

Transportation 2040

Final Environmental Impact Statement Addendum

May 7, 2012

Puget Sound Regional Council



May 7, 2012

Dear Member of the Puget Sound Regional Council or Interested Parties:

An amendment to *Transportation 2040*, the Regional Transportation Plan for King, Kitsap, Pierce, and Snohomish counties, is scheduled to be adopted at the meeting of the General Assembly of the Puget Sound Regional Council on June 7, 2012.

The plan amendment will add new projects, remove projects that have been canceled, move projects among funding categories, note completions and update financial and other information on state and local projects. These changes are the subject of this Addendum to the Final Environmental Impact Statement for *Transportation 2040* and new air quality information. These documents are all available online at psrc.org or from the Puget Sound Regional Council's Information Center at (206) 464-7532.

Sincerely,

A handwritten signature in black ink, appearing to be "IWM", written in a cursive style.

Ivan W. Miller, AICP
SEPA Responsible Official

Transportation 2040 Final EIS Addendum Fact Sheet

May 7, 2012

Description of Proposal:

This document is an Addendum to the Final Environmental Impact Statement (FEIS) for *Transportation 2040*. The purpose of this Addendum is to assess and document the environmental impacts of an amendment to *Transportation 2040*. The Puget Sound Regional Council (PSRC) is proposing its first amendment to *Transportation 2040* to include new, modified, or deleted projects proposed since 2010. No significantly different impacts were found beyond those identified in the original Final Environmental Impact Statement. Further environmental review will be conducted for each individual project, as appropriate. This Addendum complies with the State Environmental Policy Act (SEPA) rules under Revised Code of Washington (RCW) 43.21C and Chapter 197-11 of the Washington Administrative Code (WAC).

Lead Agency and Source of Proposal:

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Licenses Required: No licenses are required.

Documents Adopted for SEPA Compliance:

SEPA Addendum to *Transportation 2040* Final EIS, May 7, 2012
Transportation 2040 Final EIS, March 19, 2010
Transportation 2040 Draft EIS, May 29, 2009
Vision 2040 Final EIS, April 2008

Scheduled Date of Adoption of Amendment to *Transportation 2040* by the General Assembly: June 7, 2012

Location of Document and Supporting Technical Reports:

Available online at:
<http://psrc.org/transportation/t2040>

Copies available from:
Puget Sound Regional Council Information Center
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Cost of Document to the Public: No cost for individual copies

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Acronyms

ADA	Americans with Disabilities Act
BAT	Business Access and Transit
CO	Carbon monoxide
DEIS	Draft Environmental Impact Statement
EPA	U.S. Environmental Protection Agency
FEIS	Final Environmental Impact Statement
HOT	High-occupancy toll
HOV	High-occupancy vehicle
I-5	Interstate 5
IJR	Interchange Justification Report
JBLM	Joint Base Lewis-McChord
MP	Milepost
MTP	Metropolitan Transportation Plan
MVEB	Motor Vehicle Emissions Budget
NOx	Nitrogen oxides
PM ₁₀	Particulate matter 10 micrometers in diameter or less
PM _{2.5}	Particulate matter 2.5 micrometers in diameter or less
PS&E	Plans, specifications, and estimates
PSRC	Puget Sound Regional Council
RCW	Revised Code of Washington
SEPA	State Environmental Policy Act
SIP	State Implementation Plan for Air Quality
SR	State Route
WAC	Washington Administrative Code
WSDOT	Washington State Department of Transportation

Need for the Addendum

Transportation 2040, the Metropolitan Transportation Plan (MTP) for the central Puget Sound region, was adopted in May 2010 following the preparation and review of a plan-level State Environmental Policy Act (SEPA) Final Environmental Impact Statement. The Puget Sound Regional Council (PSRC) is amending *Transportation 2040* to include new, modified, or deleted projects proposed since 2010. This Addendum to the 2010 Final Environmental Impact Statement assesses and documents the environmental effects of the project changes.

Project Changes

Summary of Project Changes. The current adopted plan includes over 850 projects. The amendment to *Transportation 2040* updates the project list to include 18 new projects, remove 7 projects, reflect 6 status changes, and modify information for 111 projects, as follows:

- Of the 18 projects being added, 10 are intersection or interchange projects and another 3 are capacity improvement projects; all of these are on state routes. Of the remaining projects, 2 are new trail segments—1 is a complete streets project and the other is a local interchange project. In addition, one study project is being added for the Joint Base Lewis McChord Corridor Planning and NEPA documentation. The details of these 18 new projects are shown in Exhibit 1.
- Of the 7 projects being removed, 2 are widening projects on state routes, 2 are state route interchange projects, and 2 are the result of a scaled-back terminal project at a port facility. The remaining project was removed because it was a duplicate. The details of these projects are shown in Exhibit 2.
- Of the 6 projects with status changes, 3 are moving from the Unprogrammed portion of the plan to the Constrained portion of the plan. The other 3 projects with status changes include 2 moving from Transportation 2040 Concept to the Unprogrammed portion of the plan, and 1 moving from Transportation 2040 Concept to Candidate.
- The 111 modified projects include 15 completed projects, 9 exempt projects, and 87 projects with updated information such as cost, title, sponsor, or completion year.

With these changes, the amended *Transportation 2040* plan will have approximately 847 ongoing projects.

Overall, the project changes are consistent with the plans and policies identified in the *Transportation 2040* Final Environmental Impact Statement and are expected to have similar environmental impacts as those identified in the original project list.

Subsequent Environmental Review and Project Review Process: Adding the projects shown in Exhibit 1 to the *Transportation2040* project list does not commit the region or project sponsors to specific project outcomes. The projects will be subjected to additional planning processes before implementation, as follows:

1. All projects will be subject to the Puget Sound Regional Council's Project Approval process ("Candidate-to-Approved"), which established criteria that must be met before projects in the region can be implemented. These criteria address project-level financial feasibility, completion of appropriate project-level environmental review processes, and other matters.
2. All projects will undergo project-level environmental review by the project sponsor.

Exhibit 1
List of New Projects in *Transportation 2040*

Sponsor	T2040 ID	Title	Description	From	To	On
Des Moines	4299	Barnes Creek Trail	Conduct preliminary design to provide a multi-purpose non-motorized trail connection to the regional Des Moines Creek Trail. Design will be developed in phases, from south to north, and will be used to assist in environmental assessment and identification.	Des Moines Creek Trail	Kent Des Moines Road	Unused SR 509 Right of Way
Renton	4296	Lake Washington Loop Trail	Shared use regional bicycle path	Rainier Avenue N. (city limits)	Cedar River Trail/ Logan Avenue Bridge	Rainier Avenue N./ Airport Way/ Logan Avenue
Marysville	4411	156th Street NE Interchange	The project would complete the Interchange Justification Report (IJR) for converting the 156th Street NE overcrossing (currently under construction) to a full Single Point Urban Interchange.	Twin Lakes Boulevard	State Avenue	156th Street NE
Des Moines	4297	S. 216th Street Segment 1A	Conduct utility coordination, finalize PS&E, acquire right of way, and construct improvements as a complete street including widening of two additional lanes, and a turn lane; conduct transit stop improvements, including bicycle lanes, curbs, gutters, sidewalks, and stormwater retention.	29th Avenue S.	24th Avenue S.	S. 216th Street
WSDOT	4430	I-5/JBLM Corridor Planning and NEPA documentation	Complete interchange justification reports and begin NEPA documentation for DuPont Steilacoom Road, 41st Division St. Berkley St., and Thorne Lane interchanges reconstruction and corridor widening.	JBLM Vicinity	JBLM Vicinity	I-5
WSDOT	1803	I-5: Mounts Road to Thorne Lane, Joint Base Lewis-McChord (JBLM) - HOV or HOT Widening	Add one lane each direction (general purpose or HOV/HOT) and auxiliary lanes; improve the interchanges at Center Drive, DuPont-Steilacoom Road, 41st Division Drive, Berkeley Street, and Thorne Lane pending IJR and environmental documentation.	Mounts Road	Thorne Lane	I-5
WSDOT	4419	I-5/JBLM DuPont-Steilacoom - New Interchange	This project would replace the interchange with one that would have more capacity to move more traffic and allow additional lanes to be added to I-5.	DuPont-Steilacoom Interchange	DuPont-Steilacoom Interchange	I-5

Exhibit 1
List of New Projects in *Transportation 2040* (continued)

Sponsor	T2040 ID	Title	Description	From	To	On
WSDOT	4420	I-5/JBLM, 41st Division Drive Interchange	This project builds a new bridge that allows one ramp to pass over the other allowing traffic to flow smoother. This results in a reduction of congestion and an improvement of safety on I-5.	41st Division Drive Interchange	41st Division Drive Interchange	I-5
WSDOT	4421	I-5/JBLM, Berkeley Drive Interchange	This project would replace the interchange with a more modern design that could accommodate the levels of traffic anticipated in the future as well as provide additional width to add new lanes on I-5.	Berkeley Drive Interchange	Berkeley Drive Interchange	I-5
WSDOT	4422	I-5/JBLM, Thorne Lane Interchange	This project would replace the interchange with a more modern design that could accommodate the levels of traffic anticipated in the future as well as provide additional width to add new lanes on I-5. The new interchange will accommodate more traffic by allowing multiple movements at one time and is compatible with the future Cross Base Highway project.	Thorne Lane Interchange	Thorne Lane Interchange	I-5
WSDOT	4423	I-5: Thorne Lane to Gravelly Lake Drive - Frontage Road	This project allows for an alternate route (southbound only; the alignment running northwest of I-5 and the BNSF railroad tracks) and is compatible with the future Cross Base Highway project.	Thorne Lane	Gravelly Lake Drive	I-5
WSDOT	4424	I-5/Thorne Lane to Gravelly Lake Drive - Auxiliary Lanes	Construct southbound and northbound auxiliary lanes	Thorne Lane	Gravelly Lake Drive	I-5
WSDOT	4425	I-5/SR 512 Interchange	The I-5/SR 512 Interchange is the junction of two major roadways in the region just south of the City of Tacoma. It experiences backups and congestion in all directions approaching it on a daily basis. These backups are the cause of a high rate of accidents.	I-5/SR 512 Interchange		I-5
WSDOT	4413	SR 9/SR 204 Intersection Improvement	Widen SR 9 for both northbound and southbound to provide one additional through lane at the SR 9/ SR 204 intersection. A grade-separated option is also being evaluated.	SR 9 /SR 204 Intersection	SR 9/ SR 204 Intersection	SR 9
WSDOT	4426	SR 16/Wollochet Interchange	The current interchange in Gig Harbor is more than 40 years old and has marginal on-ramps that make it difficult for vehicles entering the freeway to merge into traffic creating potential conflicts. This project will add a new on-ramp and modernize the rest.	SR 16	Gig Harbor Interchange	SR 16

Exhibit 1
List of New Projects in *Transportation 2040* (continued)

Sponsor	T2040 ID	Title	Description	From	To	On
Snoqualmie	4409	SR 202/Tokul Road Roundabout	Intersections of Tokul Road/SR 202 and Mill Pond Rd/SR 202 will be reconstructed and combined into a single-lane modern roundabout.	MP 25.76	MP 26.00	SR 202
WSDOT	4416	SR 518/Des Moines Memorial Drive Vicinity - Interchange Improvements	Reconstruct the existing half-diamond interchange at Des Moines Memorial Drive. Phase 1 includes adding an eastbound off-ramp from SR 518 to Des Moines Memorial Drive. Phase 2 includes adding a westbound off-ramp from SR 518 to northbound SR 509 that diverges from SR 518 prior to the Des Moines Memorial Drive Interchange and an on-ramp from Des Moines Memorial Drive to westbound SR 518.	SR 509	Des Moines Memorial Drive	SR 518
WSDOT	4417	SR 520 - 124th Avenue NE to 148th Avenue NE - Auxiliary Lane	Construct an eastbound auxiliary lane between 124th Avenue NE and 148th Avenue NE.	124th Avenue NE	148th Avenue NE	SR 520
WSDOT	4418	SR 520/148th Avenue NE Interchange Vicinity - Interchange Improvements	Provide second eastbound grade-separated off-ramp access to the east of 148th Avenue NE. Improve interchange pedestrian and bicycle facilities along 148th Avenue NE.	148th Avenue NE		SR 520
WSDOT	4254	SR 522- 83rd Place NE Vicinity to 91st Avenue NE Vicinity - Widening	The proposed project will provide corridor continuity, improve traffic flow (capacity), provide a continuous westbound Business Access and Transit (BAT) lane and provide a continuous ADA pedestrian facility.	83rd Place NE	91st Avenue NE	SR 522
Marysville	4410	SR 529 Interchange	Complete the current half interchange by constructing a new I-5 northbound off-ramp onto SR 529 and new southbound on-ramps from SR 529 to I-5.	SR 529	I-5	I-5

Exhibit 2
List of Projects Removed from *Transportation 2040*

Sponsor	T2040 ID	Title	Description	From	To	On
King County	4037	Foothills Trail	Acquisition, design, and construction of paved regional trail from Pierce County boundary to Kanaskat	Cumberland - Kanaskat Road (Kanaskat)	Pierce County Boundary (Buckley)	Off-road
Port of Tacoma	4643	Blair-Hylebos Terminal – SR 509 Interchange	Provides intersection improvements including additional left-turn lanes and right-turn pockets at SR 509; cost included in 4639.	-	-	SR 509 Interchange
Port of Tacoma	4641	Blair-Hylebos Terminal - Taylor Bypass	Provides one new southbound and one new northbound general purpose lane plus one center left-turn lane plus sidewalks and transit stops (Taylor Bypass).	-	-	Taylor Bypass
WSDOT	5421	U.S. 3: Mason County Line to Imperial Way	Widen from Mason/Kitsap County Line to Imperial Way to four lanes.	Kitsap/ Mason County Line	Imperial Way	SR 3
WSDOT	4186	SR 3 at SR 16 Interchange (Gorst)	Reconstruct the SR 3/SR 16 Interchange.	SR 3/SR 16 Vicinity (Gorst)	SR 3/SR 16 Vicinity (Gorst)	SR 3
WSDOT	1668	SR 16	Convert two of this 6-lane cross section to HOV.	SR 166	SR 3	SR 16
WSDOT	4247	SR 518	Construct a southbound to eastbound flyover/tunnel ramp at the SR 509 Interchange.	SR 518 at SR 509 Interchange	SR 509/ SR 518 Interchange	SR 518 at SR 509 Interchange

Additional Environmental Information

The 2009 Draft Environmental Impact Statement (DEIS) and 2010 Final Environmental Impact Statement addressed a wide variety of environmental impacts and mitigation for each alternative, considering impacts to transportation, air quality, climate change, land use (population, employment, and housing), noise, visual and aesthetic resources, water quality and hydrology, ecosystems and Endangered Species Act issues, energy, earth, environmental health, public services and utilities, parks and recreation, historic and cultural resources, environmental justice, and human health. Transportation and air quality are the only two environmental impact categories addressed in this Addendum. Impacts and mitigation for all other categories would be the same as identified in the 2010 Final Environmental Impact Statement.

Transportation System Outcomes

The Puget Sound Regional Council prepared a travel demand model forecast of the roadway lane miles for the regional transportation system in 2040. The model assumes full build-out in 2040 with the proposed new projects and is compared to the model done for the 2010 Final Environmental Impact Statement in Exhibit 3. More projects have been added than deleted, with the overall number of new lane miles added to roadways in the region increasing by approximately 12 miles, or 1.21 percent

Exhibit 3

Lane Miles in 2010 *Transportation 2040* FEIS and Proposed Projects for the 2012 Amendment

Outcome Category	2010 Final EIS			2012 Amendment			Difference between 2010 FEIS and 2012 Amendment	
	Base Year (2006) Lane Miles	2040 Lane Miles	Lane Miles (above base year)	Base Year (2006) Lane Miles	2040 Lane Miles	Lane Miles (above base year)	Amount of New Lane Miles	Percent Change New Lane Miles
<i>Highway</i>	2616	3011	395	2616	3028	412	+17	4.23%
<i>Non-Highway</i>	10,189	10,752	563	10,189	10,747	558	-5	-0.91%
Total Roadway	12,805	13,763	958	12,805	13,775	970	12	1.21%

Based on the change in total lane miles, the transportation impacts of the amended project list—in terms of overall system performance and environmental impacts—would be similar to those in the 2010 Final Environmental Impact Statement for *Transportation 2040*.

Air Quality

The air quality modeling was updated in March 2012 using the amended project list to ensure conformity and assess any change in environmental impacts. The central Puget Sound region is currently designated by the U.S. Environmental Protection Agency (EPA) as a maintenance area for carbon monoxide (CO) and particulate matter less than 10 microns in diameter (PM₁₀). The PM₁₀ maintenance areas are confined to the industrial areas of the Duwamish River, Kent Valley, and Tacoma Tideflats (PSRC 2010). A portion of the region is designated as nonattainment for particulate matter less than 2.5 microns in diameter (PM_{2.5}). This area is in the Wapato Hills/Puyallup River Valley area of Pierce County.

As required by federal and state law, long-range metropolitan transportation plans must show conformity to the State Implementation Plan for Air Quality (SIP). Regional emissions must not exceed the Motor Vehicle Emissions Budget (MVEB) identified in the SIP for each of the criteria pollutants (PSRC 2010). Nitrogen oxide (NO_x), CO, PM₁₀, and PM_{2.5} emissions for on-road mobile sources for the alternatives were estimated using the Puget Sound Regional Council's travel demand model and EPA's MOBILE6.2 vehicle emissions modeling software. The air quality conformity modeling results are shown in Exhibits 4 to 6. Emissions for CO and PM₁₀ are below the MVEB, and PM_{2.5} and NO_x are below the 2008 base year estimates, per the interim conformity test requirements established by EPA¹. The air quality impacts of *Transportation 2040* with the amended project list would not be significantly different from those addressed in the 2010 Final Environmental Impact Statement .

Exhibit 4 CO Emissions - tons/day (budget test) with the 2012 Amendment

2010 Final EIS		2012 Amendment	
Year	Emissions	Year	Emissions
MVEB ¹	2,512.00	MVEB	2,512.00
2016	1,033.17	2016	1,031.80
2020	943.66	2020	942.14
2030	1,135.26	2030	1,134.72
2040	1,188.45	2040	1,189.54

¹ Motor Vehicle Emissions Budget

Exhibit 5 PM₁₀ Emissions - pounds/day (budget test) with the 2012 Amendment

2010 Final EIS				2012 Amendment			
Year	Kent	Duwamish	Tacoma	Year	Kent	Duwamish	Tacoma
MVEB ¹	231.50	844.40	460.80	MVEB ¹	231.50	844.40	460.80
2020	77.90	274.90	209.40	2020	78.21	274.84	208.20
2030	80.80	276.80	221.00	2030	81.21	275.98	220.71
2040	84.40	287.80	240.10	2040	84.79	286.41	240.13

¹ Motor Vehicle Emissions Budget

Exhibit 6 PM_{2.5} Emissions - grams/day (build to base year test) with the 2012 Amendment

2010 Final EIS			2012 Amendment		
Year	PM _{2.5}	NO _x	Year	PM _{2.5}	NO _x
2008	413,051	24,038,398	2008	413,051	24,038,398
2015	276,978	12,803,400	2015	278,638	12,859,507
2020	214,043	7,683,118	2020	216,456	7,764,837
2030	202,140	6,942,164	2030	204,732	7,030,416
2040	207,331	6,998,901	2040	210,327	7,100,153

¹ The SIP process for PM_{2.5} is not yet completed; the interim conformity test applies until such time as a Motor Vehicle Emissions Budget is adopted.

Conclusion

The travel demand modeling of roadway lane miles with the amended project list is similar to the modeling performed for the 2010 Final Environmental Impact Statement (PSRC 2010). The change in total lane miles would have similar effects on the regional transportation system compared to the 2010 Final Environmental Impact Statement ; in addition, the range of potential impacts and mitigation would be the same.

The amended project list would meet the conformity requirements for air quality. The pollutant emissions forecast for both the amended analyses and 2010 Final Environmental Impact Statement were consistently under the emissions budgets (using current law emissions budgets in effect at the time of analysis) or alternate required conformity tests.

Similarities between the prior and amended transportation networks would result in the same or similar impacts to other relevant elements of the environment. The SEPA Responsible Official concludes that the amendment of the *Transportation 2040* project list would not create significantly different environmental impacts beyond those addressed in the 2009 Draft Environmental Impact Statement and 2010 Final Environmental Impact Statement.

Reference

PSRC. 2010. *Transportation 2040* Final Environmental Impact Statement. Issued March 19, 2010.
Available at: <http://psrc.org/transportation/t2040/t2040-pubs/transportation-2040-final-environmental-impact-statement/>.