

BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE 2012-) RESOLUTION NO. 12-4358
15 METROPOLITAN TRANSPORTATION)
IMPROVEMENT PROGRAM (MTIP) TO ADD) Introduced by Councilor Craddick
THE CONSTRUCTION PHASE OF THE I-84)
EASTBOUND TO I-205 NORTHBOUND)
AUXILIARY LANE PROJECT)

WHEREAS, the Metropolitan Transportation Improvement Program (MTIP) prioritizes projects from the Regional Transportation Plan to receive transportation related funding; and

WHEREAS, the Joint Policy Advisory Committee on Transportation (JPACT) the Metro Council approved the 2012-15 MTIP on March 15, 2012; and

WHEREAS, JPACT and the Metro Council must approve any subsequent amendments to add new projects or substantially modify existing projects in the MTIP; and

WHEREAS, the Joint Policy Advisory Committee on Transportation (JPACT) and the Metro Council has previously approved the development of this project by approving a corridor operations analysis for the Interstate 84 corridor in the 2009-10 Unified Planning Work Program and preliminary engineering for the I-84 Eastbound to I-205 Northbound Auxiliary Lane project in the 2010-13 MTIP; and

WHEREAS, the Oregon Department of Transportation (ODOT) has conducted the corridor operations analysis for the Interstate 84 corridor and preliminary engineering for the I-84 Eastbound to I-205 Northbound Auxiliary Lane project; and

WHEREAS, cost savings from other projects within the state have been identified and must be reprogrammed and obligated to other projects to avoid potential rescission of federal transportation funds; and

WHEREAS, ODOT has proposed a priority improvement that would extend an auxiliary lane between the Halsey Street exit and the I-205 Northbound exit to reduce crash incidents and reduce vehicle delay; and

WHEREAS, as a result of the work completed on this project, it is uniquely ready to obligate the available funds in a timely manner; and

WHEREAS, by proceeding at this time, the project will realize cost savings due to the sharing of construction staging and traffic management work with a pavement preservation project in the same vicinity; and

WHEREAS, the Clean Air Act requires that federally funded transit and highway projects demonstrate conformity with the state's air quality goals; and

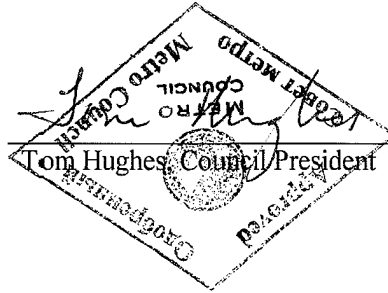
WHEREAS, the I-84 Eastbound to I-205 Northbound Auxiliary Lane project was included in the Regional Transportation Plan financially constrained system, which plan has demonstrated conformity; and

WHEREAS, funding for the I-84 Eastbound to I-205 Northbound Auxiliary Lane project is available within existing revenues, consistent with the MTIP financial plan; and

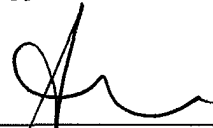
WHEREAS, JPACT approved this resolution July 12, 2012; now therefore

BE IT RESOLVED that the Metro Council hereby adopts the recommendation of JPACT to add the construction phase of the I-84 Eastbound to I-205 Northbound Auxiliary Lane project to the 2012-15 MTIP, consistent with the programming illustrated in Exhibit A.

ADOPTED by the Metro Council this 19th day of July 2012.



Approved as to Form:



Alison Kean Campbell, Acting Metro Attorney

Exhibit A to Resolution No. 12-4358

2012-15 Metropolitan Transportation Improvement Plan Table 3.1.4 amendment

Action: Amend MTIP to add construction phase to ODOT project.

Existing programming:

Project Name	Project Description	ODOT Key #	Lead Agency	Estimated Total Project Cost	Project Phase	Fund Type	Program Year	Federal Funding	Minimum Local Match	Other Funds	Total Funding
I-84 Eastbound to I-205 Northbound Auxiliary Lane	Extend auxiliary vehicle travel lane on I-84 EB from Halsey Street exit ramp to I-205 NB exit ramp	70393	ODOT	\$6,000,000	PE	STP	2010	\$897,300	\$102,700	\$0	\$1,000,000

Amended programming:

Project Name	Project Description	ODOT Key #	Lead Agency	Estimated Total Project Cost	Project Phase	Fund Type	Program Year	Federal Funding	Minimum Local Match	Other Funds	Total Funding
I-84 Eastbound to I-205 Northbound Auxiliary Lane	Extend auxiliary vehicle travel lane on I-84 EB from Halsey Street exit ramp to I-205 NB exit ramp	70393	ODOT	\$6,000,000	PE	STP	2011	\$897,300	\$102,700	\$0	\$1,000,000
					Cons	STP	2013	\$4,383,800	\$616,200	\$0	\$5,000,000

STAFF REPORT

IN CONSIDERATION OF RESOLUTION NO. 12-4358, FOR THE PURPOSE OF AMENDING THE 2012-15 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TO ADD THE CONSTRUCTION PHASE OF THE I-84 EASTBOUND TO I-205 NORTHBOUND AUXILIARY LANE PROJECT

Date: June 26, 2012

Prepared by: Ted Leybold, 503-797-1759

BACKGROUND

The Oregon Department of Transportation (ODOT) has performed operations analysis of the Interstate freeway system and has identified potential operational projects to reduce vehicle crashes and increase vehicle flow to reduce congestion. A priority project emerging from this analysis is to extend the auxiliary travel lane on eastbound I-84 from the Halsey Street exit to the I-205 northbound exit. The Preliminary Engineering phase of this project was approved as a part of the 2010-13 MTIP and is now nearing completion.

The configuration of existing and proposed lanes is shown in Attachment 1.

By extending an auxiliary lane between the Halsey Street and I-205 Northbound exits, vehicle queuing on the left most lane of I-84 from the I-205 on ramps will be reduced. This will reduce crash incidents and delay for eastbound vehicles on I-84.

ODOT has identified financial capacity to fund this project from savings to existing projects from across the state. These funds will be programmed on the project to ensure timely obligation of federal funds and avoid the potential for a rescission of federal funds allocated to the state.

This project was modeled as a part of the air quality conformity of the 2035 Regional Transportation Plan. This project was a part of the financially constrained system and modeled with an increase in vehicle capacity for this section of freeway. The forecasted timing of the modeled increase in capacity (by year 2017) is consistent with the proposed programming of funds for construction of this project.

The Joint Policy Advisory Committee on Transportation and the Metro Council must approve amendments to the MTIP. This amendment will add a construction phase the I-84 Eastbound to I-205 Northbound Auxiliary Lane project to the 2012-15 MTIP with programming as shown in Exhibit A to Resolution No. 12-4358.

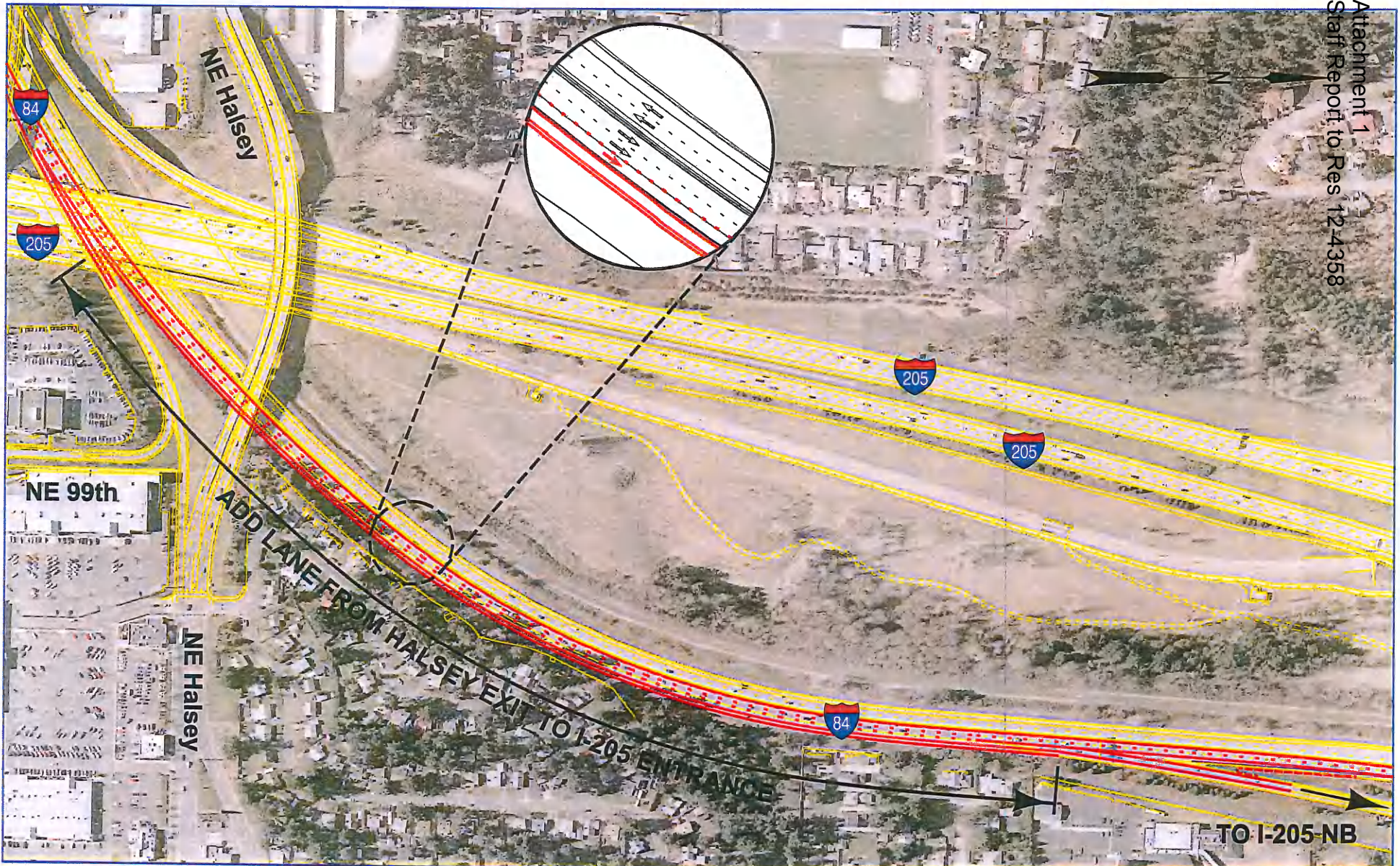
ANALYSIS/INFORMATION

- 1. Known Opposition** None known at this time.
- 2. Legal Antecedents** Amends the 2012-15 Metropolitan Transportation Improvement Program adopted by Metro Council Resolution 12-4332 on March 15, 2012 (For the Purpose of Approving the 2012-15 Metropolitan Transportation Improvement Program for the Portland Metropolitan Area).
- 3. Anticipated Effects** Allows project to be eligible for transportation funding.
- 4. Budget Impacts** None.

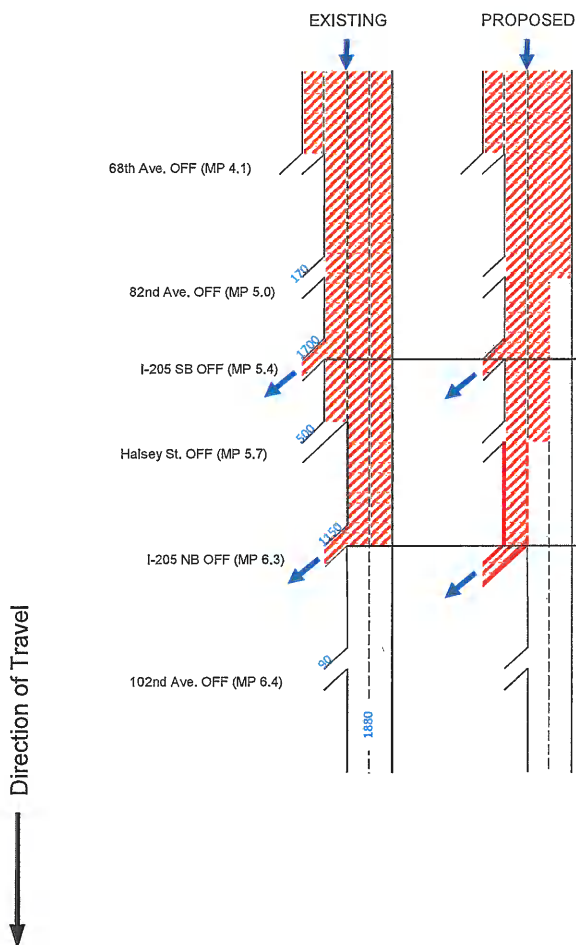
RECOMMENDED ACTION

Metro staff recommends the approval of Resolution No. 12-4358.

I-84 EB: Extend Halsey St. Lane Drop as Aux Lane to NB I-205



I-84 Eastbound - Halsey Street Lane Extension



Existing

Queue: For the I-205 SB OFF ramp the queue builds in the right-most lane with some more aggressive drivers sneaking up to this exit in the middle lane looking for gaps provided by trucks (and others). The middle and left-most lanes serve through traffic and those destined for exits further east, including the I-205 NB OFF Ramp. As the afternoon peak continues the I-205 SB OFF Ramp gaps become fewer (for the sneaking vehicles) resulting in the middle-lane experiencing higher densities (slower speeds). Downstream the I-205 NB OFF Ramp also has a high exiting volume, most of which align in the middle lane (through the I-205 SB and Halsey St. OFF Ramps) to avoid congestion in the right lane. Congestion in the middle lane, from the I-205 SB OFF Ramp "sneakers", pushes some of the vehicles destined for I-205 NB OFF Ramp (that would otherwise use the middle lane) to the left-most lane (and direct competition with through trips) in order to by-pass the I-205 SB OFF Ramp queue. Once past the exit to the I-205 NB OFF Ramp speeds increase (density and v/c ratios decrease).

Duration: The duration of the queue along I-84 between the I-205 SB & NB OFF Ramps is assumed to be equivalent to the congestion duration documented along I-205 (and connecting ramps to I-84), approximately 3.5 hrs (3:00-6:30PM during the workweek). -Source: I-205 Bottleneck graphics, bottlenecks #3 and #8.

Proposed

Description: Currently the right-most lane of the 3 lane cross-section ends at the Halsey St. OFF Ramp. The proposed improvement would extend this lane east to the I-205 NB OFF Ramp.

Benefits:

Queue: The proposed project will allow better lane alignment for the major eastbound movements (I-205 SB OFF, I-205 NB OFF, and through traffic). The 3-lane section in the vicinity of the I-205 SB OFF Ramp is anticipated to operate similar to the current conditions in the right lane with "sneaker" vehicles using the middle lane. The proposed project would provide the greatest benefit to the one mile segment between the I-205 SB and NB OFF ramps. The additional lane in this section is expected to allow for I-205 NB OFF Ramp traffic to queue in the right-most lane south of the Halsey St. OFF Ramp, with some spillover into the middle lane beginning west of Halsey St. The left-lane queue is anticipated to shrink to around the 82nd Ave OFF Ramp, thus providing a less constricted route for through vehicles east of 82nd Ave compared to current conditions.

Duration: It is anticipated that the queue along I-84 in the right-most lanes will be constant in duration (3.5 hrs) because the source of the queue is not on I-84, rather I-205. The queue/delay for through trips is anticipated to noticeably decrease.

Speed: Speeds in the two right-most lanes are expected to be relatively similar due to spillback from I-205, however, the speed for through trips will increase approximately 5 MPH.

Density: HCS traffic modeling supports these benefits showing an improvement in density (36 pc/h/ln to 22 pc/h/ln) at the Halsey St. OFF ramp over a section of 1500 feet in length. The density leading into the segment between Halsey St. OFF Ramp and the I-205 NB OFF Ramp also shows an improvement in density (22.0 pc/h/ln to 14.6 pc/h/ln).

Volume: Traffic volumes are not anticipated to change with the proposed project. Ramp demand volumes are shown on the left side of the queuing figures.

Project Impacts Summary:

Queue: The queue is reduced by over a mile in the left lane, up to a half-mile in the center lane, and no change in the right lane.

Duration: The duration of queuing for through trips (left and center lanes) is anticipated to noticeably decrease, while the queuing for the right lane remains constant (3.5 hours).

Speed: Speeds in the left lane is expected to increase approximately 5 MPH, while the right and center lanes are relatively similar to existing conditions.

LEGEND

- Travel speeds less than 35 MPH
- 170 OFF Ramp/Mainline demand volume (2008 ODOT Flow Maps)
- Influenced by a bottleneck outside of this study area

DRAFT

Source: HCS analysis



FIGURE 2

I-84 Eastbound (Halsey St. OFF Ramp) Extension of 3rd Eastbound lane