

Planning for Bicycle Transportation at the State Level

Peter Sutton

MassDOT Statewide Bicycle and Pedestrian Coordinator



massDOT
Massachusetts Department of Transportation





MASSACHUSETTS BICYCLE TRANSPORTATION PLAN

About the Plan

Timeline:

- Began late 2016
- Spring 2018 estimated completion
- May to October 2017 outreach period

MA Bike Plan focus then and now:

- 2008: implement Bay State Greenway vision
- 2018: encourage biking for short, everyday trips

Plan Vision

Biking in Massachusetts is **safe, comfortable, and convenient**

Provide safe and well-connected **bike networks**.

Advance biking for **everyday travel**, especially for short trips.

Appeal to the **broadest base of users**, statewide.



Plan Vision

MassDOT owns only **20%** of MA roads.
Partners are key to achieving the Plan vision.

Make the case for bicycle infrastructure and programs with **data**.

Communicate planning, design, and maintenance **best practices**.
Demonstrate with physical improvements to MassDOT corridors.

Encourage participation in MassDOT **funding** programs.



Outreach Results

Outreach Results

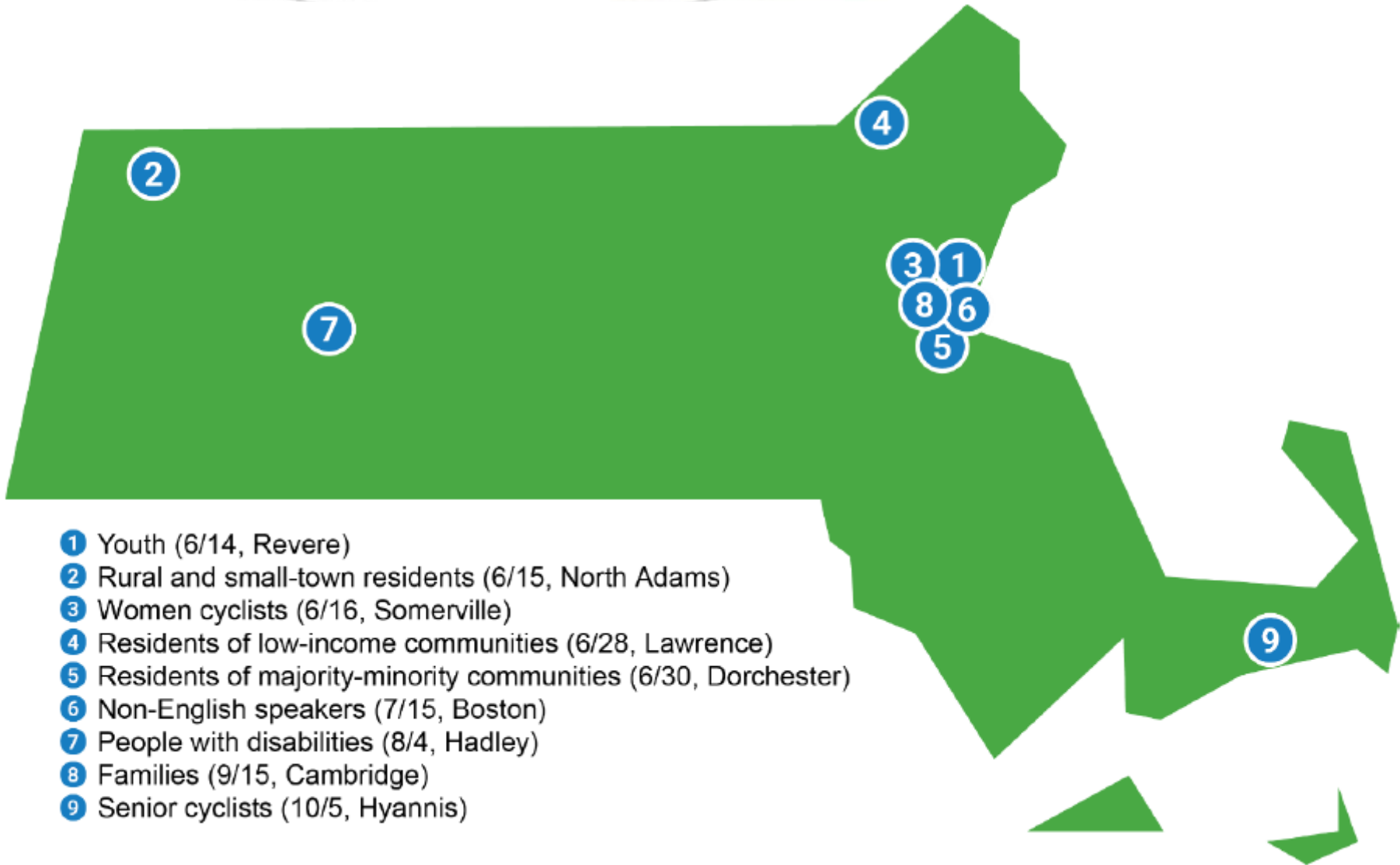
In-person:

- 9 listening sessions
- 4 open streets events
- 3 demonstration separated bike lanes

Online:

- 3,181 comments via an interactive map
- 2,246 survey participants

Listening Sessions



- 1 Youth (6/14, Revere)
- 2 Rural and small-town residents (6/15, North Adams)
- 3 Women cyclists (6/16, Somerville)
- 4 Residents of low-income communities (6/28, Lawrence)
- 5 Residents of majority-minority communities (6/30, Dorchester)
- 6 Non-English speakers (7/15, Boston)
- 7 People with disabilities (8/4, Hadley)
- 8 Families (9/15, Cambridge)
- 9 Senior cyclists (10/5, Hyannis)

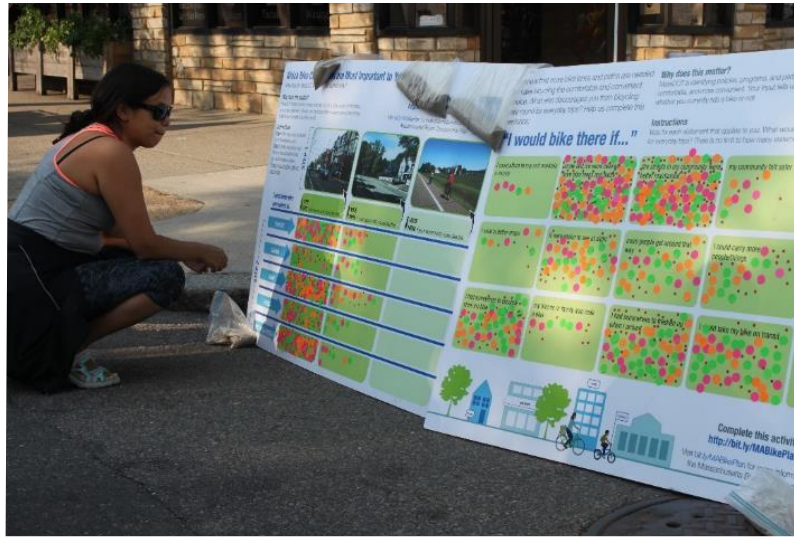
Listening Sessions

Common themes from diverse listening session audiences

- Proximity to high motor vehicle speeds and volumes is the primary barrier to everyday biking.
- People will only consider biking for everyday trips when bike networks are low-stress and facilities connect.
- Convenience is the primary motivator when deciding to bike for everyday travel (e.g., errands, shopping, etc.).
- Users of all transportation modes need more education.
- Aside from safety and comfort, weather, topography, and distance/time are the most common barriers to biking.

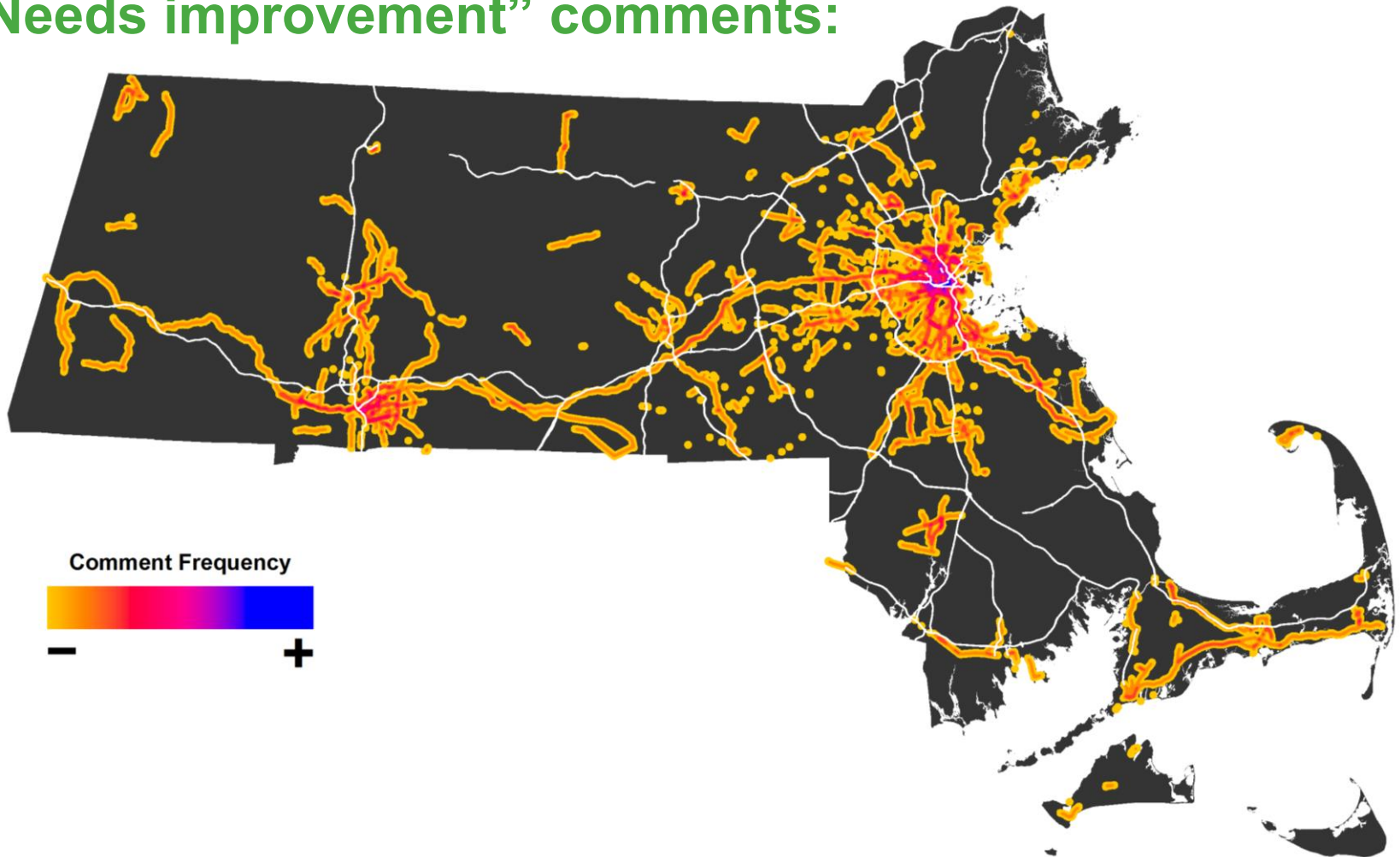
... plus many unique concerns

Demonstration Separated Bike Lanes



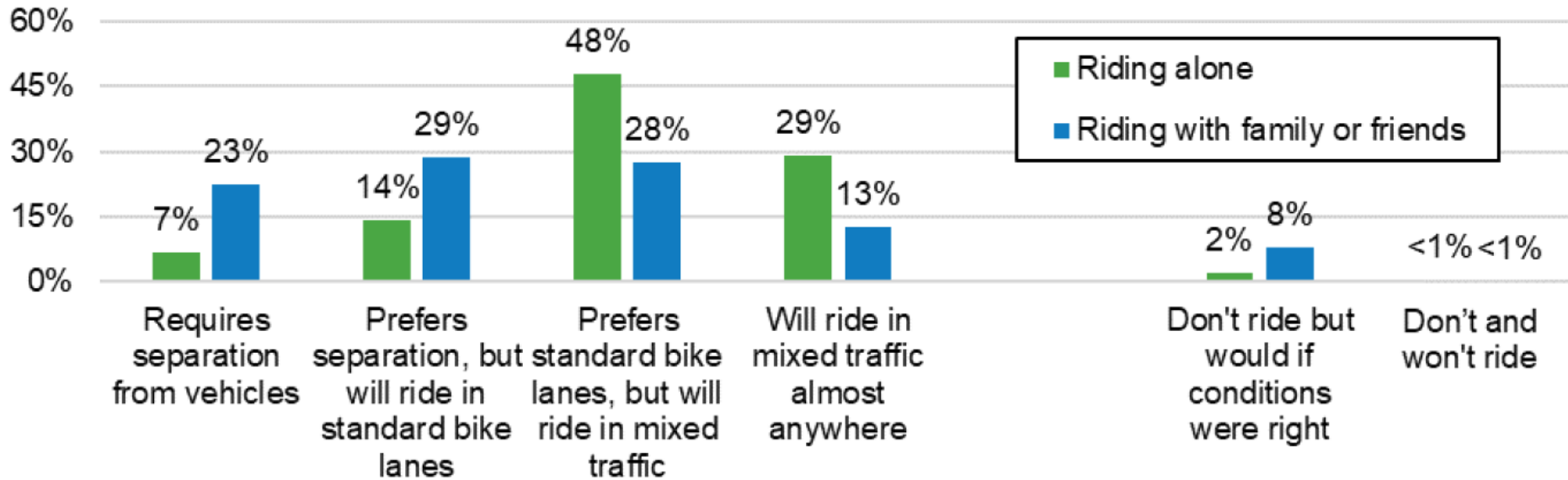
Online Map

“Needs improvement” comments:



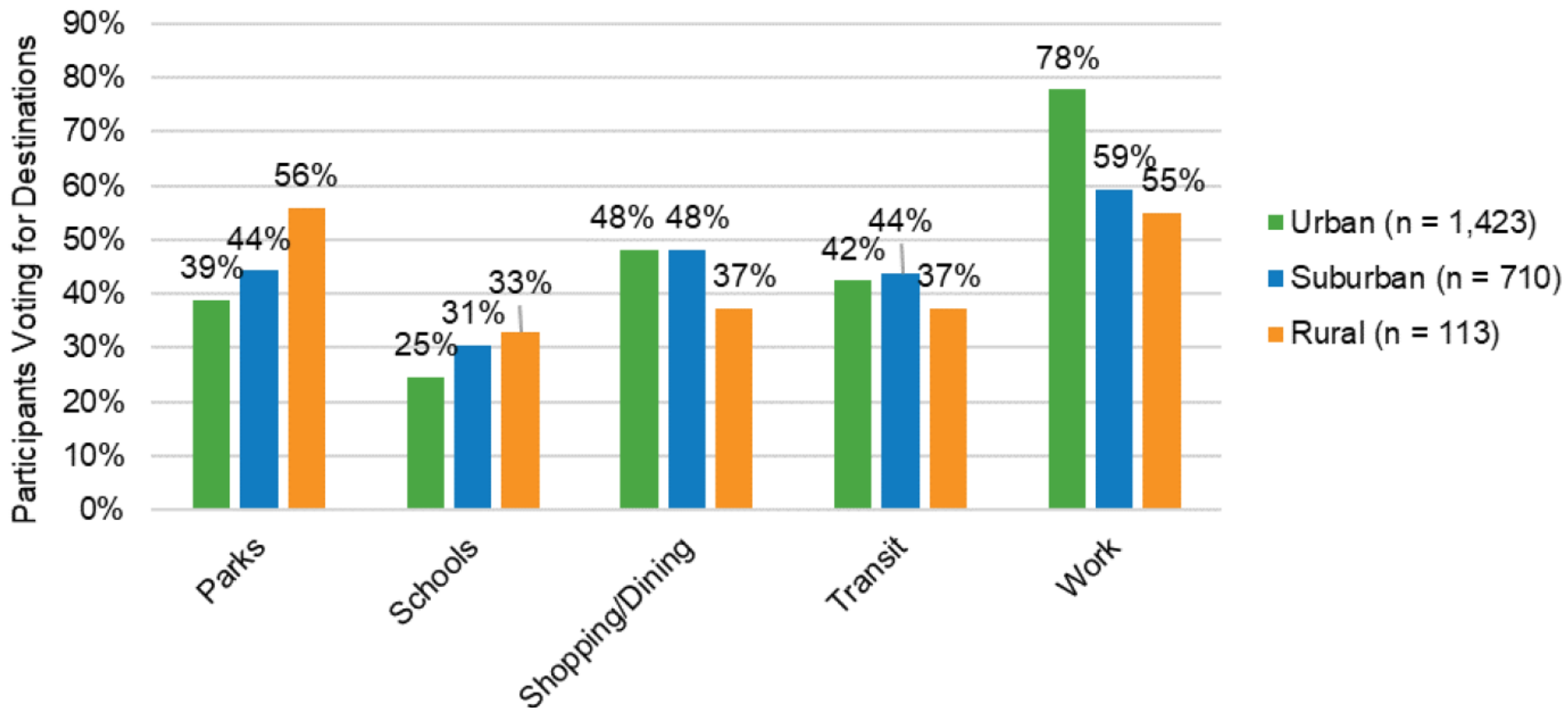
Online Map Users

Online Map Users' Comfort Level When Biking



Online Survey

Which bike connections are most important to you?



Online Survey

Top “I would bike there if...” statements

1. ...streets in my community were better **maintained** (65%)
2. ...**snow and ice** were cleared from bike paths (58%)
3. ...I had somewhere to **securely store** my bike (42%)
4. ...I could take my bike on **transit** (32%)
5. ...I had somewhere to **freshen up** when I arrived (32%)



Analysis Progress

Analysis Progress

- Updated MA bike inventory
- Estimated latent demand for bicycling
- Currently identifying priority bicycling corridors and network gaps

Gap Analysis

A **network gap** is more than a piece of pavement.
The MA Bike Plan identifies:

Physical gaps:

High priority locations to eliminate physical network gaps.

Transit gaps:

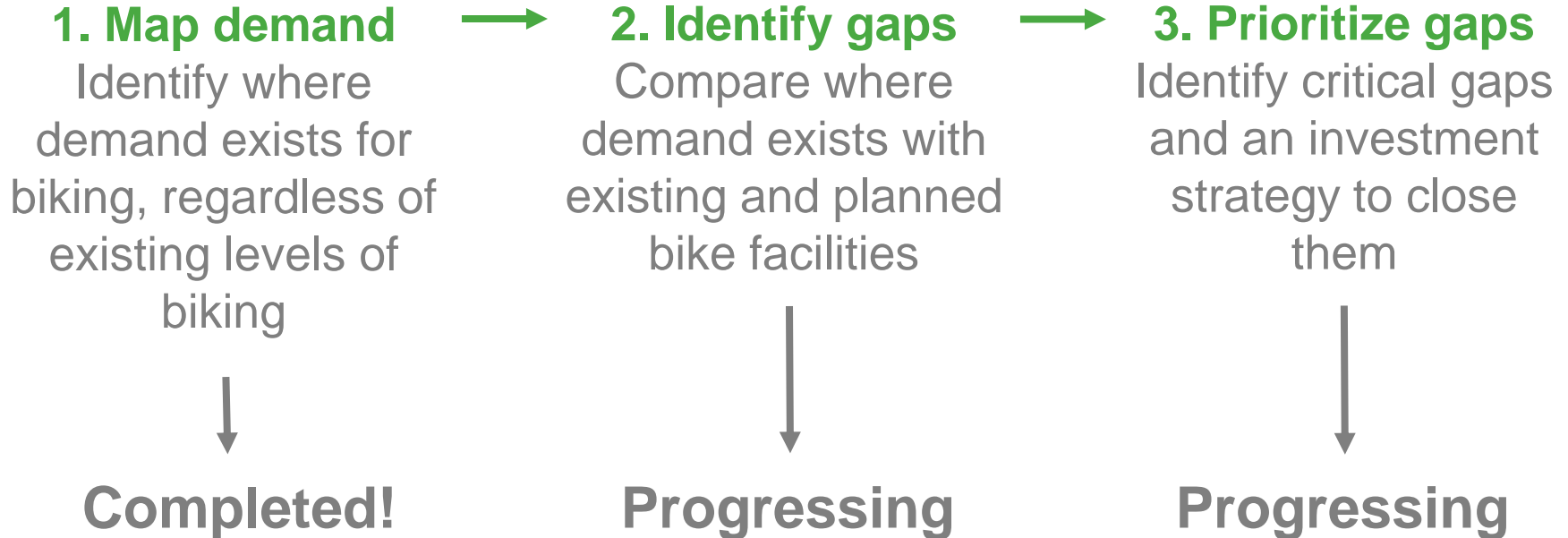
Opportunities to leverage transit and bike connectivity.

Temporal gaps:

Strategies to encourage year-round biking.

Physical Gaps

Physical gap process



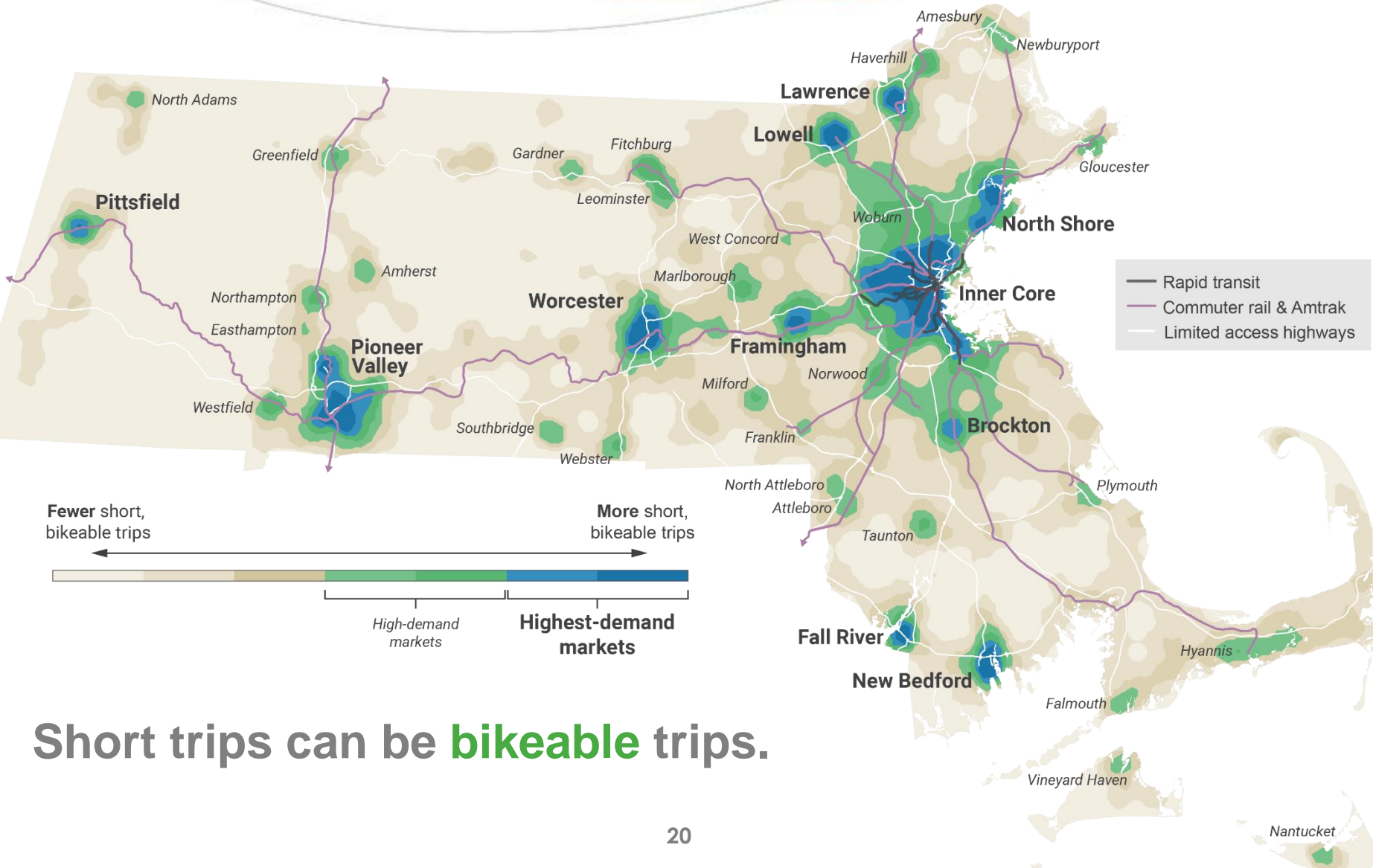
Mapping Demand

Short trips can be **bikeable** trips.

How to estimate where these trips are located?

- Run the statewide travel demand model, but...
 - View non-work trips up to 3 miles.
 - View work trips up to 6 miles.
 - Assign trips to network using shortest path.
 - Ignore existing on-road bike facilities.

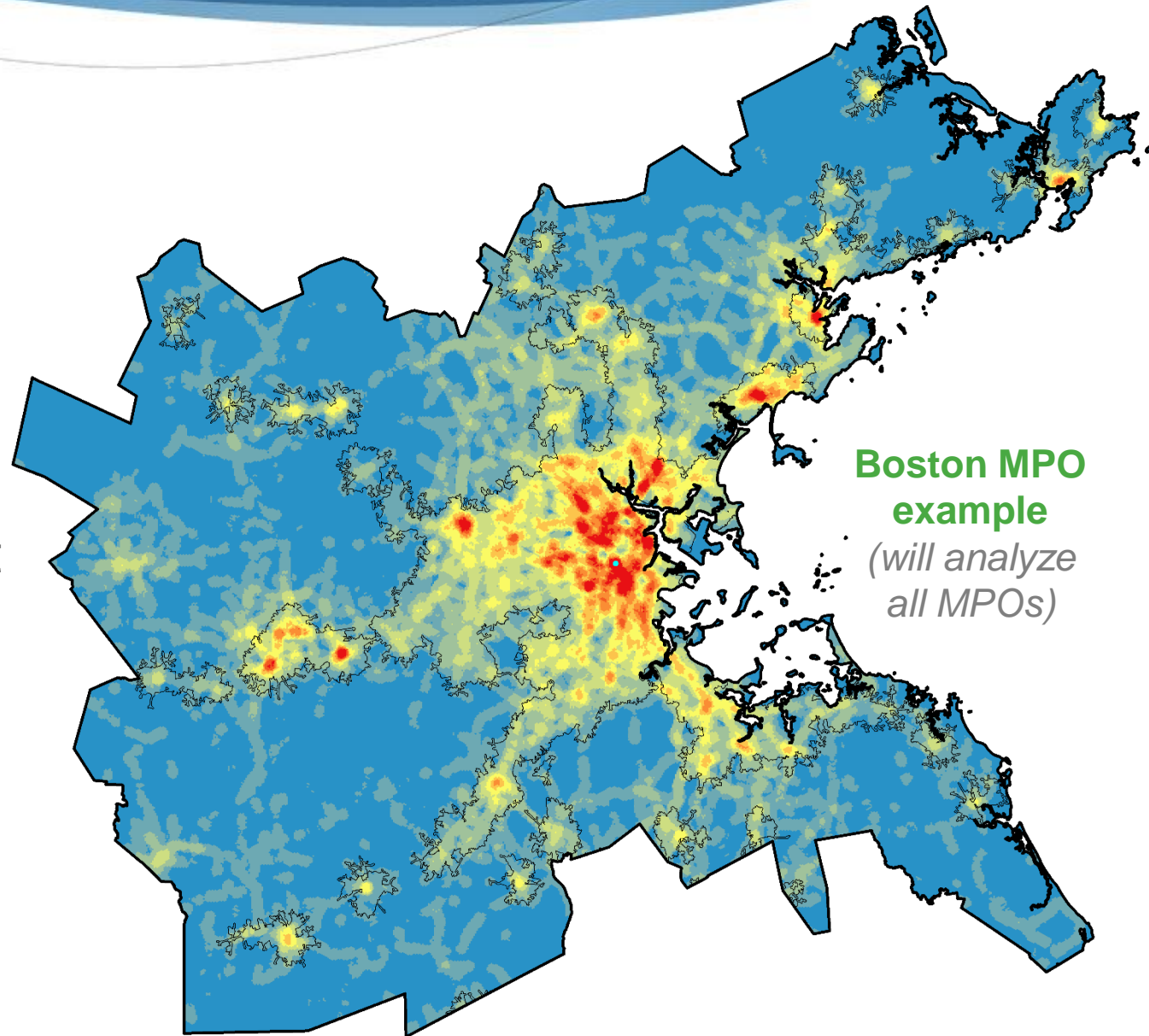
Mapping Demand



Short trips can be **bikeable** trips.

Identifying Gaps and Priorities

- Currently identifying priority corridors for **all regions**
- Scoring includes short trips, transit access, reported bike crashes, and equity



Bike-Transit Connectivity Guide

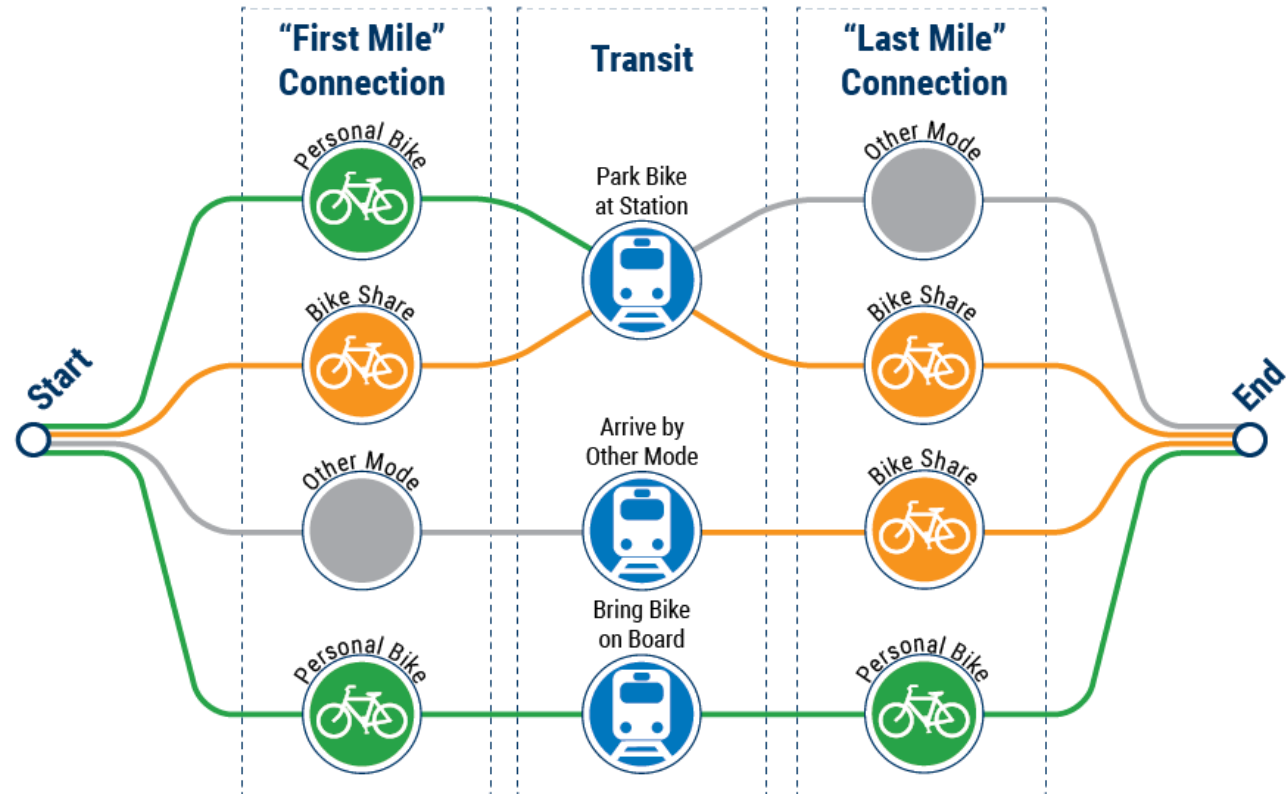
Best practice **resource guide** with case studies

- Recommends **strategies and actions** to make biking a safe, comfortable, and convenient part of routine transit trips
- Highlights **roles and partnerships** needed to implement strategies and actions
- Directs readers to local and national **resources**

Bike-Transit Connectivity Guide

Topics:

- Biking to and from stations and stops
- Parking bikes at stations and stops
- Bringing bikes on transit



Thank you!