January 15, 2014

Mr. Richard A. Davey, Secretary of Transportation, 10 Park Plaza, Suite 4160 Boston, MA 02116 Attention Stephanie Boundy, and to stephanie.boundy@state.ma.us



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Mr. Jack Murray, Commissioner, Massachusetts Department of Conservation and Recreation, 251 Causeway Street, Suite 900 Boston, MA 02114-2104 and by e-mail to dcr.updates@state.ma.us

RE: Charles River Basin Pedestrian and Bicycle Connectivity Study

Dear Commissioners Murray and Davey:

I thank you for the opportunity to comment on the Charles River Basin Connectivity study.

I attended the December 3 meeting at the Community Rowing Boathouse on Nonantum Road. I have been active in bicycle advocacy since the late 1970s. My credentials are on record at <u>http://bikexprt.com/witness/bikeres3.htm</u>. I am currently a member of the Charles River Wheelmen Board of Directors and of the Bicycle Technical Committee of the National Committee on Uniform Traffic Control Devices. In this letter, I am speaking for myself.

This is going to be a rather long comment letter, as the Study is very extensive, and as I have been using and studying the Charles River Basin paths since the 1970s. Following a summary and a list of background documents, I'll go through the Study report with comments page by page.

Summary:

I am pleased with many of the recommendations of the study, and particularly the proposals to reclaim parkland from the overbuilt Greenough Boulevard, Memorial Drive and Birmingham Parkway.

On the other hand, I disagree with some recommendations of the study concerning specific treatments, and I also have comments about larger-scale planning issues.

I am concerned with improvements not only for recreational use but also for bicycle transportation. In this light, it is important to look beyond the river corridor. The study already makes suggestions along these lines, but I have a few more.

Background:

Over the years, I have produced a series of online articles and photo albums which illustrate issues with the streets and paths in the Charles River Basin. Lately, I have produced videos further illustrating these issues.

I'll be referring to these materials in the course of my comments, but let me first list them.

South Side:

Eliot Bridge to Watertown Square: <u>http://www.john-s-allen.com/galleries/pdwsouth/index.html</u> Western Avenue to Eliot Bridge: <u>http://bikexprt.com/massfacil/boston/western.htm</u> River Street to Western Avenue: <u>http://bikexprt.com/massfacil/boston/rvstwsta.htm</u> BU Bridge to River Street Bridge: <u>http://bikexprt.com/massfacil/boston/butorvst.htm</u> Boston Esplanade: <u>http://bikexprt.com/massfacil/boston/esplanade.htm</u>

North Side:

Charles River Road, Watertown http://bikexprt.com/massfacil/watertown/charrivrd.htm North Beacon Street, Watertown: http://bikexprt.com/massfacil/watertown/nbeacon.htm North Beacon Street to Western Avenue, Watertown-Cambridge: http://www.john-s-allen.com/galleries/pdwnorth/index.html Harvard Square to Magazine Street, Cambridge: http://bikexprt.com/massfacil/cambridge/pdwhite/hsqtomag.htm River Street to BU Bridge, Cambridge: http://bikexprt.com/massfacil/cambridge/pdwhite/hsqtomag.htm BU Bridge/RR overpass, Cambridge: http://bikexprt.com/massfacil/cambridge/pdwhite/bubrrrop.htm BU Boathouse-Land Blvd., Cambridge: http://bikexprt.com/massfacil/cambridge/pdwhite/butoland.htm

Bridges:

Harvard Bridge: http://www.john-s-allen.com/galleries/hvdbridge/index.html

Longfellow Bridge comments on EOEA 14384, May 7, 2009: <u>http://john-s-</u> <u>allen.com/plandocs/John%20Allen%20comments%20on%20EOEA%2014384.doc</u>

Longfellow bridge comments of March 19, 2012: <u>http://john-s-allen.com/plandocs/longfellow.doc</u>

Longfellow bridge comments of April 23, 2012: http://john-s-allen.com/plandocs/longfellow1a.doc

Longfellow Bridge restoration project: <u>http://streetsmarts.bostonbiker.org/2013/07/20/report-on-longfellow-bridge-public-meeting-july-10-2013/</u>

Western Avenue and River Street bridges: http://john-s-allen.com/pdfs/2013-04%20River-Western1.pdf

Cambridge Street bridge over the Massachusetts Turnpike, <u>http://john-s-allen.com/reports/Cambridge_Street_Bridge.pdf</u>

Videos:

Allston to Cambridge by River Street Bridge: <u>https://vimeo.com/63856622</u>

PDW Path at Cambridge Street and Soldiers Field Road: <u>https://vimeo.com/30400141</u>

Western Avenue from North Harvard Street to the Charles River: https://vimeo.com/72136099

Left turn from PDW path at River Street to Cambridge Street: https://vimeo.com/82813087

Bike box at Charlesgate East: <u>https://vimeo.com/81022106</u>

Comments on Section A, Galen Street to North Beacon Street Bridge

I regard the restriping of Charles River Road with bike lanes as successful, see <u>http://bikexprt.com/massfacil/watertown/charrivrd.htm</u>. I strongly support the creation of a safe crossing to the park for students at the Perkins School for the Blind. In the linked article, I note that a crossing from the Perkins School for the Blind was once indicated by a sign.



Figure 1 -- former blind children crossing sign on Charles River Road, early 1980s

A bicycle count on this road after the bike lanes were installed revealed that 80% of bicyclists were riding on the roadway rather than on the shared-use path in the riverfront park. Directing faster bicyclists to the roadway and off the path will be especially important with blind children using the park. Signage should warn bicyclists of their presence.

I heard once of a proposal to narrow Charles River Road, though I don't see it in the current report. Some narrowing would be possible while still leaving room for bike lanes in the part opposite the Perkins School where there is no on-street parking. Quoting:

The existing bike lanes on Charles River Road and on North Beacon Street both end before they reach the intersection at Watertown Square. Shared lane markings should be added to continue



the facilities to the intersection.

I agree. Continuing the bike lane to the intersection would result in right hook conflicts. Parking is an issue for these first couple of hundred yards east of Watertown Square, as it impinges on the eastbound bike lane. There is parking demand for park users. I suggest time-limiting parking on weekdays to reduce parking demand.

I have discussed the intersection of North Beacon Street and Charles River Road here:

http://bikexprt.com/massfacil/ watertown/nbcncrr.htm. I agree with the need for improvements, and in particular, widening and sight line improvements where the path turns the corner between these two streets.

Figure 2 --Path on Charles River Road approaching North Beacon Street

The intersection at North Beacon Street and Greenough Boulevard does need signalization. There is a particular hazard due to a sight line restriction because the North Beacon Street Bridge is arched. A jughandle turn would be practical only in connection with a traffic signal. Bicyclists should still also continue to be able to turn left on the roadway. This is currently the only way to turn left safely despite the sight line limitation, and it is faster. See http://john-s-allen.com/galleries/pdwnorth/slides/N%20Beacon%20CRR%20Bridge1.html

I agree with the need for a connection through the Arsenal Mall to the Watertown Community path, but I note that a two-way bikeway should only be on a one-way roadway so that adjacent lanes of the bikeway and roadway carry traffic in the same direction. That appears to be the case but is not entirely clear following the intersection in the Figure at the lower right of page 14. It also appears to me that a more direct route through the parking lot might be possible, avoiding sidewalk travel on Arsenal Street.





I also agree about the need for improvements at the Galen Street and North Beacon Street bridges on the south side of the river.

The recently completed improvements to Nonantum Road and the adjacent path point the way to similar improvements in other parts of the Lower Basin. I note that while path width was increased, sufficient width also was maintained on the roadway so that motor vehicles could overtake bicycles and motor scooters. The increasing popularity of electrically-assisted bicycles and motor scooters needs to be accounted for in this way, as they pose a problem on paths shared with pedestrians. Improved crossings at Brooks Street, Charlesbank Road, Maple Street and Water Street would be welcome.

Comments on Section B, North Beacon Street Bridge to Arsenal Street Bridge

A series of crosswalks is proposed to get between the North Beacon Street Bridge and Birmingham Parkway at Parsons Street. While these would indeed be useful for pedestrians and recreational cyclists, the numerous delays would make them unsuitable for commuter cyclists.

Both eastbound and westbound, motorists, and bicyclists who travel between the bridge and Birmingham Parkway, must merge across two lanes from the left. In my opinion, the entire rotary needs a more fundamental examination and reorganization. The westbound lanes of Soldiers Field Road might be brought adjacent to the eastbound lanes. This might simplify traffic flow, eliminating the merges from the left, and recover parkland which is presently in the "no man's land" inside the rotary. There would then need to be two signalized intersections, at Parsons Street/Birmingham Parkway and at the bridge. These would be fewer traffic signals than in the proposed design. Bicycle and pedestrian routing on paths would be far simpler and involve fewer crosswalks.



Figure 4 – Please replace the rotary with two signalized intersections. Figure 44 from the report.

The report also states:

The North Beacon Street Bridge should be reconfigured from four to three lanes to provide space for a cycle track across the river. This will improve bike connections from Watertown to the Nonantum Road path and help cyclists heading into Watertown to avoid the right-turn lane from the bridge onto Greenough Boulevard.

I strongly disagree with this recommendation. The words "cycle track" are dropped into the discussion without any description of what is proposed or how it would function, and also at odds with what is shown in the map at the bottom of the page (also Figure 4 above), not a single "cycle track" but two facilities, one on each side of the bridge. Bicyclists on the bridge need to ride toward the left side of the right turn lane to avoid the right-turning traffic and continue onto the bike lane on North Beacon Street. Marking the right-turn lane with shared-lane markings for through bicycle traffic (a treatment currently experimental with the FHWA but widely used) would formalize this use. A "cycle track" would have through bicyclists traveling at speed to the right of this right-turning traffic as they descend off the bridge, a hazardous conflict.

The right turn onto the bridge from Soldier's Field Road is a problem. At this location, lane reduction and delineation of a bike lane would be helpful. My proposal to replace the rotary with two signalized intersections would eliminate the right turn and its associated problem.

The report also states:

Crosswalks should be added to the signalized intersection at North Beacon Street and Birmingham Parkway. From this intersection eastward to the Lincoln Street intersection, Birmingham Parkway can likely be narrowed from four lanes to two lanes, providing ample space for a separated shared-use path and additional parkland. At the Lincoln Street intersection, new crosswalks should be added to connect across the Parkway. (page 16).

I heartily agree that Birmingham Parkway is overbuilt between North Beacon Street and Lincoln Street, and a path would be desirable in the parkland recovered by narrowing the Parkway. However, Birmingham parkway can provide a very important connection for bicycle transportation. For this reason, adequate width on the roadway for bike lanes or shoulders should be maintained.

Because of the river's meandering, the paths along the River provide a very indirect route between Cambridge (or Brookline, or Allston Village) and Watertown. This route is suitable for recreational use but greatly increases travel time and distance for commuter and utility travel.

Projects currently in planning generate a direct route, with one missing link. Major reconstruction to Cambridge Street is already in the planning stage, and Cambridge Street leads directly to Cambridgeport. Lincoln Street, which parallels the north side of the Massachusetts Turnpike, connects to Cambridge Street at one end and Birmingham Parkway at the other. Lincoln Street is two-way over its entire length except for the last block at its west end, approaching Market Street and Birmingham Parkway, where it is one-way westbound. Though this connection is already possible legally by riding on the sidewalk, a contraflow bicycle lane would improve the route substantially. Lincoln Street is rather narrow for two-way motor and bicycle traffic with the existing on-street parking. I would suggest possibly also making Lincoln Street between Franklin Street and Birmingham Parkway one-way westbound with a contraflow eastbound bicycle lane, or removing the parking, or else reducing the speed and or volume of traffic by traffic calming.

Comments on Section C, Arsenal Street Bridge to Eliot Bridge

I very strongly support the narrowing of the overbuilt Greenough Boulevard between Arsenal Street and the Eliot Bridge, improving the riverfront path and recovering parkland. I ask though that the roadway remain wide enough to allow dual-track motor vehicles to overtake bicycles (including electrically-assisted bicycles and motor scooters), as was done on Nonantum Road. I prefer options 2 (consolidation) and 3 (parkland restoration), as they meet this goal by preserving roadway shoulders, and restore parkland. Option 1 does neither of these. Also, options 2 and 3 separate the roadway from the bikeway by a guardrail. Option 1, with only a striped buffer, invites motor vehicle encroachment onto the bikeway.



Figure 5 -- Option 3, one of the good options. Figure 47 from the report.



I note that Figure 47 on page 18 is described as showing option 2, but not as described in the text.

Once again the words "cycle track" are dropped into the discussion in Figure 49, though two of the three options show a path separated from the roadway by a buffer or a guardrail -- a standard shared- use path -- and Figure 47 shows it in use by pedestrians as well as cyclists.

Figure 51 on page 20 shows a path connecting the parking lot at Christian Herter Park to Everett Street, only a practical option for bicyclists headed out of the park. As the jughandle for left turns into Everett Street is one-way toward Everett Street, there should also be a path on the other side of the jughandle roadway leading bicyclists to the T-junction with the driveway into the parking lot (middle right of Figure 51). At that location, there should be a yield sign for motorists.

Figure 6 -- There needs to be a path connecting with the crosswalks on both sides of Everett Street. Figure 51 from the report.

Figure 7 -- Everett S

pleasant than the one adjacent to Soldiers Field Road.

Figure 8 -- Tunnel under Eliot Bridge, north side. Note poor sight line at other end.

The underpasses under the Eliot Bridge provide important connections, avoiding delays to path users as well as motorists, as wells as hazards of collisions. I see no mention in the report of improvements to these underpasses. They both become flooded and muddy in wet weather. In addition, the access from the east to the Cambridge side underpass is around a sharp bend, limiting sight distance. This issue might be addressed by path widening and realignment.

Realignment of paths near the underpasses to be ADA compliant as shown in the drawings would involve sharp turns which make them noncompliant with AASHTO bicyclefacilities guidelines. It should be possible to conform to both. I suggest that the path through Herter Park closer to the river be the primary one, as it is far more

The text on page 18 calls for improvements to the intersection of Memorial Drive, Gerrys Landing Road and the Eliot Bridge, but in the

Figure on page 19, I see only crosswalks as proposed improvements to connect between Memorial Drive and Gerrys Landing Road. There is already a path along the east side of Gerrys Landing Road. This road might also be a candidate for restriping. The connection to Elmwood Avenue, blocked off within my memory, would provide a useful bicycling route into residential neighborhoods.

Comments on Section D, Eliot Bridge to Western Avenue Bridge

I support a path underpass under the Anderson Bridge, as proposed by the Charles River Conservancy. This is not mentioned in the report.

I strongly support the widening of the north-side riverfront parkland and pathway in this segment. This is currently the most antiquated segment of the entire path system. I also support the narrowing of Memorial Drive to two lanes with shoulders, as shown. As I have commented before, there will be twowheeled slower traffic – bicycles, electrically-assisted bicycles, motor scooters -- on the roadway. Shoulders, not only the shared-use path, are important.

Some details, however, need improvement.





Figure 9 -- Crossing between path and street is incorrectly located for bicyclists. From Figure 54 of the report.

Figure 54 shows faulty connections between Hawthorn Street and the path south of Memorial Drive. Bicyclists turning from the path to Hawthorne Street need a connection which leads them to continue legally on the right side, not the left side, of Hawthorn Street. Bicyclists headed from Hawthorn Street to the path also need a connection father downstream so that they are not hazardously placed to the right of traffic turning right from Hawthorne Street to Memorial Drive.

Just east of the Eliot Bridge on

the south side, there is a disused path closer to the river, which is quiet and pleasant. It is shown on page 21 but as a secondary route. I suggest that this be the primary path. It also makes a better connection to the tunnel under the Eliot Bridge.

I support improvements to the Sinclair and Weeks footbridges to remove stairs, making them bicyclerideable and ADA-compliant. May I also suggest improvements to Plympton Street, not only DeWolfe Street, in Cambridge, and to the north sidewalk of Memorial Drive – or making DeWolfe Street a twoway bicycle boulevard – so as to provide a direct connection between Harvard Yard and the Business School?

I also strongly suggest an improvement which is not mentioned in the report: moving the eastbound roadway of Memorial Drive adjacent to the westbound roadway, converting the extremely wide "no man's land" median into a riverfront park comparable to the Esplanade on the Boston side.

Comments on Section E, Western Avenue Bridge to Boston University Bridge

I support the construction of underpasses for the south-side path at the Western Avenue and River Street bridges. This is not mentioned in the report.

Quoting:

Cycle tracks are currently part of the design for both the River Street and Western Avenue Bridges. There is an existing cycle track and bike lane on the Boston side of Western Avenue, and a cycle track is currently under construction for the Cambridge side of Western Avenue (Figure 56).



Figure 10 -- Bicycle sidewalk on Western Avenue in Cambridge will be used for two-way travel. Figure 56 from the report.

I have expressed my opposition to the "cycle track" on Western Avenue in Cambridge. To summarize, the problems are: numerous serious sight line hazards -- this is a bicycle sidewalk, suitable for riding only at low speed, but on a commuter route. The bikeway is designed and intended for one-way travel but because of the distance between River Street and Western Avenue, it will be used for two-way travel. Also, the parking lane is too narrow, making it unsafe for drivers to get in and out of cars. Moving the curb on Western Avenue, as in this project, greatly increases the expense of any future reconfiguration. Actually making Western Avenue work well for bicycle travel would require a contraflow bike lane, but that would require removing parking on the left side, and parking is the sacred cow of street design. My detailed critique is here:

http://cambridgecivic.com/?p=795

http://cambridgecivic.com/?p=976

http://cambridgecivic.com/?p=1052

Quoting again:

On the Cambridge side of the river, there is a gap in the existing and planned bicycle infrastructure on River Street between the River Street Bridge and Putnam Avenue. There are existing bike lanes on River Street between Putnam Avenue and Central Square, and a planned cycle track on the River Street Bridge.

There is no purported gap in bicycle accommodation between the River Street Bridge and Putnam Avenue. There is only inappropriate striping, with a wide right lane striped as a gore. It makes a very fine bike lane. It is shown as visible and easily rideable at 3:00 and again at 5:30 in this video:

https://vimeo.com/63856622

The planned cycle tracks on and near the River Street and Western Avenue bridges have very serious problems. The cycle tracks provide for travel only in the one-way direction that motor traffic takes on these bridges, and steal space from the sidewalks on the bridges which accommodate contraflow bicycle traffic. Because bicycle trips tend to be short, and because the bridges carry traffic between the paths on both sides of the river, efficient bicycle circulation must account for two-way travel on the bridges. My detailed comments are here:

http://john-s-allen.com/pdfs/2013-04%20River-Western1.pdf

Those comments refer to page numbers in the document:

http://www.massdot.state.ma.us/Portals/26/docs/Western River/mepa 041013.pdf

I have also addressed the issue of contraflow bicycle traffic on the bridges, and access to and from Allston, in the videos:

Western Avenue from North Harvard Street to the Charles River: https://vimeo.com/72136099

Considering the large amount of land which is to be redeveloped with Harvard University campus expansion, repurposing of the railroad yard in Allston, and straightening of the Turnpike, opportunities exist to construct paths away from roads and with grade separations where they cross the Turnpike. This should be a goal of development, rather than the shoehorning of paths onto streets, with the resulting crossing and turning conflicts and delays.

MassDOT's April 2013 proposal for an eastbound route into Cambridge on Cambridge Street and the River Street Bridge involves repeated right-hook conflicts, as described in my letter. Incidentally, no plan for this route is shown in the Connectivity Report's map on page 25.

Page 31 of the MassDOT document shows that a bicyclist coming from downtown Boston or the Esplanade is expected to use a series of no less than five crosswalks to continue into Allston on Cambridge Street. A simple lateral-entry bicycle waiting area ("bike box") in front of where northbound traffic from Soldiers Field Road turns left would avoid all of these delays. See video at https://vimeo.com/82813087.

However, the connectivity Study is outdated in its comments about the Cambridge Street viaduct, as is my letter. Current plans for reconstruction of Cambridge Street and the Turnpike will eliminate the viaduct. With the simplified traffic pattern following reconstruction of Cambridge Street, bicyclists will no longer have to merge across traffic entering the Turnpike to travel westbound on Cambridge Street. This will greatly simplify the intersection of Cambridge Street and the River Street Bridge for eastbound traffic as well. See document here: http://www.scribd.com/doc/178689391/Mass-Pike-Allston-reconfiguration-options and my comments at http://john-s-allen.com/reports/Cambridge Street Bridge.pdf.

Page 32 shows similar problems at the Western Avenue Bridge. These, and alternatives, are described in my letter at http://john-s-allen.com/pdfs/2013-04%20River-Western1.pdf.

Regarding the lack of a suitable connection between Western Avenue eastbound and the Paul Dudley White bicycle path, also see description starting at 3:40 in this video:

https://vimeo.com/72136099

An overarching problem in this area is that the intersections cannot handle the volume of traffic entering and exiting the Turnpike. Congestion on the turnpike off-ramp, on the bridges, on Western Avenue and on Memorial Drive downstream of the Western Avenue bridge is extreme. The only practical solution I can envision to this problem is mode shift to public transportation. One measure would be to make use of some of the area freed up by elimination of the rail yard in Allston to construct a parking garage, and to shuttle commuters in and out of Cambridge on buses. Buses from more distant points, and a congestion charge, also would help solve the problem.

Quoting again

One of the most significant gaps in the path system is the lack of connection from the BU Bridge to the Esplanade below. As the City of Cambridge moves forward with plans for the Grand Junction multi-use path, a connection from the Boston side of the path along the existing rail bridge over the Charles River and the BU Bridge upstream sidewalk is highly recommended. In addition, a sloping path from the end of the rail bridge to the path along the Boston side of the Charles River would provide the long-sought-after link between the river and the BU Bridge.

I strongly agree. I have mentioned these improvements in the article linked blow, which also suggests a connection under the BU bridge adjacent to Soldiers Field Road, to link the two ends of the BU campus and connect them to the rail bridge. The article also suggests other low-cost improvements to connectivity:

http://streetsmarts.bostonbiker.org/2013/01/30/connecting-the-boston-university-campus/

Comments on Section F, Boston University Bridge to Harvard Bridge Quoting (page 26):

On the Cambridge side of the river, the BU Bridge rotary is currently difficult for bicyclists to negotiate. Bicyclists not only want to access the bridge from the Cambridge side of Memorial Drive, but also the linear path system along the river. Figure 56 shows the addition of green bicycle lanes in the rotary to highlight conflict areas near the ramps. With some curb realignment and the widening of curb ramps, the transition for cyclists from the roadway to the path system will be smoother.



Figure 11 - BU Bridge rotary. This won't work. Hazardous when traffic is light, completely blocked in evening rush hour Figure 60 from the report.

The design shown in Figure 60 is hazardous and deprecated. It places bicyclists in blindspots of motorists who enter and exit this antiquated rotary without having to slow. The 1992 German study *Sicherung von Radfahrern an Städtischen Kreuzungen* (Safeguarding bicyclists at Urban Intersections) established this, see graphic at

http://bernd.sluka.de/folien/gif/Kreisverkehr1 .gif. The three bars in the graph are, from left to right, for no special bikeways, for bike lanes (like those proposed for the BU Bridge rotary) and for bikeways close to the outside of the rotary. For safety's sake, the rotary must be reconfigured as a roundabout, with deflection to slow entering and exiting traffic, and bicyclists must either merge into the flow of motor traffic before entering the intersection (driver behavior), and/or cross in crosswalks well outside the intersection, where motorists yield (a Dutch approach, see video at http://www.youtube.com/watch?v=wEXD0gu LQY0)

However, none of these approaches works

with the congestion in the evening rush hour at the BU Bridge. In a car, the few hundred feet from Waverly Street in Cambridge and through the BU Bridge rotary to the bridge can take 15 minutes. Bike lanes and crosswalks are useless when cars are backed up across them and unable to move. Much of this congestion results from traffic backed up on Memorial Drive all the way from the Western Avenue Bridge. The only effective solution, as I mentioned in the previous section, is traffic reduction.

Also, there is potential to create an esplanade along Memorial Drive by moving the eastbound lanes of Memorial Drive closer to the westbound lanes. This appears to be illustrated in Figures 69 and 70, which are misplaced in the next section of the report. See the next section of these comments.

Quoting:

On the Boston side of the river, the intersection on the south end of the BU Bridge needs several improvements to become bicycle- and pedestrian-friendly. Currently, there are no curb ramps on the crosswalks that connect from the BU Bridge across Commonwealth Avenue to Essex and Mountfort Streets. Left turns are not permitted for southbound vehicles from the BU Bridge, nor for eastbound vehicles on Commonwealth Avenue, which poses a problem for bicyclists. Motor vehicles are able to use Mountfort Street in lieu of a left turn to or from the bridge. This loop on Mountfort Street is narrow and does not have space for a separated bicycle facility. Two-stage

left turn queue boxes are recommended to assist bicyclists wanting to turn from the bridge onto eastbound Commonwealth Avenue or vice versa (see Figure 60).

I agree. Also the Mountfort Street loop is long -- but I also point out that there is a potential alternate route for bicyclists and pedestrians utilizing unused space in the underpass under the BU Bridge. I mentioned this in my comments on the previous section of the report.

Quoting again:

The second overpass near Silber Way does have ramps, but is difficult for bicyclists on Commonwealth Avenue or Bay State Road to find. The addition of bicycle facilities and wayfinding signage on Silber Way would enhance this connection.

This overpass, in addition to Sherborn Street, Cummington Mall, Babbitt Street and St. Mary's Street, were designated as links in the Claire Saltonstall Bikeway, see http://www.crw.org/claire.htm. This segment has gone into disrepair. It should be restored and improved. A contraflow lane on St. Mary's Street would avoid the need for an opposite-direction route on busy Carleton Street and University Road. I discuss this at more length in my article "Connecting the BU Campus," cited in the previous section.



Figure 12 -- Claire Saltonstall bikeway. Section at left through the BU campus has gone into disrepair.

There is no Figure 61 in the report. The proposed route through Charlesgate is shown in Figure 63.

I support an improved route over the Bowker overpass for bicyclists and the parkland access it would provide, (though ultimately I want this huge eyesore to be demolished, like the Central Artery). I also note the possibility that a bridge over the Muddy River could connect Marlborough Street with the intersection of Bay State Road and Charlesgate West. With both these streets reconfigured as two-way bicycle boulevards, there would be a continuous, low-traffic route all the way from the BU campus to the Public Garden.

Comments on Section G, Harvard Bridge to Longfellow Bridge

Quoting:

North Bank. Major improvements are planned for the path system along Memorial Drive as part of DCR's Memorial Drive Phase II project. For most of this section there will be a 10-foot, twoway, paved shared-use path adjacent to the roadway with a separated, 6-foot stabilized aggregate path along the river.

Figures 69 and 70 are misplaced and should be in the previous section: the Pierce Boathouse is between the BU Bridge and the Harvard Bridge.

Not mentioned or shown in Figure 68, but appears to be shown in Figure 69: there is an opportunity for a huge increase in usable parkland by moving the eastbound roadway of Memorial Drive closer to the westbound roadway, narrowing the wide "no man's land" median and creating a riverfront park similar to the Esplanade. The opportunities east of the Harvard Bridge are even more extensive than west of it, but are not shown in the overhead view, Figure 71.



I agree with the proposed improvements on the south side of the river, contraflow bike lanes for better connections to the overpasses.

I can hardly wait for the lowering of Storrow Drive near the Hatch Shell, described in connection with Figure 70. The Fiedler Footbridge is picturesque, as described in the report, but narrow and hazardous due to blind hairpin turns.

Figure 13 -- Opportunity for north-side Esplanade by moving eastbound lanes of Memorial Drive. Figure 69 from the report.

I agree that improvements are needed at Charles Circle, and some of what I see in the report is better

than what I have seen previously. Charles Circle has multiple lanes of right-turning traffic to the right of the through travel lane, both east and west. It is better that the shared-lane markings westbound place bicyclists ahead of the leftmost lane of right-turning traffic, rather than to the right of all the lanes as in previous proposals – though my preference and that indicated by traffic law and standard design is to ride in the through travel lane – the one nearest the median. I have previously suggested that traffic signal timing east of Charles Circle could provide an interval when bicyclists can merge left.

Eastbound, the design doesn't look so good to me.



Figure 14 -- Charles Circle, figure 72 from the report.

Are bicyclists really to be expected to make a 135-degree hairpin turn, and ride illegally toward waiting motor traffic, to establish their lane position in a bike box as they come down off the bridge? I see that this is a preliminary design, but it is so bizarre that I am astonished to see it published anywhere.

Dill and Monsere's research in Portland, Oregon confirms observations I made at the much more conventional existing bike box on Commonwealth avenue at Charlesgate East, where bicyclists are only expected to turn 90 degrees and cross in front of waiting traffic: bicyclists do not enter bike boxes on the red light. Waiting in bike boxes happens on the red light: they are irrelevant on the green light. My report on the observations is at <u>http://john-s-allen.com/blog/?p=5750</u> and links to a video.

I repeat a comment I have made in the past: that bicyclists approaching Charles Circle from the Longfellow Bridge have two safe options: either to merge into the travel lane, or to bear right onto the pedestrian plaza and enter Charles Circle on the same signal phase with pedestrian traffic. Both of these routes avoid conflicts with the traffic turning right onto Charles Street. (See comments at the bottom of page 1 of http://john-s-allen.com/plandocs/longfellow.doc.)

The report suggests a separated bikeway. To afford real separation from the complicated motor traffic in Charles Circle, such a bikeway would have to be grade-separated. Anything less will only add some mix of complication, delay and conflicts.

Comments on Section H, Longfellow Bridge to Craigie Dam + Drawbridge

I strongly support the linking of paths behind the Museum of Science. The road and sidewalk in front of the museum are not consistent with the desires and expectations of path users, and offer limited space

for improvements. The proposed South Bank Bridge and Draw One Walkway also will make important connections.

Quoting:

MassDOT has committed to reconstruct the pedestrian overpass at Leverett Circle, which will link the MBTA station to the east- and westbound walkways along Storrow Drive.

There was such a walkway until a few years ago. It was torn down. Now it is to be replaced. Was it torn down due to structural problems, or does this represent a change in planning goals, or will the new overpass connect different points?



Figure 15 -- Leverett Circle, figure 77 from the report.

Figure 77 shows a bike lane to the right of a right-turn lane. With or without a flashing red, this is in violation of AASHTO guidelines and invites right-hook collisions, which can be fatal. Bicyclists must have full signal protection if they are entering the intersection from the sidewalk, and should be encouraged to ride in line with other traffic if on the roadway.

Very truly yours,

John S. Allen

John S. Allen

cc: Charles River Conservancy (jparsons@thecharles.org)