

Appendix A



**Town of Framingham
Board of Selectmen**

Policy on Complete Streets

Issue date: January 6, 2015

Type of policy: New (x) Amendment ()

Effective date: January 6, 2015

Level: Department () Division () Town Wide (x)

Policy Statement

Complete Streets principles will contribute toward the safety, health, economic vitality, and quality of life in the Town of Framingham by providing accessible and efficient connections between residential, educational, commercial, recreational, civic, and retail destinations by improving multi-modal environments throughout the Town's urban, suburban, and rural neighborhoods. Complete Streets are designed and operated to provide safety and accessibility for all users of Framingham's roadways, trails, and transit systems, including pedestrian, bicyclists, transit riders, motorists, commercial vehicles, and emergency vehicles and for people of all ages and of all abilities. The use of Complete Streets has been shown to have a positive impact on public health concerns, including improvements in air quality, promotion of physical activity, and enhanced access to healthier food options.

The purpose of Framingham's Complete Streets Policy is to enhance existing, create new, and strengthen connections between all transportation modes to accommodate all users through implementation of physical elements. The Town of Framingham will formalize the plan, design, operation, and maintenance of streets so that they are safe for all users of all ages and abilities. This Policy shall direct decision-makers to consistently plan, design, and construct streets to accommodate all anticipated users including, but not limited to pedestrians, bicyclists, motorists, emergency vehicles, and freight and commercial vehicles. In short, all transportation and development projects shall incorporate a Complete Streets philosophy that expands transportation choices for all users.

References

1. Massachusetts Department of Transportation (MassDOT) Project Development & Design Guide (latest edition)
2. National Association of City Transportation Officials Urban Bikeway Design Guide (latest edition)
3. National Association of City Transportation Officials Urban Street Guide (latest edition)

4. Institute of Transportation Engineer's (ITE) Designing Walkable Urban Thoroughfares: A Context Sensitive Approach (latest edition)
5. Institute of Transportation Engineer's (ITE) Street and Highway Design Manual, (latest edition)
6. American Association of State Highway and Transportation Officials (AASHTO), A Policy on The Geometric Design of Highways and Streets (latest edition)
7. Town of Framingham Master Land Use Plan (2014)
8. Town of Framingham Open Space and Recreation Plan (2013)
9. Board of Selectmen Policy on Traffic Calming Measures (2013)
10. Town of Framingham Department of Public Works Construction Standards, (latest edition)
11. Other resources may be consulted

Special Terms

The following words and phrases, whenever used in this policy, shall have the meanings defined in this section unless the context clearly requires otherwise:

"Complete Streets" is the planning, scoping, design, implementation, operation, and maintenance of roads in order to reasonably address the safety and accessibility needs of users of all ages and abilities. Complete Streets considers the needs of motorists, pedestrians, transit users and vehicles, bicyclists, and commercial and emergency vehicles moving along and across roads, intersections, and crossings in a manner that is sensitive to the local context and recognizes that the needs vary in urban, suburban, and rural neighborhoods.

"Complete Streets Infrastructure" means physical street features that contribute to a safe, convenient, or comfortable travel experience for users, including but not limited to features such as: sidewalks; shared use paths; bicycle lanes; automobile lanes; paved shoulders; street trees and landscaping; planting strips; curbs; accessible curb ramps; bulb outs; crosswalks; refuge islands; pedestrian and traffic signals, including countdown and accessible signals; signage; street furniture; bicycle parking facilities; public transportation stops and facilities; transit priority signalization; traffic calming devices such as rotary circles, traffic bumps, and surface treatments such as paving blocks, textured asphalt, and concrete; narrow vehicle lanes; raised medians; and dedicated transit lanes. Other Complete Streets elements include: street and sidewalk lighting; sidewalks and pedestrian safety improvements such as median refuges or crosswalk improvements; bicycle accommodations including bicycle storage, bicycle routes, shared-use lanes, wide travel lanes as appropriate; boulevard landscaping; and reduction in the number of travel lanes or modification of on-street parking.

"Street" means any right of way, public or private, including arterials, connectors, alleys, ways, lanes, and roadways by any other designation, as well as bridges, tunnels, and any other portions of the transportation network.

Policy Description

The Town of Framingham Master Land Use Plan recommends the Town adopt a Complete Streets Policy. The Town believes that all surface road systems should provide safe and adequate access so that cars, trucks, transit, bicyclists, and pedestrians of all ages and abilities are safely accommodated in the transportation system to reach any destination throughout all of the Town's neighborhoods. The Town

recognizes that all projects (new, maintenance, or reconstruction) are potential opportunities to apply Complete Streets design principles. The Town will, to the maximum extent practical, design, construct, maintain, and operate all streets to provide for a comprehensive and integrated street network of facilities for people of all ages and abilities.

The Framingham Open Space and Recreation Plan sets an objective to create and complete corridors for non-motorized passage that serve as greenways and provide access to recreation facilities, place of work, school, public transportation connections, and other points of interest in town.

In order to meet the goals and objectives of the Master Land Use Plan and the Open Space and Recreation Plan and honor the Town's commitment to Complete Streets, the Town shall:

1. Recognize that Complete Streets may be achieved through single elements incorporated into a particular project or incrementally through a series of smaller improvements or maintenance activities over time.
2. Integrate Complete Streets planning into all types of projects, when practical, including new construction, reconstruction, rehabilitation, and repair or other changes of transportation facilities on streets and additional projects under Town review.
3. Incorporate Complete Streets elements into public transportation projects in order to provide appropriate accommodation for bicyclists, pedestrians, transit users and person of all abilities, while promoting safe operation for all users, in comprehensive and connected networks in a manner consistent with, and supportive of, the surrounding neighborhood.
4. Approach every newly designed transportation project as an opportunity to improve the streets and the transportation network for all users.
5. Follow the aforementioned references, which provide guidance on basic design controls and achievement of Complete Streets.

At a minimum, the following shall be considered:

- a. In urbanized areas, continuous sidewalks should be provided on both sides of a roadway, minimizing the number of pedestrian crossings required.
- b. On the streets with sidewalks on one side, the sidewalk should be provided on the side that minimizes the number of pedestrian crossings.
- c. Pedestrian requirements must be fully considered in the design of intersections, including taking into consideration the following concerns: crossings and pedestrian curb cut ramp locations; minimizing curb radius at corners; walking speed; pedestrian flow capacity; traffic control; yielding; and delays.
- d. All new and reconstructed sidewalks must be accessible to and usable by persons with disabilities in accordance with the Americans with Disabilities Act (ADA) and the Massachusetts Architectural Access Board (MAAB).
- e. Along roadway segments, greater separation of motor vehicle and non-motorized users should be considered by implementing cycle tracks, buffered or conventional bicycle lanes, bicycle boxes, shoulders, or buffered sidewalks.

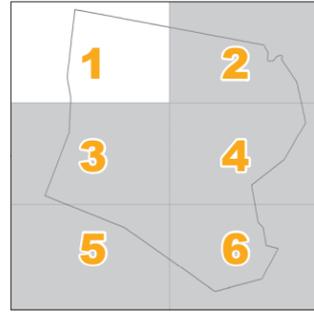
- f. Where motorized and non-motorized users cannot be separated, driver attentiveness should be improved and traffic calming should be prioritized to implement a low-speed shared street [not to exceed 30 mph or the posted speed] compatible with bicycle and pedestrian speeds on non-federal aid eligible roads.
6. Incorporate, when applicable and practical, bicycle, pedestrian, and transit facilities, in street reconstruction and rehabilitation projects, except in the following circumstances to be approved by the Town Engineer in consultation with the Department of Public Works, Highway Division.:
 - a. Facilities or areas where bicycles or pedestrians are prohibited by law from using the facility.
 - b. The cost of establishing bikeways or walkways as part of the project would be disproportionate in cost or to anticipated future use (not the current use).
 - c. The existing right of way is constrained in a manner that inhibits simple addition of transit, bicycle, or pedestrian improvements. In this case, the Town shall consider alternatives such as lane reduction, lane narrowing, on-street parking relocation or reduction, shoulders, signage, traffic calming, pavement markings, or enforcement.
 - d. Where such facilities would constitute a threat to public safety in the determination of the Town Engineer in consultation with the Department of Public Works, Highway Division.
7. Make an effort to (1) evaluate the effect of the proposed project on safe travel by all users, and (2) identify measures to mitigate any adverse impacts on such travel that are identified in all initial planning and design studies, health impact assessments, environmental reviews, and other project reviews for projects requiring funding or approval by the Town.
8. The design of new or reconstructed facilities should anticipate and support likely future demand for bicycling, walking and transit facilities.
9. A multi-disciplinary group comprised of Town staff will be organized to review Complete Streets opportunities, completed projects, and other topics regarding Complete Streets on a quarterly basis.
10. The Town, in working with community stakeholders, will produce a Bicycle and Pedestrian Plan in order to prioritize locations throughout Town for Complete Streets infrastructure.
11. Success of this policy will be evaluated by the number of new miles of Complete Streets infrastructure created. Complete Streets amenities that cannot be measured in miles, such as signs, bicycle racks, crosswalks, etc..., will be measured based on the quantity of each type of amenity.

Appendix B



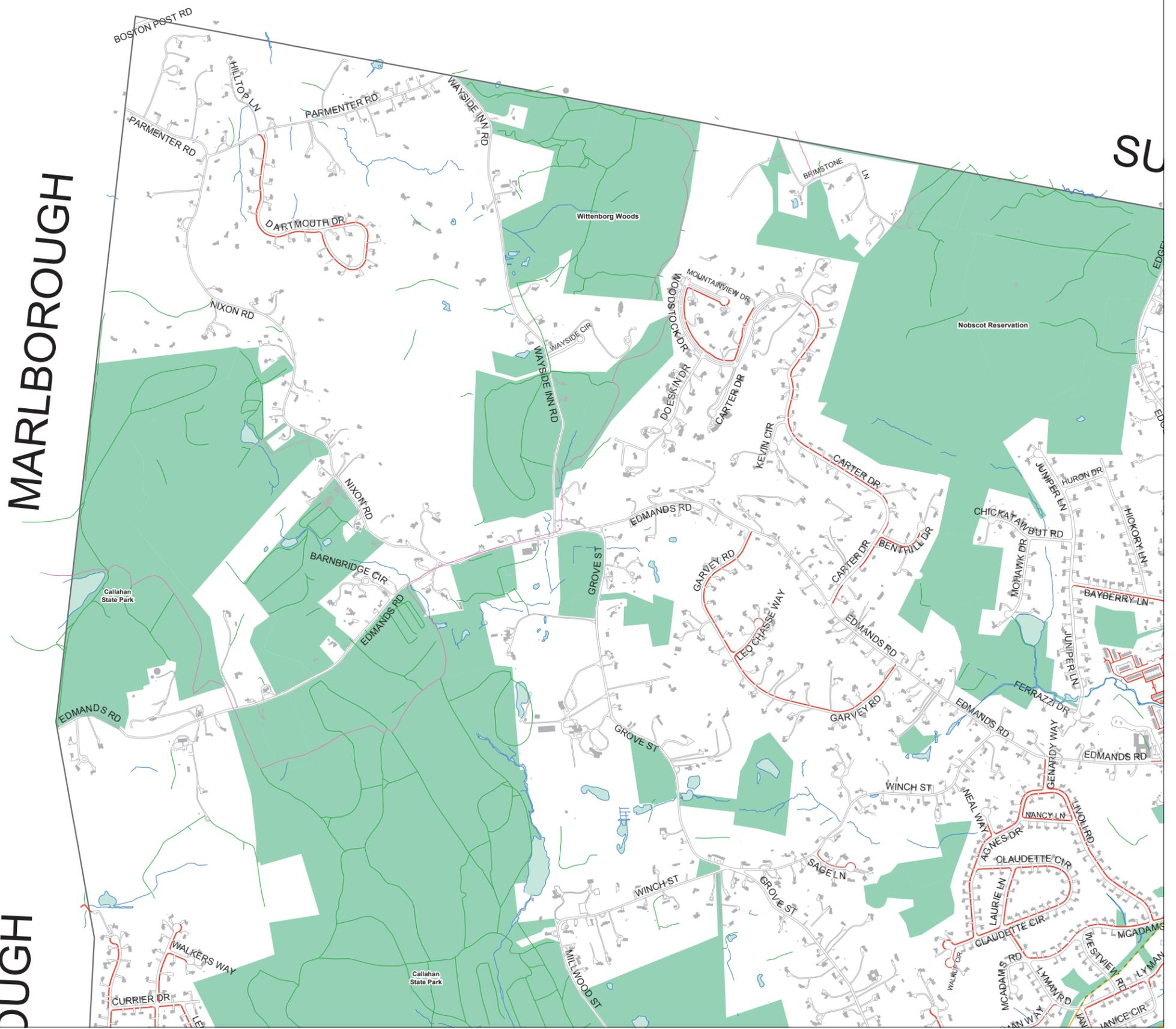
Framingham Bicycle & Pedestrian Plan 2016
Existing Conditions Mapping
Last updated February 2017

- | | |
|------------|------------------------|
| Aqueducts | Trails |
| Railroads | Other Trails |
| Bike Lanes | Bay Circuit Trail |
| Sidewalks | Carol Getchell Trail |
| Crosswalks | Cochituate Rail Trail |
| Schools | Opened Aqueduct Trails |
| Cemeteries | |
| Water Body | |
| Open Space | |



MARLBOROUGH

DUGH

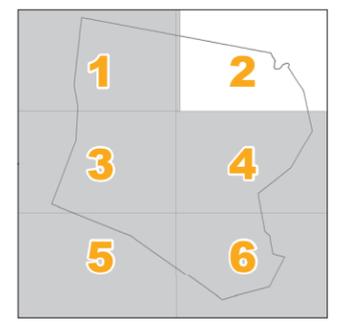


SU

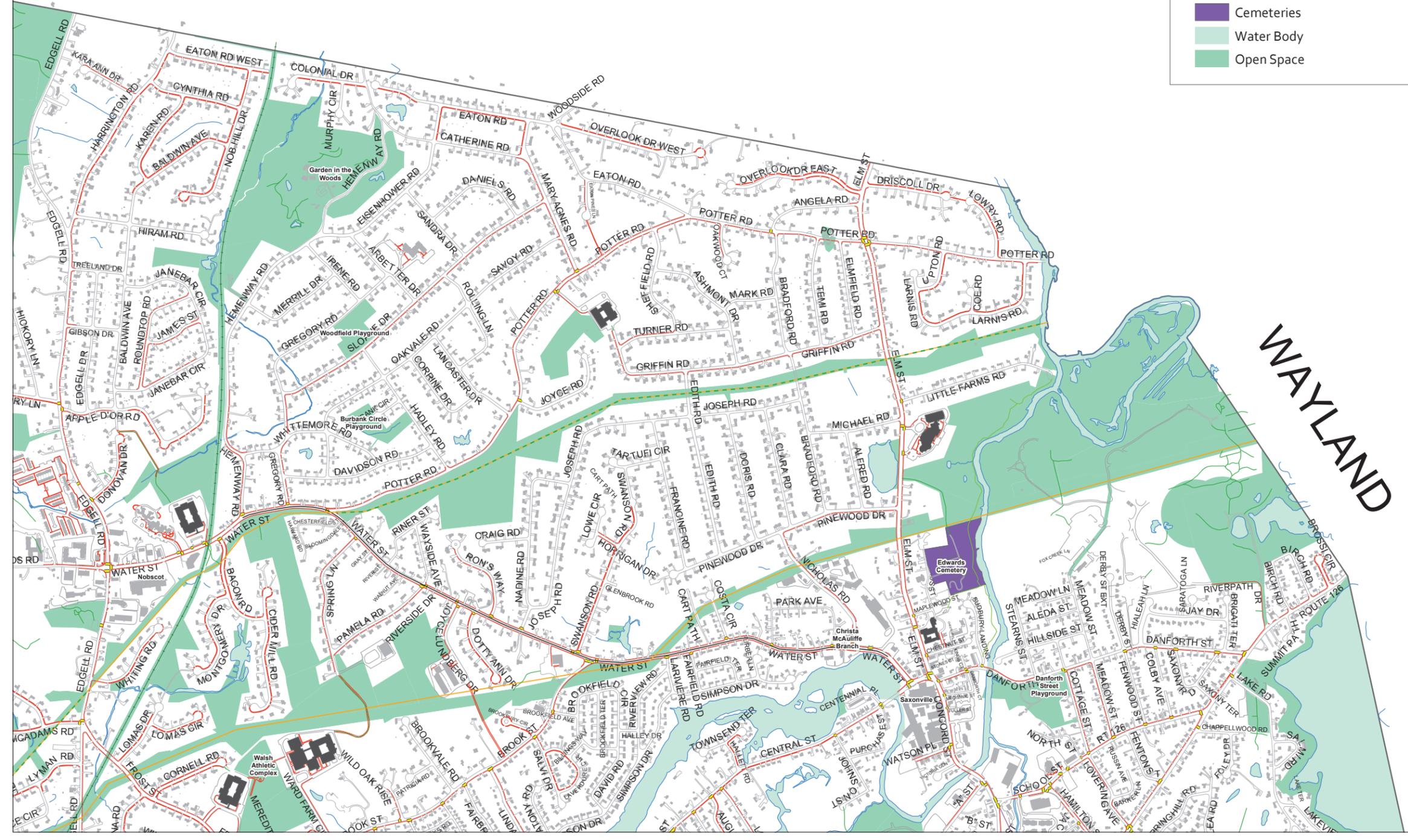


Framingham Bicycle & Pedestrian Plan 2016
 Existing Conditions Mapping
 Last updated February 2017

- | | | | |
|--|------------|--|------------------------|
| | Aqueducts | | Trails |
| | Railroads | | Other Trails |
| | Bike Lanes | | Bay Circuit Trail |
| | Sidewalks | | Carol Getchell Trail |
| | Crosswalks | | Cochituate Rail Trail |
| | Schools | | Opened Aqueduct Trails |
| | Cemeteries | | |
| | Water Body | | |
| | Open Space | | |



SUDBURY

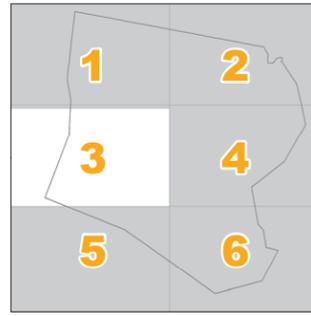


WAYLAND

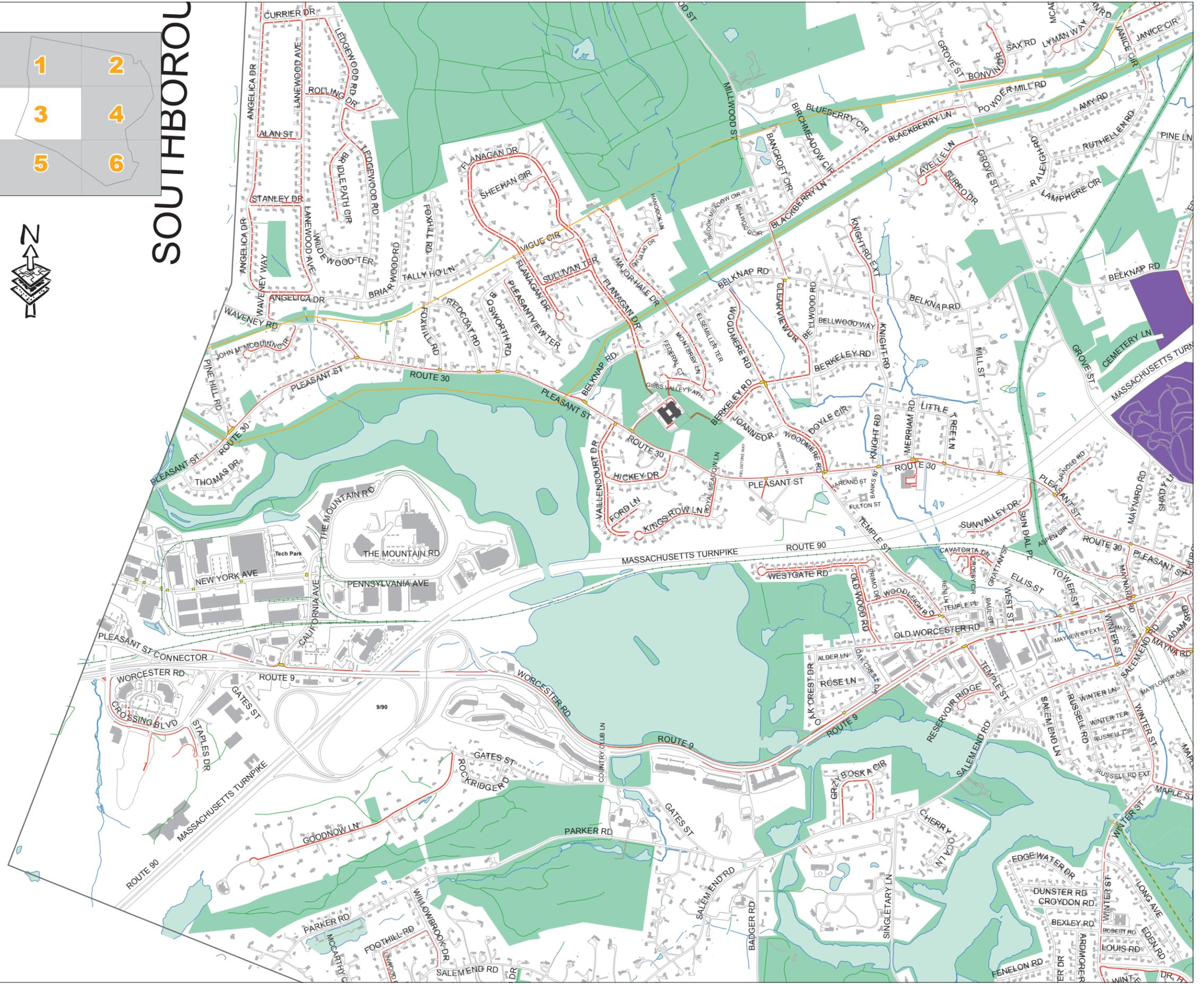


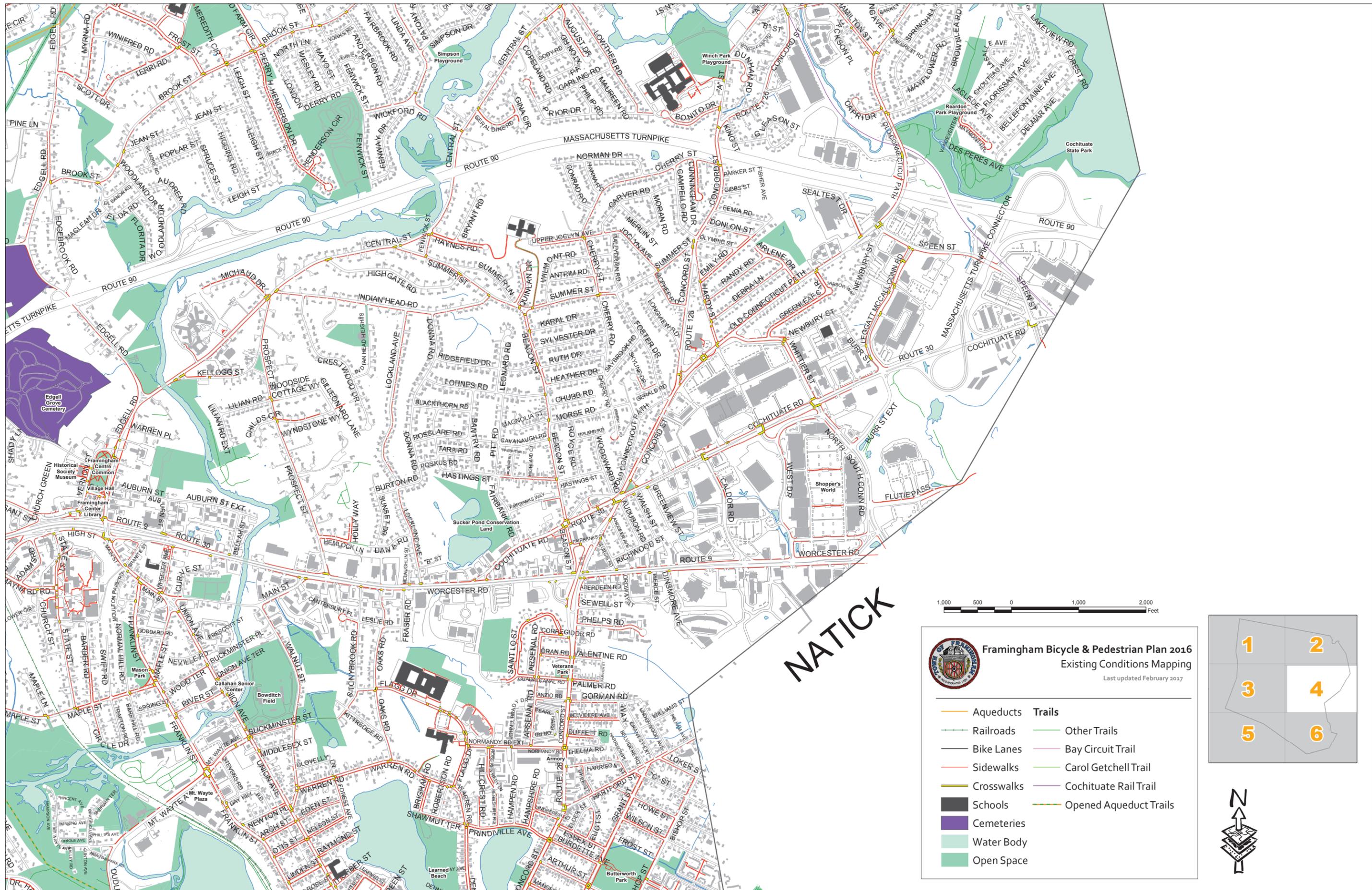
Framingham Bicycle & Pedestrian Plan 2016
Existing Conditions Mapping
Last updated February 2017

- | | |
|------------|------------------------|
| Aqueducts | Trails |
| Railroads | Other Trails |
| Bike Lanes | Bay Circuit Trail |
| Sidewalks | Carol Getchell Trail |
| Crosswalks | Cochituate Rail Trail |
| Schools | Opened Aqueduct Trails |
| Cemeteries | |
| Water Body | |
| Open Space | |



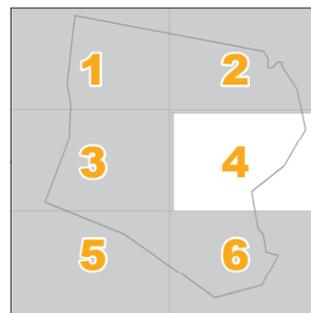
SOUTHBOROL





Framingham Bicycle & Pedestrian Plan 2016
 Existing Conditions Mapping
 Last updated February 2017

	Aqueducts		Trails
	Railroads		Other Trails
	Bike Lanes		Bay Circuit Trail
	Sidewalks		Carol Getchell Trail
	Crosswalks		Cochituate Rail Trail
	Schools		Opened Aqueduct Trails
	Cemeteries		
	Water Body		
	Open Space		





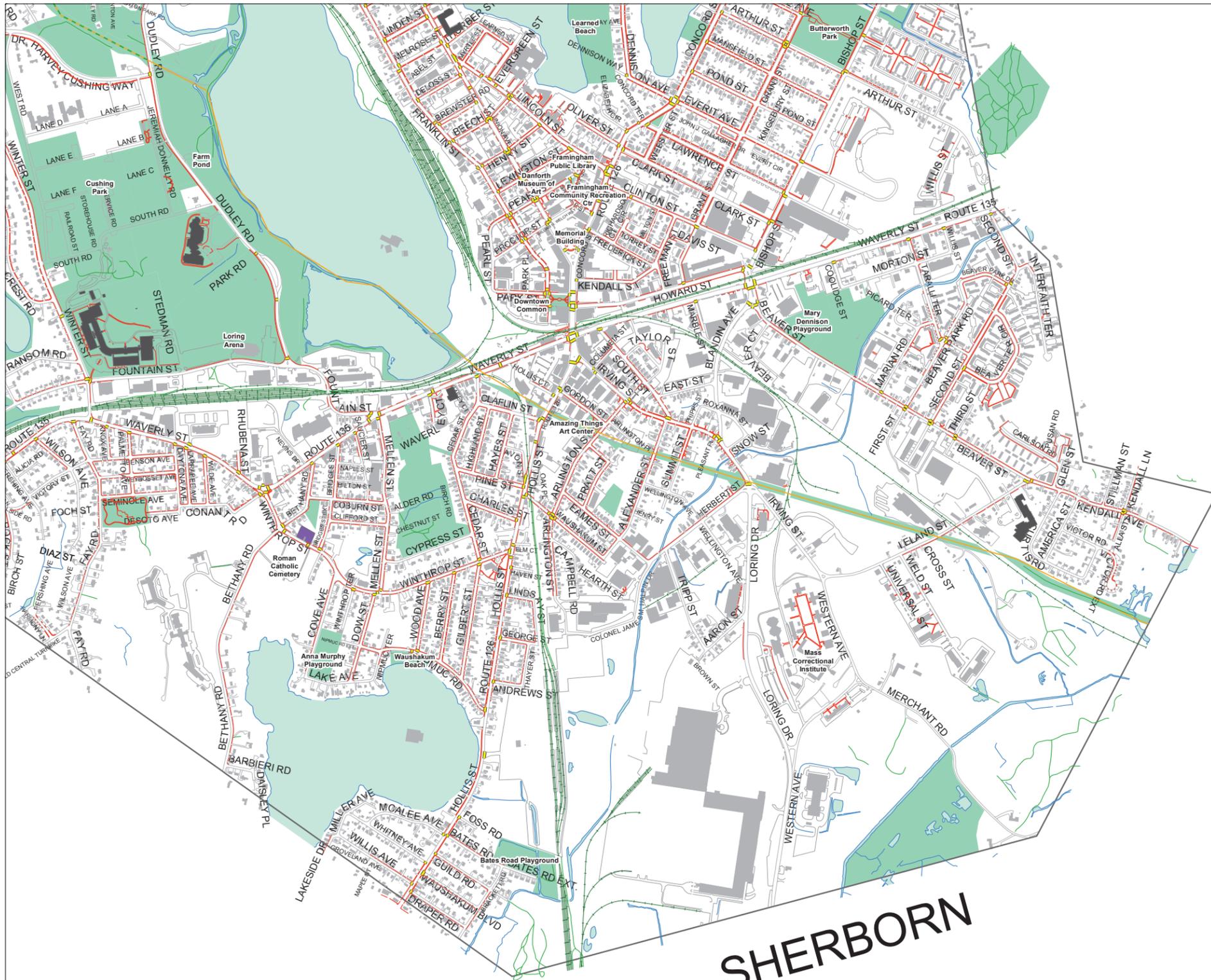
Framingham Bicycle & Pedestrian Plan 2016

Existing Conditions Mapping

Last updated February 2017

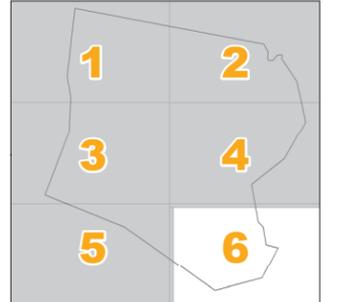
- | | |
|------------|------------------------|
| Aqueducts | Trails |
| Railroads | Other Trails |
| Bike Lanes | Bay Circuit Trail |
| Sidewalks | Carol Getchell Trail |
| Crosswalks | Cochituate Rail Trail |
| Schools | Opened Aqueduct Trails |
| Cemeteries | |
| Water Body | |
| Open Space | |





Framingham Bicycle & Pedestrian Plan 2016
Existing Conditions Mapping
Last updated February 2017

- | | |
|------------|------------------------|
| Aqueducts | Trails |
| Railroads | Other Trails |
| Bike Lanes | Bay Circuit Trail |
| Sidewalks | Carol Getchell Trail |
| Crosswalks | Cochituate Rail Trail |
| Schools | Opened Aqueduct Trails |
| Cemeteries | |
| Water Body | |
| Open Space | |



Appendix C

Bike Pedestrian Plan - Proposed Street Segment Evaluation Matrix

Street Name	From	To	Town owned?	Typology	Attributes - Existing Conditions														Right of Way Section - Existing Conditions												
					Travel Direction		Parking	Segment Length	Pedestrian Environment										ROW	Curb-to-curb	Sidewalk	Buffer	Shoulder	Parking	Travel Lanes		Parking	Shoulder	Buffer	Sidewalk	Remaining
					1-way or 2-way	Multiple Lanes? (direction)			1 side, 2 sides, or no (0)	Feet	Sidewalks - 0 / 1 / 2 sides	WB / SB Complete? (Y/N)	EB / NB Complete? (Y/N)	HC Ramps?	# of crossings (perpendicular)	Benches?	# Street Trees	Avg. dist. btw. crossings							% Curbcuts (where sidewalks present)	Width					
Beaver Street	Waverly Street	Blandin Ave	Y	Inter-city Connector	2	Y	0	248	Y	Y	Y	Y	2	N	0	187'	94-128	77-82	7	0	1-Jan	0	9 to 12	9 to 12	0	1.5	Y - Limited	6	5		
Beaver Street	Blandin Ave	Marian Road	Y	Inter-city Connector	2	N	0	1711'	2	Y	Y	Y	0	0	0	N/A	N/A	40-41	25	5 TO 6	0	1-Jan	0	12	10 TO 12	0	1.5	0	5 TO 6	2	
Beaver Street	Marian Road	Leland Street	Y	Inter-city Connector	2	N	0	1887	2	Y	Y	N	1	N	0		40	24	5.5	0	1-Jan	0	11.5	12	0	1.5	0	6	2		
Bishop Street	Waverly	Arthur	Y	Inter-city Connector	2	P 516'	N	2585	1.5	Y	HALF	2.5	9	N	18		65	38-51	5	8-8.5	0-9	0	12 TO 16	12 TO 13	0	0-8	0	5 TO 8	0		
Bishop Street	Arthur	Hartford	Y	Inter-city Connector	2	N	N	2137	1	Y	N	N	1	N	11		65-66	42-44	5	5.5-8	8 to 10	0	13	11	0	7 to 8	4.5	0	0		
Central Street	Concord St	Water St	Y	Regional Arterial	2	2 each way	0	255	2	Y	Y	Y	1	N	0	250	12.5%	60	45	6.5	0	1	0	11, 11	11, 11	0	1	0	6.5	0	
Central Street	Water St.	Purchase St.	Y	Regional Arterial	2		0	435	1	Y	Y	N	1	Y	0		13.8%	50	35	0	0	3	0	11	16	0	1.5	0	7.5	0	
Central Street	Purchase St.	Johnson St.	Y	Regional Arterial	2		0	654	2	N	Y	N	0	N	0		23.5%	41	25	5	0	1.5	0	11.5	10.5	0	1.5	0	6	0	
Central Street	Johnson St.	Wickford Rd.	Y	Regional Arterial	2		0	4087	1	N	Y	N	1	N	0		15.0%	41	25	0	0	2	0	11.5	10.5	0	2	2.5	5	6	
Central Street	Wickford Rd.	Mass. Turnpike	Y	Regional Arterial	2		0	582	1	N	Y	N/A	0	N	0	N/A	9.5%	65	40	0	0	8	0	13	15	0	2	0	6	0	
Central Street	Mass. Turnpike	Prospect St.	Y	Regional Arterial	2		0	3573	1	N	Y	N	1	N		N/A	8.7%	50	35	0	0	8	0	13	15	0	2	0	6	0	
Central Street	Prospect St.	Edgell Rd.	Y	Regional Arterial	2		0	2423	2	Y	Y	Y	0	N		N/A	7.0%	50	35	6	0	2.5	0	14	15	0	2.5	0	6	0	
Cochituate Road	Speen St.	Shoppers World Dr.	Y	Regional Arterial	2	2 each way	0	2300	1	N	N	Y	2	N	0	1150	96	70	5	0	2	0	11	11	0	2	0	0	0	0	
Cochituate Road	Shoppers World Dr.	Concord St.	Y	Regional Arterial	2	2 each way	0	3200	2	Y	Y	Y	3	N	0	1070	112	72	6	0	2	0	12	12	0	3	0	6	0		
Cochituate Road	Concord St	Rt. 9	Y	Regional Arterial	2	2 each way	1	2300	2	Y	Y	Y	4	N	0	575	58	45	5	0	10	0	12	12	0	10	0	5	0		
Concord Street	Waverly St.	Union Ave.	N	Regional Arterial	2	2 each way	2	830	2	Y	Y	Y	5		208	82	62	9	0	0	7	0	13, 11	11, 13	7	0	0	11 to 12	0		
Concord Street	Union Ave.	Clark St.	N	Regional Arterial	2		2	1045	2	Y	Y	Y	4		348	~60	~40	9	0	0	7.5	0	13	13	7.5	0	0	9.5	0		

Bike Pedestrian Plan - Proposed Street Segment Evaluation Matrix

Street Name	Decision Criteria														Intervention Types (Y/N)					Recommendation (e.g. Bicycle lanes, shared lanes, two-way path, sidewalk extension)	Right of Way Section - Recommended (note: Parking and/or Buffer may be on either side of bike path)														
	Arterial (Y/N)	Widening				Road Diet / Traffic Calming				Other Prioritization Criteria						Restriping	Signage	Reconstruction	Easement-Reconst.		Taking-Reconst.	Sidewalk	Parking	Buffer or shoulder	Bike path	Buffer	Parking	Travel Lanes		Parking	Buffer	Bike Path	Buffer or shoulder	Parking	Sidewalk
		ROW width	within existing ROW?	Easement possible?	Taking Required?	Reduce # of auto lanes?	Reduce auto lane width?	Remove parking lane?	Curb extensions?	Are improvements planned? (DPW)	Is located in an EJ area?	# Accidents - last 5 years	Key destinations within 1/4 mi	LCW Public Workshop? (CED)	Alternative Route Possible?													WB / SB Width	WB / SB Width						
Beaver Street	Y	94-128	N	N	Y	N	N	N/A	Y*	Y				N	Y	Y	N	N	N		Install sharrows and bicycle box for turning, bicycle signages, consider working with landowners to consolidate curb cuts, consider re-timing lights to have them talk with each other, often get through one light to sit at the next which causes congestion and back up --- Center islands has been installed, crosswalks exist for all roadway crossing. Still very difficult intersection for pedestrians, bicyclist, and motorist.	6	0	1	0	3	0	11	11	0	1	0	3	0	6
Beaver Street	Y	40-41	Y	Y	N	N	Y	N/A	Y					N	Y	Y	N	N	N		Reduce auto lane to 11, install crosswalks, dedicated bicycle lanes, bicycle signage, install street trees, install bulbouts at Mary Dennison Parking lot curb cuts with crosswalks, install bicycle racks and park benches near Mary Dennison or within proximity of Bus Stops	5	0	1	4	1	0	11	11	0	1	4	1	0	6
Beaver Street	Y	40	Y	Y	Y	N	Y	N/A	N					N	Y	Y	Y	Y	Y		Roughly two of the crossings that run across streets that intersect with Beaver Street have handicap ramps. Would suggest reconstructing the crossings, repainting the crosswalk, install bicycle lane and signage due to the close proximity of the school and a large housing complex. Consider installing bulb outs and increasing the pedestrian crossings	5	0	1	4	0	0	11	11	0	1	4	1	0	5
Bishop Street	Y	65	N	N	N	N	Y	N/A	Y	No				N	Y	Y	Y	Y	N	N	restripe to include bicycle lanes in two directions - reconstruct the sidewalk and install missing sidewalks on both sides of the roadway, provide a planted buffer - install pedestrian scale lighting - install bulb outs at all intersections	6	0	4	5	2.5	0	11	11	0	2.5	5	4	0	6
Bishop Street	Y	65	N	N	N	N	Y	N/A	Y	No				N	Y	Y	Y	Y	N	N	restripe to include bicycle lanes - narrow drive aisles - decrease shoulder - upgrade all crosswalks to be handicap accessible - ped and bicycle signage	5	0	4	5	2.5	0	11	11	0	2.5	5	4	0	5
Central Street	Y	60	N	N	Y			N/A						N	Y		Y				Shorten crossing; remove island; curb extensions; benches; sharrows; bike boxes; add crossings at Water St. and Concord St. Automatic ped. signals. Street trees.	6.5	0	0	0	0	0	11, 11	11, 11	0	0	0	0	0	6.5
Central Street	Y	50	N		Y		Y	N/A	Y					N	Y	Y	Y	Y	N	N	Shorten crossing by up to 10 ft. by removing center island; install curb extension on northwest corner at Water; sharrows; bike box. Ensure automatic ped signals.	6	0	2.5	0	0	0	15	15	0	0	0	2.5	0	6
Central Street	Y	41	N		N	N	N	N/A	N					N	Y	Y	Y				Add ped. crossing at W side of Purchase intersection. Extend sidewalks and add buffers. Sharrows and "share the road" signs.	6	0	1.5	0	0	0	11	11	0	0	0	1.5	0	6
Central Street	Y	41	Y			N	N	N/A	Y					N		Y	Y				Sharrows and "share the road" signage. Add sidewalk buffer between Wickford and Paxton. Curb extensions (CE) at Copeland 100-ft crossing. Add crossing at Hallett Rd. CE at Wickford.	0	0	2	0	0	0	11	11	0	0	0	2	0	6
Central Street	Y	65	Y		N	N	Y	N/A	N					N	Y		N	N	N		Reduce auto lane widths and stripe shoulder bike lanes	0	0	8	5	0	0	12	12	0	0	5	0	0	6
Central Street	Y	50	N		N	N	Y	N/A	Y					N	Y		N	N	N		Narrow traffic lanes and stripe bike lanes. Add perp. crossing at Simpson Park. Shorten parallel crossings with CEs or islands where possible. Add HCP ramps. Pave island at Summer St.	0	0	0	5	0	0	12	12	0	0	5	0	0	6
Central Street	Y	50	N		N	N	Y	N/A	Y					N	Y		N	N	N		Narrow traffic lanes and stripe bike lanes. Add perp. crossings at Edgell Rd. and Michaud Dr. Shorten parallel crossings with CEs or islands where possible. Add HCP ramps where missing.	6	0	0	5	0	0	12	12	0	0	5	0	0	6
Cochituate Road	Y	96	N	N	N	N	N	N/A	N					N	Y	Y	Y	N	N		Provide appropriately buffered painted bike lanes by narrowing vehicle travel lanes. Bike lanes will be dropped and "sharrows" will be used at intersections where additional dedicated turn lanes are required by traffic or the road narrows. Install 5' concrete sidewalk on EB side of road and improve sidewalk on WB side. Crosswalks are long and spaced very far, recommend exploring improvements.	5	0	0	6	1	0	11	11	0	1	6	0	0	5
Cochituate Road	Y	112	N	N	N	N	N	N/A	N					N	Y	Y	N	N	N		Provide appropriately buffered painted bike lanes by narrowing vehicle travel lanes. Bike lanes will be dropped and "sharrows" will be used at intersections where additional dedicated turn lanes are required by traffic or the road narrows. Crosswalks are very long, recommend installing refuge islands.	5	0	0	6	1	0	11	11	0	1	6	0	0	5
Cochituate Road	Y	58	N	N	N	N	N	N/A	N					N	Y	Y	N	N	N		Provide appropriately buffered painted bike lanes by narrowing vehicle travel lanes. Bike lanes will be dropped and "sharrows" will be used at intersections where additional dedicated turn lanes are required by traffic or the road narrows. Existing sidewalk on EB side conflicts with many wide driveways and crosswalks are long and spaced far apart west of Beacon St. Recommend exploring improvements.	5	0	0	6	1	0	11	11	0	1	6	0	0	5
Concord Street	Y	82	N	N	N	N	N	N	Y					N	Y	Y	N	N	N		Reconstruction in progress. Potential improvements include bike amenities, calibrating crossing signals, common improvements, etc.														
Concord Street	Y	60	N			N	N	N	Y					N	Y	Y	N	N	N		Reconstruction in progress. Potential improvements include bike amenities, calibrating crossings. 2-way protected bike track from the North should terminate at Lincoln, getting people at least as far as the library.														

Bike Pedestrian Plan - Proposed Street Segment Evaluation Matrix

Street Name	From	To	Town owned?	Typology	Attributes - Existing Conditions														Right of Way Section - Existing Conditions												
					Travel Direction	Parking	Segment Length	Pedestrian Environment											ROW	Curb-to-curb	Sidewalk	Buffer	Shoulder	Parking	Travel Lanes		Parking	Shoulder	Buffer	Sidewalk	Remaining
								1-way or 2-way	Multiple Lanes? (direction)	1 side, 2 sides, or no (0)	Feet	Sidewalks - 0 / 1 / 2 sides	WB / SB Complete? (Y/N)	EB / NB Complete? (Y/N)	HC Ramps?	# of crossings (perpendicular)	Benches?	# Street Trees							Avg. dist. btw. crossings	% Curbside (where sidewalks present)					
Concord Street	Clark St.	Hartford St.	N	Regional Arterial	2	Turn lane at Hartford, Dennison	2	2768	2	Y	Y	Y	4		11	923	66	40	5 TO 6	5 to 6	0	8	12	12	8	0	5 to 6	5 to 6	2		
Concord Street	Hartford St.	Valentine Rd.	N	Regional Arterial	2	Turn lanes	0	2264	2	Y	Y	Y	4	N	0	755	60	42	8	0	2 to 5	0	10 to 11, turn lane in center	10 to 11, turn lane in center	0	3 to 5	2	6	0		
Concord Street	Valentine Rd.	Cochituate Rd.	N	Regional Arterial	2	1-2 each	0	2434	2	Y	Y	Y	1	N		N/A	Varying	40-52	5	0	2	0	12, 12	12, 12	0	2	0	5	0		
Concord Street	Cochituate Rd.	School St.	N	Regional Arterial	2	Some turn lanes	0	7935	2	N	N	N	4			1134	50	34	5 to 6	0	1 to 4	0	12 to 13	12 to 13	0	1 to 4	0	5 to 6	varies		
Concord Street	School St.	Central St.	Y	Regional Arterial	2	Some turn lanes	0	1820	2	Y	Y	Y	4			260	50	34	6 TO 8	0	0	8	11	11	0	4	0	6 TO 8			
Dudley Road	Mount Wayte Ave	Fountain St.	Y	Inter-city Connector	2		0	4600	1	N	Y	Y	3	N	0	1535	50	30	0	0	2	0	11	11	0	2	0	5	0		
Edgell Road	Worcester Rd.	Auburn St.	Y	Regional Arterial	2	2 SB, 1 NB	0	500	2	Y	Y	Y	2	0	0	443	15%	60	40	6	0	2.5	0	10, 10	15	0	2.5	0	6	0	
Edgell Road	Auburn St.	Central St.	Y	Regional Arterial	2		0	1400	2	Y	Y	Y	2	1	48	700	50	32	0	13	5	0	11	11	0	5	5	0	0		
Edgell Road	Central St.	Brook St.	Y	Regional Arterial	2		0	3800	1	Y	N	N	0	0	N/A		40	26	6	0	1	0	12.5	12	0	1	0	0	7.5		
Edgell Road	Brook St.	Pine Ln.	Y	Regional Arterial	2		0	825	2	Y	Y	N	0	0	N/A		40	26	6	0	1	0	12.5	12	0	1	0	7	0.5		
Edgell Road	Pine Ln.	Lyman Rd.	Y	Regional Arterial	2		0	2230	1	N	Y	N	0	0	N/A		40	26	0	0	1.5	0	12	12	0	1.5	0	6	8		
Edgell Road	Lyman Rd.	Whiting Rd.	Y	Regional Arterial	2		0	1020	2	Y	Y	N	0	0	N/A		40	26	6	0	1.5	0	12	12.5	0	1.5	0	6	0.5		
Edgell Road	Whiting Rd.	Water St.	Y	Regional Arterial	2	2 turning lanes NB at Water	0	1320	1	N	Y	Y	2	0	N/A	28%	40	26	0	0	1.5	0	12	12	0	2	0	6	6.5		
Edgell Road	Water St.	Donovan St.	Y	Regional Arterial	2	2 turning lanes SB at Water	0	840	2	N	Y	Y	1	0	N/A	630	18%	50	30	5	8	2	0	13.5	13.5	0	2	0	6	0	
Edgell Road	Donovan St.	Harrington Rd.	Y	Regional Arterial	2		0	3225	1	N	Y	N	2	0	N/A	977	47	30	0	0	2	0	13	13	0	2	0	6	10		
Edgell Road	Harrington Rd.	Town Line	Y	Regional Arterial	2		0	0	N	N	N	0	0	N/A	N/A	N/A	50	25	0	0	1.5	0	12	12	0	1.5	0	0	25		

Bike Pedestrian Plan - Proposed Street Segment Evaluation Matrix

Street Name	Decision Criteria														Intervention Types (Y/N)					Recommendation (e.g. Bicycle lanes, shared lanes, two-way path, sidewalk extension)	Right of Way Section - Recommended (note: Parking and/or Buffer may be on either side of bike path)														
	Arterial (Y/N)	Widening				Road Diet / Traffic Calming				Other Prioritization Criteria						Restriping	Signage	Reconstruction	Easement-Reconst.		Taking-Reconst.	Sidewalk	Parking	Buffer or shoulder	Bike path	Buffer	Parking	Travel Lanes		Parking	Buffer	Bike Path	Buffer or shoulder	Parking	Sidewalk
		ROW width	within existing ROW?	Easement possible?	Taking Required?	Reduce # of auto lanes?	Reduce auto lane width?	Remove parking lane?	Curb extensions?	Are improvements planned? (DPW)	Is located in an EJ area?	# Accidents - last 5 years	Key destinations within 1/4 mi	LCW Public Workshop? (CED)	Alternative Route Possible?							WB / SB Width	WB / SB Width	WB / SB Width	WB / SB Width	WB / SB Width	WB / SB Width	WB / SB Width	WB / SB Width	EB / NB Width	EB / NB Width	EB / NB Width			
Concord Street	Y	66	Y	N	Y	Y	Y	Y	No		3	9	15		Y - Grant	Y	Y	N	N	N	Replace parking on one side with a 2-way bike track, buffered by curbing or bollards. Could test with paint and cheap materials before performing expensive reconstruction. Green paint at intersections. Signage. Add perpendicular pedestrian crossings at Clark, Lawrence, Pond, Mansfield, Arthur, Essex. Calibrate signals to reduce ped. wait at Hartford.	5	0	5	8	2	0	11	11	7.5	0	0	5	0	5
Concord Street	Y	60	N	N	Y	Y	N/A	N	No		2	5			N						Calm SB traffic coming over Rte. 9 by narrowing lane width, and adding gateway signage identifying residential neighborhood. Consider 2-way buffered bike path on NB side. Evaluate possible additional ped crossings, e.g. at Valentine. Evaluate need for turning lanes and consider removal. At minimum, paint shoulder lanes with share the road signage.	6	0	2	0	0	0	12	12	0	2	8	2	0	6
Concord Street	Y	Varying		N	Y	Y	N/A	N	No		2	5			N	Y	Y				On overpass, reduce lane width to 12' from 14. Buffered shoulder lanes, or continue two-way bike path on NB side. Between Fairbanks and Cochituate, consider reducing to 3 lanes to accommodate bikes. Possible sharrows, traffic calming a priority.														
Concord Street	Y	50	Y	N	N	Y	N/A	Y	Road improvements scheduled north of Rt. 9 in 2018		1	2				Y	Y				Stripe 5-foot shoulder lanes. Add buffer where width permits. Sidewalk on 1 side sufficient. Green paint at dangerous intersections. More frequent pedestrian crossings. 11-foot lanes can help slow traffic and reduce need for enhanced crossings.	5	0	2	5	2	0	11	11	0	2	5	0	0	0
Concord Street	Y	50	N		N	Y	N/A	Y	Road improvements scheduled north of Rt. 9 in 2019		1	5				Y	Y	Y			Sharrows and shared use signage. Narrow lane width to 11 ft to slow traffic. Parking lane on SB side adjacent to Saxonville Mill. Additional ped crossings near Mill, especially on south side of Central intersection. Curb extensions around parking lane.	6 to 8	8	0	0	0	0	11	11	0	0	0	4	0	6 to 8
Dudley Road	Y	50	N	N	N	N	N/A	N	Water main replacement scheduled for 2020-2021							N	Y	Y	N	N	Existing road is too narrow to safely accommodate painted bike lanes, recommend installing a separated shared use path on NB side of road that can safely allow 2 way pedestrian and bicycle traffic. Investigate need for SB turning lane. Tighten turning radius at Rte. 9 WB on ramp to shorten crossings. Ensure pedestrians have automatic signal. Sharrows. Street trees. Possible benches. Widen sidewalks and add planted buffers. 25mph through congested area. Bike boxes at signal. Pedestrian-scale lighting. Bike boxes at signal.	5	0	3	0	0	0	11	11	0	0	15	0	0	0
Edgell Road	Y	60	N	N	Y	N	N/A	Y	Water, sewer, and roadway improvements scheduled to occur from 2018-2021	N		8			N	Y	Y	N	N	N	Investigate reconfiguration of Central intersection, removing islands, with 3-way stop? Possible addition of bike path in large buffer zone on NB side (outside of ROW). Restripe for protected bike lane on SB side. Add ped crossing just south of Central intersection. Ped-scale lighting so drivers can see people crossing. Concrete sidewalk with buffer strip on 1 side. Crossing N of Central intersection. Reduce turning radii at Belknap, and add crosswalk, HCP ramps. Share the road signage.	8	0	4	0	0	0	10,10	12	0	0	0	4	0	10
Edgell Road	Y	50	N		N	N	N/A	N	Water, sewer, and roadway improvements scheduled to occur from 2018-2021	N		10			Y	Y	Y	Y	N	N	Investigate reconfiguration of Central intersection, removing islands, with 3-way stop? Possible addition of bike path in large buffer zone on NB side (outside of ROW). Restripe for protected bike lane on SB side. Add ped crossing just south of Central intersection. Ped-scale lighting so drivers can see people crossing. Concrete sidewalk with buffer strip on 1 side. Crossing N of Central intersection. Reduce turning radii at Belknap, and add crosswalk, HCP ramps. Share the road signage.	0	0	0	4	2	0	11	11	0	0	0	4	0	0
Edgell Road	Y	40			N	Y	N/A	Y	Water, sewer, and roadway improvements scheduled to occur from 2018-2021	N		6			Y	Y	Y	Y			Concrete sidewalk with buffer strip on 1 side. Crossing N of Central intersection. Reduce turning radii at Belknap, and add crosswalk, HCP ramps. Share the road signage.	8	0	1.5	0	0	0	11	11	0	0	0	1.5	0	0
Edgell Road	Y	40	N		N	Y	N/A	N	Water, sewer, and roadway improvements scheduled to occur from 2018-2021	N		1			Y	Y	Y	Y			Add crossing at Brook St (N side of intersection). Add crossing at south side of Pine Ln. intersection (sidewalk on W side ends). Consolidate sidewalks on one side with buffer. Share the road signage.	8	0	1.5	0	0	0	11	11	0	0	0	1.5	0	6
Edgell Road	Y	40	N		N	Y	N/A	N	Water, sewer, and roadway improvements scheduled to occur from 2018-2021	N		1			Y	Y	Y	Y			Parallel crossings at Lyman Rd. and Scott Dr. Add buffer strip to sidewalk on NB side. Share the road signage. Wayfinding signage for Bruce Freeman and Aqueduct trails when complete.	0	0	1.5	0	0	0	11	11	0	0	0	1.5	0	8
Edgell Road	Y	40	N		N	Y	N/A	N	Water, sewer, and roadway improvements scheduled to occur from 2018-2021	N		2			Y	Y	Y	Y			Perpendicular crossing at S side of Frost intersection. Widen at least one sidewalk to add buffer strip. Share the road signage.	6	0	1.5	0	0	0	11	11	0	0	0	1.5	0	8
Edgell Road	Y	40	Y		N	Y	N/A	Y	Water, sewer, and roadway improvements scheduled to occur from 2018-2021	N		5			Y	Y	Y	Y			Reduce turning radius at SW corner of Water/Edgell intersection, to shorten crossing. To enhance village feel, sidewalk should be added on SB side with buffer strip. Sharrows. Reduce curb cut widths where possible to improve pedestrian continuity. Concrete sidewalks.	7.5	0	1.5	0	0	0	11	11	0	0	0	1.5	0	7.5
Edgell Road	Y	50	Y		N	Y	N/A	Y	Water, sewer, and roadway improvements scheduled to occur from 2018-2021	N		4			N	Y	N	Y			Add buffer strip to sidewalk on NB side. Reduce curbscots where possible. Add crossing at Nobscot Convenience Store where SB sidewalk terminates. Tighten turning radii at Water St.	5	0	8	0	1.5	0	12	12	0	1.5	0	0	0	8
Edgell Road	Y	50	Y		N	Y	N/A	N	Water, sewer, and roadway improvements scheduled to occur from 2018-2021	N		3			Y	Y	N	Y			Add buffer strip to sidewalk on NB side. Handicap ramps.	0	0	8	0	1.5	0	12	12	0	1.5	0	0	8	
Edgell Road	Y	50	Y	N	N	N	N/A	N	Water, sewer, and roadway improvements scheduled to occur from 2018-2021	N		1			N	N	Y	N			Share the road signage.	0	0	2	0	0	0	12	12	0	0	0	2	0	0

Bike Pedestrian Plan - Proposed Street Segment Evaluation Matrix

Street Name	From	To	Town owned?	Typology	Attributes - Existing Conditions													Right of Way Section - Existing Conditions												
					Travel Direction	Parking	Segment Length	Pedestrian Environment										ROW	Curb-to-curb	Sidewalk	Buffer	Shoulder	Parking	Travel Lanes		Parking	Shoulder	Buffer	Sidewalk	Remaining
								1-way or 2-way	Multiple Lanes? (direction)	1 side, 2 sides, or no (0)	Feet	Sidewalks - 0 / 1 / 2 sides	WB / SB Complete? (Y/N)	EB / NB Complete? (Y/N)	HC Ramps?	# of crossings (perpendicular)	Benches?							# Street Trees	Avg. dist. btw. crossings					
Edmunds Road	Southborough	Genardy Way	Y	Regional Arterial	2		0	13730	0	N	N	N/A	N/A	N/A	N/A	35	20	0	0	0	0	10	10	0	0	0	0	0	15	
Edmunds Road	Genardy Way	Edgell Rd.	Y	Regional Arterial	2		0	2000	2	N	N	Y	N/A	N/A	N/A	35	20	6	0	0	0	10	10	0	0	0	6	3		
Elm Street	Central Street	Michael Rd.	Y	Regional Arterial	2		0	3100	2	Y	Y	Y	3	N	0	1035	60	42	5	0	8	0 - Parking only adjacent to Stapleton	13	13	0 - Parking only adjacent to Stapleton	8	0	5	0	
Elm Street	Michael Rd.	Potter Rd.	Y	Regional Arterial	2		0	2200	2	Y	Y	Y	3	N	0	735	55	42	5	0	8	0 - Parking only adjacent to Stapleton	13	13	0 - Parking only adjacent to Stapleton	8	0	5	0	
Fountain Street	Waverly St.	Dudley St.	Y	Inter-city Connector	2		0	1300	2	Y	Y	Y	1	N	0	N/A	50	30	5	0	2	0	11	11	0	2	0	5	0	
Fountain Street	Dudley St.	Winter St.	Y	Inter-city Connector	2		0	2270	0	N	N	N	1	N	0	N/A	50	30	0	0	1	0	14	14	0	1	0	0	0	
Fountain Street	Winter St.	Cutler Dr.	Y	Inter-city Connector	2		0	2720	0	Y	Y	Y	1	N	0	N/A	50	26	0	0	0	0	13	13	0	0	0	0	0	
Grove Street				Regional Arterial	2	N	0	15,600	0			N	1	N	100+	N/A	0%	28-40	22	0	7	0	0	11	11	0	0	7	0	
Irving Street	Leland St.	Loring Dr.	Y	Regional Arterial	2		0	1200	0	N	N	N	0	N	0	N/A	50	30	0	0	0	0	15	15	0	0	0	0	0	
Irving Street	Loring Dr.	Summit St.	Y	Regional Arterial	2		0	950	2	Y	Y	Y	0	N	0	N/A	50	40	5	0	0	0	20	20	0	0	0	5	0	
Irving Street	Summit St.	Hollis St.	Y	Regional Arterial	2		0	950	2	Y	Y	Y	0	N	0	N/A	50	30	5	0	0	0	11	11	8	0	0	5	0	
Merchant Road				Regional Arterial	2		0	2847	0	N	N	N	0	N/A	N/A	N/A	40	20	0	0	0	0	10	10	0	0	0	0	20	
Mt. Wayte Avenue	Union Ave.	Franklin St	Y	Inter-city Connector	2		0	820	2	Y	Y	Y	2	N	0	410	66	43	5	0	0	0	22	22	0	0	0	5	0	
Mt. Wayte Avenue	Franklin St	Dudley St.	Y	Inter-city Connector	2		0	1700	1	Y	Y	Y	2	N	0	850	66	43	5	0	0	0	22	22	0	0	0	0	0	
Old Connecticut Path	Wayland Town Line	Lovering Ave/Pinecrest Rd	Y	Regional Arterial	2	N	N	3992	1	Y	N	N	1	N	7		52-63	32-35	4.5-6.5	0-10	3-5.5	0	13	10.5	0	5	0	0	36-50.5	
Old Connecticut Path	Lovering Ave/Pinecrest Rd	Mass. Turnpike	Y	Regional Arterial	2	N	N	2525	2	Y	Y	Y	3	N	N		55-60	36-38	3.5-6	2	4.5 TO 7	0	11 TO 13	12 TO 18	0	6	2 TO 3	4 TO 6	45-61	
Old Connecticut Path	Mass. Turnpike	Concord Street	Y	Regional Arterial	2	N	N	4409	1.5	Y	N	Y	7	N	Y		51-67	35-40	4.5-6.5	0	1.5-5	0	12	13	0	6-6.5	0	0	37-43	
Old Connecticut Path	Concord St	Worcester Road	Y	Regional Arterial	2	N	N	3262	0	Y	N	N	0	N	0	N/A	30-37	20	0	0	0	0	10	10	0	0	0	0	0	
Pleasant Street	Vernon Street	Southboro Town Line	Portions	Regional Arterial	2	N	N	16,218	1	Y*	N	Y*	21	N	100+	100 (97CC)	37-52	25-27	6.5	N	1.5	0	11-12*	11-12*	N	1.5*	N	N		

Bike Pedestrian Plan - Proposed Street Segment Evaluation Matrix

Street Name	From	To	Town owned?	Typology	Attributes - Existing Conditions													Right of Way Section - Existing Conditions													
					Travel Direction		Parking	Segment Length	Pedestrian Environment										ROW	Curb-to-curb	Sidewalk	Buffer	Shoulder	Parking	Travel Lanes		Parking	Shoulder	Buffer	Sidewalk	Remaining
					1-way or 2-way	Multiple Lanes? (direction)			1 side, 2 sides, or no (0)	Feet	Sidewalks - 0 / 1 / 2 sides	WB / SB Complete? (Y/N)	EB / NB Complete? (Y/N)	HC Ramps?	# of crossings (perpendicular)	Benches?	# Street Trees	Avg. dist. btw. crossings							% Curbside (where sidewalks present)	Width					
Pleasant Street	Vernon Street	Church Green	Y	Historic Center	2	N	2 PLOT	548	1.5	Y	N	Y	2	N	10	330	100	INTO RT 9	25-28	3-4.5	N	1.5-2.5	**60	11.5	10.5	**9	1.5-2.5	N	N		
School Street	Concord St.	Hamilton St.	Y	Regional Arterial	2		0	675	2	Y	N	Y	3	2	0	338		53	27	6	0	1	0	13	13	0	1	0	6.5		
School Street	Hamilton St.	OCP	Y	Regional Arterial	2		0	2110	1	Y	N	N	4	0	0	703		50	30	6	0	1	0	14	13	0	2.5	0	0	13.5	
Speen Street				Regional Arterial	2	2 to 6 varying	0	2937	1	N	N	N	2			2937		50-90	34-75	6	0	2	0	15	15	0	2	0	6		
Union Avenue	Concord St	Beech St.	Y	Regional Arterial	2		0	1720	2	Y	Y	Y	4	0	0	430		63	44	5	0	0	7	13	13	0	0	0	5	0	
Union Avenue	Beech St.	Maple St.	Y	Regional Arterial	2		0	5650	2	Y	Y	Y	7	0	0	810		50	32	5	0	0	0	16	16	0	0	0	5	0	
Water Street	Edgell Rd.	Central St.	Y	Regional Arterial	2		0	10500	2	Y	Y	Y	9	0	0	1200		50	34	5	0	5	0	12	12	0	5	0	5	0	
Waverly Street	Ashland Townline	1067 Waverly St.	N	Regional Arterial	2		1	625	1	N	Y	N/A	0	0	0	N/A		50	35	0	0	5	0	12	12	0	5	0	6	10	
Waverly Street	1059 Waverly St.	Fountain St.	N	Regional Arterial	2	Left turn lanes at Fountain, Winthrop, Winter	0	5475	2	Y	Y	Y	7	0	0	912.5		50	35	6	0	5	0	12	12	0	5	0	6	4	
Waverly Street	Fountain St.	Concord St.	N	Regional Arterial	2	Left turn lanes at Concord, Fountain	2	2333	2	Y	Y	Y	4	0	0	777.7		55	40	6	0	0	8	12	12	8	0	0	8	1	
Waverly Street	Concord St.	Natick Townline		Regional Arterial	2	Turn lanes at Concord, Blandin/Bishop	2	4922	1	N	Y	Y	3	0	0	2461	26%	65	48	6	0	0	11	12	12	11	0	0	7		
Wayside Inn Road				Regional Arterial	2		0	5827	0	N	N	N/A	0	0	0	N/A	N/A	30	20	0	0	0	0	10	10	0	0	0	0	0	
Western Avenue	Leland St.	Herring Dr.		Regional Arterial	2		0	1110	0	N	N	N/A	N/A	0	0	N/A	N/A	40	28	0	0	0	0	14	14	0	0	0	0	0	
Western Avenue	Herring Dr.	Sherborn		Regional Arterial	2		0	1775	0	N	N	N/A	N/A	0	0	N/A	N/A	60	40	0	0	8	0	12	12	0	8	0	0	20	

Bike Pedestrian Plan - Proposed Street Segment Evaluation Matrix

Street Name	Decision Criteria														Intervention Types (Y/N)					Recommendation (e.g. Bicycle lanes, shared lanes, two-way path, sidewalk extension)	Right of Way Section - Recommended (note: Parking and/or Buffer may be on either side of bike path)													
	Arterial (Y/N)	Widening					Road Diet / Traffic Calming				Other Prioritization Criteria				Restriping	Signage	Reconstruction	Easement-Reconst.	Taking-Reconst.		Sidewalk	Parking	Buffer or shoulder	Bike path	Buffer	Parking	Travel Lanes		Parking	Buffer	Bike Path	Buffer or shoulder	Parking	Sidewalk
		ROW width	within existing ROW?	Easement possible?	Taking Required?	Reduce # of auto lanes?	Reduce auto lane width?	Remove parking lane?	Curb extensions?	Are improvements planned? (DPW)	Is located in an EJ area?	# Accidents - last 5 years	Key destinations within 1/4 mi	LCW Public Workshop? (CED)							Alternative Route Possible?	WB / SB Width	WB / SB Width	WB / SB Width	WB / SB Width	WB / SB Width	WB / SB Width	WB / SB Width	WB / SB Width	EB / NB Width	EB / NB Width	EB / NB Width	EB / NB Width	EB / NB Width
Pleasant Street			N	Y	N	N	N/A	Y	Water main improvements scheduled for 2020-2024	N		Y		Y	Y	Y	N	N	Provide bicycle lanes/sharrow, decrease parking lot to 1-way flow, decrease drive aisle in parking lot - relocated west bound entrance to parking lot to the most western bound of the parking lot, provide signage, install benches and bicycle racks	6	20+ DA if 11'	2	4	1	0	11	11	0	1	4	0	0	0	
School Street	N	53	N	N	N	Y	N/A	Y	Sewer replacement scheduled for 2018, bridge replacement scheduled for 2020	Y		4		Y	Y	Y	Y		Complete sidewalk at EB side (at Concord). Narrow crossing and remove island if possible with curb extensions. Bridge is 35 ft. wide. Narrow traffic lanes to 11 ft. on bridge, install sidewalk. CE at Hamilton St. to narrow crossing.	6	0	1	0	0	0	11	11	0	0	0	1	0	6	
School Street	N	50	Y	N	N	Y	N/A	N	Sewer replacement scheduled for 2018, bridge replacement scheduled for 2020	Y		3		Y	Y	Y	Y		Complete EB sidewalk. Add additional crossings and handicap ramps. Paint shoulder bike lanes with markings.	6	0	0	4	1.5	0	11	11	0	1.5	4	0	0	6	
Speen Street	N	50	Y		Y	Y	N/A		Sewer force main abandonment scheduled for 2016-2018, eliminate pumping station in 2020	N	0			Y - CRT	Y	Y	Y		Complete sidewalk on at least 1 side of street. Consider adding ped crossings where possible. Protected shoulder lanes or two-way bike path.	6	0		8	2	0	12	12	0	0	0	2	0	0	
Union Avenue	Y	63	N	N	N	N	N	N	Utility and roadway upgrades planned for 2016-2020					Y	Y	N	N	N	Restripe pavement to accommodate bike lanes by reducing travel lanes and shoulder widths. Reduce bike lane buffers to allow dedicated turning lanes where required at intersections. Recommend exploring improving existing crosswalks to allow for safer pedestrian crossings.	5	0	2	6	2	0	12	12	0	2	6	2	0	5	
Union Avenue	Y	50	N	N	N	N	N	N	Utility and roadway upgrades planned for 2016-2020					Y	Y	N	N	N	Restripe pavement to accommodate bike lanes by reducing travel lanes and shoulder widths. Drop bike lanes to "sharrows" at intersections that require a dedicated turning lane. Recommend exploring improving existing crosswalks to allow for safer pedestrian crossings.	5	0	0	5	0	0	11	11	0	0	5	0	0	5	
Water Street	Y	50	N	N	N	N	N	N	No					Y	Y	N	N	N	Restripe pavement to accommodate bike lanes by officially restricting parking and reducing travel lanes and turning existing shoulder into designated bike lane. Recommend exploring improving existing crosswalks to allow for safer pedestrian crossings.	5	0	0	6	0	0	11	11	0	0	6	0	0	5	
Waverly Street	Y	50	Y	N	N	N	N/A	N	Drainage improvements scheduled for 2020	Y		0		Y	Y	Y	Y		Add buffer strip to EB sidewalk. 5-ft marked bike lanes on both sides.	0	0	0	5	0	0	12	12	0	0	0	5	0	8	
Waverly Street	Y	50	N	N	N	Y	N/A	N	Drainage improvements scheduled for 2020	Y		4		N	Y	Y	N		5-ft marked bike lanes both directions, continuous markings, with sharrows at intersections with turning lanes. Add additional ped crossings approximately every 500 ft. Redesign Fountain St. intersection with bike turning. Tighten turning radii. No parking signs.	6	0	0	5	0	0	12	12	0	0	5	0	0	6	
Waverly Street	Y	55	N		N	Y	Y	Y	Drainage improvements scheduled for 2020	Y		11		N	Y	Y	N		Buffered green painted bike lanes to displace street parking. More frequent ped crossings. No parking signage. Bike lanes would end at turning lanes, replaced by sharrows. Curb extension to narrow crossing of Concord.	6	0	0	4	2	0	12	12	0	2	4	0	0	8	
Waverly Street	Y	65	Y		N	N	Y	Y	Drainage improvements scheduled for 2020	Y		11		N	Y	Y	N		Buffered green painted bike lanes to displace street parking. More frequent crossings. Potential pedestrian bridge between Bishop and Concord over rail tracks. No parking signage. Bike lanes would end at turning lanes, replaced by sharrows. Review need for turning lanes and reduce crossing width if possible.	6	0	0	4	2	0	12	12	0	2	4	0	0	7	
Wayside Inn Road	Y	30	Y	N	N	N	N/A	N	No	N	0		N	N	Y	N			Share the road signage.															
Western Avenue	Y	40	Y	N	N	Y	N/A	N	No	N	2		Y	Y	Y	Y			New sidewalk on SB side for employees or visitors to MCI who may wish to walk. Share the road signage. Reduce lane width to 11 or 12 ft.	7.5	0	1	0	0	0	12	12	0	0	0	1	0	0	
Western Avenue	Y	60	Y	N	N	Y	N/A	N	No	N	1		N	Y	Y	N			Bike/ped symbols in shoulder lanes to indicate shared. Possible buffered shared use path in future.	0	0	8	0	0	0	12	12	0	0	0	8	0	0	

Appendix D

Cemetaries

Edgell Grove Cemetery
Edwards Cemetery
Roman Catholic Cemetery

Religious Institutions

Boston Taiwanese Church
Christian Mercy Church
Church of St George
Edwards Congregational Church
First Assembly Church
First Baptist Church in Framingham
First Church of Christ Scientist
First Methodist Church - Saxonville
First Parish in Framingham
Framingham Friends Meeting
Grace Congregational Church
Greater Framingham Community Church
Hope Christian Reformed Church
Iglesia Getsemani Pentecostal
Lutheran Church of Framingham
New Jerusalem Baptist Church
Park Street Baptist Church
Plymouth Congregational Church
Seventh Day Adventist Church
Shalom Assembly
St Andrews Episcopal Church
St Bridgets Church
St Jeremiahs Church
St Stephens Church
St Tarcisius Church
St. John's of Shaghai Church
Temple Baptist Church
Village Bible Chapel
Wesley Methodist Church
B'nei Akiva
Temple Beth Am
Temple Beth Sholom

Government

First District Court -South Middles
Police Station - Main
Memorial Building
Armory
Post Office

Cultural

Amazing Things Art Center
Fountain Street Studios
Christa McAuliffe Branch
Framingham Public Library
Danforth Museum of Art
Historical Society Museum
Garden in the Woods

Commercial Centers

Grocery store/Shopping Plaza
Nobscot Plaza
Pinefield Plaza
Shopper's World Plaza
Saxonville Mill
9/90 Office Park
Tech Park Office Park
The TJX Companies

Historic

Framingham Centre Common
Village Hall

Hospital/Services

Metrowest Medical Center
Callahan Senior Center
Dennison Building

Recreation

Bowditch Field
Danforth Green - 88 acres
Loring Arena
Walsh Athletic Complex
Framingham Country Club
Millwood Farms Golf Course
Callahan State Park
Callahan State Park
Cochituate State Park
Learned Beach
Wauhakum Beach
Anna Murphy Playground
Bates Road Playground
Burbank Circle Playground
Butterworth Park
Danforth Street Playground
Downtown Common
Mary Dennison Playground
Mason Park

Recreation, continued...

Reardon Park Playground
Simpson Playground
Sucker Pond Conservation Land
Tercentennial Park
Veterans Park
Winch Park Playground
Woodfield Playground
Bay Circuit Trail
Carol Getchell Trail
Cochituate Rail Trail
Other trails
Weston Aqueduct Trail
Framingham Community Recreation Ctr
YMCA

Schools

Barbieri Elementary School
Brophy Elementary School
Cameron Middle School
Charlotte Dunning Elementary School
Framingham High School
Framingham State College
Fuller Middle School
Hemenway Elementary School
Juniper Hill/MWJDS
Keefe Technical Vocational School
Learning Center for the Deaf
Marion High School
Massachusetts Bay Community College
McAuliffe Charter School
McCarthy Elementary School
Potter Road Elementary School
Reed Academy
St. Bridget's School
St. Tarcicius School
Stapleton Elementary School
Sudbury Valley School
Summit Montessori School
Temple Beth Am School & Preschool
Walsh Middle School
Woodrow Wilson Elementary School

Transit

Railroad Station
Logan Express

Appendix E

Framingham Bicycle Pedestrian Plan - Priority Roadway Ranking Matrix

Responsibility	Weight (out of 100)	Criteria	Ranking
MI	10	Environmental Justice area	3 – Area meets all 3 EJ Criteria 2 – Area meets 2 EJ Criteria 1 – Area meets 1 EJ Criteria 0 – Area meets 0 EJ Criteria
SS	10	Population density (by Block Group)	3 – >10 people/acre 2 – 5-10 people/acre 1 – 2-5 people/acre 0 – 0-2 people/acre
AL	10	Bike/Pedestrian Accidents	3 – >5 accidents in last five years 2 – 3-5 accidents in last five years 1 – 1-2 accidents in last five years 0 – 0 accidents in last five years
MI	10	Destinations	3 – >6 destinations within ¼ mile 2 – 4-6 destinations within ¼ mile 1 – 1-3 destinations within ¼ mile 0 – 0 destinations within ¼ mile
AL	5	MAPC Prioritization Tool	3 – High utility score 2 – Medium utility score 1 – Low utility score
PB	10	Cost of recommended treatment(s)	3 – Low cost relative to likely benefits (most feasible) 2 – Moderate cost relative to likely benefits 1 – High cost relative to likely benefits (less feasible)
PB	5	DPW improvements	3 – ROW improvements anticipated 2017-2019 2 – ROW improvements anticipated 2020-2022 1 – ROW improvements anticipated >2023 0 – ROW improvements not anticipated at this time
SS	20	General Bike Conditions – Level of Stress	3 – Poor (Very unsafe for cyclists; virtually no accommodation) 2 – Fair (Cyclists are unsafe; potential conflicts high; riders often choose sidewalk) 1 – Good (Safety is good; few potential conflicts; inconveniences occur) 0 – Excellent (Safe for inexperienced cyclists & children; very few potential conflicts; cyclists are prioritized)
SS	20	General Pedestrian Conditions – Level of Stress	3 – Poor (Unsafe for pedestrians; virtually no accommodation) 2 – Fair (Accommodation provided but still unsafe; pedestrians need additional prioritization) 1 – Good (Safe for pedestrians but some inconveniences may occur) 0 – Excellent (Environment is safe and inviting for pedestrians; they are prioritized in design & conflicts are rare)

Appendix F

Street Name	From	To	Prioritization Criteria (see "Prioritization Key" tab for score instructions)									Total Score (of 100)
			# of EJ Criteria Met (0-3)	Population density (0-3)	Accidents in Last 5 yrs. (0-3)	Destinations within 1/4 mi. (0-3)	MAPC Utility Score (1-3)	Cost Relative to Benefit (1-3)	DPW Planned Project (0-3)	Bike Conditions (0-3)	Ped. Conditions (0-3)	
Waverly Street	Concord St.	Natick Townline	3	3	3	3	3	3	2	3	2	92
Union Avenue	Concord St	Beech St.	2	3	2	3	3	3	1	3	2	83
Union Avenue	Beech St.	Maple St.	2	3	2	3	3	3	1	3	2	83
Concord Street	Union Ave.	Clark St.	3	3	2	3	3	3	0	3	1	78
Concord Street	Hartford St.	Valentine Rd.	2	3	3	3	3	3	0	3	1	78
Waverly Street	1059 Waverly St.	Fountain St.	2	2	2	3	3	2	2	3	2	78
Waverly Street	Fountain St.	Concord St.	1	3	3	3	3	3	2	3	1	78
Cochituate Road	Speen St.	Shoppers World Dr.	2	1	2	2	3	1	2	3	3	75
Water Street	Edgell Rd.	Central St.	0	3	2	3	3	3	0	3	2	75
Beaver Street	Waverly Street	Blandin Ave	3	3	0	1	3	3	1	3	2	73
Concord Street	Waverly St.	Union Ave.	3	3	3	3	3	2	0	2	1	72
Concord Street	Clark St.	Hartford St.	2	3	3	3	3	3	0	2	1	72
Concord Street	Cochituate Rd.	School St.	1	2	1	3	3	2	2	3	2	72
Bishop Street	Waverly	Arthur	2	3	1	1	3	2	2	3	2	72
Concord Street	Valentine Rd.	Cochituate Rd.	1	3	1	2	3	3	0	3	2	72
Mt. Wayte Avenue	Union Ave.	Franklin St	2	3	1	1	3	2	2	3	2	72
Western Avenue	Herring Dr.	Sherborn	3	2	1	1	3	3	3	2	2	70
Dudley Road	Mount Wayte Ave	Fountain St.	2	1	1	2	3	2	2	3	2	68
Mt. Wayte Avenue	Franklin St	Dudley St.	2	3	1	1	3	3	2	3	1	68
Pleasant Street	Vernon Street	Worcester Town Line	0	2	2	3	3	1	2	3	2	68
Central Street	Concord St	Water St	1	2	0	3	3	3	3	3	1	67
Beaver Street	Blandin Ave	Marian Road	3	3	2	1	3	1	1	2	2	67
Cochituate Road	Shoppers World Dr.	Concord St.	2	1	2	2	3	1	1	3	2	67
Irving Street	Summit St.	Hollis St.	0	1	3	3	3	2	3	2	2	67
School Street	Hamilton St.	OCP	1	2	2	2	3	1	1	3	2	67
Old Connecticut Path	Mass. Turnpike	Concord Street	1	1	1	2	3	3	0	3	2	65
Beaver Street	Marian Road	Leland Street	3	3	1	1	3	1	1	2	2	63
Central Street	Wickford Rd.	Mass. Turnpike	1	2	0	0	3	3	3	3	2	63
Central Street	Prospect St.	Edgell Rd.	0	1	0	3	3	2	3	3	2	63
Fountain Street	Dudley St.	Winter St.	0	1	1	2	3	2	3	3	2	63
Concord Street	School St.	Central St.	1	2	2	3	3	2	2	2	1	62
Waverly Street	Ashland Townline	1067 Waverly St.	2	2	0	0	3	2	2	3	2	62
Central Street	Mass. Turnpike	Prospect St.	0	2	0	1	3	2	3	3	2	60
Irving Street	Leland St.	Loring Dr.	0	1	1	0	3	1	3	3	3	60
Irving Street	Loring Dr.	Summit St.	0	1	1	0	3	3	3	3	2	60
Bishop Street	Arthur	Hartford	1	3	0	1	3	2	2	2	2	58
Edgell Road	Central St.	Brook St.	0	1	1	3	3	1	0	3	2	58
Old Connecticut Path	Wayland Town Line	Lovering Ave/Pinecrest Rd	1	2	1	1	3	3	0	3	1	58
Old Connecticut Path	Lovering Ave/Pinecrest Rd	Mass. Turnpike	1	2	1	1	3	3	0	3	1	58
Speen Street			0	1		1	3	3	2	3	2	58
Fountain Street	Winter St.	Cutler Dr.	0	1	1	1	3	2	1	2	3	57
School Street	Concord St.	Hamilton St.	1	2	1	2	3	1	1	3	1	57
Central Street	Purchase St.	Johnson St.	1	2	0	2	3	1	3	2	2	57
Fountain Street	Waverly St.	Dudley St.	2	2	1	2	3	2	1	2	1	57
Edgell Road	Lyman Rd.	Whiting Rd.	0	1	1	2	3	1	0	3	2	55
Edgell Road	Whiting Rd.	Water St.	0	1	1	2	3	1	0	3	2	55
Edmands Road	Genardy Way	Edgell Rd.	0	1	1	2	3	1	0	3	2	55
Grove Street			0	1	2	3	3	1	0	2	2	55
Central Street	Johnson St.	Wickford Rd.	1	2	0	1	3	1	3	2	2	53
Cochituate Road	Concord St	Rt. 9	0	1	1	2	3	2	1	2	2	53
Central Street	Water St.	Purchase St.	1	2	0	2	3	2	3	2	1	53
Elm Street	Central Street	Michael Rd.	0	1	1	3	3	3	1	2	1	53
Edgell Road	Pine Ln.	Lyman Rd.	0	1	1	1	3	1	0	3	2	52
Edgell Road	Water St.	Donovan St.	0	1	0	2	3	1	0	3	2	52
Edgell Road	Donovan St.	Harrington Rd.	0	1	1	1	3	1	0	3	2	52
Elm Street	Michael Rd.	Potter Rd.	0	1	0	1	3	3	1	2	2	50
Edgell Road	Brook St.	Pine Ln.	0	1	0	1	3	1	0	3	2	48
Edmands Road	Southborough	Genardy Way	0	1	1	1	3	1	0	2	2	45
Edgell Road	Worcester Rd.	Auburn St.	0	1	1	3	3	1	0	2	1	45
Edgell Road	Auburn St.	Central St.	0	1	1	3	3	1	0	2	1	45
Pleasant Street	Vernon Street	Church Green	0	1	0	3	3	1	1	2	1	43
Edgell Road	Harrington Rd.	Town Line	0	1	0	1	3	1	0	2	2	42
Old Connecticut Path	Concord St	Worcester Road	0	1	1	2	3	1	0	1	1	35
Western Avenue	Leland St.	Herring Dr.	0	1	0	1	3	1	3	1	1	33
Merchant Road			0	1	0	1	3	1	0	1	1	28
Wayside Inn Road			0	0	0	1	3	1	0	1	1	25

Appendix G



MEMORANDUM

To: Robert J. Halpin
From: Erika Oliver Jerram, Deputy Director
Marianne Iarossi, Senior Planner
Re: Final Bicycle and Pedestrian Plan – comments summary
Date: June 15, 2017

Attached is an updated copy of the Recommendations from the Framingham Bicycle and Pedestrian Plan. We feel this plan represents a great step forward for Framingham's non-vehicular access. The full final report can be found at www.framinghamma.gov/bikeped. At the meeting on 6/20 we will talk through some of the changes made since our last meeting and ask that you vote to adopt this plan.

The formal draft of Framingham's first ever Bicycle and Pedestrian Plan was released on February 23, 2017. The public review comment period ran for 30 days from February 23 to March 23, 2017. During that period, C&ED staff presented the plan to the Board of Selectmen on March 21, 2017. C&ED solicited comments via the Town's Main News Page, emails to attendees of the public forums, as well as an email sent to the Community & Economic Development "Notify Me" list of over 1,000 names. The Bicycle & Pedestrian Advisory Committee (FBPAC) discussed it in a regular public meeting and submitted comments and the Planning Board was invited to comment as well.

The public comments received included grammatical changes, specific roadway recommendations/bike and pedestrian treatments, making the language stronger and more specific, and focusing on intersections and making a *complete* bicycle and pedestrian network with north to south connections and east to west connections.

We incorporated as many comments from the public, as well as from the Selectmen's meeting on March 21st as we could. Most comments were addressed and are reflected in the final Plan, however, some comments were not addressed because they were not actionable, or not actionable now but could be addressed in the next round of bicycle and pedestrian planning. All written comments received will be included in the final document as an appendix.

Specific changes to Section 10. Recommendations include:

- Action Item 3.2 was changed from "DPW walk roads once a year to identify...." to "Suggest DPW walk roads once a year to identify...."
- Action Item 3.3 was changed from "Create a snow removal policy...." to "Investigate creating a snow removal policy...."
- Action Item 4.4 was changed from "Require major employers to provide covered...." to "Encourage major employers to provide covered...."



FRAMINGHAM COMMUNITY & ECONOMIC DEVELOPMENT

150 CONCORD STREET □ MEMORIAL BUILDING □ ROOM B-2

FRAMINGHAM, MA 01702-8325

T: 508.532.5455

- Added Action Item 4.6 “Encourage Framingham officials to continue attending the MassDOT Moving Together annual conference. Refer to Section 4 of the Plan for more info.” Per a Framingham Bicycle and Pedestrian Advisory Committee comment.
- Action Item 7.3 was changed from “Manage parking to promote alternative modes of transportation through examining parking regulations changed to “...Manage parking to promote alternative modes of transportation through examining parking regulations. Consider pilot projects in key districts.
- Added Action Item 7.8 “Establish a Bicycle and Pedestrian Plan Implementation Working Group to meet on a quarterly basis to implement this Plan. Revisit and update this Plan every five years.

SAMPLE ADDITIONAL COMMENTS

A number of people commented at how pleased they were that the Town was paying attention to these issues and working towards making it easier to bike and walk in Framingham. Most of the rest of the comments could be broken down into three distinct categories:

- 1) Specific Comments on the Five Year Action Plan
- 2) Future Actionable items
- 3) General Comments and Non Actionable items

1. Specific Comments on Items in the Five Year Action Plan:

Some comments highlighted specific roadway treatments for roadways on the Five Year Action Plan. Key examples include:

- Pedestrian flashing signal at the Concord/Kendall intersection
- “High Pedestrian and Bike Activity” (or something similar) sign at Concord Street for drivers turning right onto Waverly Street

2. Key Future Actionable Items:

Other comments received were not actionable now but should be considered for future discussions. These items will be addressed in the immediate future through Plan implementation and subsequent Plan iterations. These comments include:

- Additional roadway segments need to be added to the Five Year Action Plan for bike and pedestrian implementation, such as:
 - Remaining Concord Street segments
 - School Street
 - Irving Street
 - Temple Street

Note: Not all roadways were addressed in the 2017 Five Year Action Plan due to limited Town financial resources. The aim was to highlight key arterial roadways that can be the Town’s focus in the immediate



future. Other roads mentioned in the public comments as key connections and bicycle and pedestrian routes are indeed important but were not highlighted as a five year priority based off of the prioritization process and Town professional input. See Section 8 of the Plan for more details on this.

- Additional roadway segments need to be prioritized and evaluated for roadway treatment types, such as the Union through to Edgell segment
- Usage of Eversource corridors for bicyclists and pedestrians
- Connecting the north to south roads to each other
- Biking on Edmands Road less safe than Central Street (in reference to Map M.4.3 Ranking Considerations: Qualitative Criteria – bike conditions). In future plan iterations, we can change Edmands to “poor” and Central to “fair” or keep the same.
- Establish a major public relations campaign and a comprehensive education program through the schools and other institutions. Strengthen the Heads Up initiative. Specific suggestions include:
 - Take videos inside a car at night that show that bikers and pedestrians are invisible at night when wearing dark clothes.
 - Mount public service announcements on the local cable stations concerning bike and pedestrian safety.
 - Send police men and women to the schools to educate kids much the way fire departments for generations have been educating kids about fire hazards.
 - Install more lights at places where pedestrians go at night: 1) the Centre near the stores. FSU students cross the Rt. 9 exit ramp at night and are invisible as there are no lights there. 2) SE corner of Concord St. and Hartford St, and 3) other places down town.
 - Work with civic organizations to distribute free bicycle lights and reflector armbands and shoe laces. (Google “glow in the dark safety products”)
 - Urge pedestrians to use the lights on their cell phones or carry flashlights when walking at night.

3. General Comments and Non-Actionable Items:

Finally, there were some items that were just general comments or thoughts on general policy that could not be incorporated directly into the plan. Samples of this include:

- Language in the plan should be strengthened and not suggested, such as requiring action items versus recommending action items.
- Framingham roads are not safe for bicyclists.
- Heavily consider how roadway segments connect especially at intersections. Make intersections safer with bike boxes or higher visibility bike through lanes.
- It is better to have fully marked lanes as opposed to sharrow whenever possible as this increases safety for both motorists and bicyclists.
- Follow the Dutch example for handling bicyclists in intersections:
<http://www.texasstandard.org/stories/texas-am-showcases-dutch-bike-safety-lanes/>

Marianne E. Iarossi

From: Framingham Bicycle and Pedestrian Advisory Committee <FBPAC.mail@gmail.com>
Sent: Thursday, March 23, 2017 10:22 AM
To: Marianne E. Iarossi
Subject: Comments on Draft Bicycle and Pedestrian Plan
Attachments: Comments_TB.pdf; Comments_WH.pdf; Comments_JR.pdf; ATT00001.txt

Importance: High

Dear Marianne,

Attached are comments from FBPAC members as presented at the March 21 meeting.

Overall we are quite impressed with the quality of the Plan and look forward to promoting realization of the goals.

Regards,
William Hanson

Thomas Branham's notes on the Draft Bicycle and Pedestrian Plan

Format: page,paragraph,line comment

notes: page 5 of the pdf is document page 1, using pdf numbers. also not a big fan of the Oxford comma, is much better if ONLY used where needed.

3,,, indentation too extreme and should match that on page 4

6,1,1 "mostly blank "

7,all,all General layout comment: The overly large white space, the diminutive text column widths, the right justified text and aggressive hyphenation all combine to significantly reduce the readability of the text. The use of white space is a good idea but here it is too strong and it overwhelms the text, try toning it down by reducing its width by at least 1/3. The column widths and justification cause erratic spacing and awkward visual rivers of white (see 7,1,6 to 7,1,7), and multiply the hyphenation hyperactivity (see 7,, second column). Try switching to left justify, disable automatic hyphenation (use manual when essential) and try either much wider columns or even a single column.

8,2,8 plan should not be capitalized, same goes for town, all through the document except where named

15,2,20 neigh has missing hyphen

15,3,8 workers' (commutes?)... probably better replacing "required" with "not allowing " and deleting "no longer"

15,4,1 "Economic development " instead of Economics

19,1,13 not enough commas?

E26,, appropriate place to include potential future use of Eversource corridors?

27,, odd shift to the left and resulting white space is disconcerting

29,, update chart to show CRT and Potter Road trails as active trails; also use better contrasting colors

for existing/potential versus regional trail

36,, first picture top left, also utility pole blocking part of sidewalk, a handicapped hazard

49,, "7" suggest also" and provide long term policies that are accretive to trail and sidewalk inclusion in currently disconnected areas"; suggest adding "8. Coordinate regional connectivity of trail network with neighboring communities ...By considering and helping to develop trails not just in town but beyond the utility and impact of all the trails can be greatly improved" or can modify #6 instead; suggest adding to #2 "implementation of short cross-neighborhood trail connectors to rapidly and inexpensively create large stretches of bike and pedestrian friendly quiet minor road network spans"

55,, include rail line parallel trail from train station downtown around east side of Farm Pond north to Bruce Freeman right of way; also extend southward? Rails with trails?

82,3,1 pedestrians'

82,4, header...changing text size, bolding AND underling seems like too many changes. In addition to having at least five font sizes, a couple of italicizations and a color change, the underlining just is a bridge too far...

83,, lots of wide white space top right, but text

83,2,15 bollards can be rather dangerous

84,, Text flow should at least flow back to two columns to match stylistically with the prior page

87,, should consider including outdoor mini-parks, with with both adult and children's exercise equipment , picnic tables, wilderness area observation stops, gathering areas etc.

89,, in addition to minimizing stuff, reducing impacts of above ground utility poles. In addition to the unsightliness and outage hazard utility poles provide, they tend to block sidewalks for

handicap access, prevent snow clearance and the visual cluttering and blockage can decrease safety for both vehicular and pedestrian users

90,4, at the same time consideration of the dangers that physical barriers can impact on pathway users themselves should be carefully considered

91,, Could you find a photo that has a helmet on the rider? Hate for someone to say, "well Framingham's plan showed it was OK" you might check the other photos as well

91,3, Also, trails have the potential to form shortened connections between neighborhoods where roads cannot. As the number of these connections is increased the ability of residents to find drastically shorter pedestrian and biking paths that span calmer traffic routes to their desired destinations will be exponentially improved.

92,1, racks should also be designed to allow for non standard bikes as recumbents and trikes are increasingly present

92,1, maintenance is not really addressed despite the header. Long term the town needs to address the general need for entities tasked to monitor, maintain, budget for and manage trails.

97,, to 101,, Including FBPAAC in the policy and planning stages could help benefit the town, as could including reps from neighboring communities, disability and parks and rec

These resources of information and knowledge are here, why not use them?

William Hanson's comments for Draft Bicycle and Pedestrian Plan

1. Add document automation such as WWW hyperlinks and intra-document links.
2. Change the cover page to show photographs that have pedestrians and bicyclists.
3. The photograph on page 87 shows a bicyclist riding without a helmet. This practice should be discouraged.
4. Mention the annual *Moving Together* conference and encourage continuing attendance by Framingham officials. <<http://www.movingtogetherma.org/>>
5. Mention *Bay State Bike Week* observed annually in May. <<http://baystatebikeweek.org/>>
6. MAPAC created a *Snow Removal Policy Toolkit*. <<http://www.mapc.org/resources/snow-removal-policy>>
7. Add WWW links for MassDOT publications:
Separated Bike Lane Planning & Design Guide
<<http://www.massdot.state.ma.us/highway/DoingBusinessWithUs/ManualsPublicationsForms/SeparatedBikeLanePlanningDesignGuide.aspx>>
Project Development & Design Guide
<<http://www.massdot.state.ma.us/highway/DoingBusinessWithUs/ManualsPublicationsForms/ProjectDevelopmentDesignGuide.aspx>>
8. Mention the **Massachusetts Bicycle and Pedestrian Advisory Board**. The Massachusetts Bicycle and Pedestrian Advisory Board should be used as a resource for bicycle and pedestrian policies and procedures.
From the WWW page.
“The Massachusetts Bicycle and Pedestrian Advisory Board serves in an advisory role on advancing bicycle and pedestrian transportation for MassDOT and other State Agencies. The Massachusetts Bicycle and Pedestrian Advisory Board was established by law August 10, 2004.”
Meetings are held bi-monthly either in Boston at the State Transportation Building, 10 Park Plaza, Boston or at various locations throughout the State.
<<http://www.massdot.state.ma.us/planning/Main/SustainableTransportation/HealthyTransportation/MABicycleandPedestrianAdvisoryBoard.aspx>>

Joseph Repole's comments for Draft Bicycle and Pedestrian Plan

Add the following to Recommendation 2

Connect Assets into a usable Bicycle and Pedestrian Network.

Goal:

Eliminate town wide Odd Even Parking Policy to increase usable road width for painting additional bike lanes where applicable.

Objective:

To add miles of bike lanes to Framingham roads.

Type:

Policy/Planning

Marianne E. Iarossi

From: Janet Drake <hall-drake@comcast.net>
Sent: Wednesday, March 22, 2017 10:12 AM
To: Marianne E. Iarossi
Subject: Comments on cycling safety needs

Marianne, here is my comment:

***Most unsafe aspect of my biking in Framingham has been this:
A driver turning right onto a side street, will dangerously cut off a cyclist who is riding straight
ahead and not turning right.***

Here is a suggestion used in Texas that's preventing accidents:

<http://www.texasstandard.org/stories/texas-am-showcases-dutch-bike-safety-lanes/> .

Janet Drake
66 Linda Ave
Framingham, MA 01701
508-877-5227

Marianne E. Iarossi

From: Michael Croci <michaelbcroci@gmail.com>
Sent: Wednesday, March 22, 2017 9:55 AM
To: Marianne E. Iarossi
Subject: Re: Feedback on Framingham Bicycle and Pedestrian Plan

You are very welcome :)

I was just alerted to this really great way of dealing with intersections: <http://www.texasstandard.org/stories/texas-am-showcases-dutch-bike-safety-lanes/#>

Thanks again!
Mike

On Wed, Mar 22, 2017 at 8:38 AM, Marianne E. Iarossi <mei@framinghamma.gov> wrote:

Thank you!

Marianne Iarossi, AICP

Senior Planner

Community and Economic Development

Zoning Board of Appeals

Town of Framingham

150 Concord Street, B2

Framingham, MA 01702-8325

[\(508\) 532-5455](tel:(508)532-5455)

mei@framinghamma.gov

From: Michael Croci [mailto:michaelbcroci@gmail.com]
Sent: Wednesday, March 22, 2017 7:53 AM
To: Marianne E. Iarossi
Subject: Feedback on Framingham Bicycle and Pedestrian Plan

Marianne,

I just read through the Framingham Bicycle and Pedestrian Plan and was told I could submit feedback to you.

First of all, let me say how excited I am to see this kind of plan. I grew up in Framingham and this is something that the town could really use!

Here's my thoughts.

1. It would be significantly better to have fully marked lanes as opposed to sharrows whenever possible. I find these are much safer for bikers and motorists.
2. It would be ideal if the bike lanes continued through the intersections as again this is much safer for everyone. Most accidents happen at the intersection so to be sure the lanes are clearly marked through all intersections is a must. Whatever we can do to ensure safety at intersections would be great.
3. It looks like on the map on page 71 (M.6 Action Plan (Complete Streets) Map) that there is no plan to connect the roads with bike lanes on the north side of town with those on the south side of town. Will this be part of a future plan? Ideally the roads with lanes would all be connected eventually so that it's safer and more likely for people to use.

Thanks!

Mike Croci

One Framingham - Focused on the Future

Please be advised that the Massachusetts Secretary of State considers e-mail to be a public record, and therefore subject to public access under the Massachusetts Public Records Law, M.G.L. c. 66 § 10.

Marianne E. Iarossi

From: Courtney Thraen <courtney@fdrms.org>
Sent: Monday, March 20, 2017 8:00 AM
To: Marianne E. Iarossi
Subject: Bike and Ped Feedback

Hi Marianne,

I skimmed through most of the plan and read the 5 year plan and recommendations.

I definitely recommend a pedestrian flashing signal at Concord and Kendall that faces drivers.

My other other recommendation is the problem for walkers and cyclists when people turn right on red at the Concord / Waverly intersection, even when people are walking during the pedestrian signal. I actually was honked at once while crossing even when I had the pedestrian signal. Due to congestion, it probably would not be good to have a 'No Turn on Red' sign, either. There is an elevated sign at the BU Bridge / Comm Ave intersection that says "High Pedestrian and Bike activity".

Thanks,

Courtney

--

Courtney Thraen | Executive Director | Framingham Downtown Renaissance | 75 Hollis Street:: PO Box 227
Framingham, MA 01704

[LinkedIn](#) | [Facebook](#) | [Twitter](#) | [Instagram](#) | <http://www.fdrms.org>

Marianne E. Iarossi

From: Ruth Winett <rwinett@rcn.com>
Sent: Friday, March 03, 2017 10:36 AM
To: Marianne E. Iarossi
Subject: Feedback for Bike and Pedestrian Plan and the Heads Up Initiative

Importance: High

Hello,

Recently, a car struck a pedestrian at FSU. Accidents involving pedestrians and bikers occur all too frequently in Framingham. The very professional Bike and Pedestrian Plan does not, however, explore ways to increase the safety of bike riders and pedestrians. It is very important that the Town act immediately as this winter several pedestrians have been struck, including an FSU student.

Framingham has recognized the dangers caused by distracted drivers and walkers through its aptly named Heads Up initiative. However, posting a web link is not enough. What is needed are a major PR campaign and a comprehensive education program through the schools and other institutions.

Here are some suggestions:

- Take videos inside a car at night that show that bikers and pedestrians are invisible at night when wearing dark clothes.
- Mount public service announcements on the local cable stations concerning bike and pedestrian safety.
- Send police men and women to the schools to educate kids much the way fire departments for generations have been educating kids about fire hazards
- Install more lights at places where pedestrians go at night: 1) the Centre near the stores. FSU students cross the Rt. 9 exit ramp at night and are invisible as there are no lights there. 2) SE corner of Concord St. and Hartford St, and 3) other places down town.
- Work with civic organizations to distribute free bicycle lights and reflector armbands and shoe laces. ([Google "glow in the dark safety products."](#))
- Urge pedestrians to use the lights on their cell phones or carry flashlights when walking at night.

Last month at 7 pm a cyclist without any lights crossed Rt. 9 onto Concord St. going South. He nearly collided with me as I was turning to go South on Concord Street from Rt. 9. Luckily, I looked to the left a second time and saw the cyclist. These near misses—and misses—occur all too frequently.

Please add the above initiatives to the Bike and Pedestrian Plan and add them to the Heads Up program immediately.

Ruth Winett
508-877-1938

Best regards,

Ruth Winett
508-877-1938

Marianne E. Iarossi

From: William Hanson, Framingham Bicycle and Pedestrian Advisory Committee <FBPAC-Chair@rcn.com>
Sent: Tuesday, February 28, 2017 5:41 PM
To: Erika O. Jerram; Marianne E. Iarossi
Subject: Cover of Draft Bicycle and Pedestrian Plan

Importance: High

Dear Erika and Matianne,

I am just beginning to review the draft plan but the cover immediately got my attention. The cover photo doesn't show any pedestrians nor bicyclists; only some automobiles. Perhaps you could change it to show things like the CRT, bicycle racks, crosswalks, walkers, wheelchairs, bicycles, etc. If you like I can contact some advocacy organizations to obtain suitable stock photos from non-copyrighted sources.

Regards,
Bill Hanson

--

Framingham Bicycle and Pedestrian Committee William Hanson, Chair
6 Sun Dial Place
Framingham, MA 01701-4739
(508) 628-3686 (Residence/Voicemail)
(508) 904-0446 (Mobile/Text/Voicemail)
<mailto:FBPAC-Chair@rcn.com>

Marianne E. Iarossi

From: Marie Egan <mcegan@rcn.com>
Sent: Friday, February 24, 2017 6:41 PM
To: Marianne E. Iarossi
Subject: comment on pedestrian/bike plan

- 1) A number of people have clearly spent large amount of time and effort gathering information and making plans. I am quite impressed and look forward to the improvements outlined.
- 2) P 57 implies biking on Edmands Road is safer than on Central Street. Really? I live near the red section of Central and have a friend who lives on the orange section of Edmands. I would much rather my kids ride on Central (despite the speeders). Not that you can do anything about Edmands itself given the restrictions on it.

Marie Egan

mcegan@rcn.com

Marianne E. Iarossi

From: David Gutierrez <daf3553@hotmail.com>
Sent: Wednesday, March 29, 2017 12:01 PM
To: Marianne E. Iarossi
Subject: Comment on bike plan

Hi,

I live in Natick, but I bike commute in Framingham (route 135) and 126 south of downtown very frequently. Let me be clear I DO NOT FEEL SAFE. I do not own a car, and I do not have any other option for transportation. When it snows I am force to walk on the street often, because people and businesses do not clean the sidewalks.

I am really happy Framingham is doing this, and I fully support it.

If we are serious about this then language should be strong , and not be merely suggestions (as some selectman have suggested). It is easy to say that cleaning snow on the sidewalks is not necessary when you have a car and you can drive on the plowed roads.

In order to encourage anyone to bike or walk more, we need some real changes in the way things are done. Just having suggestions will not make difference, given there is a long way to go.

David Gutierrez

Marianne E. Iarossi

From: Alexander Volfson <alex.ooforyou@gmail.com>
Sent: Friday, March 24, 2017 12:36 AM
To: Marianne E. Iarossi; William Hanson, Framingham Bicycle and Pedestrian Advisory Comm
Subject: Bike and Pedestrian Plan Comments

Hi Marianne,

I read with great pleasure the Draft Bike and Ped Plan you sent last month. As you rightfully point out, the bicycling and pedestrian network must be connected to be functional. It's funny that it even needs mention (when was the last time you had to deal with a non-connect road on a car ride?) but yes, there's no reason to spend time, effort and resources on infrastructure that's just for show; we want it to actually get used.

I was cautiously excited when I saw M.5 Roadway Prioritization Map - this has almost perfectly responded to my feedback that for infrastructure to work we need to help people get where there going and we should start with the major routes. Leaving aside Edgell Rd, the prioritization map does that fabulously.

Before diving into further detail, I would like to emphasize that where a road is highlighted (say, Water St), we don't just look at the middle of the road segment but also (and especially) look at how that segment connects to other roads at major (especially at each end) and minor intersections. A bike lane (like the sharrow-ed one on Water St) will not return nearly the dividends we would like because it end at Hemenway (!) and 500 ft before Central. Intersections are precisely the place not to skimp. That is where every dollar spent has the most return on functionality, human safety, and (because of that) actual usage. Intersections are were the most accidents happen for cyclists and motorists alike. Countless studies have found that you get more cyclists when the roads feel safe for cycling. Make them safer at intersections and we win. Let's use [bike boxes](#) (or something similar). Let's continue [lanes through the intersection](#). People will feel safe, then people will use the lanes.

Moving on to M.6 Action Plan Map. One minor comment - change the shade of green for Priority 3. I was ready to complain that the Action plan is only a shadow of M.5 but that was because I couldn't make out the Priority 3 roads. They blend in with parks too well. Dim the parks or change the color.

The major comment - Our Action Plan bears preciously little resemblance to the Prioritization Map!

Priority 1 looks OK - it seems that some existing projects bumped lower priority roads into this Action Priority.

- One MAJOR issue here - Water St is highlighted from Edgell to Central, but it is not complete from end to end. See the paragraph about the critical importance of Bike & Ped support at intersections.
- Another issue - no mention of bicycle support on Blandin & Beaver. Does it make sense to have a separate Action Plan map for Bikes & Pedestrians?

Switching to M.5

Red roads -

- Major issue: Union through to Edgell has no color. It's hard enough to get across town. The action plan has 4 major road segments in North Framingham let's make sure to connect them where we can!

- Personally, I suspect we could use Franklin instead of Union, but (as aforementioned) connections through to Edgell and down to 135 would still need to be *fully* addressed.
- Major issue: Why doesn't Union even make it onto the Action Plan? And yet, Speen St does? Union is more critical.
- 126 - Looks gorgeous in red on M.5 but is left with a MAJOR hole on the Action Plan. What's the meaning of red? What's the point of disconnected infrastructure? I know for a fact that cyclists don't want to cross 30 at 126 because of the intersection. It isn't actually that scary, but they need support to feel safe.
- Bishop - looks great

Orange roads -

- Major, Major issue: Concord St from Central to School - Add this to the Action Plan. It's a vital connector (From Saxonville, the current plan only gets folks to Nobscot and the Centre Common - what if they want to go downtown?)
- School St - also missing from the Action Plan. Not critical from my personal, commuter perspective, but think of the school children. They must live around there. Plus, 126 is all green & without School St, Saxonville is disconnected.
- Central looks good - I would simply emphasize that both ends of Central need to be thought through thoroughly. I've already commented on Saxonville, so now I'll mention that the entire Framingham Centre Common... *Complex* needs a design that doesn't simply move cars.
- 30 going west of the Centre Common - same comment as above. It's good, but the connection to other roads will really make it successful & useful
- Irving st - if this was Orange, why doesn't it make it on the Action Plan? I see how Blandin is *somewhat* of a replacement, but 126/135 is really the thick of things. Leaving this gap is somewhat glaring
- The rest looks good!

That's it :)

To summarize:

1. Great work, M.5 looks awesome except @ Centre Common. Caveat - I don't know downtown that well, there may be more needs there not included in M.5
2. Say it with me: Intersections, Intersections, Intersections
3. Comments on Action Plan not lining up with Roadway Prioritization
4. What's up with Water St?

Thanks!

Alex

Marianne E. Iarossi

From: RS <shellyis@gmail.com>
Sent: Thursday, March 23, 2017 11:23 AM
To: Marianne E. Iarossi
Subject: Comments about the Draft 2017 Framingham Bicycle and Pedestrian Plan

Dear Marianne Iarossi, AICP

Thanks for the opportunity to comment.

The main concern I have is safety, especially at intersections. I frequently drive to Brooklyn where there are a lot of cyclists and it is often a harrowing experience which I would not like to encounter in Framingham.

There are several solutions - use bike boxes, have the cyclist lanes continue into the intersection, or follow the Dutch example -

<http://www.texasstandard.org/stories/texas-am-showcases-dutch-bike-safety-lanes/> .

Another concern I have is Water st. not being included. It's a major road, and it should be included

Sincerely, Rochelle Sivan 508-3335698

Marianne E. Iarossi

From: Anne Rookey <anne.rookey@gmail.com>
Sent: Tuesday, February 28, 2017 2:01 PM
To: Marianne E. Iarossi
Subject: Comment on Framingham Draft Bicycle & Pedestrian Plan

I just read the Framingham Draft Bicycle & Pedestrian Plan, and I am so excited to see this plan go forward! It seems sensible and well thought out, and I think enacting it will greatly increase Framingham's appeal to new residents including millennials, as well as existing residents. I myself will ride my bike and leave the car in the driveway when these renovations are in place. Thank you for the committee's hard work.

Best,
Anne Rookey
37 Pond Street
Framingham, MA 01702

Marianne E. Iarossi

From: CiscoCycles <info@ciscocycles.net>
Sent: Thursday, February 23, 2017 8:37 PM
To: Marianne E. Iarossi
Subject: Re: Draft Bike and Pedestrian Plan for release

Thank you Marianne. We'll give it a good read. This is great.

Sincerely,

Francisco Cornelio
Manager and Head Mechanic
N + 1 Cyclery, LLC
57 Waverly Street
Framingham, MA 01702 USA

www.nplusonecyclery.com
508-620-6600

On Feb 23, 2017, at 1:46 PM, Marianne E. Iarossi <mei@framinghamma.gov> wrote:

Hello,

You are receiving this email because you have attended a community meeting affiliated with or have interest in the Bike and Pedestrian Plan.

The Draft 2017 Framingham Bicycle and Pedestrian Plan is now available for review and can be found on the [Bicycle and Pedestrian Planning website](#). If you have any questions or comments please send them to myself at this email address by **March 23rd**.

Please forward to anyone that may be interested in this effort and thank you for your involvement!

Marianne Iarossi, AICP
Senior Planner
Community and Economic Development
Zoning Board of Appeals

*Town of Framingham
150 Concord Street, B2
Framingham, MA 01702-8325
(508) 532-5455
mei@framinghamma.gov*

<image001.jpg>
www.chooseframingham.com
[@ChooseFram](#)

Please be advised that the Massachusetts Secretary of State considers e-mail to be a public record, and therefore subject to public access under the Massachusetts Public Records Law, M.G.L. c. 66 § 10.

Marianne E. Iarossi

From: Erika O. Jerram
Sent: Monday, June 19, 2017 4:59 PM
To: Marianne E. Iarossi
Subject: FW: Temple Street improvement suggestions -- Framingham Bicycle and Pedestrian Plan

Erika Oliver Jerram, AICP | Deputy Director
Community and Economic Development

Town of Framingham
150 Concord Street, B2
Framingham, MA 01702-8325
t: (508) 532-5455
e: ej@framinghamma.gov
w: www.framinghamma.gov
www.ChooseFramingham.com
Twitter: @ChooseFram
Facebook: Choose Framingham



From: Nadia Ullman [mailto:nadia.ullman@gmail.com]
Sent: Monday, March 20, 2017 12:22 PM
To: Erika O. Jerram <ej@framinghamma.gov>
Subject: Re: Temple Street improvement suggestions -- Framingham Bicycle and Pedestrian Plan

Hi Ms. Jerram,

A second inquiry from me today... (I wasn't sure whom exactly to contact.)

A new neighbor on our street has asked me to look into what is the process/ possibility for getting a street light installed. Currently there isn't a lamppost and there is a story behind that: when the developer was working on Reservoir Ridge (a cul-de-sac), the consensus between the initial owners was for NO light. Most of the properties have changed hands since then. (My husband and I are open for considering a lamp post depending on where it is and what it would look like.) So, the question is, if our neighbor is interested in pursuing installation of a light, what is the process and who would be the contact person? Is there some sort of a neighborhood consensus procedure required?

Best,
Nadia Ullman
Precinct 10 Town Meeting Member
6 Reservoir Ridge

On Sun, Mar 19, 2017 at 11:18 PM, Nadia Ullman <nadia.ullman@gmail.com> wrote:

Dear Ms. Jerram,

At the recent Dudley Road Bike Path Project neighborhood meeting I spoke to you about the opportunities and the need for expanding the bicycle and pedestrian mobility on Temple Street -- between Rt. 9 to the North and Salem End Rd. to the South. Adding two crosswalks, a sidewalk, and a pathway will greatly benefit the residents on Reservoir Ridge, at Water View Village Apartments and along this section of Temple Street. Please consider adding the following improvements to Temple Street as a part of the Framingham Bicycle and Pedestrian Plan:

- A pedestrian crosswalk is needed at the parking lot entry of Stop and Shop at Temple Street. Currently, pedestrians headed to the store on the existing sidewalk along the East side of Temple are at the mercy of the incoming traffic. Vehicles turning right into the Stop and Shop parking lot have poor visibility of pedestrians and this makes walking to the store dangerous.
- A second pedestrian crosswalk is sorely needed for folks walking down Reservoir Ridge and on the West side of Temple Street who need to cross to get to Stop and Shop. Currently these residents drive there. I have attempted crossing the street with my kids in a stroller in the past, but have always felt at the mercy of the cars flying on Temple. With two active young children who no longer fit in a stroller, I no longer feel safe to cross the street. Such a crosswalk can be located at the bottom of Reservoir Ridge.
- Another possible location for the second crosswalk would require a new sidewalk on the west side of Temple Street. If the existing green strip along the west side of the street is converted into a sidewalk, then the proposed pedestrian crosswalk can be located right across from the Stop and Shop parking lot entry. The sidewalk on the west side of Temple would allow the children from the apartments waiting for the bus in the morning to stand on the sidewalk. Currently they wait standing on the street and in the Water View Apartments' driveway during the busiest time of the day. (Some school busses also stop on the East side of Temple and those kids don't have a safe way to cross the street and wait for the bus.) Also, the apartments' residents walking to the store would take a right along the new sidewalk and then safely cross Temple on the new crosswalk towards the Stop and Shop entry. Currently, residents from the apartments do not have a safe way to cross Temple at the end of Water View entrance.
- Additionally, if you cross Temple Street at Rt. 9 westwards, there is no direct pedestrian access to the CVS, even though its front door is several feet away. Installing a pathway through the landscaped area in front of CVS will be an easy solution – just like the pathway planned for the Fountain – Winter Street intersection that is part of the Bike Path project.
- Lastly, please consider improvements to the area that will allow bicycle mobility along Temple Street. If those options exist, surely Framingham State students and adjacent streets' residents would be more inclined to bike to the store and to CVS rather than driving there.

Improved pedestrian and bike access to this section of Temple Street will be a wonderful addition to the Framingham Bicycle and Pedestrian Plan. Turning this small section of Temple into a “complete street” will not only benefit us, the residents on Reservoir Ridge, at the Water View Apartments, and along Temple Street, but will also help with the traffic congestion issue at the Rt. 9 intersection that we are all so familiar with.

A copy of this letter signed by my neighbors will be arriving in the mail shortly. Please do not hesitate to contact me about these improvements and once again, congratulations on amazing work on the Dudley Road Bike Path project!

Sincerely,

Nadia Ullman

Town Meeting Member, Precinct 10

Resident, 6 Reservoir Ridge

One Framingham - Focused on the Future

Please be advised that the Massachusetts Secretary of State considers e-mail to be a public record, and therefore subject to public access under the Massachusetts Public Records Law, M.G.L. c. 66 § 10.