TRANSPORTATION – Part 3

Central Square Advisory Committee: 2011/2012
October 17, 2012
Mass Ave/River/Prospect:

- Low Critical sums at Mass/River are counterintuitive to how the intersection feels because:
  - No left turns means low vehicle conflicts.
  - Critical sums do not include peds in the analysis.

- Highest ped volumes of all intersections studied.
  - PM Peak 1900 vehicles, 2500 peds.

- Intersection operations heavily influenced by River St vehicle right turns and peds crossing between Starbucks and the Plaza.

- Alternative tool for analysis – LOS (Level of Service)

- Move goes from existing LOS C to K2C2 build out LOS E.
Mass Ave/River/Prospect: Current PM Peak Volumes

K2C2 2030:
+ 60 vehicle or 1.5 per cycle.
+ 80 pedestrians. 2 per cycle.

Conclusion

• Mass/River joins Broadway/Third as the two most sensitive intersections for K2C2 build out.

• Development projects will be required to do a detailed traffic study during permitting and mitigation will be required.

• At Mass/River the ped/vehicle conflicts are influenced by:
  • Fewer people driving
  • Through traffic avoiding Central Square
  • Drivers avoiding peak hour times
  • Signal timings being adjusted
  • Access/egress to/from new development being accommodated without sending vehicles through the intersection.
Existing Bus Conditions in Central Square

44 buses during AM peak (8-9am)
14,000 users on typical weekday
9 different bus routes (CT-1, 1, 47, 64, 70, 70A, 83, 91, M2)
Coming and going in all directions
Central Square Bus Transportation Goals

• Evaluate ways to consolidate the Central Square bus stops
  – provide a space where all bus routes starting/ending in Central Square can layover
• Allocate scarce sidewalk space to best serve pedestrians, sidewalk activities, and serve bus stops and waiting areas
• Continue to keep buses close to MBTA Red Line for transfers between bus & subway
• Increase MBTA transit ridership
• Plan for future bus growth and extensions
Why Underground/Overhead Bus Depot Is not Feasible

- **Underground depot:**
  - Large footprint
  - Hard/impossible to serve both N-S and E-W routes
  - Red line is below Mass Ave therefore requiring a depot in that area to be below it
  - Extremely long ramps would take space from sidewalks or roadway
  - Rider safety is compromise/expensive when the depot is out of sight
  - Could increase headways/frequencies or costs of many of the buses

- **Overhead depot:**
  - Large footprint
  - Hard/impossible to serve both N-S and E-W routes
  - Extremely long ramps would take space from sidewalks or roadway
  - Damage character of area
  - Blocks views and adds noise for building tenants
  - Degrades the environment below the depot
5 Possible Locations for Surface Bus Depot

C - 60 Prospect St.

B - Lot 5

OR

B - Lot 6

D - YMCA + Lot 9

A - Green St. Garage

+Library

Notes for all locations:
• Parking spaces need to be eliminated, relocated or replaced on site.
• Extension of routes could add costs to MBTA or reduce frequencies.
• Each location involves large amounts of money, and in some cases taking of private property.
## Central Square bus depot possible locations and impacts

<table>
<thead>
<tr>
<th>Changes/Criteria /Impacts</th>
<th>Which buses would NOT use depot?</th>
<th>Plaza Stop</th>
<th>Mass Ave Stop EB</th>
<th>Streets with bus activity (More or Less than current)</th>
<th>Public parking loss?</th>
<th>Distance to Red line</th>
<th>Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Conditions</td>
<td>n/a</td>
<td>83, 91, CT-1, 64</td>
<td>1, CT-1, 47, 64, 70, 70A</td>
<td>n/a</td>
<td>n/a</td>
<td>Inbound Outbound (0-1 blocks)</td>
<td></td>
</tr>
<tr>
<td>Location A: Green St. Garage + Public Library</td>
<td>1</td>
<td>none</td>
<td>1, 70, 70A</td>
<td>Mass. Ave, Pearl St, Green St</td>
<td>290 spaces (public)</td>
<td>Inbound Outbound (2-3 blocks)</td>
<td><strong>Not Recommended:</strong> Lot too small; loss of public library; 83 &amp; 91 needs longer routes and travel time to access depot; closest to current conditions</td>
</tr>
<tr>
<td>Location B: Lot 5 or 6</td>
<td>1, 47</td>
<td>64</td>
<td>1</td>
<td>Bishop Allen Drive, Prospect St, Columbia St, Mass Ave</td>
<td>89 spaces (public Lot 5) 45 spaces (public Lot 6) = 134 Total</td>
<td>Inbound Outbound (3+ blocks)</td>
<td><strong>Not Recommended:</strong> Size constraints; too much added bus traffic on Bishop Allen Drive; far distance to MBTA Red Line</td>
</tr>
<tr>
<td>Location C: 60 Prospect St.</td>
<td>1, 70, 70A</td>
<td>none</td>
<td>1, 70, 70A</td>
<td>Bishop Allen Drive, Prospect St, Columbia St</td>
<td>169 spaces (private)</td>
<td>Inbound (3+ blocks) Outbound (2-3 blocks)</td>
<td><strong>Not Recommended:</strong> Too much added bus traffic on Bishop Allen Drive; hurt frequency of #47 &amp; CT-1; would require taking of private lot</td>
</tr>
<tr>
<td>Location D: YMCA + Lot 9</td>
<td>1, 70, 70A</td>
<td>none</td>
<td>1, 70, 70A</td>
<td>Pleasant St, Green St</td>
<td>106 spaces (private) + 17 spaces (public Lot 9) = 123 Total</td>
<td>Inbound Outbound (3+ blocks)</td>
<td><strong>Not Recommended:</strong> Size constraints; crossing Western &amp; Franklin is difficult; taking of private lot; far distance from MBTA Red Line</td>
</tr>
</tbody>
</table>

*Note 1: Parking spaces for each option need to be eliminated, relocated, or replaced on site.*
*Note 2: Extension of routes could add costs to MBTA or reduce frequencies.*
*Note 3: Each location involves large amounts of money, and in some cases taking of private property.*
Next Steps/Conclusions

• One central bus depot does not appear to be viable
  – limited physical sites available (either publicly or privately owned).
  – single location cannot serve all bus routes.
  – buses may be diverted onto residential streets.

• Bus depot very expensive, competes for limited funds needed to enhance the bus and red line services and is not likely to increase ridership

• Recommend a study with MBTA to evaluate routes, stops and layovers to recommend changes to meet the goals articulated for the review of the bus depot.
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