Commonwealth Avenue Proposed Roadway Improvements

Boston Public Library, Monday August 31st, 2009



Hyattsville, MD - Boston, MA - Seattle, WA

- 1. Overview
- 2. Typical Cross Section
- 3. Charlesgate
- 4. Mass Ave
- 5. Arlington St
- 6. Comments & Questions



Hyattsville, MD - Boston, MA - Seattle, WA

Project Description

- Project Purpose: Improve Bicyclist Accommodations and Roadway Safety
- Limits: Kenmore Square to Arlington St



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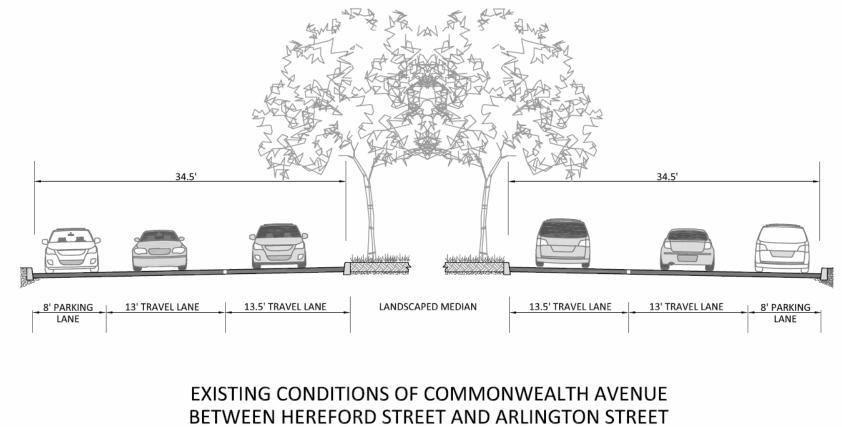


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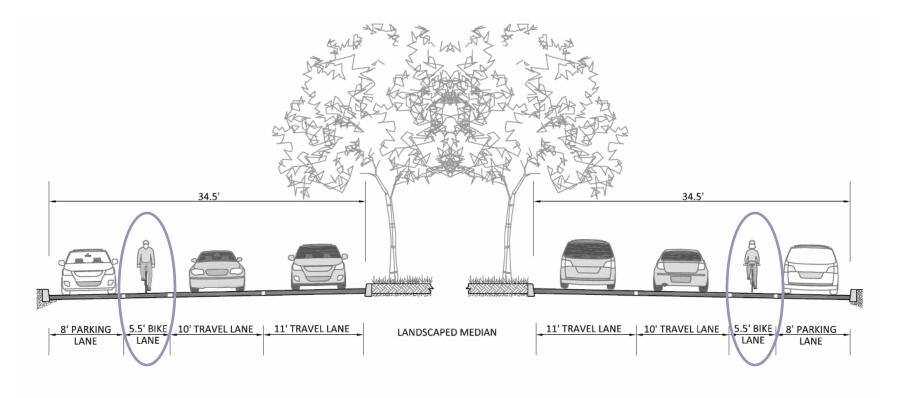


Existing Conditions



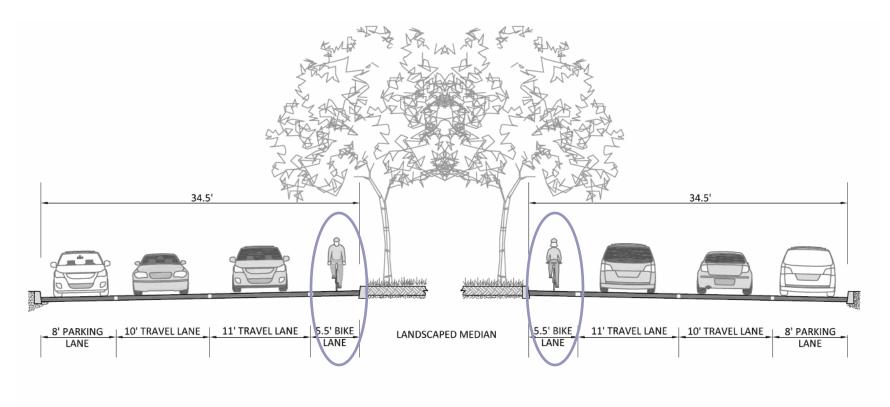
LOOKING EAST

Right Side Bike Lane Hereford Street to Arlington Street



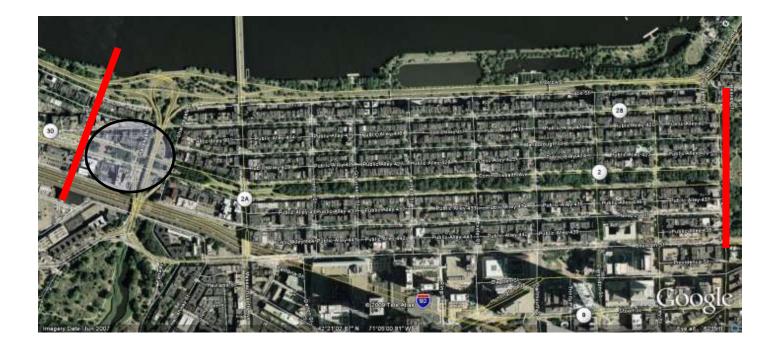
PROPOSED CONDITIONS OF COMMONWEALTH AVENUE, RIGHT SIDE OPTION BETWEEN HEREFORD STREET AND ARLINGTON STREET LOOKING EAST

Left Side Bike Lane Hereford Street to Arlington Street



PROPOSED CONDITIONS OF COMMONWEALTH AVENUE, LEFT SIDE OPTION BETWEEN HEREFORD STREET AND ARLINGTON STREET LOOKING EAST

Bowker Overpass



Existing Conditions



Eliminating 1 Vehicle Lane Eastbound Kenmore St to Charlesgate West



Table 7. Comparison of Existing and Proposed Conditions Level of Service Summary

	a.m. Peak Hour		p.m. Peak Hour	
Intersection	Existing	Proposed	Existing	Proposed
Beacon Street/Charlesgate West/ Bay State Road	D	D	D	D
Beacon Street/Charlesgate East	В	С	С	С
Commonwealth Avenue Westbound/ Charlesgate West	А	В	В	с
Commonwealth Avenue Westbound/ Charlesgate East	С	С	D	D
Commonwealth Avenue Eastbound/ Charlesgate West	В	В	В	В
Commonwealth Avenue Eastbound/ Charlesgate East	В	С	D	D

Shading indicates a decrease in level of service from the previous condition.

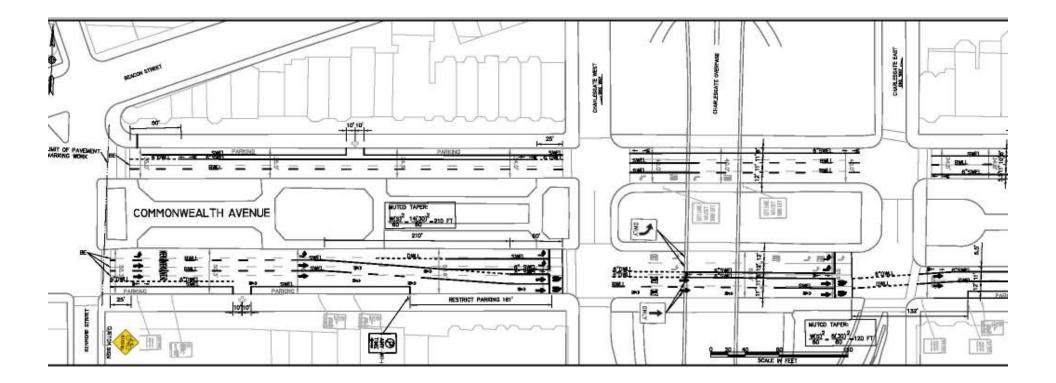
NOTE: Adjusted Traffic Volumes

The study area intersections are less than a half-mile from Fenway Park and experience additional traffic during Boston Red Sox games. HSH examined the ATR data for weekday home games and weekday away games and determined that a.m. peak traffic is 4% higher and p.m. peak traffic is 16% higher on days when the Red Sox play in Boston. In order to adjust the turning movement data, which was collected while the Boston Red Sox were out of town, HSH factored up the turning movement volumes by those amounts to account for a "worst-case scenario."

Analysis

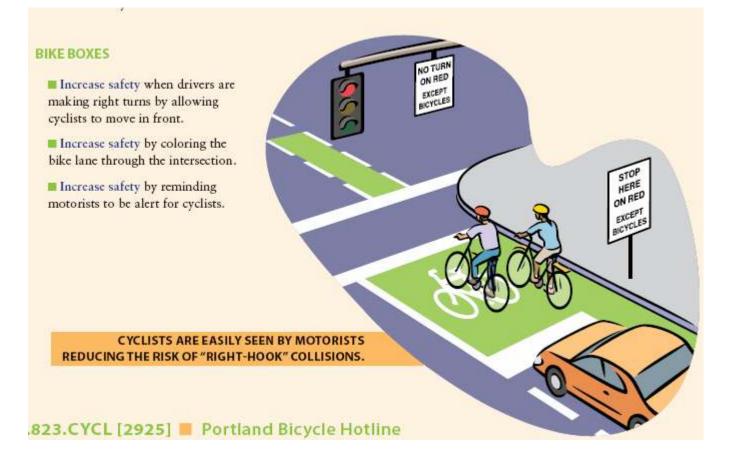
- Dropping one vehicle lane from Kenmore St to Charlesgate West feasible
- Dropping one vehicle lane from Mass Ave underpass feasible
- Overall Vehicle LOS remains relatively unchanged
- Providing bike lane improves bicycle LOS
- No change to pedestrian LOS
- Loss of 8 parking spaces approaching Charlesgate West recommended to reduce weaving and merging movements by motorists

Left Side Bike Lane Approach Charlesgate West to Charlesgate East



Shifting vehicle lanes requires parking restriction approaching Charlesgate West

Bike Boxes



Mass Ave & Underpass



Underpass at Mass Ave

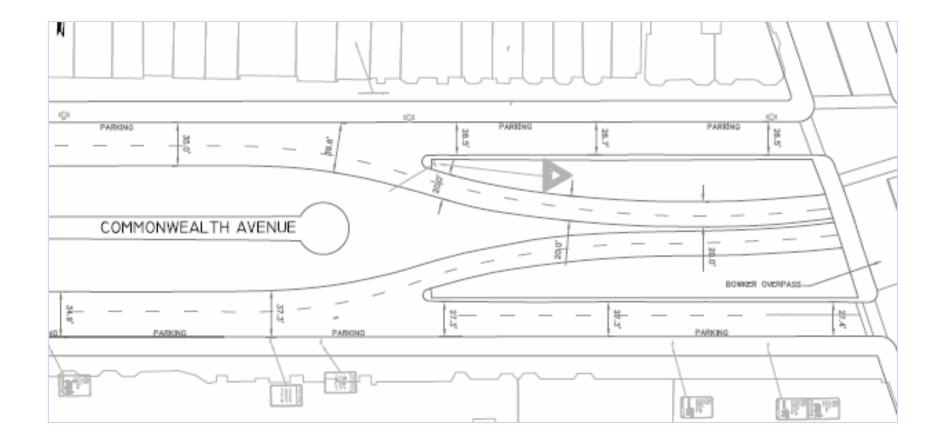
Table 1. Existing Lane Usage

Roadway Segment	Left Lane	Middle Lane	Right Lane			
Beacon Street west of Charlesgate East	15.7%	66.0%	18.3%			
Commonwealth Avenue EB at Massachusetts Avenue underpass	68.3%	n/a	31.7%			
Commonwealth Avenue WB at Massachusetts Avenue underpass	65.8%	n/a	34.2%			

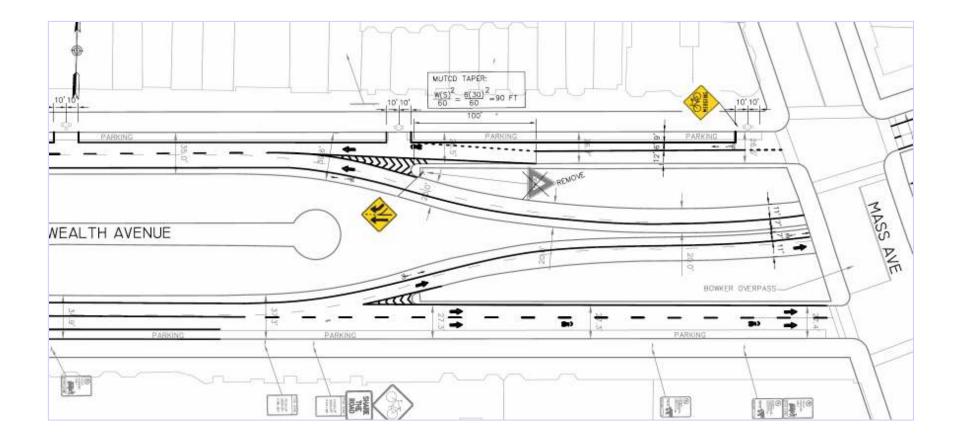




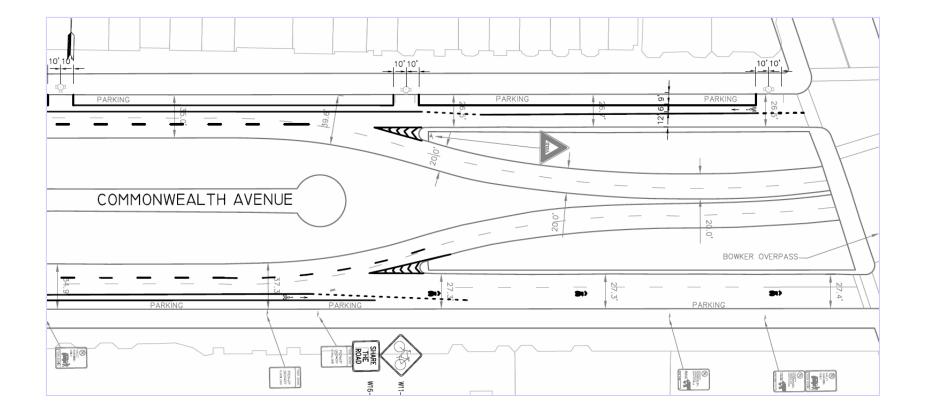
Existing Conditions (Underpass) Charlesgate East to Hereford Street



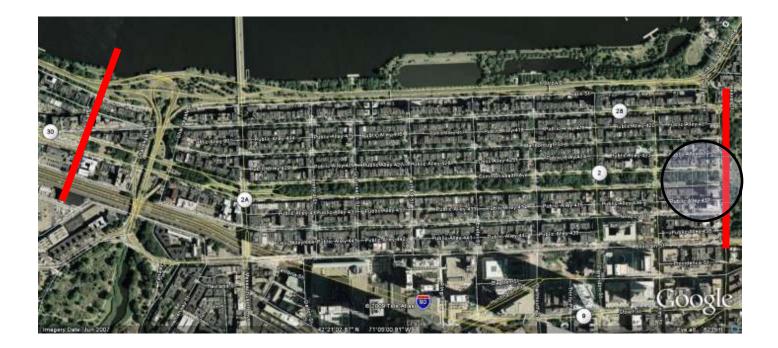
Left Side Bike Lane (Underpass) Charlesgate East to Hereford Street



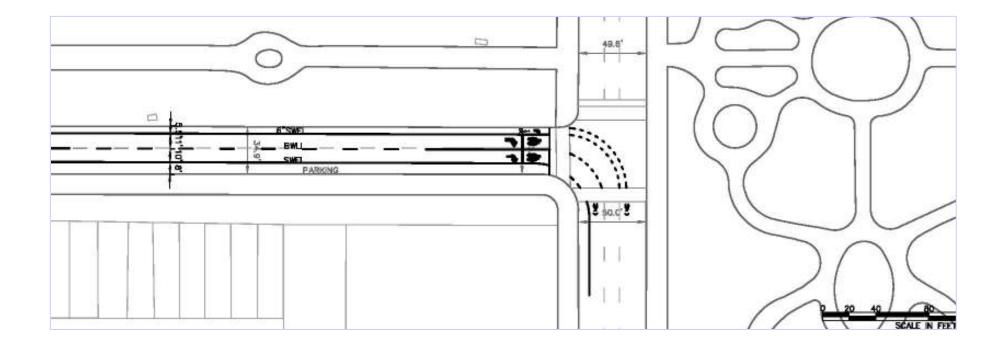
Right Side Bike Lane (No Underpass) Charlesgate East to Hereford Street

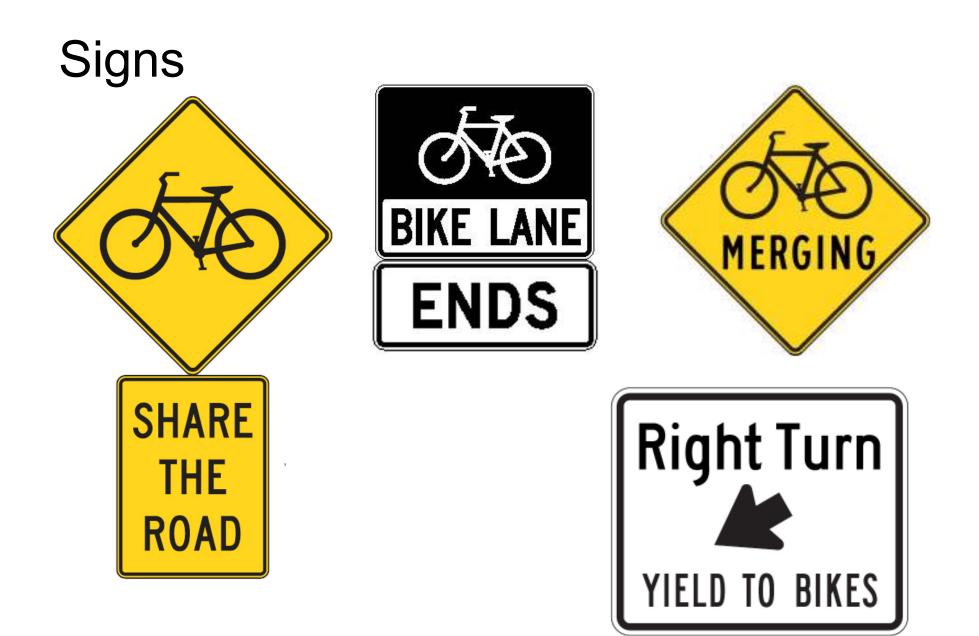


Arlington St.



Arlington St.





Questions & Comments