

# TOWN OF DUXBURY

# Complete Streets Prioritization Plan

*Presented by*

**Keri Pyke**

*Principal*

**Aysha Minot**

*Project Manager*

*Presented to*

**Town of Duxbury, MA**

**Wednesday, October 28, 2020**

**6 p.m. – 8 p.m.**

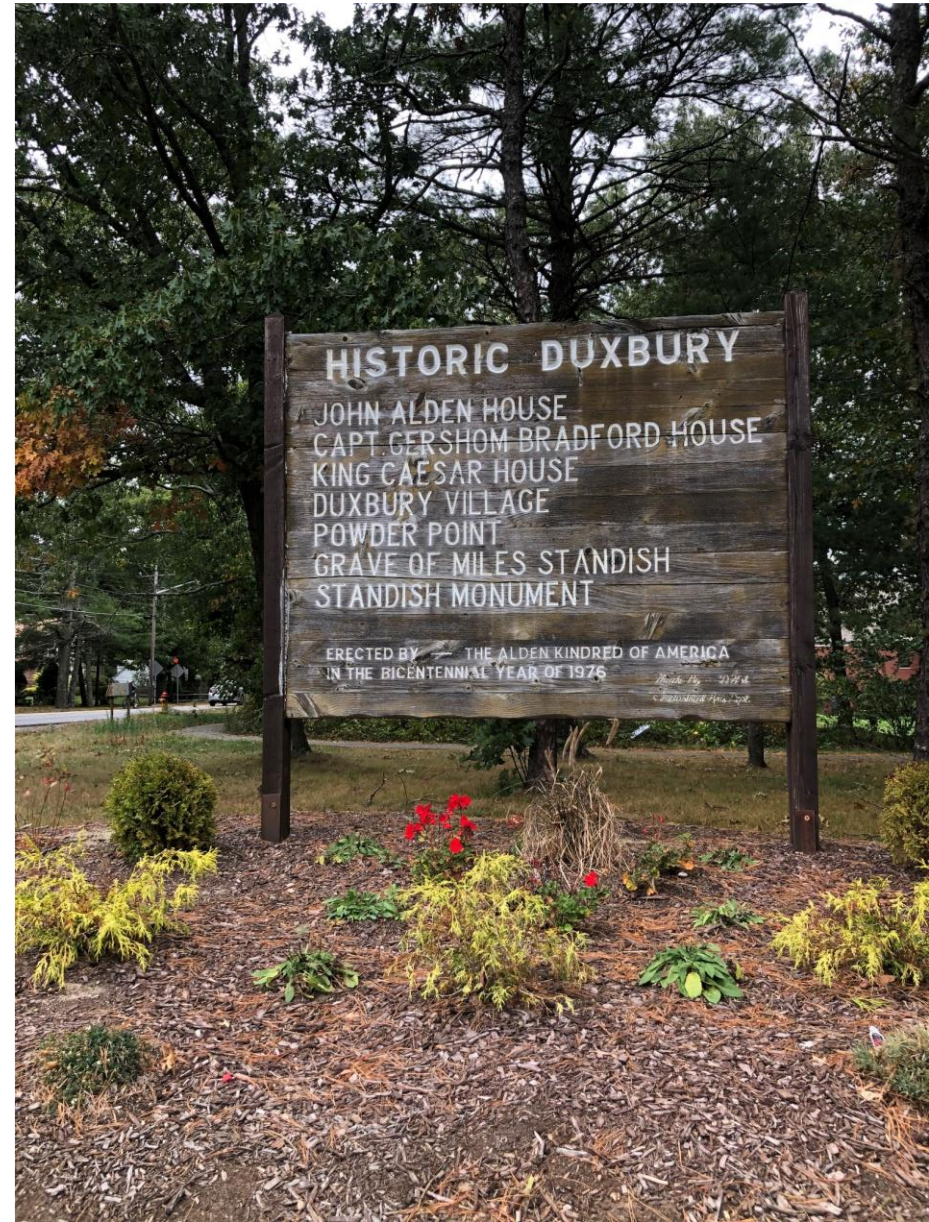


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# Agenda

- Who is HSH?
- Introduction to the Complete Streets Funding Program
- Review existing conditions
- Open House
  - Wikimap Tutorial
  - Get your feedback on problem areas and transportation issues in Duxbury



# Our Services

Engineers + Planners

We design, plan, and coordinate complex planning and engineering projects, providing unmatched focus on transportation solutions.

- Complete Streets Planning and Design
- Transportation Planning
- Public Involvement
- Traffic Engineering
- Roadway Design
- Site/Civil Engineering
- Traffic Impacts and Permitting
- Bridge Engineering
- Bus Rapid Transit
- Construction Services



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## SO YOU WANT TO BUILD A SHARED USE PATH

Juliana and her family would like to spend time outside walking, jogging, and enjoying the scenery. However, getting to the shared path requires driving on the busy road in front of their house for fifteen minutes. The kids in the neighborhood sometimes play on an abandoned railroad behind the houses, but they have to go through the woods, and it's not a suitable place for Juliana's dad to walk because of his health condition.

Bryan likes to ride his bike to work, usually taking the busy road, even though the traffic makes him feel uncomfortable. Sometimes he takes a shortcut where the railroad crosses the road on an old bridge, but there are signs posted not to trespass because it's unsafe.

This "primer" provides the basics on how a path project goes from start to finish. Every path has its own history, challenges, and potential to serve a community. Advocates and planners, with or without a technical background, can use this primer to understand what is expected along the way and how to prepare for a successful path.



PROJECT DESCRIPTION		PROJECT INPUTS - PAGE 1 OF 2		INPUT	CLICK INFO
1	What year is the project expected to begin construction?			2020	<a href="#">?</a>
2	Should the estimate include cost of engineering design and/or traffic control?			Design	<a href="#">?</a>
3	How many distinct segments of path are there? (differing exist. or prop. conditions)			3	<a href="#">?</a>
4	Input a number between 1 and 4	Segment 1	Segment 2	Segment 3	
5	What is the length of the segment of path? (in feet)	400 ft	800 ft	3,000 ft	<a href="#">?</a>
6	What are the existing conditions of the use?	Handicap	Clear	Clear	<a href="#">?</a>
7	What type of path is being proposed?	Handicap	East Trail (w/ with rail)	Rail with Trail	<a href="#">?</a>
8	What material will the shared use path be?	Asphalt	Asphalt	Asphalt	<a href="#">?</a>
9	What material will the shoulders be?	Concrete	Grass	Unpaved	<a href="#">?</a>
10	What is the width of the path? (ft) (range: 10 ft to 14 ft)	8 ft	10 ft	12 ft	<a href="#">?</a>
11	Will a separate aqueous path be provided?	No	Yes, unpaved	No	<a href="#">?</a>
12	What length of the path requires handrails due to untraversable wetlands?			100 ft	<a href="#">?</a>
13	Please use the Guidance Document and consult the MassGIS website to locate wetlands.			OLIVER	<a href="#">?</a>
14	Are there steep slopes or resource areas that may require retaining walls?			Yes	<a href="#">?</a>
15	Is the ROW constrained in any locations?			None of the length	<a href="#">?</a>
16	How many crossings with roadways are there?			3	<a href="#">?</a>
17	Please fill in the information in the chart on the next page.				<a href="#">?</a>
18	How many crossings are there over bodies of water?			1	<a href="#">?</a>
19	Please fill in the information in the chart on the next page.				<a href="#">?</a>
20	How many crossings are there with a active railroad?			0	<a href="#">?</a>
21	Please fill in the information in the chart on the next page.				<a href="#">?</a>
22	What is the extent of landscape restoration and enhancements?			Moderate	<a href="#">?</a>
23	How many parking spaces will be provided?			25	<a href="#">?</a>
24	What will be the material of the parking lot?			Typical Asphalt	<a href="#">?</a>
25	Will the path require lighting along its length?			Yes	<a href="#">?</a>
26	What along the entire length, what length requires lighting?			200 ft	<a href="#">?</a>
27	Where it is lighting, should security be included?			No	<a href="#">?</a>

Click Buttons before proceeding



# MassDOT's Shared Use Path Planning and Design Guide





**Complete Streets Prioritization Plans, Statewide**



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**Legacy Trail, Weston**



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# Northbridge School Traffic Circulation



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## Route 28 Safety Improvements, Barnstable



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## Route 30 Safety Improvements, Weston



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# Quincy Center Planning and Design



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# Central Square Complete Streets Reconstruction





Connect Historic Boston



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# East Milton Square Reconstruction



# What is a Complete Street?

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- A **Complete Street** is one that provides safe and accessible options for all travel modes – walking, biking, transit, and vehicles – for people of all ages and abilities
- Improvements may be large scale, such as corridor-wide, or focused on the needs of a single mode at a single location
- Context-sensitive

North Main Street, Cohasset



Shared use path in Hudson, MA



# Benefits of Complete Streets

- **Safety**
- **Accessibility**
- **Equity**
- **Health**
- **Economic**
- **For users of all ages and abilities:**
  - Children
  - Seniors
  - Those with disabilities
  - Those without access to a car

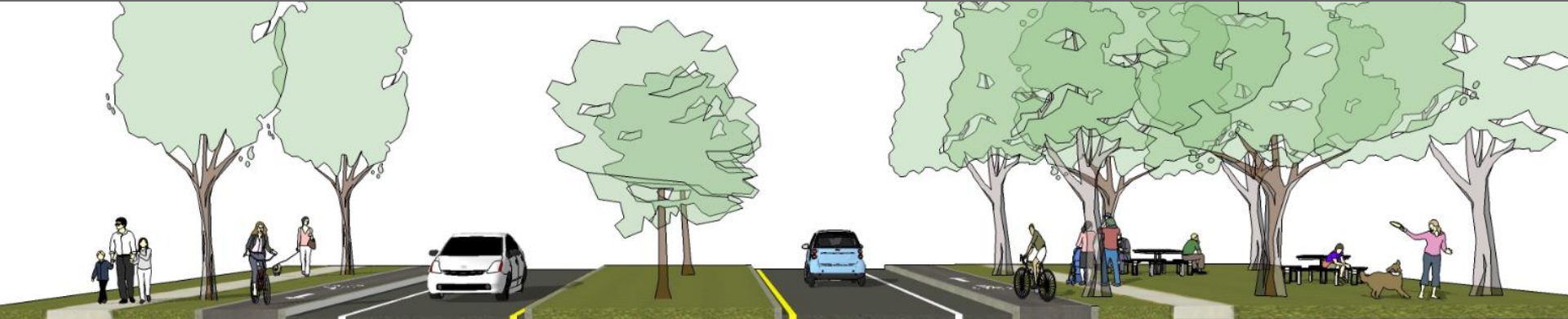




# Complete Streets Funding Program History

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- Program was released February 2, 2016
- The MassDOT Capital Investment Plan (CIP) started provided funding for this program in FY 2017
- Nearly \$46 million awarded for project construction to date





# PROGRAM/FUNDING

## Funding to Date

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### Tier 1 Training and Policy

- 226 municipalities with CS policies



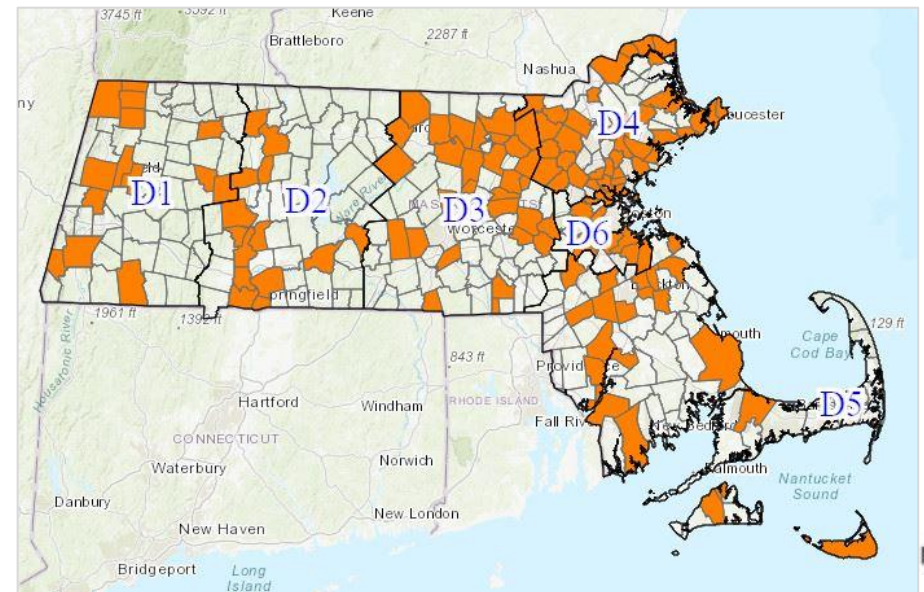
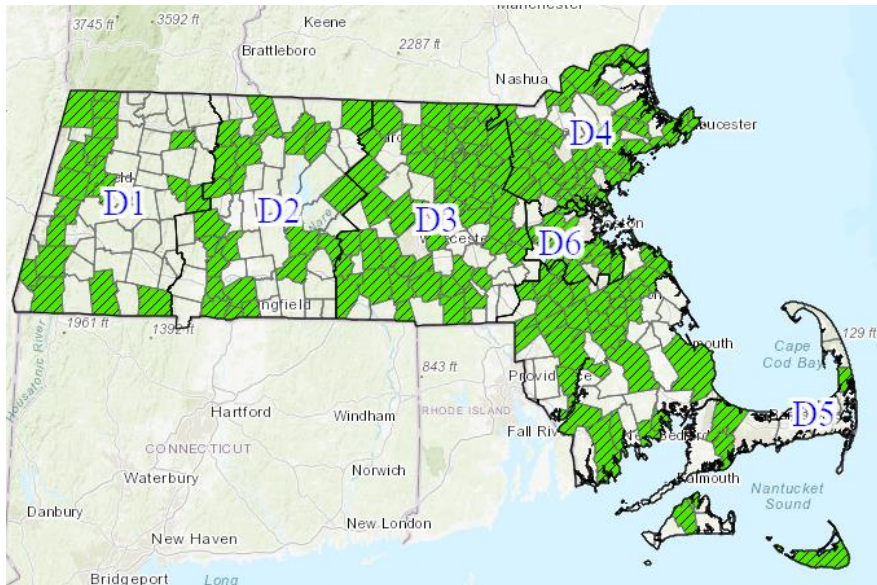
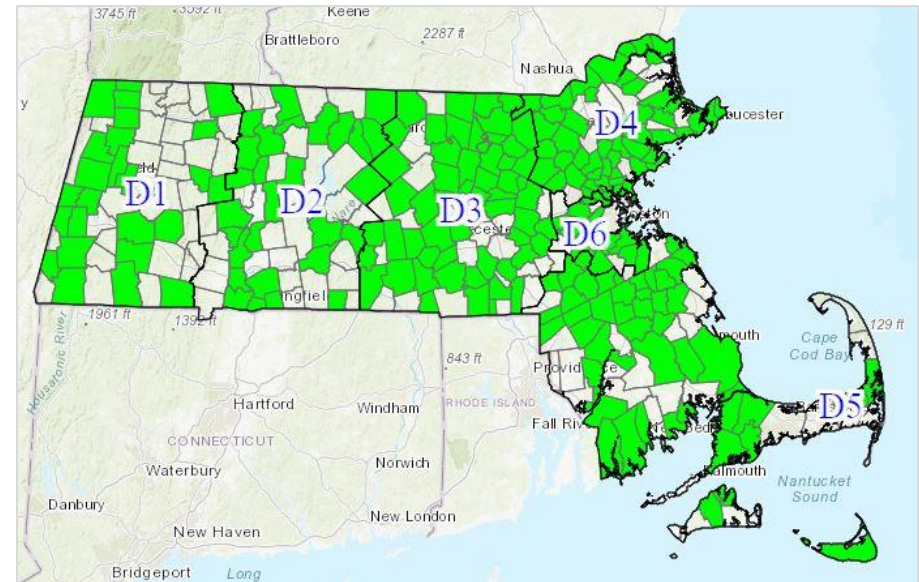
### Tier 2 Prioritization Plan

- 198 approved Prioritization Plans



### Tier 3 Project Funding

- FY 17: 26 projects totaling \$9M
- FY 18: 45 projects totaling \$13.3M
- FY 19: 35 projects totaling \$9.8M
- FY 20: 42 projects totaling \$13.2M





# CS Funding Program Snapshot

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- Planning assistance to support CS Prioritization Plan – up to **\$38,000** available to any community (reimbursable)
- CS Construction – up to **\$400,000** annually (reimbursable)
- Projects must be fully designed or require little/no design to be funded.
  - Funds cannot be used for design
- Tier 3 (construction) cannot be used for projects on State-owned roads.
  - **Route 3**
  - **Route 3A**



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# CS Funding Program Framework

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- **Tier 1:**  
**Training and Complete Streets Policy Development**
- **Tier 2:**  
**Complete Streets Prioritization Plan Development**
- **Tier 3:**  
**Project Approval and Notice to Proceed  
for Construction**



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# Prioritization Plan Process

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- Compile existing studies, plans, projects, etc.
- Map areas of concern and areas with potential demand
- Gather input from the community and from Town officials
- Work with Town to identify a list of potential projects
- Prioritize projects based on potential, need, input from community, and Town officials' priorities



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# Document Review of Recent Studies

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- Envision Duxbury Master Plan (2019)
- Duxbury Housing Production Plan (2019)
- OCPC Bicycle and Pedestrian Connectivity and Safety Survey (2018)
- Climate Vulnerability Assessment and Action Plan (2018)
- Traffic Study for Saint George St, Alden St, Railroad Ave (2018)
- Route 53 Corridor Study (2018)
- Duxbury Open Space Recreation Plan (2017)
- Route 3A Corridor Study (2017)
- Hall's Corner Economic Development and Transportation Study (2014)



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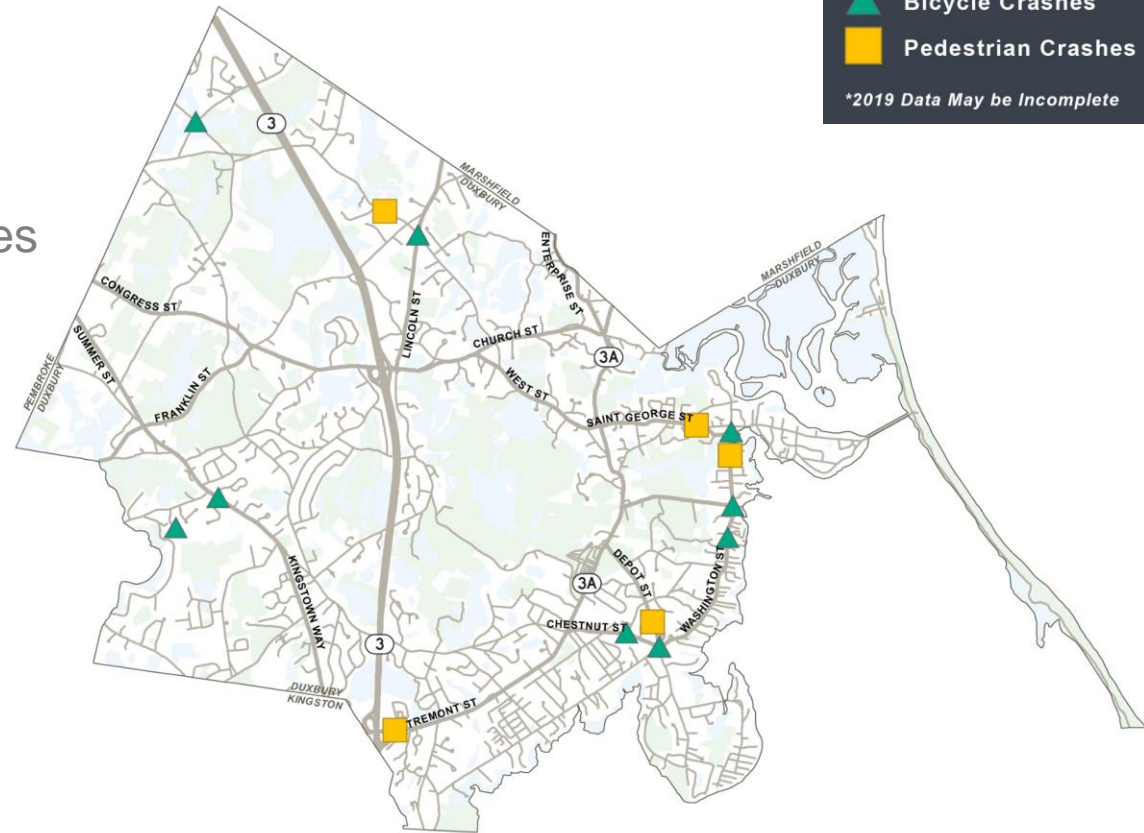


## Bicycle and Pedestrian Crashes, 2015-2019\*

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- Crash sites may indicate potentially unsafe design conditions
- 17 bike and pedestrian crashes between 2015 and 2019

▲ Bicycle Crashes  
■ Pedestrian Crashes  
\*2019 Data May be Incomplete



Crosswalk on Pilgrims By-Way

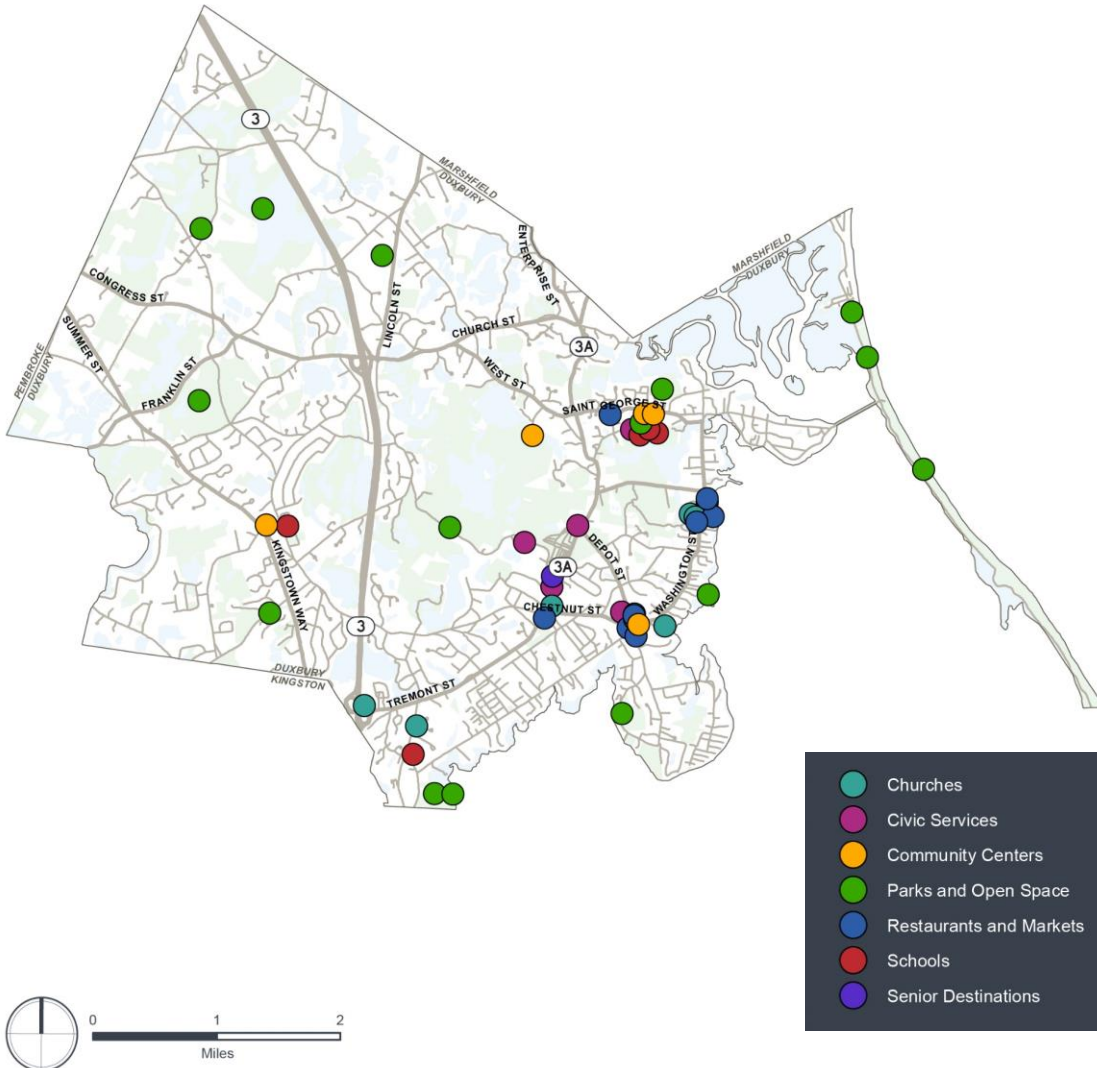




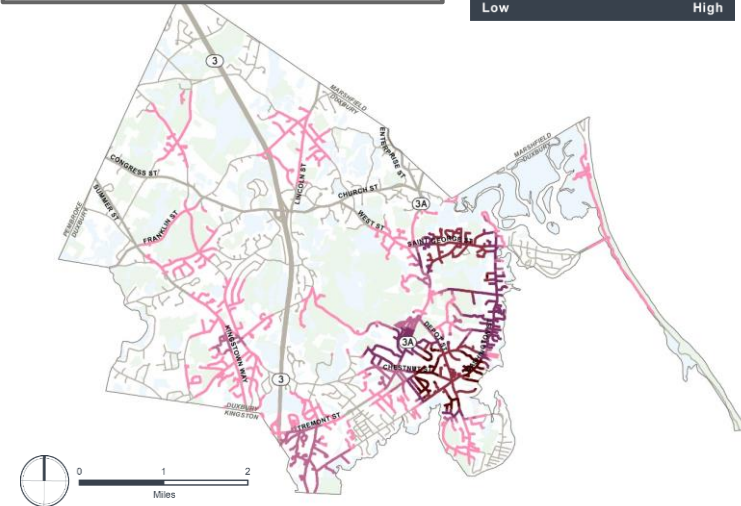
## Latent Demand – Bicycle and Pedestrian

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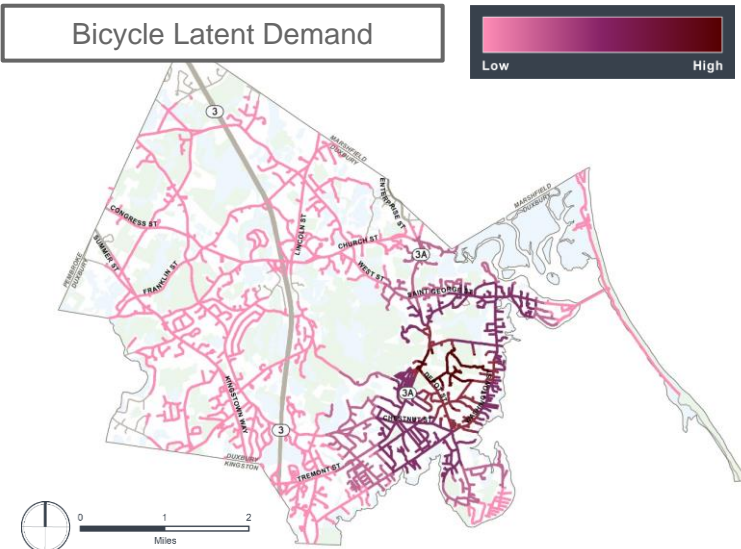
Points of Interest



Pedestrian Latent Demand



Bicycle Latent Demand





# HSH PRIORITIZATION PROCESS

## Sidewalk Condition

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- **Sidewalks condition is identified in four categories:**
  - Excellent (pavement is smooth/new and there are no obstructions),
  - Good (pavement is smooth with few bumps and depressions and there are very little to no obstructions),
  - Fair (pavement is comfortable with intermittent bumps and depressions and several obstructions)
  - Poor (pavement is uncomfortable with frequent bumps and depressions and there are many obstructions).



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# HSH PRIORITIZATION PROCESS

## Bicycle Level of Comfort

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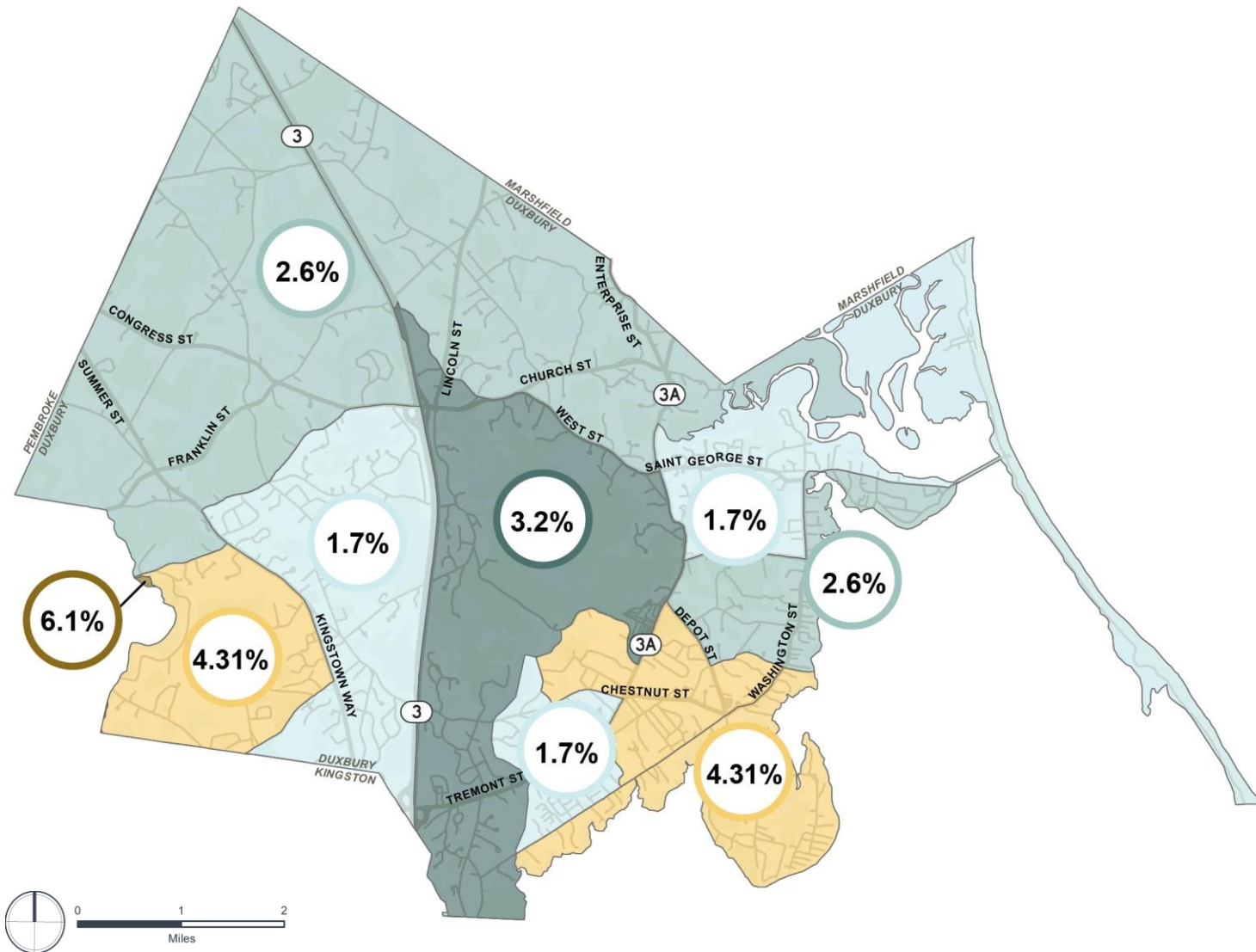
- Local roads and trails are typically comfortable for novice-level cyclists
- Narrow or high-volume roads are uncomfortable for most except for strong and fearless riders
- Criteria considered include:
  - Road width
  - Traffic volumes
  - The presence of a center line



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## Equity Assessment – Persons with Disabilities





# Trends

- Most roads are not comfortable for cycling
- Missing connections between current pedestrian network and trails and points of interest
- Minimal sidewalk infrastructure around town





# Prioritization Plan Process

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# HSH PRIORITIZATION PROCESS

## Community and Municipal Input: WikiMap

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### DUXBURY COMPLETE STREETS PRIORITIZATION PLAN

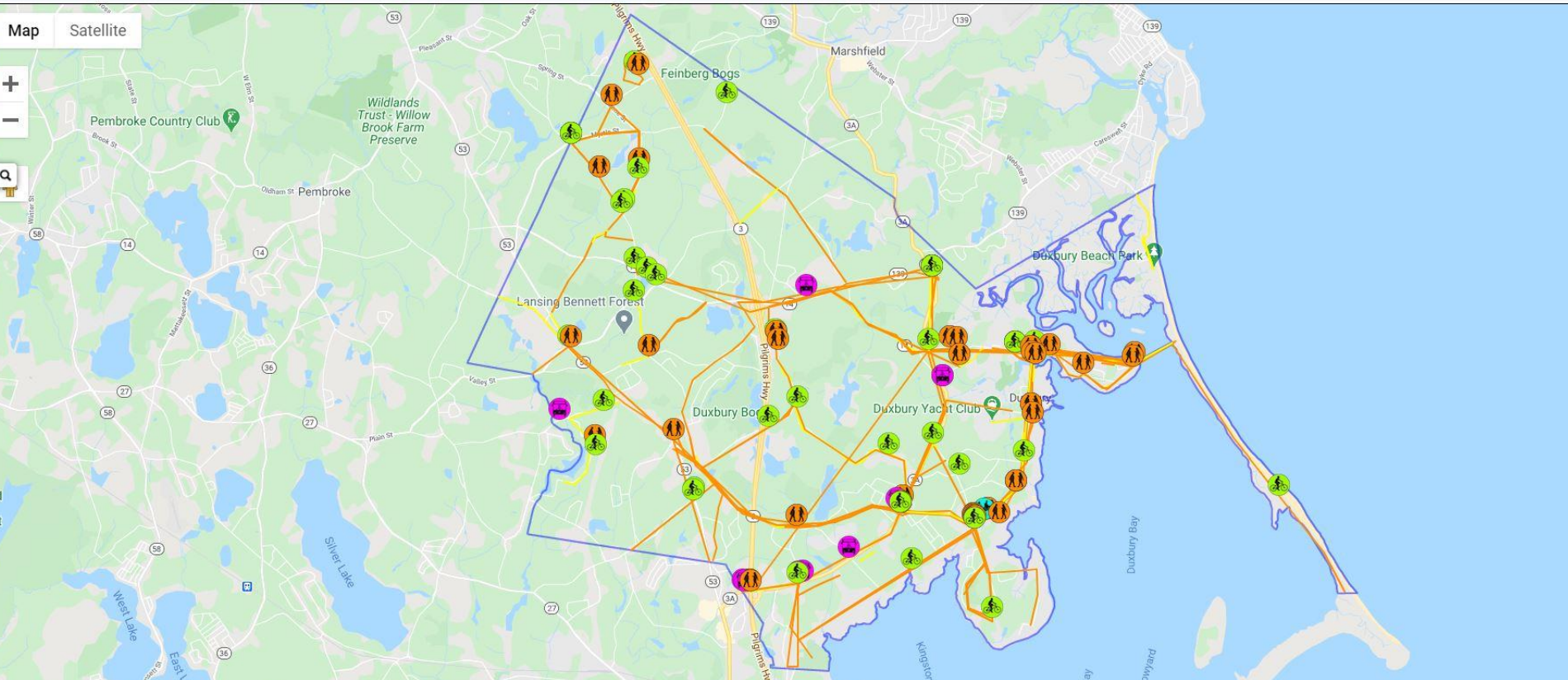


Use the **ADD & DRAW** buttons below to add to the map. Add as many points and lines as you would like.



 Accessibility (ADA)  Bicyclist  Pedestrian  Transit

Welcome



Go to: <http://wikimapping.com/Duxbury.html>

## Community and Municipal Input: Public Meeting

- Input from community – Today!
- Input from Duxbury Town officials – Ongoing
- WikiMap – Active and Ongoing

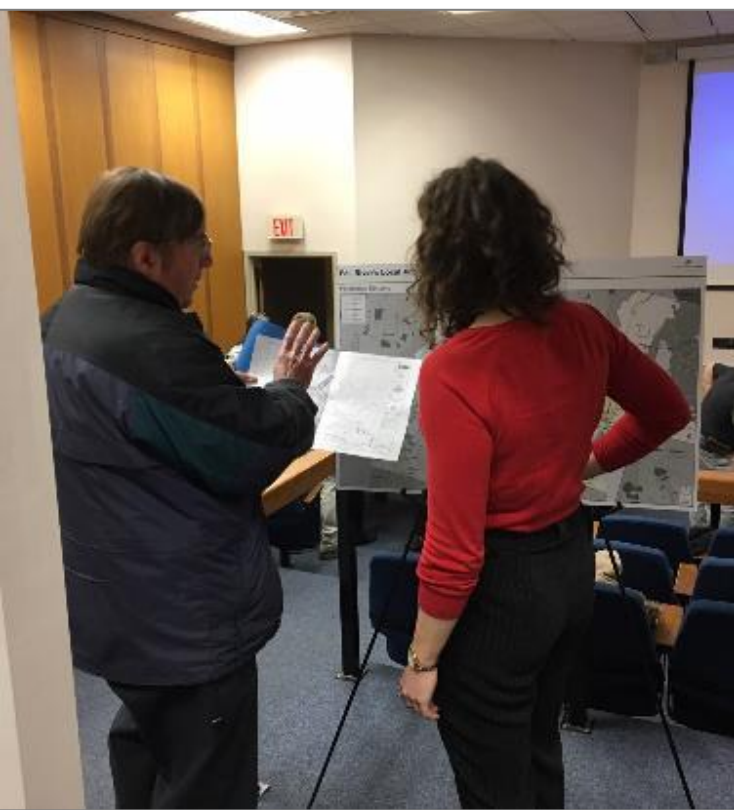




## Community and Municipal Input: Public Meeting

### ■ Today's Virtual Meeting

- Answer any questions about the program
- Use the **WikiMap** to write down your comments regarding problematic areas and issues relating to biking, walking, and taking transit



# Next Steps – Prioritization Plan Process

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- Compile existing studies, plans, projects, etc.
- Map areas of concern and areas of potential
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# Next Steps

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1. Continue stakeholder and community input
2. Project identification and prioritization
3. MassDOT's Complete Streets portal deadlines:

**April 2021** – Tier 2 (Prioritization Plan)

**May 2021** – Tier 3 (Funding Application)

For more information:

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# Questions?



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