

Columbia River CROSSING

INTERSTATE 5
COLUMBIA RIVER CROSSING PROJECT



Final Environmental Impact Statement and Final Section 4(f) Evaluation

VOLUME 1 OF 2

SEPTEMBER 2011



U.S. Department of Transportation
Federal Highway Administration
Federal Transit Administration



Washington State
Department of Transportation

C-TRAN



TRI MET



Interstate 5 Columbia River Crossing Project

Vancouver, Washington and Portland, Oregon

Final Environmental Impact Statement

Submitted Pursuant to:

The National Environmental Policy Act (42 U.S.C. 4322(2)(c))
and the Washington State Environmental Policy Act (Ch. 43.21 C RCW)

Submitted by:

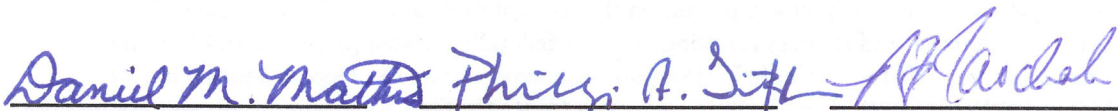
Federal Highway Administration
Federal Transit Administration

and

Washington State Department of Transportation
Oregon State Department of Transportation
Southwest Washington Regional Transportation Council
Metro
Clark County Public Transportation Benefit Area
Tri-County Metropolitan Transportation District

In cooperation with

U.S. Army Corps of Engineers
U.S. Coast Guard
Federal Aviation Administration
National Park Service
Washington State Department of Archaeology and Historic Preservation
U.S. General Services Administration



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Title VI

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Americans with Disabilities Act (ADA) Information

If you would like copies of this document in an alternative format, please call the CRC project office at (360) 737-2726 or (503) 256-2726. Persons who are deaf or hard of hearing may contact the CRC project through the Telecommunications Relay Service by dialing 7-1-1.

¿Habla usted español? La informacion en esta publicación se puede traducir para usted. Para solicitar los servicios de traducción favor de llamar al (503) 731-4128.

Project Abstract

The Columbia River Crossing (CRC) project is a bridge, transit, highway, and bicycle and pedestrian improvement project proposed by the Oregon and Washington Departments of Transportation (ODOT, WSDOT), Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Southwest Washington Regional Transportation Council (RTC), Metro, Clark County Public Transportation Benefit Area (C-TRAN), and Tri-County Metropolitan Transportation District (TriMet) to improve safety and mobility in the Interstate 5 (I-5) corridor between Portland, Oregon and Vancouver, Washington. FHWA and FTA are the lead federal agencies for this study. Both agencies must ensure that the National Environmental Policy Act (NEPA) process is properly conducted and completed, including the publication of this Final Environmental Impact Statement (FEIS), before they provide funding or approval to construct the project.

I-5 is the main interstate corridor on the west coast from Canada to Mexico and one of only two roadway crossings of the Columbia River in the Portland-Vancouver metropolitan area. The CRC project focuses on a 5-mile segment of the I-5 corridor extending from State Route (SR) 500 in Vancouver to approximately Columbia Boulevard in Portland. Alternatives considered in the Draft Environmental Impact Statement (DEIS) included a No-Build Alternative and four multimodal build alternatives that either replace or rehabilitate the existing river crossing, provide highway improvements, either extend light rail or provide bus rapid transit with several transit alignment and length options, improve bicycle and pedestrian facilities, consider tolling, and implement transportation demand and system management measures.

During preparation and following publication of the DEIS, the project solicited public and stakeholder feedback through public comments, hearings and workshops to gather input and discuss the alternatives. In July 2008, following the release of the DEIS, the project sponsors adopted the locally preferred alternative (LPA) as a refined version of Alternative 3 in the DEIS, which includes the following transportation improvements along the project corridor:

- A new river crossing over the Columbia River and associated I-5 highway improvements, including seven interchanges, north and south of the river.
- A variety of bicycle and pedestrian improvements throughout the project corridor.
- Extension of light rail transit from the Expo Center in Portland to Clark College in Vancouver, and associated transit improvements, including transit stations, park and rides, bus route changes, and expansion of a light rail transit maintenance facility.
- A new toll on motorists using the river crossing as both a financing and demand management tool.
- Transportation demand and system management measures to be implemented with the project.

Following the adoption of the LPA, the project team continued to evaluate and solicit input from the public, other stakeholders, and the project sponsors to help further refine the LPA.

Depending on the availability of funding, construction of several highway elements of the LPA could be deferred to some later date. This FEIS evaluates both the LPA Full Build and the LPA with highway phasing. The LPA with highway phasing would build most of the LPA in the first phase, but would defer construction of specific highway elements of the project to some future, undetermined date. This FEIS also includes two design options for the interchanges at Hayden Island and Marine Drive, referred to as LPA Option A and LPA Option B. LPA Option A is the option preferred by the federal project leads and the local sponsoring agencies and includes local vehicular access between Marine Drive and Hayden Island on a local multimodal bridge. LPA Option B does not have vehicle traffic lanes on the light rail bridge, but instead provides direct access between Marine Drive and the island with collector-distributor (CD) lanes that would be built adjacent to I-5.

The following persons can be contacted for additional information regarding this document:

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Fact Sheet

Project Title

Interstate 5 Columbia River Crossing

Project Description

The Interstate 5 (I-5) Columbia River Crossing (CRC) project is a bridge, transit, highway, and bicycle and pedestrian improvement project of ODOT, WSDOT, RTC, Metro, C-TRAN, and TriMet. The project's purpose is to reduce congestion, enhance safety, and increase mobility. The project area begins at SR 500 in Vancouver, Washington, and extends to Columbia Boulevard in Portland, Oregon, and includes the existing I-5 crossing of the Columbia River.

Date of Issue

DEIS: May 2, 2008

FEIS: September 23, 2011

Document Availability

Download an electronic copy: www.columbiarivercrossing.com

Request an electronic or printed copy of the FEIS:

Submit request to feedback@columbiarivercrossing.org, or call (360) 737-2726 or (503) 256-2726 or call toll free at (866) 396-2726.

The Executive Summary and electronic copy of the FEIS are available at no charge. Hard copies of the FEIS are available for purchase.

The FEIS is also available for review at various public libraries and meeting places throughout the project area.

WASHINGTON LOCATIONS:

- Clark College – Cannell Library
1933 Fort Vancouver Way #112, Vancouver, WA 98663 (360) 992-2869
- Esther Short Building
610 Esther Street, Vancouver, WA 98660 (360) 696-8200
- Firstenburg Center
700 NE 136th Avenue, Vancouver, WA 98684 (360) 487-7001
- Vancouver Community Library
901 C Street, Vancouver, WA 98663 (360) 906-5106
- Luepke Center
1009 E McLoughlin Boulevard, Vancouver, WA 98663 (360) 696-8202
- Marshall Center
1009 E McLoughlin Boulevard, Vancouver, WA 98663 (360) 487-7100
- Washington State University – Vancouver Campus Library
14204 NE Salmon Creek Avenue, Vancouver, WA 98686 (360) 546-9680

OREGON LOCATIONS:

- Albina Library
3605 NE 15th Avenue, Portland, OR 97212 (503) 988-5362
- Matt Dishman Community Center
77 NE Knott Street, Portland, OR 97212 (503) 823-3673
- Multnomah County Central Library
801 SW 10th Avenue, Portland, OR 97205 (503) 988-5123
- North Portland Library
512 N Killingsworth Street, Portland, OR 97217 (503) 988-5394
- Peninsula Park Community Center
700 N Rosa Parks Way, Portland, OR 97217 (503) 823-3620
- Portland State University – Branford P. Millar Library
1875 SW Park Avenue, Portland, OR 97201 (503) 725-5874
- Portland Community College – Cascade Campus – Library
705 N Killingsworth Street, Portland, OR 97217 (503) 244-6111
- St. Johns Community Center
8427 N Central Street, Portland, OR 97203 (503) 823-3192
- St. Johns Library
7510 N Charleston Avenue, Portland, OR 97203 (503) 988-5397
- University of Portland Library – Wilson W. Clark Memorial Library
5000 N Willamette Boulevard, Portland, OR 97203 (503) 943-7788
- University Park Community Center
9009 N Foss Avenue, Portland, OR 97203 (503) 823-3631

Public Drop-in Sessions

Public drop-in sessions will be held in Portland and Vancouver at the following dates and locations:

Wednesday,
October 12, 2011
2:00 to 4:00 pm and
6:00 to 8:00 pm
Vancouver Community
Library (Columbia Room)
901 C Street
Vancouver, WA 98660

Thursday,
October 13, 2011
2:00 to 4:00 pm and
6:00 to 8:00 pm
Jantzen Beach
SuperCenter (Park Room)
1405 Jantzen Beach
Center
Portland, OR 97217

Additionally, copies have been provided to all active neighborhood associations in the project area. Please contact your neighborhood leader to request to borrow the document.

Review Period

September 23, 2011 to October 23, 2011

Review Comments and Contact Information

Where to send written comments:
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For more information regarding this document please contact:
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Where to email comments:
feedback@columbiarivercrossing.org

Anticipated Local, State, and Federal Permits and Approvals

Water Quality, Wetlands and Shoreline	Section 4(f)
Clean Water Act (CWA) Section 404 Permit	Section 4(f) Evaluation
Oregon Removal and Fill Permit	
CWA Section 401 Water Quality Certification (Oregon and Washington)	Public Utilities
CWA National Pollutant Discharge Elimination System Permit	Use and occupancy agreements (if relocated)
Rivers and Harbors Act Section 9 Bridge Permit	Federal Highway Administration Approvals
Rivers and Harbors Act Section 10 Waterway Structures Permit	Several different approvals necessary for I-5 freeway improvements
Rivers and Harbors Act, US Code 33, Section 408 Civil Works Alteration Permit	Parks
Sole Source Aquifer Protection Review	Federal Land to Parks
Washington Shoreline Management Act Substantial Development Permit	Land and Water Conservation Fund Act
Washington Critical Areas Protection	Aviation
Washington Construction Stormwater General Permit	FAA Notice of Proposed Construction or Alteration
Oregon 1200-C Construction Permit	Land Acquisitions
City of Portland Environmental Zone Permit	Federal Land Transfer
City of Vancouver Critical Areas Permit	Uniform Relocation Assistance and Real Property Acquisitions Policies Act
Fish and Wildlife	Oregon Lease/Easement Approval
Endangered Species Act Section 7 Consultation	Washington Lease/Easement Approval
Marine Mammal Protection Act	Construction of Transit Stations and Park and Rides
Magnuson-Stevens Fishery Conservation Management Act	Building Permits
Migratory Bird Treaty Act	Noise Variance
Oregon Endangered Species Act	Sign Permits
Washington Aquatic Lands Act	Site Plan Approvals
Washington Hydraulic Project Approval	Local Roadways and Traffic Plans
Air Quality	Environmental Conservation Zone Permit
Air Quality Conformity Determination	Improvements in Right Of Way
Oregon Stationary Source Permit	Transportation Management Plan
Washington Stationary Source Permit	Temporary Use Permit
Hazardous Waste	Land Use and Growth Management
Voluntary Cleanup Program Approval	Metro Land Use Final Order
Archaeological and Historic Resources	
Section 106 Memorandum of Agreement	
Historic Property Demolition Permit	

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Preface

The CRC project co-leads for the National Environmental Policy Act (NEPA) process are the Federal Transit Administration (FTA), Federal Highway Administration (FHWA), Oregon Department of Transportation (ODOT), Washington State Department of Transportation (WSDOT), Southwest Washington Regional Transportation Council (RTC), Metro, Clark County Public Transportation Benefit Area (C-TRAN), and Tri-County Metropolitan Transportation District (TriMet). The co-leads prepared this FEIS for the I-5 CRC project pursuant to the NEPA, the Washington State Environmental Policy Act (SEPA), and the guidelines of the U.S. Department of Transportation (DOT), FHWA, and FTA.

The FEIS 1) describes project alternatives along with their impacts in the context of the existing conditions and foreseeable future conditions; 2) describes the locally preferred alternative (LPA) identified by local and regional sponsoring agencies and the process used to adopt the LPA; 3) provides transportation, community, and environmental information to assist the public and decision makers; 4) identifies proposed mitigation measures that would reduce or eliminate impacts; and 5) assesses project costs, institutional issues, and potential revenue options.

In 2001, the governors of Oregon and Washington formed the I-5 Portland/Vancouver Transportation and Trade Partnership Task Force, a bi-state partnership chartered to study transportation problems and possible solutions for the I-5 corridor from the Interstate 205 interchange north of Vancouver to the Interstate 405 interchange in Portland. The partnership recommended fixing three bottlenecks in its 2002 Strategic Plan; one bottleneck was I-5 at the Columbia River.¹ Staff from the Oregon and Washington departments of transportation began initial work to refine the work of the I-5 Transportation and Trade Partnership and plan for on-the-ground projects to reduce congestion in the project area. The CRC Task Force was established in early 2005 to advise the transportation departments on key decisions and decision-making criteria. The 39-member CRC Task Force was composed of leaders from a broad cross section of Washington and Oregon communities, including public agencies, civic organizations, neighborhoods, and freight, commuter, and environmental groups.

Through discussions with the Task Force and community, the CRC project staff studied alternatives proposed for improving the river crossing and public transportation. Over a period of several months, a set of 23 initial river crossing ideas were reduced to four, and a set of 14 initial public transportation ideas were reduced to five, using the evaluation criteria developed through consultation with local agency sponsors (WSDOT, ODOT, RTC, Metro, TriMet, C-TRAN, the City of Vancouver, and the City of Portland), the CRC Task Force, state and federal permitting agencies (which, on the CRC project, have been brought together in the Interstate Collaborative Environmental Process Group [InterCEP]), and extensive public input. Further packaging and analysis of river crossing and public transportation ideas were conducted before

¹ The other two bottlenecks identified were I-5 at Salmon Creek in Clark County and I-5 at Delta Park in Portland. The project to address the Salmon Creek bottleneck was completed in 2006, and construction to improve the Delta Park bottleneck, begun in 2008, was completed in 2010.

the best-performing alternatives were moved forward for further evaluation in the DEIS.

Since October 2005, project staff has had more than 27,000 public outreach contacts at about 900 events. These interactions and project outreach efforts have been targeted to reach neighborhoods; low-income, minority and limited English proficiency populations; and other interest groups.

Common themes of comments received from 2005 through 2009 included:

- Preferences for taking action to solve the problems in a short time frame
- Specific river crossing options (including alternate highways) and transit modes
- Location of I-5 improvements for this project
- Number of lanes and size of the highway facilities
- Need for improved bicycle and pedestrian facilities, including the size of the facilities
- Project aesthetics
- Project cost
- Tolling
- Impacts to low-income and minority communities
- Concerns about environmental effects, including changes in air quality
- The project's contribution to land use changes and climate change
- Community impacts during construction of the project

Following publication of the DEIS, the LPA was adopted in July 2008. The LPA represents the alternative preferred by the local and regional agencies sponsoring the CRC project. The elected or appointed boards and councils of local sponsor agencies determined their preferences based on the results of the evaluation in the DEIS and on the public and agency comments received before and following its publication. The LPA was approved with conditions to be evaluated and concluded before publication of the FEIS. Subsequent to adoption of the LPA, the project team continued to evaluate and solicit input from the public, other stakeholders, working groups, independent and expert review panels, and project sponsors to address the LPA conditions and obtain public input on other elements of the project that would help further refine and develop the LPA.

To comply with NEPA and SEPA requirements, the FEIS focuses on the most pertinent information regarding the project purpose, impacts from evaluated alternatives, and proposed impact mitigation measures. The FEIS is intended to refine the impacts and potential mitigation measures of the LPA.

The FEIS is organized as follows:

The **Summary** briefly describes key information and findings of the overall document. It describes the Columbia River Crossing project, project co-leads, studies that preceded the project, and problems the project is seeking to fix. It discusses the various alternatives that were developed to address these

problems, and the process used for adopting an LPA. It concludes with a brief discussion of the next steps and methods by which the public can continue to be involved in the project.

Chapter 1, **Project Purpose and Need**, describes the parameters for project development and decision-making as based on defined problems and issues. It outlines the significance of the Columbia River Crossing corridor, the project purpose, and the need for the project, and reviews the principles used to frame the physical limits and alternatives of the project. It concludes with a discussion of the project's vision and values as outlined by the project team, sponsoring agencies, and the CRC Task Force.

Chapter 2, **Description of Alternatives**, describes the LPA and the alternatives evaluated in the DEIS from which the LPA was developed. It describes the proposed river crossing, highway and transit improvements, and the bicycle, pedestrian, transportation system and demand management, and tolling scenarios. It describes likely construction duration, techniques and approaches, and includes an explanation of how the alternatives were developed through an iterative process of public input, agency input, and analysis of a wide range of alternatives. It also includes a description of the alternatives that were not brought forward for further consideration and why they were dropped. This chapter outlines the process and key findings that supported the selection of the LPA and subsequent LPA refinements.

Chapter 3, **Existing Conditions and Environmental Consequences**, describes the likely temporary and long-term effects of the project alternatives on the area's existing and future transportation system, communities, and environment. Each section of Chapter 3 outlines existing conditions in the project area and analyzes the impacts of project alternatives on those conditions. It describes potential mitigation strategies to reduce or eliminate impacts, and concludes with a discussion of the cumulative effects of this project and other past, present, and reasonably foreseeable actions. This chapter summarizes the existing conditions, impacts, and potential mitigation measures for the following disciplines and areas of possible impacts:

- Transportation
- Aviation and Navigation
- Property Acquisitions and Displacements
- Land Use and Economic Activity
- Neighborhoods and Environmental Justice
- Public Services and Utilities
- Parks and Recreation
- Historic and Archaeological Resources
- Visual and Aesthetic Qualities
- Air Quality
- Noise and Vibration
- Energy
- Electric and Magnetic Fields

- Water Quality and Hydrology
- Wetlands and Jurisdictional Waters
- Ecosystems
- Geology and Soils
- Hazardous Materials
- Cumulative Effects

Chapter 4, **Financial Analysis**, provides an assessment of project costs, institutional issues, and potential revenue options, along with highway and transit financial plan scenarios.

Chapter 5, **Final Section 4(f) Evaluation**, completes the analysis and documentation requirements of Section 4(f) of the US Department of Transportation Act. It describes the potential impacts of project alternatives on federally protected historic, park, and recreational resources. It evaluates alternatives that could avoid impacts to these resources, including whether such alternatives are prudent and feasible. It considers measures to minimize harm to these resources, and evaluates whether these measures are reasonable. The chapter concludes with a determination of the least harm alternative.

Chapter 6, **Public Input on the Draft EIS**, describes the public involvement activities that occurred between May and July 2008 from publication of the DEIS through selection of the LPA's river crossing, transit mode, and transit terminus. The chapter also includes an overview of comments received during the DEIS comment period and provides responses to a sampling of the most common non-preference comments (those that did not express a preference for or against any particular alternative or option).

The **Appendices and Supplemental Materials** to the FEIS provide additional detail on the project and the FEIS process. They include summaries of agency and tribal coordination, and public involvement; the CRC Sustainability Plan; a list of alternatives considered early in screening; a list of property acquisitions and displacements; Sponsor Agency Resolutions on the LPA; an index and glossary; a list of references cited in this document; and identification of project staff and recipients of this document. The detailed technical reports and memoranda on which the results and conclusions in the FEIS are based include the following:

- Acquisitions Technical Report
- Air Quality Technical Report
- Archaeology Technical Report
- Aviation Technical Report
- CEVP Workshop Final Report
- Cumulative Effects Technical Report
- Economics Technical Report
- Ecosystems Technical Report
- Electromagnetic Fields Technical Report

- Energy Technical Report
- Environmental Justice Technical Report
- Geology and Groundwater Technical Report
- Hazardous Materials Technical Report
- Historic Built Environment Technical Report
- Indirect Effects Technical Report
- Land Use Technical Report
- Navigation Technical Report
- Neighborhoods and Population Technical Report
- Noise and Vibration Technical Report
- Parks and Recreation Technical Report
- Public Services Technical Report
- TDM/TSM Technical Report
- Traffic Technical Report
- Transit Technical Report
- Utilities Technical Report
- Visual and Aesthetics Technical Report
- Water Quality and Hydrology Technical Report
- Wetlands Technical Report

These supporting materials are provided on a disc attached to the back cover of Volume 1 of this FEIS and in the appropriate folder structure in online postings. Please note that the technical reports have not been printed in hard copy form due to their bulk and the associated printing costs.

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Acronyms

A

AC	alternating current
ACEC	American Council of Engineering Companies
ACGIH	American Conference of Governmental Industrial Hygienists
ACM	asbestos-containing material
ADA	Americans with Disabilities Act
ADT	average daily traffic
APE	area of potential effect
AQMA	Air Quality Management Area
ARPA	Archaeological Resources Protection Act
ASTM	ASTM International (formerly, American Society for Testing Materials)
AYOS	Albina Youth Opportunity School

B

BIA	bridge influence area
BMP	best management practice
BNSF	Burlington Northern Santa Fe Railroad
BO	Biological Opinion
BRP	Bridge Review Panel
Btu	British thermal unit

C

CAA	Clean Air Act
CAFE	Corporate Average Fuel Economy
CBO	community-based organization
CD	collector/distributor

CEJG	Community and Environmental Justice Group
CEQ	Council on Environmental Quality
CETAS	Collaborative Environmental and Transportation Agreement for Streamlining
CFR	Code of Federal Regulations
CIG	University of Washington's Climate Impacts Group
CLF	combined license fee
CMAQ	congestion management air quality program
CMMP	Contaminated Media Management Plan
CO	carbon monoxide
CO ₂	carbon dioxide
COP	City of Portland
COTE	Counting on the Environment
COV	City of Vancouver
CPC	City of Portland Code
CPI	consumer price index
CPTED	Crime Prevention Through Environmental Design
CRC	Columbia River Crossing
CRD	Columbia River Datum
CRITFC	Columbia River Inter-Tribal Fish Commission
CSCMP	Council of Supply Chain Management Professionals
CSDDHD	Columbia Slough Drainage Districts Historic District
C-TRAN	Clark County Public Transit Benefit Area Authority
CTR	Commuter Trip Reduction (Washington)
CWA	Clean Water Act of 1977

D

DAHP	Department of Archaeology and Historic Preservation (Washington)
dB	decibel
dBA	A-weighted decibel
DC	direct current

DCE	documented categorical exclusion
DDE	dichloro-diphenyl-dichloroethylene
DDT	dichloro-diphenyl-trichloroethane
DEIS	Draft Environmental Impact Statement
DEQ	Oregon Department of Environmental Quality
DLCD	Oregon Department of Land Conservation and Development
DMV	Department of Motor Vehicles
DOD	Department of Defense
DOT	U.S. Department of Transportation
DPS	distinct population segment
DSL	Oregon Department of State Lands

E

E-Zone	City of Portland Environmental Zone Designation
ECO	Employee Commute Options (Oregon)
Ecology	Washington State Department of Ecology
EF	emission factor
EIA	U.S. Energy Information Administration
EIS	Environmental Impact Statement
EJ	Environmental Justice
EM	emissions of CO ₂ (pounds)
EMF	electromagnetic field
EO	executive order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
ESU	evolutionarily significant unit
ETC	electronic toll collection

F

FAA	Federal Aviation Administration
FC	fuel consumed (gallons)
FCC	Federal Communications Commission
FDA	Food and Drug Administration
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FFGA	Full Funding Grant Agreement
FFY	Federal Fiscal Year
FHWA	Federal Highway Administration
FLP	Federal Lands to Parks
ft	feet/foot
ft/NM	feet/nautical mile
FTA	Federal Transit Administration
FVNHS	Fort Vancouver National Historic Site
FWG	Freight Working Group
FY	fiscal year

G

G	gauss
GARVEE	Grant Anticipation Revenue Vehicles
GHG	greenhouse gas
GIS	geographic information system
GMA	Growth Management Act
GPR	ground-penetrating radar
GSA	General Services Administration

H

HABS	Historic American Building Survey
HAC	high accident corridor
HAER	Historic American Engineering Record
HAL	high-accident location

HASP health and safety plan
 HBC Hudson's Bay Company
 HCT high-capacity transit
 HfL Highways for Life
 HILP Hayden Island Livability Project
 HiNooN Hayden Island Neighborhood Network
 HOV high-occupancy vehicle
 HPA Hydraulic Project Approval
 HRA Heritage Research Associates
 Hz Hertz

JTA Jobs and Transportation Act (Oregon)

K

kHz kilohertz
 kV kilovolt
 kV/m kilovolts per meter

L

lbs pounds
 LCDC Land Conservation and Development Commission (Oregon)
 LCRWT Lower Columbia River Water Trail
 L_{dn} day-night equivalent sound level
 LEED Leadership in Energy and Environmental Design
 L_{eq} equivalent sound pressure level
 L_m maximum noise level
 LNG liquid natural gas
 LOA Letter of Authorization
 LOS level-of-service
 LPA locally preferred alternative
 LULAC League of United Latin American Citizens
 LUST leaking underground storage tank
 LWCF Act Land and Water Conservation Fund Act

I

I-5 Interstate 5
 IAMP Interchange Area Management Plan
 IAMR Interstate Access Modification Request
 IAP2 International Association for Public Participation
 IBRD Innovative Bridge Research and Deployment
 ICNIRP International Commission on Non-ionizing Radiation Protection
 IDOT Illinois Department of Transportation
 IDP Inadvertent Discovery Plan
 IM Interstate Maintenance
 IMD Interstate Maintenance Discretionary
 InterCEP Interstate Collaborative Environmental Process
 IPCC Intergovernmental Panel on Climate Change
 IRP Independent Review Panel
 ITS intelligent transportation system

M

MAX Metropolitan Area Express
 MDSG Marine Drive Stakeholder Group
 MDX Miami-Dade Expressway Authority
 MESD Multnomah Educational Service District
 mG milligauss
 MHz megahertz

J

JBMI Jantzen Beach Moorage Inc.
 JPACT Joint Policy Advisory Committee on Transportation

MMPA	Marine Mammal Protection Act	NOAA	National Oceanic and Atmospheric Administration
MMS	moment magnitude scale	NOI	Notice of Intent, notice of infraction
MOA	memorandum of agreement	NPDES	National Pollutant Discharge Elimination System
MOS	minimum operable segment	NPS	National Park Service
MP	milepost	NRHP	National Register of Historic Places
mph	miles per hour	NRMP	Natural Resource Mitigation Plan
MPO	Metropolitan Planning Organization	NWAEP	Northwest Association of Environmental Professionals
MSAT	Mobile source air toxics		
MSFCMA	Magnuson-Stevens Fishery Conservation Management Act		
MT	metric ton		
MTIP	Metropolitan Transportation Improvement Program		
MTP	metropolitan transit plan		
MVMT	million vehicle-miles traveled		
M _w	moment magnitude scale units		

N

NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NACCC	Neighborhood Associations Council of Clark County
NAGPRA	Native American Graves Protection and Repatriation Act
NAWIC	National Association of Women in Construction
NEPA	National Environmental Policy Act of 1969
NFA	No Further Action
NFRAP	No Further Remedial Action Planned
NHPA	National Historic Preservation Act
NHS	National Highway System; National Historic Site
NHTSA	National Highway Traffic Safety Administration
NIH	National Institutes of Health
NINA	Northwest Industrial Neighborhood Association
NMFS	National Marine Fisheries Service

O

O&M	operations and maintenance
OAME	Oregon Association of Minority Entrepreneurs
OAR	Oregon Administrative Rule
ODFW	Oregon Department of Fish and Wildlife
ODOT	Oregon Department of Transportation
OHP	Oregon Highway Plan
OHW	ordinary high water
ORS	Oregon Revised Statutes
OTC	Oregon Transportation Commission
OTIA	Oregon Transportation Investment Act

P

PAH	polycyclic aromatic hydrocarbon
PBAC	Pedestrian and Bicycle Advisory Committee
PCB	polychlorinated biphenyl
PDC	Portland Development Commission
PDX	Portland International Airport
PGIS	pollutant-generating impervious surface
PHS	Washington Priority Habitat and Species Designation

PLSO	Professional Land Surveyors of Oregon	SOV	single-occupancy vehicle
PM	particulate matter	SPCCP	spill prevention control and countermeasures plan
PNRS	Projects of National and Regional Significance	SPIS	Safety Priority Index System
PP&R	Portland Parks and Recreation	SPUI	single-point urban interchange
ppm	parts per million	SR	State Route
PPP	public private partnership	STHB	stacked transit/highway bridge
PTBA	Public Transportation Benefit Area	STIP	State Transportation Improvement Program
PSC	Project Sponsors Council	STP	surface transportation program
PWG	Portland Working Group	SWCAA	Southwest Washington Clean Air Agency
		SWPPP	stormwater pollution prevention plan

R

R&R	rehabilitation and replacement
RCW	Revised Code of Washington
REC	Recognized Environmental Condition
RM	river mile
RMLS	Regional Multiple Listing Service
ROD	record of decision
ROW	right-of-way
RTC	Southwest Washington Regional Transportation Council
RTP	regional transportation plan

S

SAC	Signatory Agency Committee
SAE	Society of Automotive Engineers
SCPP	Spill Control and Prevention Plan
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SEPA	State Environmental Policy Act (Washington)
SHPO	State Historic Preservation Office (Oregon)
SMA	Shoreline Management Act (Washington)
SOC	species of concern

T

TAZ	traffic analysis zone
TBD	Transportation Benefit District
TCP	traditional cultural property
TCSP	Transportation, Community, and System Preservation Program
TDM	transportation demand management
TESCP	temporary erosion and sediment control plan
TIFIA	Transportation Infrastructure Finance and Innovation Act Program
TMA	Transportation Management Association
TMDL	total maximum daily load
TOD	transit-oriented development
TPA	Transportation Partnership Account
TPAC	Transportation Policy Alternatives Committee
TPR	Transportation Planning Rule (Oregon)
TriMet	Tri-County Metropolitan Transportation District
TSC	Tolling Study Committee
TSM	transportation system management
TSS	total suspended solids
TSSA	Troutdale Sole Source Aquifer

U

UDAG	Urban Design Advisory Group
USACE	U.S. Army Corps of Engineers
USC	United States Code
USCG	U.S. Coast Guard
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	underground storage tank

V

V	volt
V/m	volts per meter
VCCV	Vancouver City Center Vision (Plan)
VCPRD	Vancouver-Clark Parks and Recreation Department
VdB	vibration decibel
VHD	vehicle hours of delay
VMC	Vancouver Municipal Code
VMS	variable-message signs
VMT	vehicle miles traveled
VNHR	Vancouver National Historic Reserve
VOC	volatile organic compound
VOT	value of time
VWG	Vancouver Working Group

W

WAC	Washington Administrative Code
WASHTO	Western Association of State Highway and Transportation Officials
WDFW	Washington Department of Fish and Wildlife
WHO	World Health Organization
WHUF	Washington Highway Users Federation
WSDOT	Washington State Department of Transportation
WTC	Washington Transportation Commission