

ABAC Meeting Presentation

08-18-21

Daniel Amstutz, Town of Arlington
Department of Planning & Community
Development



Items in this Presentation

1. Minuteman Bikeway Planning Project
2. MassTrails Grant – Mystic River to Minuteman Bikeway
3. Data Update: Bluebikes and Minuteman Bikeway
4. Bike Lanes/Accommodations as Part of Connect Arlington Implementation, and Upcoming Repaving





- Contracting with Kittelson & Associates
- Internal project kick-off in the next few weeks
- Looking for 2-3 ABAC members to serve as an informal steering committee/check on the consultant's work, i.e. to provide feedback at specific intervals
 - First opportunity to weigh in on community survey as part of initial data collection/outreach process
 - Other opportunities during initial cuts of intersection safety review, waysides review/analysis, and more
- Consultant has planned specific meeting attendance at up to 4 ABAC meetings, 3 public meetings



Mystic to Minuteman Connection (MassTrails Grant)

- Received \$80,000 from MassTrails plus \$10,000 from Lawrence & Lillian Solomon Foundation
- RFP for consultant to go out this week or next
- Field review with Mystic River Watershed Association, MassDOT, DCR, MAPC, and Solomon Foundation
- Project will create plan for creating trail connection and review alternatives for route alignment and intersection crossings
- Project must be completed by June 30, 2022

Data Update: Swan Place Eco Counter and Bluebikes

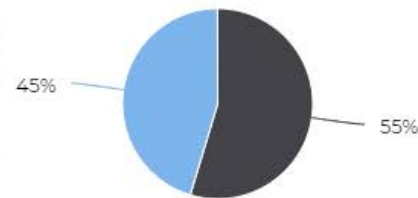
Location

Arlington, MA - Minuteman Counter



Distribution by User Type

Current ... Arlington, MA - Minut...



● Arlington, MA - Minuteman Cou...
● Arlington, MA - Minuteman Cou...

Pictures Gallery

Arlington, MA - Minuteman Counter



Daily Avg. - Week - Pedestri...

Current ... Arlington, MA - Minut...

Daily Average

633

Compared to Previous Year

Daily Avg. - Weekend - Pede...

Current ... Arlington, MA - Minut...

Daily Average

689

Compared to Previous Year

Daily Avg. - Week - Cyclists

Current ... Arlington, MA - Minut...

Daily Average

681

Compared to Previous Year

▼ -5.8%

Daily Avg. - Weekend - Cycli...

Current ... Arlington, MA - Minut...

Daily Average

1,032

Compared to Previous Year

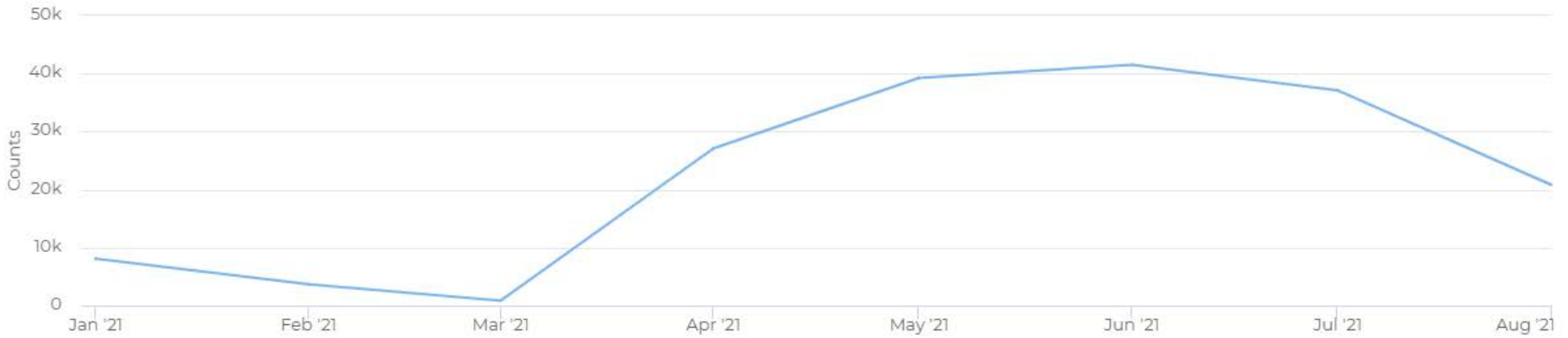
▲ +1.7%

Bikeway at Swan Place Data

Cyclists per month - 2021

📅 Current Year

📍 Arlington, MA - Minuteman Counter 🟡 Cyclist



Annual Comparison - Cyclists

📅 @3y → @0d

📍 Arlington, MA - Minuteman Counter 🟡 Cyclist



Bikeway at Swan Place Data

- Total trips YTD: 326,459
- Bike Trips YTD: 178,439
 - Bike trips only; includes August and small amount of March data that was captured
 - 39,268 trips in May
 - 41,491 in June
 - 37,127 in July
 - 20,868 in August so far
- Pedestrian trip data collecting erratically since late July



Bluebikes Data

- Trip Data:
 - 4,967 trips year-to-date in 2021
 - (+ 1,112 from last month)
 - 1,046 trips in May
 - 1,179 in June
 - 1,244 in July
 - 577 in August so far
 - Greatest number of trips near Bikeway locations
 - (RR Lot @ Bikeway and Linwood St @ Bikeway make up 50% of all trips)



Bluebikes Data

A	B	C	D	E	F	G
June 2021						
District	Logical Terminal Name	Station Name	Starting Trips	Ending Trips		
Arlington	L32001	Railroad Lot and Minuteman Bikeway	326	343		
	L32002	Linwood St at Minuteman Bikeway	241	264		
	L32003	Mass Ave at Grafton St	101	121		
	L32004	Broadway at Grafton St	60	78		
	L32005	Thorndike Field at Minuteman Bikeway	234	211		
	L32006	Mass Ave at Broadway	188	191		
					Total Attributed trips	1179

A	B	C	D	E	F	G
July 2021						
District	Logical Terminal Name	Station Name	Starting Trips	Ending Trips		
Arlington	L32001	Railroad Lot and Minuteman Bikeway	301	330		
	L32002	Linwood St at Minuteman Bikeway	314	351		
	L32003	Mass Ave at Grafton St	135	133		
	L32004	Broadway at Grafton St	90	91		
	L32005	Thorndike Field at Minuteman Bikeway	229	227		
	L32006	Mass Ave at Broadway	143	144		
					Total Attributed trips	1244

Note: Trips are “attributed” to Arlington stations by summing the number of starting and ending trips and dividing by two.

Bluebikes Data

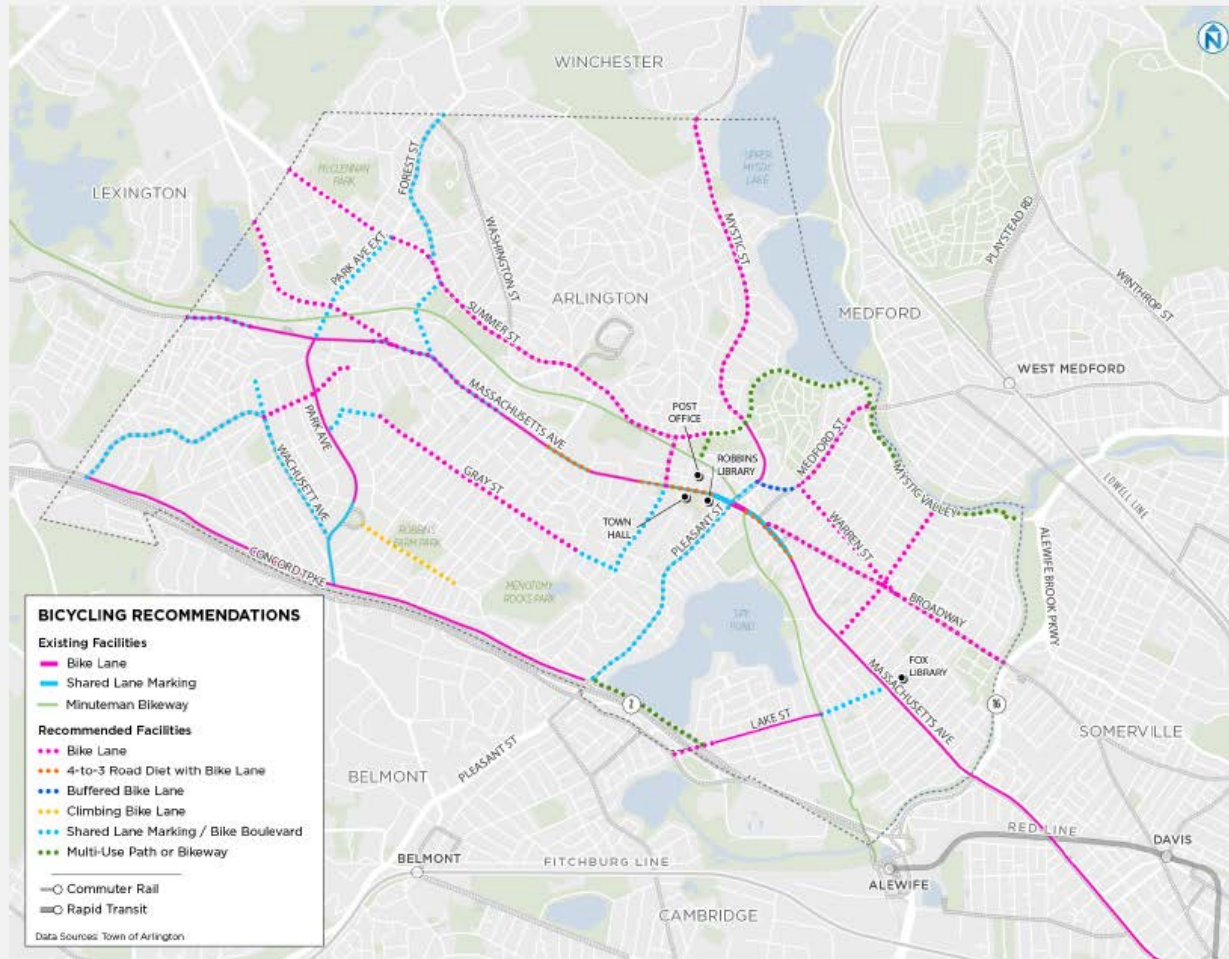
A	B	C	D	E	F	G
August 2021 as of 08-16-21						
District	Logical Temrinal Name	Station Name	Starting Trips	Ending Trips		
Arlington	L32001	Railroad Lot and Minuteman Bikeway	127	138		
	L32002	Linwood St at Minuteman Bikeway	132	150		
	L32003	Mass Ave at Grafton St	70	85		
	L32004	Broadway at Grafton St	44	46		
	L32005	Thorndike Field at Minuteman Bikeway	106	104		
	L32006	Mass Ave at Broadway	73	78		
					Total Attributed trips	576.5

A	B	C	D	E	F	G
Year-to-Date as of 08-16-21						
District	Logical Temrinal Name	Station Name	Starting Trips	Ending Trips		
Arlington	L32001	Railroad Lot and Minuteman Bikeway	1,235	1,312		
	L32002	Linwood St at Minuteman Bikeway	1,094	1,181		
	L32003	Mass Ave at Grafton St	410	436		
	L32004	Broadway at Grafton St	309	324		
	L32005	Thorndike Field at Minuteman Bikeway	1,254	1,221		
	L32006	Mass Ave at Broadway	563	595		
					Total Attributed trips	4967

Note: Trips are “attributed” to Arlington stations by summing the number of starting and ending trips and dividing by two.

Bike Lanes/Accommodations as Part of Connect Arlington Implementation

RECOMMENDED BICYCLE NETWORK



Developing a highly connected network of dedicated, preferably separated, bicycle lanes and facilities is a priority recommendation of Connect Arlington.

Building out a town-wide network would provide safer, more comfortable, and convenient facilities to encourage bicyclists of varying levels of experience and comfort to move around, reducing the need or preference to drive.

Bike Lanes/Accommodations as Part of Connect Arlington Implementation

D. A Low-Stress Bicycling Environment

Developing a robust, interconnected network of dedicated bicycle facilities and amenities will make bicycling a safe, comfortable, and practical option—a preferred choice—for more of Arlington’s residents, workers and visitors, no matter their comfort level—from beginner to experienced. More bicycling will also help to reduce greenhouse gas emissions and provide health benefits to users.

While a comprehensive Bike Master Plan should be considered to develop a truly comprehensive strategy, this plan recommends the below initiatives to achieving a low-stress bicycling network.

Strategies:

- **Prioritize new bicycle facilities along corridors currently designated as Arlington’s “lane-sharing network”** including completing the bicycle lane network on all of Mass Ave, and prioritizing projects that connect to existing facilities including schools and other public facilities.
- **Construct a multiuse path from the Minuteman Bikeway at Arlington Center to the Mystic River Path along Summer Street and the Mystic Valley Parkway.**
- **Establish preferred bike routes (“bike boulevards”)** on low-volume streets that provide safer bicycle travel parallel to high traffic roadways - on roadways that connect to neighborhoods and schools.
- **Add or upgrade existing bicycle parking along commercial corridors and at public facilities** to encourage more to choose a bicycle over a car trip because they know their bicycles can be parked easily and locked up safely.
- **Study potential to redesign major intersections and rotaries/roundabouts** to encourage more bicycling by providing improved rider safety and comfort.

Bike Lanes/Accommodations as Part of Connect Arlington Implementation

Context Sensitive Bike Facility Design Guide Matrix

Arlington BAC/TAC Roadway Restriping Working Group – December 2014

Introduction

Given the increasing number of bicycles on Arlington’s roads, it is the ABAC/TAC Roadway Restriping Working Group’s (RRWG) desire to find appropriate accommodations to enhance accessibility and safety for bicyclists and to reduce conflicts with other road users, including drivers of motor vehicles and pedestrians. With appropriate planning, opportunities for improvements arise when roadways are repaved by the Town. The intent of this memorandum to provide a guide for restriping the roadway that provides the appropriate facility for bicyclists depending on the traffic, topographic and land use context.

The various types of potential bicycle facilities include:

Type of facility	Considerations	Example
Shared use path	<ol style="list-style-type: none"> 1. Provides the greatest separation from motor vehicle (MV) traffic 2. May have some bicycle – pedestrian conflicts 3. Typically, a separate right-of-way is required, such as a rail bed 4. Rarely provides the same level of access to homes and businesses as roads. “The presence of a shared use path near a roadway does not eliminate the need to accommodate bicyclists within a roadway”¹ 	Minuteman Bikeway
Cycle Track	<p>A cycle track is a one or two-way bicycle facility located next to a road, either at road or sidewalk grade.</p> <ol style="list-style-type: none"> 1. On roads with few driveways or intersections, provides good separation from motor vehicle traffic 2. Substantial motor vehicle conflicts in areas with many driveways or intersections (for example, Route 16 at Fresh Pond Mall) 3. Busy road intersections require special design treatment, illustrated well in the NACTO Urban Bikeway Design Guide 4. Substantial right-of-way is required (minimum 8’ for two-way, 5’ for one-way plus a 3’ minimum buffer to parked cars) 	Vassar Street or Concord Avenue, Cambridge
Buffered bike lane	<p>A painted bike lane, parallel to traffic flow, with a painted or otherwise delineated buffer between the bike lane and MV traffic². A buffer might also be provided between the bike lane and parked cars</p> <ol style="list-style-type: none"> 1. Provides better MV-bike separation than a conventional bike lane 2. Useful where the space available for a bike lane is wide enough that it might be mistaken for a motor vehicle travel lane 	Congress Street, Downtown Boston

Bike Lanes/Accommodations as Part of Connect Arlington Implementation

BIKE FACILITY DESIGN GUIDE MATRIX SUMMARY			
STREET	BATES ROAD	RIVER STREET	MEDFORD STREET
BIKE NETWORK	Yes	Yes	Yes
ROAD WIDTH	34-36 ft	34 – 36 ft	32 – 41 ft
PARKING	Allowed both sides	Allowed both sides	Allowed both sides
SPEED LIMIT	25 mph (per Town Wide Speed Limit)	30 mph	25mph & 35 mph
TRUCKS/BUSES	Moderate	Moderate	Frequent
ROAD GRADE	flat	flat	1 - 4%
DESIGN MATRIX RECOMMENDATION	Shared Lane Marking	Shared Lane Marking	Shared Lane Marking
PROPOSED IMPLEMENTATION	<p>Travel lanes to be 11-ft wide and separated by a DYCL with SWEL at shoulder. Rideable shoulder/parking lane varies between 6 – 7ft.</p> <p>SLMs placed in the center of travel lanes in each direction, every 250-ft.</p>	<p>Travel lanes to be 11-ft wide and separated by a DYCL with SWEL at shoulder. Rideable shoulder/parking lane varies between 6 – 7ft.</p> <p>SLMs placed in the center of travel lanes in each direction, every 250-ft.</p>	<p>Travel lanes to be 11.5-ft wide and separated by a DYCL with SWEL at shoulder. Rideable shoulder/parking lane varies between 4.5–9ft.</p> <p>SLMs placed in the center of travel lanes in each direction, every 250-ft.</p>

Bike Lanes/Accommodations as Part of Connect Arlington Implementation

- Revise matrix to align with Connect Arlington
 - Strengthen provisions to create all ages, all abilities bike network
 - Longer-term planning and collaborative process with transparency and public engagement
 - Incorporate new state and national guidance
- Revise Complete Streets policy as well to support Connect Arlington goals
- Work on including bike boulevards and treatments for local streets but still critical links in the bike network

Context Sensitive Bike Facility Design Guide Matrix
Arlington BAC/TAC Roadway Restriping Working Group – December 2014

Introduction

Given the increasing number of bicycles on Arlington's roads, it is the ABAC/TAC Roadway Restriping Working Group's (RRWG) desire to find appropriate accommodations to enhance accessibility and safety for bicyclists and to reduce conflicts with other road users, including drivers of motor vehicles and pedestrians. With appropriate planning, opportunities for improvements arise when roadways are repaved by the Town. The intent of this memorandum to provide a guide for restriping the roadway that provides the appropriate facility for bicyclists depending on the traffic, topographic and land use context.

The various types of potential bicycle facilities include:

Type of facility	Considerations	Example
Shared use path	<ol style="list-style-type: none"> 1. Provides the greatest separation from motor vehicle (MV) traffic 2. May have some bicycle – pedestrian conflicts 3. Typically, a separate right-of-way is required, such as a rail bed 4. Rarely provides the same level of access to homes and businesses as roads. "The presence of a shared use path near a roadway does not eliminate the need to accommodate bicyclists within a roadway" ⁴ 	Minuteman Bikeway
Cycle Track	<p>A cycle track is a one or two-way bicycle facility located next to a road, either at road or sidewalk grade.</p> <ol style="list-style-type: none"> 1. On roads with few driveways or intersections, provides good separation from motor vehicle traffic 2. Substantial motor vehicle conflicts in areas with many driveways or intersections (for example, Route 16 at Fresh Pond Mall) 3. Busy road intersections require special design treatment, illustrated well in the NACTO Urban Bikeway Design Guide 4. Substantial right-of-way is required (minimum 8' for two-way, 5' for one-way plus a 3' minimum buffer to parked cars) 	Vassar Street or Concord Avenue, Cambridge
Buffered bike lane	<p>A painted bike lane, parallel to traffic flow, with a painted or otherwise delineated buffer between the bike lane and MV traffic⁴. A buffer might also be provided between the bike lane and parked cars</p> <ol style="list-style-type: none"> 1. Provides better MV-bike separation than a conventional bike lane 2. Useful where the space available for a bike lane is wide enough that it might be mistaken for a motor vehicle travel lane 	Congress Street, Downtown Boston

Bike Lanes/Accommodations as Part of Connect Arlington Implementation

- Two options for Bates/River/Medford St
 - Go ahead with sharrows and address bike issues in future projects
 - Install essential pavement markings (double yellow line, crosswalks) and add new markings next year after matrix revisions
- Work with TAC as well to update matrix
 - Assume one or two people from ABAC to meet, review drafts, research if needed

