BEFORE THE METRO COUNCIL

FOR THE PURPOSE OF AMENDING THE 2010-13 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TO ADD THE I-5 CARMAN DRIVE RAMP OPERATIONS PROJECT	)))))	RESOLUTION NO. 11-4287 Introduced by Councilor Collette

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 2010-13 MTIP on September 16, 2010; 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 Oregon Department of Transportation (ODOT) has conducted a corridor operations analysis for the south Interstate 5 corridor as programmed in the 2009-10 Unified Planning Work Program; and

WHEREAS, as a result of this analysis, ODOT has proposed an operations project as a priority improvement that would modify the design of the southbound on-ramp to Interstate 5 from Highway 217 to connect to the existing auxiliary lane between the Carman Drive and Lower Boones Ferry Road exit to reduce crash incidents and reduce vehicle delay (the "I-5 Carman Drive Ramp Operations Project"); and

WHEREAS, ODOT wishes to add a construction phase to the I-5 Carman Drive Ramp Operations Project, as described in Exhibit A to this resolution; 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-5 Carman Drive Ramp Operations Project is considered a part of the development of a Regional Intelligent Transportation System / Transportation System Management & Operations program (Project #11104) included in the Regional Transportation Plan financially constrained system, which plan has demonstrated conformity; and

WHEREAS, the code of federal regulations 40 CFR 93.127 further exempts interchange reconfiguration projects from the Clean Air Act's requirements that a regional emissions analysis be performed to demonstrate the project's conformity with the state's air quality goals; and

WHEREAS, funding for the I-5 Carman Drive Ramp Operations Project is available within existing revenues, consistent with the MTIP financial plan; and

WHEREAS, JPACT approved this resolution September 8, 2011; now therefore

BE IT RESOLVED that the Metro Council hereby adopts the recommendation of JPACT to add the I-5 Carmen Drive Ramp Operations Project to the 2010-13 MTIP.

ADOPTED by the Metro Council this 15 day of September 2011.

for Tom Hughes, Council President

Approved as to Form:

Alison Kean Campbell, Acting Metro Attorney

Exhibit A to Resolution No. 11-4287

2010-13 Metropolitan Transportation Improvement Plan Table 3.1.1 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 (all phases, all years)	Project Phase	Fund Type	Program Year	Federal Funding	Minimum Local Match	Other Funds	Total Funding
I-5 Carman Drive Ramp Operations Project	Restripe the existing merge lane of the Highway 217 ramp to I-5 southbound to connect to the existing auxiliary lane of the Carman Drive southbound access ramp to I-5.	17515	ODOT	$1,950,823	PE	STP	2011	$358,920	$41,080	$0	$400,000

Exhibit A to Resolution No. 11-4287

Amended programming:

Project Name	Project Description	ODOT Key #	Lead Agency	Estimated Total Project Cost (all phases, all years)	Project Phase	Fund Type	Program Year	Federal Funding	Minimum Local Match	Other Funds	Total Funding
I-5 Carman Drive Ramp Operations Project	Restripe the existing merge lane of the Highway 217 ramp to I-5 southbound to connect to the existing auxiliary lane of the Carman Drive southbound access ramp to I-5.	17515	ODOT	$1,950,823	PE	STP	2011	$358,920	$41,080	$0	$400,000
				$1,950,823	Cons	STP	2011	$1,391,553	$159,270	$0	$1,550,828

STAFF REPORT

FOR THE PURPOSE OF AMENDING THE 2011-13 METROPOLITAN TRANSPORTATION IMPROVEMENT PROGRAM (MTIP) TO ADD THE I-5 CARMAN DRIVE RAMP OPERATIONS PROJECT

Date: September 15, 2011 Prepared by: Ted Leybold, 503-797-1759

BACKGROUND

The Oregon Department of Transportation (ODOT) is completing a corridor operations analysis of the southern portion of Interstate 5 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 realign the south bound Carman Drive on-ramp to Interstate 5 (I-5) to allow a safer transition for vehicles merging onto I-5 with vehicles preparing to exit at Lower Boones Ferry Road to the south. The configuration of existing and proposed lanes is shown in Attachment 1.

The project would restripe the existing merge lane of the Highway 217 ramp to I-5 southbound to connect to the existing auxiliary lane of the Carman Drive southbound access ramp to I-5. To allow this re-striping, the Carman Drive southbound on-ramp to I-5 will be reconstructed to address proper safety for merging traffic. This will allow vehicles entering I-5 southbound from Highway 217 to not have to merge and change lanes in the short distance between Highway 217 and the Carman Drive overpass where the existing merge lane ends. The benefits of the new configuration are summarized in Attachment 1.

ODOT has identified financial capacity to fund this project from savings to existing projects. Urban STP 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. State administered funds will be programmed to replace the urban STP funds at a later date.

Air quality conformity was completed on the 2035 Regional Transportation Plan, which included a small program of regional system management and operations program projects, consistent with this project, as a part of the financially constrained system. Additionally, interchange reconfiguration projects are exempt from regional emissions analyses by the code of federal regulations 40 CFR 93.127.

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-5 Carman Drive Ramp Operations project to the 2010-13 MTIP with programming as shown in Exhibit A to Resolution No. 11-4287.

ANALYSIS/INFORMATION

1. **Known Opposition** None known at this time.

2. **Legal Antecedents** Amends the 2010-13 Metropolitan Transportation Improvement Program adopted by Metro Council Resolution 10-4186 on September 16, 2010 (For the Purpose of Approving the 2010-13 Metropolitan Transportation Improvement Program for the Portland Metropolitan Area).

3. **Anticipated Effects** Allows

4. **Budget Impacts** None.

RECOMMENDED ACTION

Metro staff recommends the approval of Resolution No. 11-4287.

Attachment 1

INTEROFFICE MEMORANDUM

TO: TED LEYBOLD, MTIP PROGRAM MANAGER

FROM: RIAN WINDSHEIMER

SUBJECT: I-5 @ CARMAN DR OPERATIONAL IMPROVEMENT

DATE: 8/15/2011

ODOT Region 1 started the I-5/I-205 Operations Study in 2009 to identify, rank and provide conceptual low cost, low impact operational solutions for the worst bottlenecks on I-5 south of the Marquam Bridge and I-205 in the Portland Metro Region. The study has identified several bottlenecks on I-5 and I-205 based on PORTAL data, ODOT traffic cameras, travel time runs, collision data and field observations. This study identified a solution at I-5@ Carman Drive involving restriping at a low cost.

The primary bottleneck problem between OR 217 and Lower Boones Ferry Road is caused by a heavy entering volume from OR 217 that is weaving with traffic exiting at Carman Drive. Traffic with destinations beyond Carman Drive tend to get over to the left immediately upon entering I-5 rather than making use of the existing auxillary lane because the lane merges under the Carman Drive overcrossing. The result has been 308 crashes over a 5 year period and speeds of 10 miles per hour when the bottleneck activates.

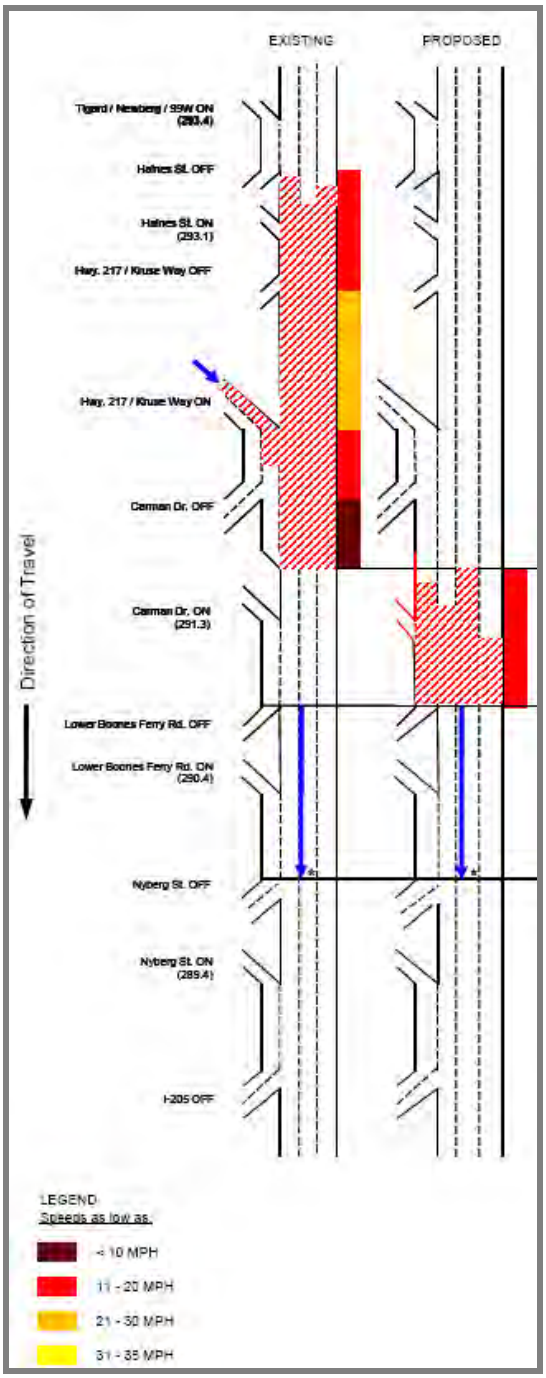
The proposed operational improvement will re-purpose the existing merge lane that under the Carman Drive structure on southbound I-5 by restriping it to connect with the existing auxillary lane between Carman Drive and Lower Boones Ferry Road. This project requires rebuilding the existing Carman Drive on-ramp to create safe merging operations and improving acceleration distances for vehicles entering from Carman Drive. VISSIM, a micro-simulation software package, predicts the following operational and safety improvements (see Figure 1):

- shorten the peak hour back-ups on I-5 South by approximately 1 mile,
- increase peak operating speeds by approximately 4 mph (40% increase),
- shrink the peak duration by up to 60 minutes per day,
- reduce accidents related to merging and weaving and;
- increase reliability in the corridor.

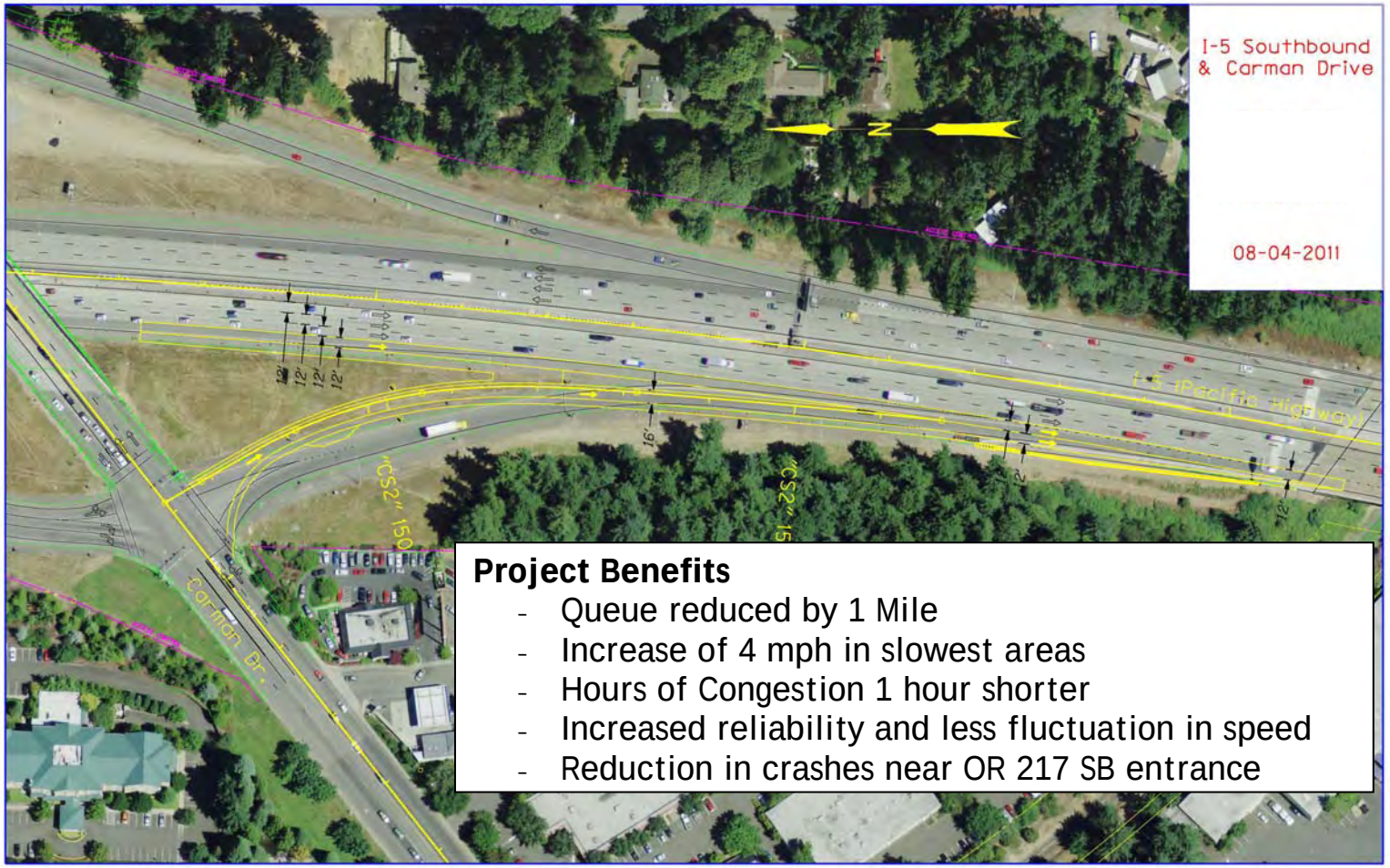
The proposed improvement makes more efficient use of pavement that exists today. Transport, the TPAC subcommittee that coordinates operational improvements in the region, has indicated support for the project in an attached letter.

Attachment 1

Figure 1: I-5 Southbound Carman Drive Auxiliary Lane Extension



Attachment 1



Attachment 1

DATE:

TO: Oregon Transportation Commission

FROM: Matthew L. Garrett
Director

SUBJECT: 2010-2013 Statewide Transportation Improvement Program (STIP)
Amendment request to add a construction phase to an Interstate Operations Project

Requested Action:
Region 1 requests approval to amend the 2010-2013 STIP to add a construction phase to the following Operations D-STIP project:

Project Name	I-5 SB: Carmen Dr – Lower Boones Ferry KN 17515	
PHASE	**YEAR**	**COST**
PE	2011	$400,000
RW		
UR		
CN	2011	$1,550,823
TOTAL		**$1,950,823**

Background:
ODOT Region 1 conducted an I-5/I-205 Operations Study in 2009 to identify, rank and provide conceptual solutions for the worst bottlenecks in the Portland Metro Region on I-5 south of the Marquam Bridge and along I-205. The study identified several bottlenecks on these facilities based on PORTAL traffic data, ODOT traffic cameras, field observations and travel time and collision data.

The bottleneck on I-5 at Carman Drive has been identified as one of the worst on I-5 south as well as one of the most affordable to address. The proposed solution will restripe an existing merge lane that currently drops under the Carman Drive structure to extend the auxiliary lane from Hwy 217 to Lower Boones Ferry Road. As part of the project, the Carman Drive on-ramp will be realigned and lengthened to improve the weave distance and improve safety. This improvement is expected to reduce the congestion in the area by an hour, reduce the Southbound backup in the PM peak by approximately 1 mile, and reduce accidents and increase reliability in the corridor.

Funding is coming from operations project savings within Region 1.

Copies (w/enclosures) to:
Jason Tell
Rian Windsheimer
Naveen Chandra
Jeff Flowers
Steve Leep

600 NE Grand Ave.
Portland, OR 97232-2736
503-797-1700
503-797-1804 TDD
503-797-1797 fax

www.oregonmetro.gov

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August 15, 2011

Rian Windsheimer, Policy and Development Manager
ODOT Region 1
123 NW Flanders Street
Portland OR 97209

Subject: TransPort Endorsement of ODOT's I-5 at Carman Drive Operational Improvement Project MTIP Amendment

Dear Mr. Windsheimer:

TransPort, the Transportation System Management & Operations (TSMO) Subcommittee for the Portland metropolitan region is pleased to submit this letter of support on behalf of ODOT's I-5 at Carman Drive Operational Improvement project.

TransPort reviewed this project at its August 2011 meeting and concluded that ODOT's operational solution of connecting an existing merge lane to an existing auxiliary lane on southbound I-5 between Carman Drive and Lower Boones Road is a cost-effective operations solution to a known bottleneck location. The VISSUM model findings of reduced duration and length of vehicle backups, increased travel speeds, and decreased merge/weave crashes are the compelling reasons for TransPort endorsement of the MTIP amendment necessary to advance this project.

We have high confidence that the completion of this project will result in safer and more efficient mobility for I-5 travelers.

Sincerely,

Dennis Mitchell, ODOT Region 1
TransPort Chair