West Washington Avenue

Resurfacing with Bus Lanes

MADISON DEPARTMENT







OF TRANSPORTATION

Concept: Move Some Bus Service from State Street to West Washington Avenue

- Reroute regional and commuter service from State Street to West Washington
- Install bus lanes in prevailing direction on West Washington
- Accommodate bikes with buffered bike lanes in one direction, shared bike/bus lane in the other







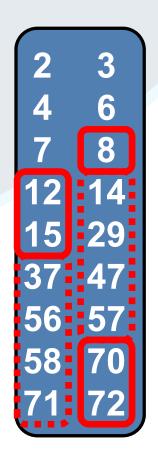




Benefits

- Reduces bus congestion on State Street, freeing capacity for BRT
- Reduces noise and exhaust on State Street, helping businesses recover
- Provides a more reliable detour route when State Street is closed to buses
- Improved service to Bassett neighborhood

Reroute Some Bus Service



Moved off of State Street

Currently suspended – likely moved to West Washington if resumed

Bus service on West Washington increased from 90 buses per day to 260 buses per day







West Washington Avenue



Existing Cross Section



Proposed Cross Section





Can Metro Move Bus Service Without Bus Lanes?

- Existing operations are West Washington Avenue are adequate, but not great
 - Mixed traffic
 - Pullout bus stops
 - Saturated travel lanes
 - Frequent turns and traffic signals
- Tripling bus service and reducing capacity will make conditions worse
 - Improvements are needed to accommodate 3 times as many buses



West Wash Compared with State Street

- 1/3 mile additional travel
- 2 additional traffic signals
- Mixed traffic compared to semi-exclusive lanes
- Pullout bus stops compared to in-lane stops
- Bus stops that can only accommodate one bus

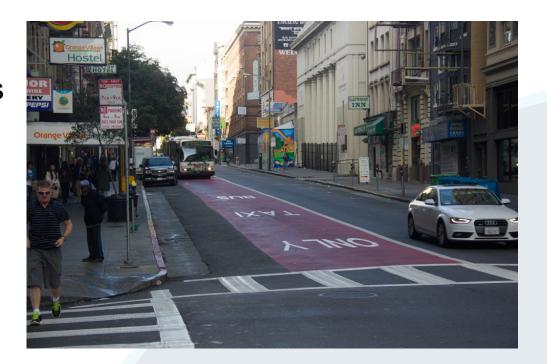




OF TRANSPORTATION

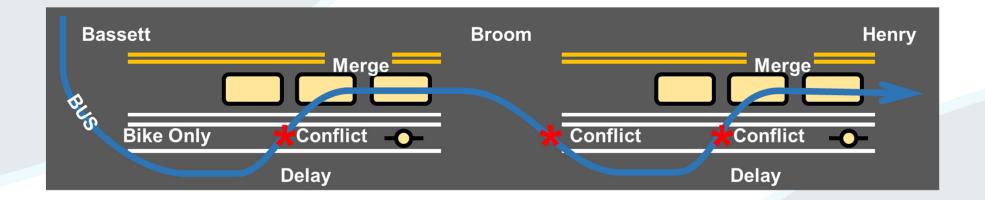
Bus Lanes would Ameliorate these Deficiencies

- Eliminates delays at traffic signals
- Eliminates pullout delay
- Unless intersection is LOS A, bus lanes will reduce travel times





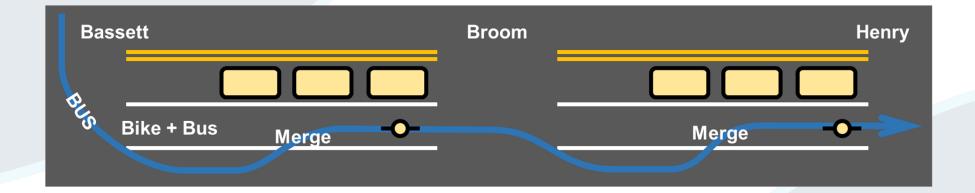
Without Bus Lanes







With Bus Lanes

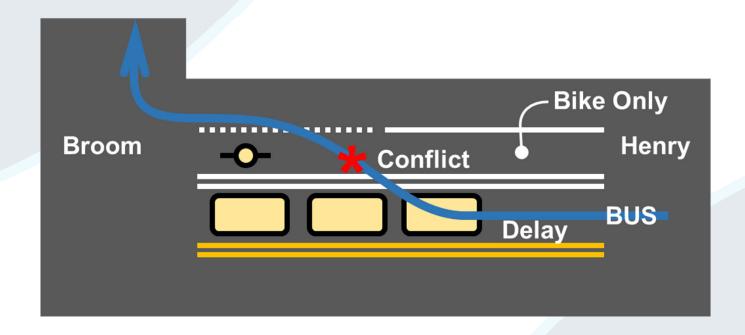








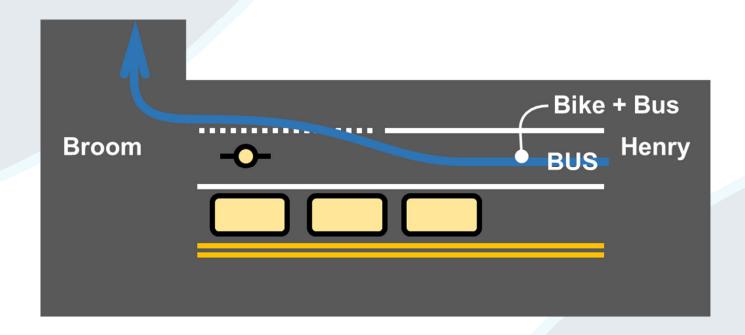
Without Bus Lanes







With Bus Lanes





Bike Considerations

- Without bus lanes, buses would cross the bike lane 4 times in the space of about a block
- Sharing the lane, rather than crossing it, eliminates several conflicts.
- Eastbound pullout bus stops mean that bikes will not have to wait behind buses as they serve bus stops
- Westbound buses and bikes are going the same speed and there are not bus stops, so there will be no leap frog
- There have been documented cases where buses crossing bike lanes have been problematic because of limited visibility

Bus Stop Islands Are Not Possible

 Islands would eliminate some conflicts and delays, but would require an additional travel lane, or traffic would back up through intersections





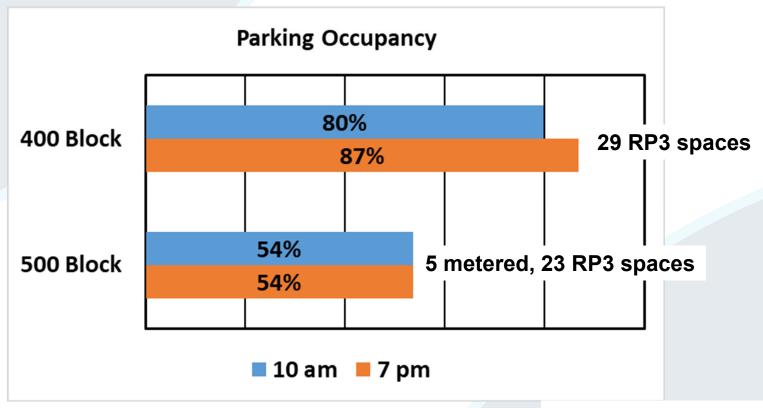
Other Considerations

- Increasing transit travel times is not consistent with MetroForward, ImagineMadison, BRT, or the Transit Network Redesign
- Bus stops may need to be lengthened so that a bus waiting for a gap does not block other buses from using the stop, eliminating additional parking
- Fixed guideway funding would be lost if transit vehicle miles are shifted from an existing bus lane to mixed traffic

Conclusion

- The bus lane and bus reroute were presented as one connected project
- Metro does not support shifting service onto West Washington Avenue without adding bus lanes

Parking Occupancy



Tuesday, Feb 23, 2021



Bike Low Stress Network







- Restripe West Washington as two-lane facility with considerations for parking, bike lanes, and potential transit service
- Add refuge islands
- Pavement area should not be expanded beyond existing width





