



City of Seattle
Edward B. Murray, Mayor

Department of Transportation
Scott Kubly, Director

MEMORANDUM

Date: February 17, 2015

To: Freight Advisory Board

From: Carter Danne, Seattle Department of Transportation Traffic Operations
Jonathan Dong, Seattle Department of Transportation Transit

Subject: D2 Construction Alternatives

To accommodate the upcoming construction activities of East Link, the D2 roadway is scheduled for closure from 2019 through 2023. East Link will begin service on the D2 roadway in 2023. In preparation for the upcoming closure, the D2 Solution team, comprised of Seattle Department of Transportation, King County Metro, Community Transit, Washington State Department of Transportation and Sound Transit staff, is meeting regularly to identify alternate pathways for Metro and Sound Transit bus service to use to and from the eastside to downtown Seattle. The team identified and analyzed the following pathways:

1. Rainier Avenue and Dearborn Street
2. I-90 to 4th Avenue
3. I-90 to Downtown Transit Tunnel

The analysis compared transit travel times and identified potential enhancements to improve transit speed and reliability. The team is working to finalize costs and recommendations for the preferred transit pathway in late 2015. Buses would begin to use one or a combination of these pathways in fall 2018.

The purpose of today's briefing to provide information to the Freight Advisory Board. No action is requested at this time.

Alternative 1: Rainier Avenue and Dearborn Street

Under this alternative, inbound buses would travel westbound on I-90 and exit off Rainier Avenue. Buses would travel north to South Dearborn Street and merge into the nearside left turn lane. A northbound bus queue jump would be installed to help buses make a left turn onto South Dearborn Street. Traveling westbound on South Dearborn Street, buses will make a right turn onto 5th Avenue and travel to South Washington Street.

For outbound trips, buses will travel on the same streets but in the reverse direction. Transit signal priority will be installed southbound at 5th Avenue and South Dearborn Street to help buses make this turning movement.

Alternative 2: I-90/4th Avenue South

Under this alternative, inbound buses will stay on I-90 and exit off the 4th Avenue ramp. Buses will turn left and go northbound on 4th Avenue to South Washington Street. To accommodate bus movements, WSDOT will convert the middle lane of the eastbound approach to a bus- only turn lane on the I-90 westbound off ramp/4th Avenue. This will allow buses to turn left onto 4th Avenue with a bus-only lane. For the outbound direction, the same path would be used in the reverse direction.

Alternative 3: I-90/Royal Brougham/Downtown Seattle Transit Tunnel

Under this alternative, inbound buses will travel on I-90 and exit off the 4th Avenue ramp. Buses will turn right onto 4th Avenue and go southbound to Royal Brougham. At Royal Brougham, buses will turn left and travel to the SODO busway. Buses will turn left onto the SODO busway and travel northbound into the Downtown Seattle Transit Tunnel (DSTT). For outbound trips, buses will use the same path in the reverse direction.

At this time, it is uncertain on whether Alternative 3 is a feasible option. The DSTT may be closed to bus traffic during the time period this alternative is needed, but until this decision is made, Alternative 3 is still considered as an option.

Hybrid Option

After reviewing these alternatives, a hybrid option was developed that uses Alternative 2 for inbound bus trips and Alternative 1 for outbound trips. For inbound trips, buses would travel westbound on I-90 and exit off the 4th Avenue ramp. WSDOT would convert the middle lane of eastbound approach at the I-90 westbound off ramp/4th Avenue to bus-only lane that will enable buses to turn left onto a 4th Avenue northbound bus-only lane.

For outbound trips, buses would travel from South Washington Street to southbound on 5th Avenue and turn left onto Dearborn Street. From Dearborn Street, buses would turn right onto Rainier Avenue and travel to the Rainier Avenue/I-90 on ramp. WSDOT would restripe the southbound approach on Rainier Avenue so high occupancy vehicles and buses could turn right while general purpose and freight vehicles turn around the pedestrian island. The HOV bypass would switch to the right side and allow buses to use the existing shoulder.

Comparison of Transit Travel Times (in minutes)

Direction	Existing	Alt 1: Rainier and Dearborn	Alt 2: I-90/4 th Ave	Alt 3: Royal Brougham/DSTT
AM Westbound (inbound) – with improvements	12.4	14.6	12.9	13.9
PM Eastbound (Outbound) – with improvements	12.7	18.8	17.7	17.2