



Pedestrian and Bicycle Safety Public Hearing

March 19, 2013

Pedestrian and Bicycle Safety



- **Introduction**
- **Applicable Laws and Wellesley Accident History**
- **Pedestrian/Bicycle Update**
- **Alternative Accommodations**
- **Questions from Board**
- **Public Input**

Town of Wellesley Bicycle By-Laws

- Wherever a sidewalk is provided adjacent to the roadway, bicycles may use such sidewalk and not the roadway, except:
- No person shall operate a bicycle on the sidewalk adjacent to a church, store, or business establishment.
- When on a sidewalk approaching a pedestrian, the bicyclist shall slow down and give a timely warning upon the signaling device
- Pedestrians shall be given right of way at all times
- ***Additional items found in Mass General Laws***

Accident Statistics

Reported Motor Vehicle Accidents:

- **2010: 849**
- **2011: 782**
- **2012: 784**

Reported Motor Vehicle Accidents
involving Pedestrians:

- **2010: 9**
- **2011: 8**
- **2012: 8**

Reported Motor Vehicle Accidents
involving Bicyclists:

- **2010: 13**
- **2011: 9**
- **2012: 5**

Recent Pedestrian & Bicycle Activities in Wellesley

- 2007-11 Bike rack MAPC grant
 - Installed 42 bike racks (216 bike spaces) in Wellesley
- 2008-12 Wellesley High School Project
 - Improved ADA compliance and reconstructed sidewalk network
 - Bike racks
- 2009 Planning Board “Wellesley Walks”
- 2009-11 Redevelopment of Linden Square
 - Coordinated traffic lights
 - Street furnishings
 - Pedestrian Bump-outs
 - Bike racks

Recent Pedestrian & Bicycle Activities in Wellesley



Recent Pedestrian & Bicycle Activities in Wellesley

- 2010 - ongoing Fuller Brook Project
 - 2.2 miles of universal access pathways (Dover Road to Maugus Ave)
 - Links to popular pathways through Hunnewell Field
- 2011-12 Lower Falls Improvement Project
 - Exclusive pedestrian phase at traffic lights
 - Lighted pedestrian activated crosswalks
 - Pedestrian Bump-outs
 - Bike racks
 - Connection to public trails and DCR Footbridge

Recent Pedestrian & Bicycle Activities in Wellesley



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Recent Pedestrian & Bicycle Activities in Wellesley



Future Projects with Considerations for Bicycle & Pedestrian Improvements

➤ Washington Street

- Multi-year street resurfacing project
- Anticipated **Phase 1** - Route 9 to Forest Street, **Phase 2** - Forest Street to Wellesley Ave and **Phase 3** - Wellesley Square
- Mobility improvements including ADA ramp upgrades, removal brick banding and brick crosswalks

➤ Kingsbury Street

- Street reconstruction project to improve pedestrian safety and localized drainage problems
- Install curbing, replacing and installing ADA ramps, improve crosswalk visibility

Challenges for Wellesley

- Pedestrian safety enhancements are not always compatible with bicycle lanes
- Current Design guidance may require street widening
 - Commercial areas with on-street parking 48 to 50 feet (2 parking lanes, 2 bike lanes and 2 travel lanes)
 - Residential areas w/out parking 27 to 30 feet (2 travel lanes and 2 bike lanes)
- Added design costs
 - Proposed bike lane installation should be analyzed for traffic and pedestrian volumes
- Esthetic Concerns
 - Some communities have experienced concerns with pavement markings looking “too urban”

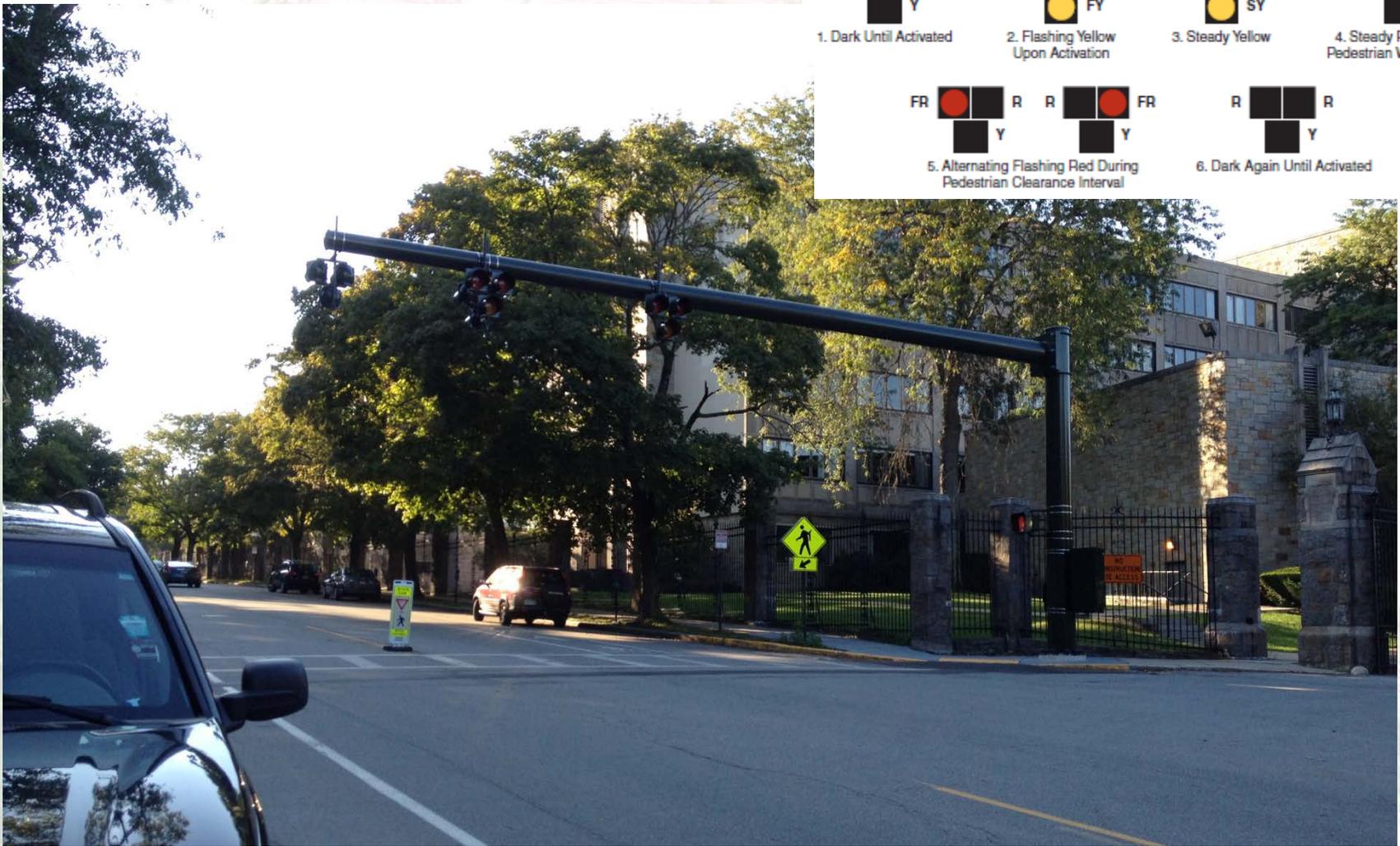
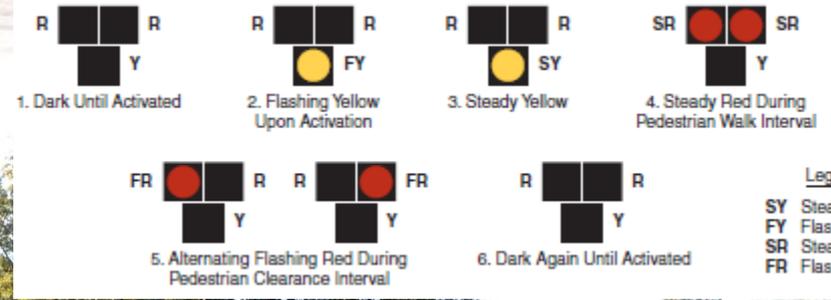
Complete Streets Design Approach

- Example - Dennis, MA



- Aims at accommodating ALL users within the public ROW
- Balances safety, operational efficiency and sustainability through design improvements

Pedestrian Safety Technologies – HAWK Signals



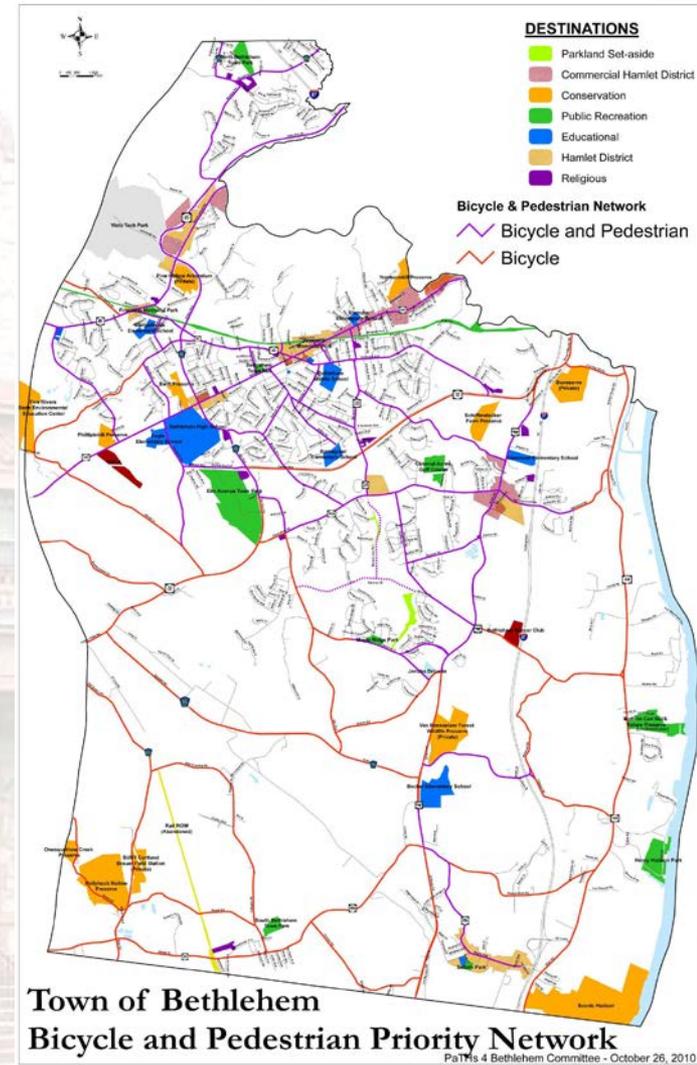
Five “E’s” of Bikeable Community

- **Evaluation and Planning** –identify and prioritize improvements to the system that benefit the greatest number of users and addresses the connectivity issues at a reasonable cost.
- **Engineering** –ensuring roadway design, bicycle-parking facilities, and other infrastructure are developed to better support bicycle use.
- **Education** –provide instruction to bicyclists and motorists on the safe use of bicycles in traffic.
- **Enforcement** –responsibility of the police to enforce the existing traffic laws and rules of the road for both motorists and bicyclists.
- **Encouragement** –programs, policies or events that can be implemented to encourage the use of bicycles as a transportation choice.



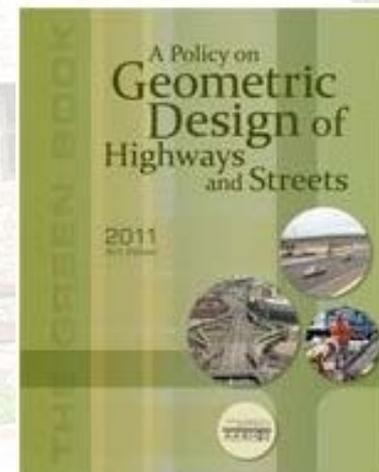
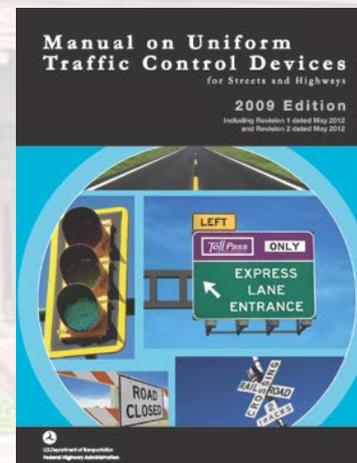
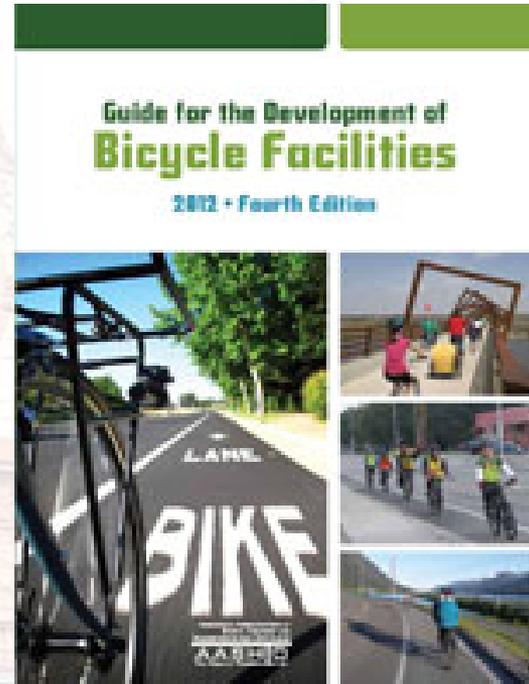
Evaluation & Planning- Mid & Long Term Plan (Example)

- Establish a bike/ped committee
- Updated Town bicycle GIS map
- Develop a pedestrian and bicycle priority network map
- Establish list of bike and pedestrian priority projects based on qualitative and quantitative data



Engineering Resources

- 2012 AASHTO Guide for Development of Bicycle Facilities
- 2011 AASHTO Green Book
- 2009 FHWA MUTCD



Engineering-Low Cost Alternative Examples

- Develop signed & marked on-road bike routes
- Improve parking conditions for cyclists
- Develop education and encouragement materials
- Implement bike and pedestrian priorities into maintenance program
- Recommendation for annual operations budget
- Bike Friendly Community Designation
- Apply for Walkable Community Designation

Bicycle Accommodation – Bike Lane Widths

- ...widths should be determined by context and anticipated use.
- Measure to center of line
- Bicyclists preferred operating width is at least 5 feet

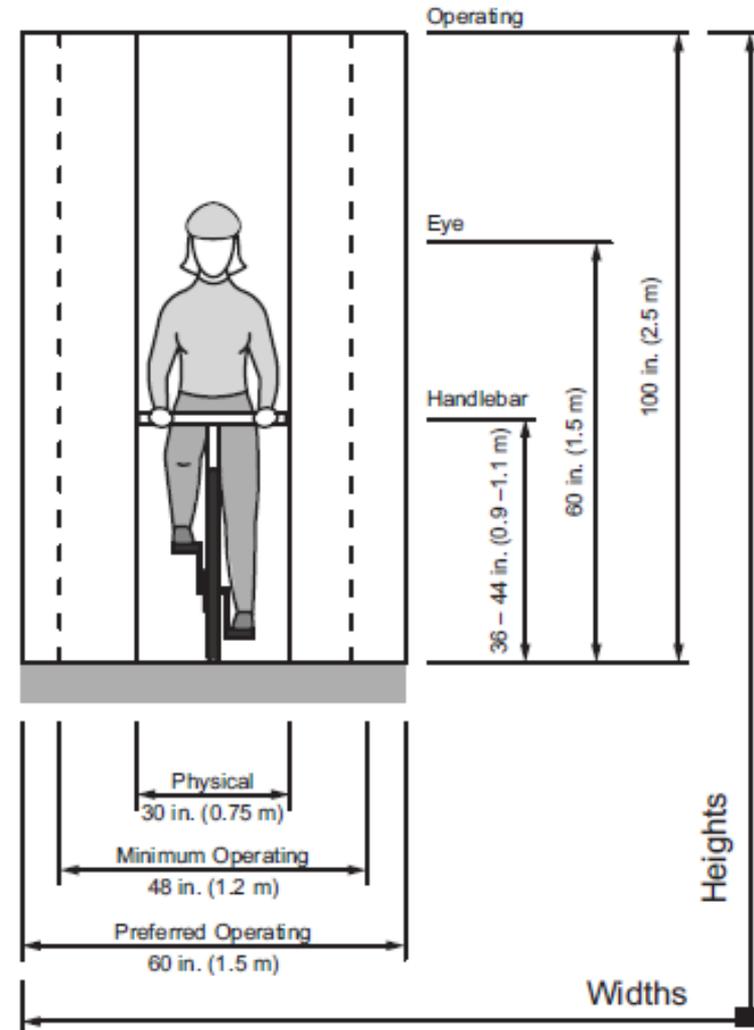
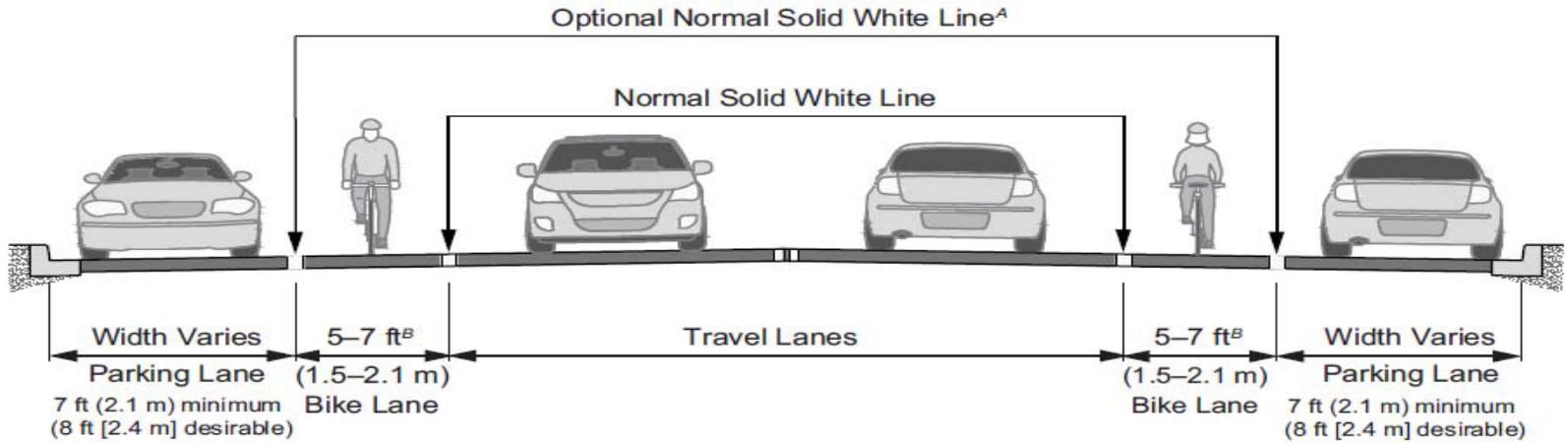
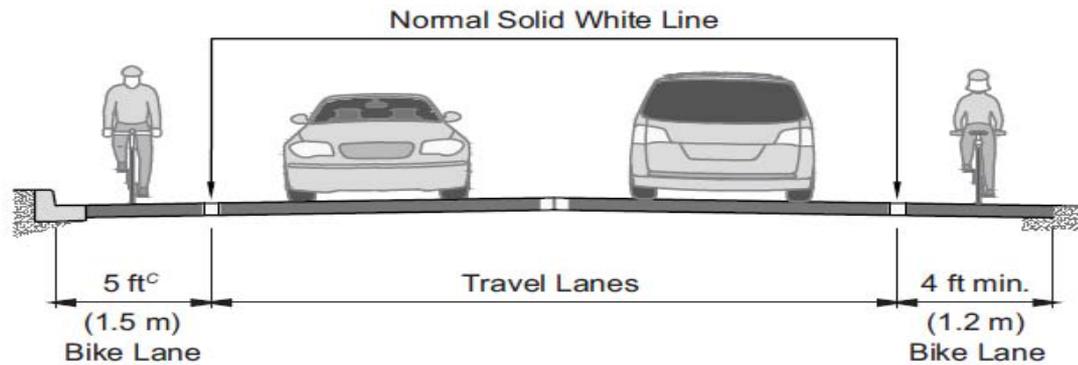


Figure 3-1. Bicyclist Operating Space

Illustrative Cross Sections



On Street Parking



Parking Prohibited

Marked Shared Lanes (SLM, Sharrows)

➤ Shared Lane Marking

Applications:

- Adjacent to parking to position cyclist outside of door zone
- In wide lanes to position away from curb
- Middle of narrow lanes
- Multi-lane roads with no room for bike lanes



Shared Lane Supplemental Signs



R4-11

Less than 13' Lane
SLM middle of lane



W11-1

W16-1P

Greater than 13' Lane
SLM at 11' from face of curb

Western Avenue Bike Accommodation – Allston MA

Bike Lanes



Sharrows



Floating Parking -
Bicycle Lane



Engineering Low Cost Alternatives: On-road Signed Bike Network



Education and Encouragement Low Cost Alternatives

new haven connecticut

EXPANDING THE REACH OF BIKEABILITY

With the City of New Haven's Transportation, Traffic & Parking (TT&P) Department adoption of a Bike Plan, the City now has a map for the future of maintaining a bicycle friendly community. The TT&P Department has refocused its efforts on education and expansion; educating all drivers and riders on rules of the road and expanding the number of bike riders and access to biking infrastructure across the City.

With the goal of educating motorists and bicyclists, the City shares these rules of the road as well as web links for further information. **Remember. Bicycles are vehicles too!**

- Bicyclists are allowed to ride on the roads
- Bicyclists riding on the roadway have the same rights and duties as the driver of a vehicle
- Bicyclists must ride in the same direction as traffic and must obey all traffic control devices
- Bicyclists are not allowed to ride on limited access highways
- When riding with multiple riders, bicyclists shall ride no more than two abreast in a single travel lane
- For motorists, when passing a bicyclist, allow adequate room so that the bicyclist is not endangered
- If riding on a street where there is a right turn lane and the rider intends to go straight, the rider must move into the travel lane to go straight staying to the right side of that lane
- When riding after dark, bikes must be equipped with a white front light and a red reflector or red light in the back
- When riding on a bike path and approaching other people from behind, warn them of your passing
- Recommendation: **Always wear a helmet**

FOR MORE INFORMATION ON BICYCLE RESOURCES, PLEASE VISIT:

City of New Haven, CT
www.cityofnewhaven.com/trafficparking/bikenewhaven.asp

Bikes Belong
www.bikesbelong.org

League of American Bicyclists
www.bikeleague.org

Elm City Cycling
www.elmcitycycling.org

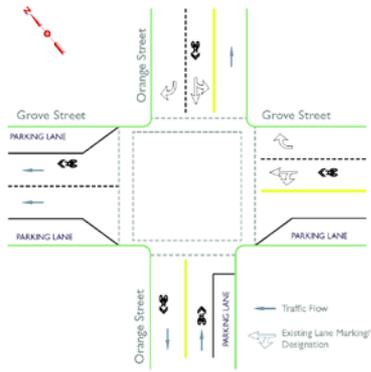


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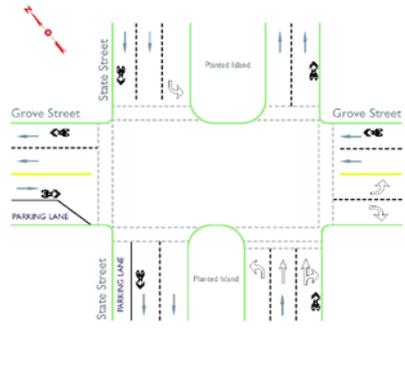


BECOMING
AND
MAINTAINING
A BICYCLE
FRIENDLY
COMMUNITY

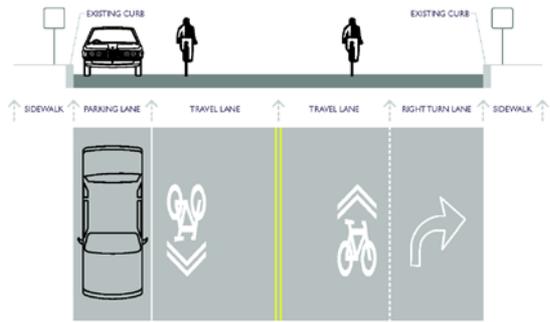
Education and Encouragement Low Cost Alternatives



GROVE STREET AND ORANGE STREET



GROVE STREET AND STATE STREET



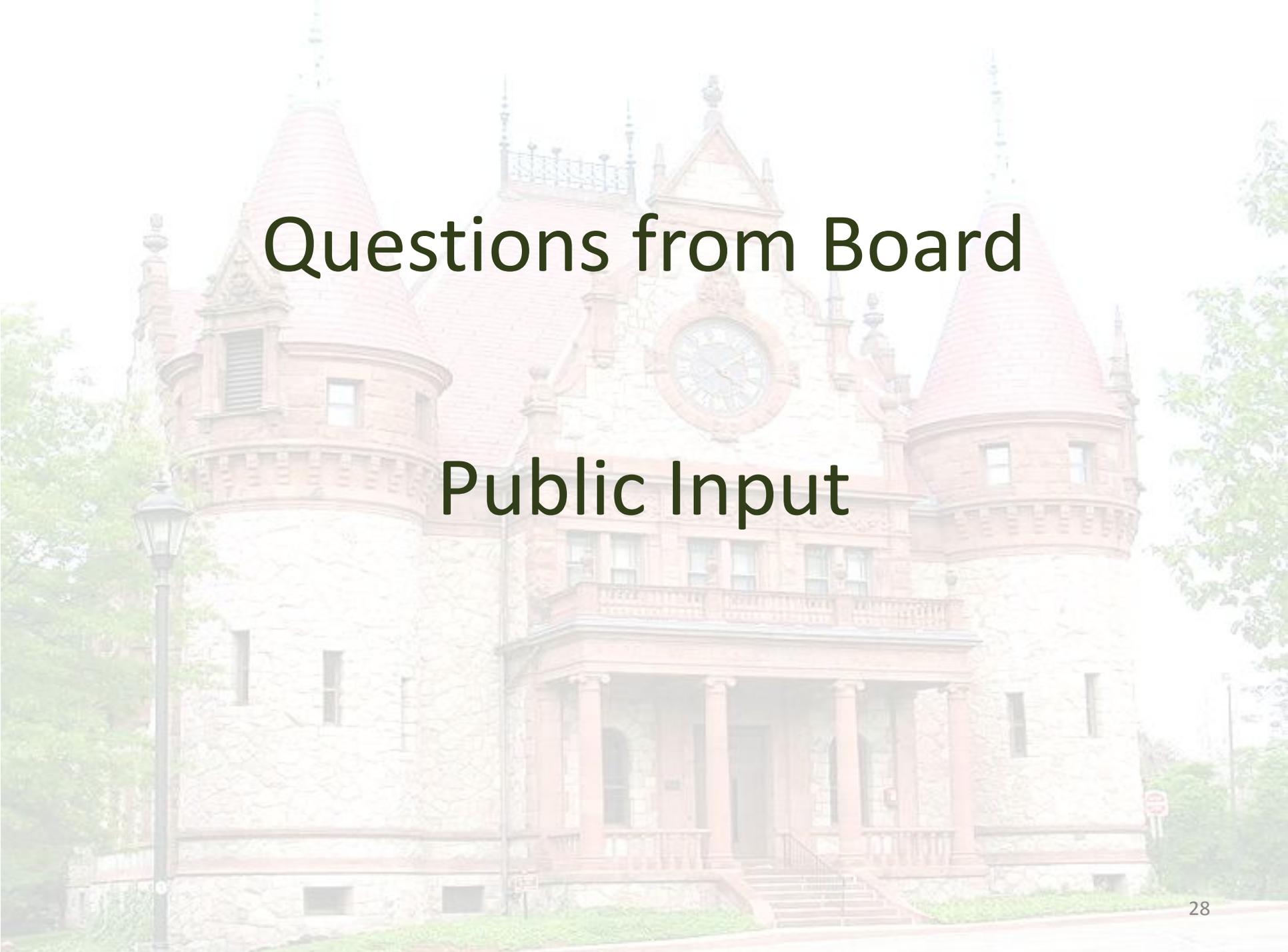
**SHARED LANE ROADWAY:
TWO-WAY ROADWAY WITH RIGHT TURN LANE AND PARKING LANE**

WWW.BIKENEWHAVEN.COM | [203.946.8075](tel:203.946.8075) | WWW.CITYOFNEWHAVEN.COM




THE SHARED LANE MARKING IS USED TO:

- Assist bicyclists with lateral positioning in a shared lane with on-street parallel parking in order to reduce the chance of a bicyclist impacting the open door of a parked vehicle
- Assist bicyclists with lateral positioning in lanes that are too narrow for a motor vehicle and a bicycle to travel side by side within the same traffic lanes
- Alert road users of the lateral location bicyclists are likely to occupy within the traveled way
- Encourage safe passing of bicyclists by motorists
- Reduce the incidence of wrong way bicycling



Questions from Board

Public Input





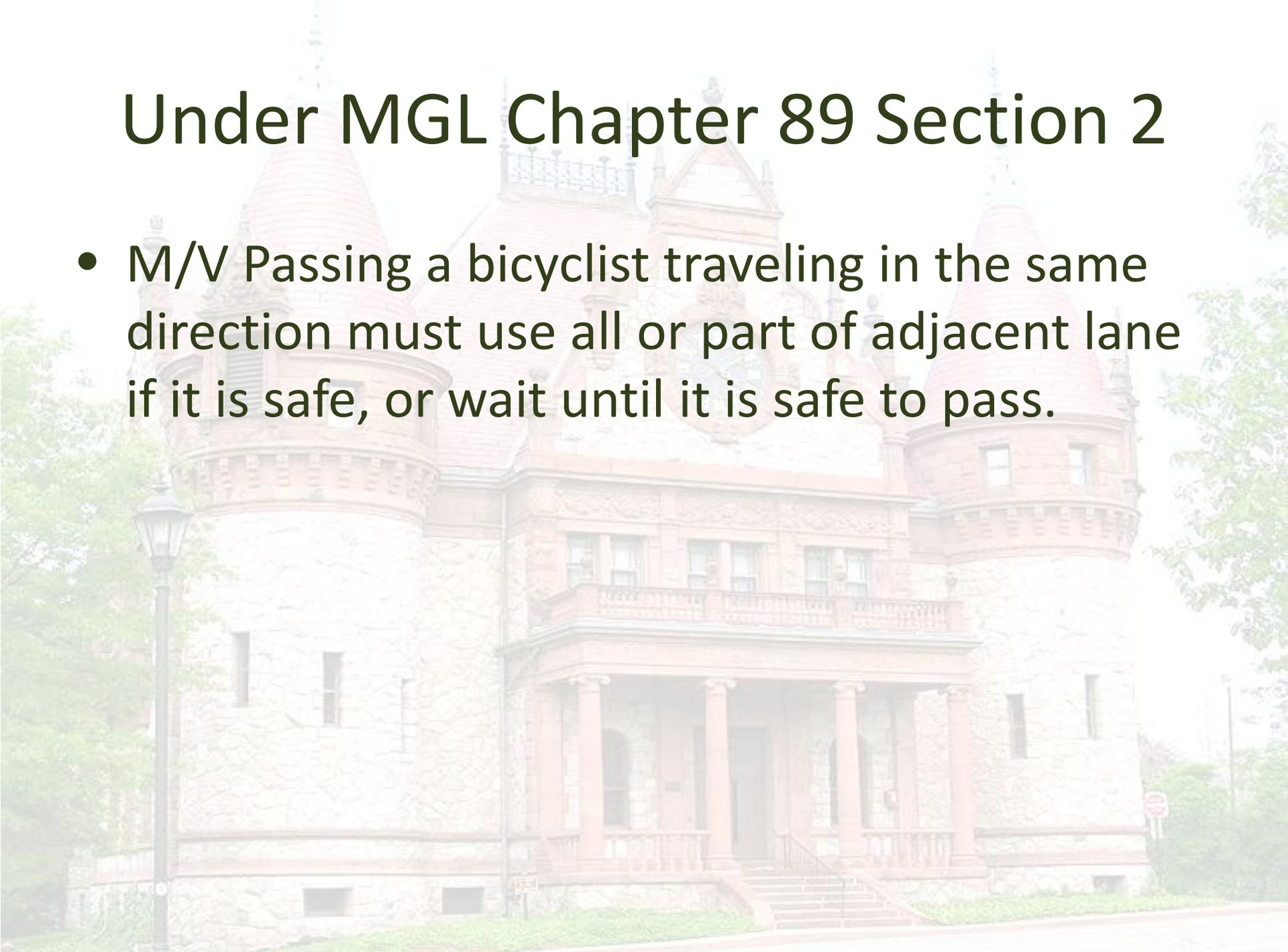
Motor Vehicles Responsibilities Toward Bicyclists

Under MGL Chapter 90 Section 14

- When approaching or passing a bicyclist, M/V must slow and pass at safe distance at reasonable speed
- M/V cannot turn right into path of bicyclist
- M/V cannot turn left into path of oncoming bicyclist
- M/V cannot open door of vehicle unless safe

Under MGL Chapter 89 Section 2

- M/V Passing a bicyclist traveling in the same direction must use all or part of adjacent lane if it is safe, or wait until it is safe to pass.



Bicyclists Responsibilities Toward Motor Vehicles and Pedestrians

The background image is a photograph of a grand, historic building, likely a university or institutional structure. It features a central clock tower with a large clock face, flanked by two prominent turrets with conical roofs. The building's facade is a mix of light-colored stone and reddish-brown brick. A balcony with a decorative railing is visible on the second floor. The scene is set outdoors with green trees and a street lamp in the foreground. The overall image has a light, semi-transparent overlay.

Under MGL Chapter 85 Section 11B

- Bicyclist shall signal by either hand intention to stop or turn
- Bicyclist may ride on sidewalks outside of business districts
- Bicyclist shall yield right of way to pedestrian on sidewalk and give audible signal before passing

Under MGL Chapter 85 Section 11B (continued)

- Bicyclists may ride 2 abreast, but must facilitate passing
- Bicyclist or bike passenger must wear helmet if 16 years of age or under

