Arborway Bicycle Facilities

DCR Public Meeting #2

Thursday, February 5, 2015 – 6:30 p.m. - 8:00 p.m.
Arnold Arboretum Visitor Center/Hunnewell Building
125 Arborway, Boston
DCR Mission Statement

“To protect, promote and enhance our common wealth of natural, cultural and recreational resources for the well-being of all.”
Tonight’s Meeting - Purpose

To obtain feedback on starter ideas
Toole Design Group’s Mission Statement

“Making walking and biking possible for every trip”
Project Goals

- Incorporate bicycle facilities
- Increase connectivity
- Improve comfort and safety for all users
- Reduce conflicts between all modes
- Increase predictability of each mode
- Maintain existing historic landscape
Project Process

- Existing Conditions Analysis
- Stakeholder & Public Input
- Discuss Starter Ideas
- Develop Starter Ideas
- Next Steps
Why incorporate bicycle facilities
Arborway Bicycle Facilities

Study Area
Arborway - 1905
Historic Alignment
Previous Planning Projects

- Crosswalks Improvements at Arnold Arboretum and Upper Arborway (2014)
- Crosswalk and Pathway Treatment Guidelines for the Emerald Necklace Parks (2012)
- Jamaica Pond Pedestrian and Bicycle Access Improvements Project (2011)
- “Gateway to the Arborway” Landscape Treatment Plans (2008)
- Parkways Preservation Treatment Guidelines (2006)
- Emerald Necklace Master Plan (2001)
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Building a Common Vocabulary – Types of Bicycle Facilities

**Bike Lane**
A bike lane is an exclusive travel lane for bikes, typically located along the right side of the travel lanes on a two-way street; however, bike lanes may be located on either side of a one-way street.

**Buffered Bike Lane**
Buffered bike lanes provide a higher quality bike facility where right-of-way allows. On roads with higher speeds, a buffer between the travel lane and the bike lane allows for increased comfort for cyclists. On roads with on-street parking, a buffer may be placed between the parking lane and the bike lane, reducing doorin crashes.

**Shared-Use Path**
A shared-use path is typically a paved path which may be located on an exclusive right-of-way or parallel to an existing roadway. Paths are typically two-way, open for bicyclists, pedestrians, and other non-motorized users. Shared-use paths should be ADA-compliant and range from 10 to 14 feet wide.

**Separated Bike Lane**
Separated bike lanes provide increased comfort and safety to cyclists. The lane itself may be at street level, sidewalk-level, or in between. They are separated from vehicular traffic by a vertical element, which may take the form of flex posts, planters, parked cars, curbs, or raised medians. Separated bike lanes may be one-way or two-way facilities.

**Shared-Lane Markings**
Shared-lane markings designate positioning for cyclists within lanes shared by vehicles and bicyclists and alert drivers to the presence of cyclists. Shared lane markings should be considered in constrained corridors where installation of bicycle lanes is not feasible or as temporary until future improvements can be provided full bicycle facilities.
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Traffic Control

24 Hour Counts
Traffic Data: Arborway

- Average Daily Traffic ~ 49,200 vehicles per day
- AM Peak – 3,820 vph  PM Peak – 3,660 vph
Afternoon Peak Traffic Data
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Volumes with Speed Breakdown

Speed Limit

50th Percentile Speed

85th Percentile Speed
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Volumes with Speed Breakdown

Hourly Vehicular Volume

Time of Day

<20 MPH
20-24 MPH
25-29 MPH
30-34 MPH
35-39 MPH
40-44 MPH

12:00 AM 02:00 AM 04:00 AM 06:00 AM 08:00 AM 10:00 AM 12:00 PM 02:00 PM 04:00 PM 06:00 PM 08:00 PM 10:00 PM
Field Observations

- Bicyclists riding on sidewalks
- High vehicle speeds between Kelley Circle and Murray Circle
- Minimal pedestrian crossing opportunities
- Many drivers don’t yield to pedestrians at unsignalized crossing locations
- Queues at the Centre Street signal often back into Murray Circle
What we heard
What we heard

CYCLETRACKS!

“Speeding is a serious concern.”

PROTECTED BIKE LANE!

“Ability to cross traffic circles on foot or bicycle.”

“Less car centric.”

“Design for people not for cars.”
What we heard

• Trees
What we heard

- Trees
- Disconnected open space
- Trees
- Disconnected open space
- Speeding

What we heard
• Trees
•Disconnected open space
• Speeding
• Preserve easy access
• Trees
• Disconnected open space
• Speeding
• Preserve easy access
• Hard to navigate
What we heard

- Trees
- Disconnected open space
- Speeding
- Preserve easy access
- Hard to navigate
- Complex traffic circles
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- Vehicles do not yield to pedestrians
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- Vehicles do not yield to pedestrians
- Continuous bike connection
What we heard

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- Hard to navigate
- Complex traffic circles
- Vehicles do not yield to pedestrians
- Continuous bike connection
- Carriageway comfortable for all
- Trees
- Disconnected open space
- Speeding
- Preserve easy access
- Hard to navigate
- Complex traffic circles
- Vehicles do not yield to pedestrians
- Continuous bike connection
- Carriageway comfortable for all
- Regional traffic on mainline