drain grates as necessary.
	Greendale Avenue Bicycle Accommodations	Restripe Greendale Avenue between Great Plain Avenue and Brookline Street to provide 5-foot bicycle lanes in both directions. Install bicycle- safe drainage grates as necessary. <i>An Alternative would be a shared-use path on the eas t side of Greendale Avenue, separated from the roadway for all users.</i>



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Rank	Project Name	Project Description
	Beaufort Park / Perry Park Pedestrian Accommodations	Reconstruct existing poor condition sidewalk circling Beaufort Park, to provide a consistent 5-foot width and ADA-compliant cross-slope. Reconfigure the existing pedestrian crossings at Hawthorn Avenue and Sargent Street to provide high-visibility crosswalks across Beaufort Avenue, south of Hawthorn Avenue and north of Sargent Street. Add appropriate pedestrian crossing signs and remove conflicting crosswalks. Install a flashing beacon, such as an RRFB, at the crosswalk across Beaufort Avenue at Sargent Street. Widen the shoulder along the east side of Beaufort Avenue between Hawthorn Avenue and Arden Street to provide more width to accommodate on-street parking as well as pedestrians. Add ADA-compliant wheelchair ramps where crosswalks are located.



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Rank	Project Name	Project Description
	Highland Avenue Intersections Reconstruction	<p>At Highland Avenue / Honnewell Street, reconstruct the northwest corner of the intersection to reduce pedestrian crossing distances and slow vehicular turning speeds. Add a curb extension, or bump-out on the northeast corner. Remove the existing crosswalk across Highland Avenue and replace with new crosswalks to the north and south of the intersection and add ADA-compliant wheelchair ramps. At Highland Avenue / Mark Lee Road / Avery Square, construct new curb extensions, or bump-outs, on the northeast and southeast corners to reduce pedestrian crossing distances. Consider access management on the northwest corner to define and minimize the areas of pedestrian conflict with vehicles. Realign the crosswalk across Highland Avenue to take advantage of the reduced crossing distance and provide more efficient access to the Needham Heights MBTA Rail station and add ADA-compliant wheelchair ramps.</p>



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Rank	Project Name	Project Description
	Kendrick Street Pedestrian and Bicycle Accommodation	Widen the existing sidewalk along the north side of Kendrick Street between 4th Avenue and 3rd Avenue to close a network gap between the north and south legs of the DCR Blue Herron multi-use trail. Replace the pedestrian signal equipment at the intersection of Kendrick Street / 3rd Avenue to provide ADA-compliant signal heads and audible detection. Revise signal timings to ensure sufficient crossing times.
	Rosemary Street / Nehoiden Street / Parish Road Intersection Reconstruction (Option A)	Realign Rosemary Street to remove the channelized right turn between Parish Road and Nehoiden Street to create two standard T- intersections to reduce pedestrian and vehicle conflict areas. Evaluate the stop-sign placement based upon traffic volumes and turning movements. Realign the crosswalks and provide ADA-compliant wheelchair ramps. Provide a high-visibility crosswalk across Nehoiden Street. Consider additional school bus shelter for students.



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Rank	Project Name	Project Description
	Rosemary Street / Nehoiden Street / Parish Road Intersection Reconstruction (Option B)	Realign Rosemary and Nehoiden Street at the intersection to create a new single-lane roundabout to simplify vehicular movements and more clearly define pedestrian conflict and crossing areas. Restripe/ relocate the existing crosswalks and construct ADA-compliant wheelchair ramps.
	Great Plain Avenue / North Hill Avenue Intersection Improvements	Reconstruct the North Hill Avenue corner radii to reduce pedestrian crossing distances and slow vehicular turning speeds. Relocate the crosswalk across Great Plain Avenue to the west of the intersection to extend vehicle sight lines to the crosswalk. Replace the existing flashing sign to a flashing beacon, such as an RRFB to improve visibility of crossing pedestrians and provide more efficient access to the Newman Elementary School. Add ADA-compliant wheelchair ramps to both crosswalks at the intersection.



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	Great Plain Avenue / Wilshire Park Intersection Improvements	Reconstruct the Mt Vernon Avenue approach corner radii to reduce pedestrian crossing distances, better align the intersection opposite Wilshire Park and slow vehicular turning speeds. Relocate the crosswalk across Great Plain Avenue to the west of the intersection, to Washington Avenue to extend vehicle sight lines to the crosswalk. Install a flashing beacon, such as an RRFB to improve visibility of crossing pedestrians. Add ADA-compliant wheelchair ramps to both crosswalks at the intersection.



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