SMACSI Transit Evaluation

Transit Advisory Committee, September 4, 2019 - Slide 1

SMACSI transit evaluation – Overview of bus lane implementations



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SMACSI transit evaluation – Project elements

- 1. Bus lanes
 - Implementation from late October to November 2018 –markings, red lanes, flexposts, initial signage
 - Additional follow-up work through early 2019 additional signage
- 2. Intersections
 - Changed lane configurations and added signals at Albany and Vassar Sts
- 3. Curb-use regulation changes
 - Added loading zones in corridor
 - Moved location of curb uses within corridor

SMACSI transit evaluation – Evaluation elements

- 1. MBTA travel time data evaluation
 - Compared "typical day" and "typical worst" travel times between stops in April-May 2018 and April-May 2019
 - Evaluated positively if travel times improved on both a "typical day" and a "typical worst" day; evaluated negatively if travel times worsened for either
- 2. Site visits with MBTA and other project partners
 - Observed locations where travel times did not improve as much as expected
- 3. Evaluation of additional modifications

SMACSI transit evaluation – MBTA travel time evaluation

| | AM Peak | Midday | PM Peak |
|-----------------------|---------|-----------------|-----------------|
| Boston to Cambridge | Worse | Slightly worse | Worse |
| Back Bay to MIT | Worse | Worse | Slightly worse |
| Project area | Worse | Slightly worse | |
| MIT to Albany | Worse | Worse | Slightly better |
| Albany to Sidney | Worse | Slightly worse | |
| Sidney to Prospect | Worse | Slightly better | Worse |
| Cambridge to Boston | | | Better |
| Central Sq. to Sidney | | | |
| Project area | | | |
| Sidney to Albany | Worse | Slightly worse | Worse |
| Albany to MIT | Better | | Better |
| MIT to Back Bay | Better | Better | Better |
| | | | |

Note: -- = no change

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SMACSI transit evaluation – MBTA travel time evaluation

| | AM Peak | Midday | PM Peak |
|-----------------------|---------|-----------------|-----------------|
| Boston to Cambridge | Worse | Slightly worse | Worse |
| Back Bay to MIT | Worse | Worse | Slightly worse |
| Project area | Worse | Slightly worse | |
| MIT to Albany | Worse | Worse | Slightly better |
| Albany to Sidney | Worse | Slightly worse | |
| Sidney to Prospect | Worse | Slightly better | Worse |
| Cambridge to Boston | | | Better |
| Central Sq. to Sidney | | | |
| Project area | | | |
| Sidney to Albany | Worse | Slightly worse | Worse |
| Albany to MIT | Better | | Better |
| MIT to Back Bay | Better | Better | Better |

Note: -- = no change

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SMACSI transit evaluation – Site visit

- 1. Buses and bus lanes
 - Between Landsdowne and Windsor Streets, many MBTA and other buses did not use bus lane (least used during uncongested times)
 - Buses have difficulty with merging into general traffic at Windsor St.
 - When bus lane is next to parking, buses travelled between lanes or as far left as possible
- 2. Intersections
 - Backups on Boston-bound Mass Ave at Vassar St. and Albany St. caused significant queuing; vehicles having difficulty clearing intersections when entering Mass. Ave.
 - Central Square-bound vehicles did not fully utilize both through lanes on Mass Ave. at Albany and Vassar Streets

Buses outside bus lane



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Queuing from Mass Ave at Vassar...



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...through and beyond Front Street.



Public Meeting #1, March 26, 2019 - Slide 10

SMACSI transit evaluation – Additional work needed

- 1. Bus lanes
 - Evaluate bus lane operations between Landsdowne and Albany St. potential to extend lane to Vassar St
 - Collaborate with MassDOT/DCR/Boston for bus priority on Mass Ave. / Harvard Bridge
- 2. Intersections
 - Evaluate changing the configuration of Mass Ave between Albany and Vassar Sts
 - Evaluate different signage to indicate bus lanes (i.e. bus priority, except right turns)

SMACSI transit evaluation – Overview of bus lane implementations



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