



Transforming
Transportation

Cascadia
***HIGH-SPEED
RAIL & I-5***
Program Plan

PACKET A

HDR Engineering, Inc.
November 17, 2023



1a Firms, Expertise, and Resources

The opportunity to transform transportation is now! The Cascadia High-Speed Rail and I-5 Program Plan (Cascadia Program) will create a safe, resilient, and interconnected system that meets the existing and future needs of our communities. Together, we will:

- Establish a bold vision for regional mobility
- Focus our decision making to achieve equitable outcomes
- Advance innovative solutions to strengthen multimodal mobility
- Strategically integrate the High-Speed Rail (HSR) and I-5 programs
- Provide a forward-thinking mindset to support the economic vitality and quality of life of the communities along the Cascadia corridor

To accomplish this, HDR has assembled a team of program management and GEC experts, specialty subconsultants, DBEs, and MSVWBE firms. As a locally based team, supported by company-wide national and international specialty expertise, we will provide WSDOT complete access to our key leads and a large pool of subject matter experts to meet your evolving program needs. Key benefits of our team include:

- ✓ **Proven leadership** to fully support WSDOT
- ✓ **A strategic approach** to analyze the Cascadia corridor as a complete and interconnected system, while advancing early action projects and modal-specific activities appropriate to the unique needs of HSR and I-5
- ✓ **A compelling business case**, funding plan, and implementation strategy
- ✓ **An informed engagement plan** to build lasting support
- ✓ **A programmatic equity framework** that aligns with the HEAL Act and Justice40; removes barriers to engagement; and includes DBEs and MSVWBEs in significant and meaningful roles

As shown in Figure 1.1, our team provides a full range of capabilities, including program management, planning, communications, engagement, environmental, engineering, real estate services, construction management, and comprehensive specialty services. Many of our team members have been providing these services for decades in the Pacific Northwest. Nearly all members of our team live and work here and are able to co-locate should WSDOT desire this in the future. To make sure we meet WSDOT's needs, we are well prepared to call upon additional subconsultants or request use of WSDOT's GECs or pre-qualified consultants to supplement our team.

Figure 1.1 A Partnership of Firms With the Right Experience, Expertise, and Staff Resources

FIRM AND EXPERTISE	YEARS PROVIDING EXPERTISE		
	WA/PDX	# OF EMPLOYEES	NATIONWIDE
HDR Management, Planning, Environmental, Permitting, Engineering, Communications, Engagement, Equity, Funding/Grant Writing, Traffic, ITS, Tolling, Bridges/Structures, HSR, Rail, Transit, Hydraulics, Utilities, Stormwater, Fish Passage, Constructability, Risk Assessment, Procurement Documents, Project Controls, Advisory, Government Relations, Right-of-Way Acquisition, Construction Management	106	741	11.3K
Art Anderson Associates SBE, WBE Utilities, Mechanical, Electrical, Civil, Naval Architecture	66	32	32
Berry Consulting DBE, MBE Document Management	5	1	1
Clearway Environmental DBE, MBE Streams, Wetlands, Fish Passage, Permitting, NEPA/SEPA, ESA	15	9	9
Confluence Environmental Company SBE Tribal Coordination, Environmental, Permitting, Fish Ecology, Wetlands, Streams, Critical Areas Studies	16	27	27
Deloitte Consulting Strategic Planning, Scenario Analysis, Cross-Border Coordination, Financial Advisory, Grants, FRA Negotiations, Economic Impact Analysis, Procurement, Risk, TOD	178	2.1K	171K
eComply Solutions DBE, MBE Document Management Training, Workflow Automation	6	3	9
Exeltech Consulting DBE, MBE Structural, Civil, Landscape, Environmental, Stormwater, Rail	36	39	42
Furtado & Associates DBE, MBE Survey, Basemapping	40	48	48
Greenbusch Group MWBE Noise, Vibration	34	24	24
HNTB Management, Planning, Environmental, Permitting, Engineering, HSR, Air, Traffic, Managed Lanes, Tolling, Bridges/Structures, Utilities, Fish Passage, Data Analytics, Equity, Government Relations, Funding, MOT, Procurement, Construction Management	109	390	5.8K
Irwin Writing/Editing DBE, WBE Technical Writing	17	1	1
JLA Public Involvement DBE, WBE Communications, Engagement	35	20	20
Kirsten L Pennington Consulting DBE Management, Planning	2	1	1
Krebs Corporation Cost Estimating	8	3	18
Maul Foster & Alongi Communications, Engagement	26	114	140
Osborn Consulting DBE, WBE Stormwater, Hydraulics, Fish Passage, Landscape	18	90	90
Ott-Sakai & Associates DBE, MBE Constructability, Cost Estimating	13	13	15
Pacific Communications Consultants DBE, MWBE Diversity Management	33	4	4
Parametrix Management, Planning, Business Cases, Engineering, ITS, Transit, Traffic, Highway/Interchange Design, Structures, Environmental, Permitting, Hydraulics, Stormwater, Utilities, Safety, MOT, Survey, Construction Management	54	547	756
PRR DBE, MBE Communications, Engagement, Equity	41	87	104
R H Chen Engineering DBE, MWBE Civil, Bridge, Structural, Procurement Documents	9	10	10
Shannon & Wilson Geotechnical, Pavement Design, Environmental	69	176	369
Spur Communication * Communications, Engagement	8	0	0
Stepherson & Associates Communications DBE, MBE Communications, Engagement	16	32	32
The Vida Agency DBE, MWBE Communications, Engagement, Equity	6	24	24
TranTech Engineering DBE, MBE Structural, Civil/Roadway, Construction Management	18	69	69
<i>Our Team's Combined Experience and Staff</i>	984 Years of Experience	4.5K WA/PDX Staff	190K Nationwide Staff

* DBE/MSVWBE Team Member | *Spur Communication is a well-connected, WBE outreach firm based in British Columbia, Canada with eight staff members, making them ideally suited to lead our Canadian engagement. As a Canadian-based business, Spur Communication is certified by WBE Canada, not OMWBE.

Figure 1.2 The HDR Team Offers a Complete Suite of Advisory, GEC, and Technical Services

TEAM ORGANIZATION

We offer a fully blended team of recognized leaders and a deep bench of experts, Figure 1.2, to efficiently deliver this evolving program. Strategically selected for their unparalleled experience, our staff are committed to helping WSDOT realize the vision for the transformation of this corridor.

PROGRAM MANAGEMENT LEADS

I-5 GEC

RESOURCES

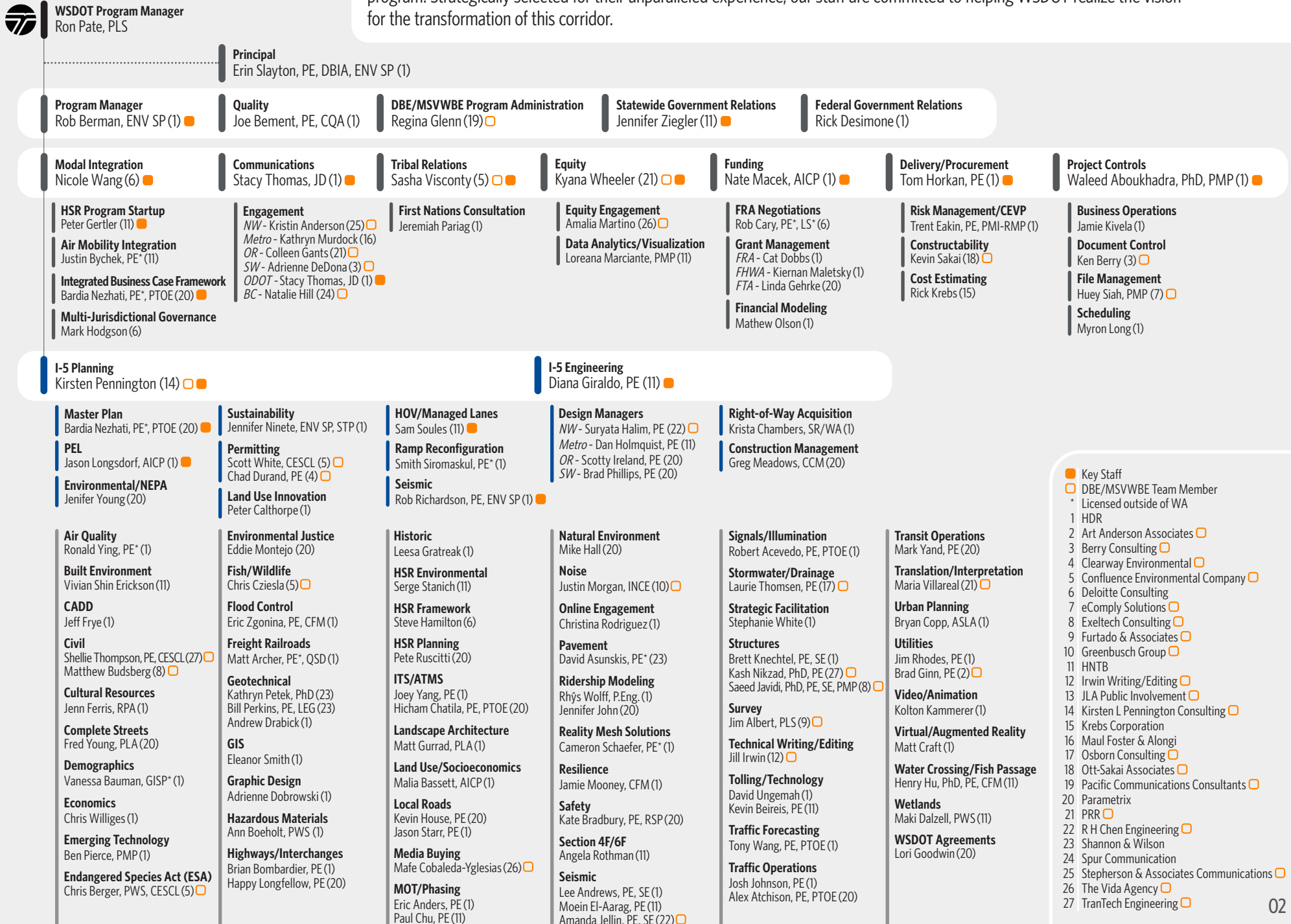
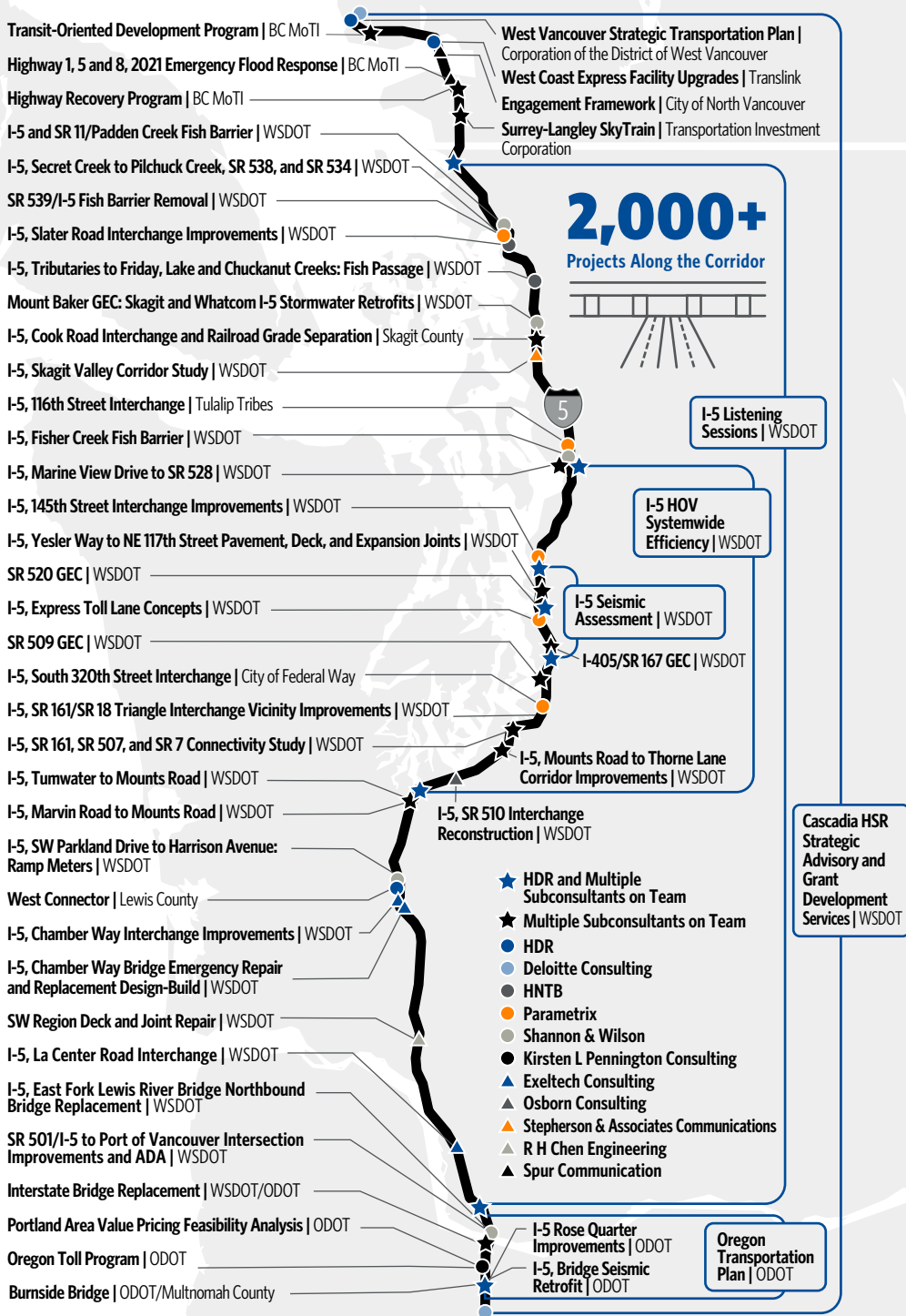


Figure 1.3 Our Experience in the Cascadia Corridor Means We Know the Challenges Ahead



OUR TEAM'S HSR EXPERIENCE

30+ HSR Projects **10** Completed Together

25+ Years of HSR Experience, **4,700+** Miles of Projects Including Program Management | Planning | Environmental | Design | Right-of-Way | Construction Support

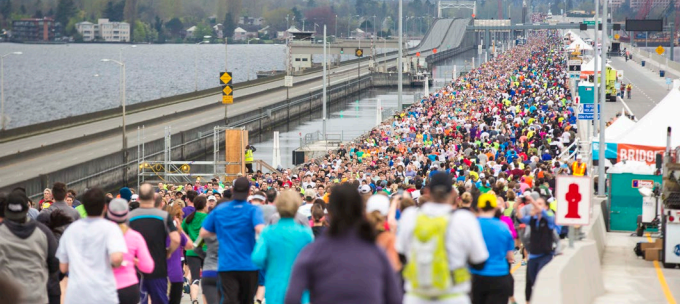
(1b) Ability to Support the Cascadia HSR and I-5 Needs

To transform transportation in this corridor, you need a team that is well-versed in WSDOT's values and accountable, engaged, innovative, resilient, inclusive, and focused on delivery. Rob Berman, our program manager, is uniquely suited to kick the program into high gear with these objectives as guiding principles. He brings the proven ability to establish a program vision and assemble a flexible, results-oriented team that will serve as a truly integrated extension of WSDOT. For example, on the Management, Engineering, and Technical Support Consultant (METC) contract, WSDOT requested that HDR assess the seismic resilience of more than 100 structures along I-5, including recommendations and a funding request, within six months. Rob assembled an integrated team that rapidly delivered with clear guidance to maintain consistency and quality.

Our Cascadia Program team has the right mix of experience delivering:

- WSDOT's current HSR and I-5 planning work, including organizational, funding, reporting, communications, and governmental relations support
- A wide range of HSR projects, including Brightline (FL), Brightline West (NV-CA), Link21 (CA), UK High-Speed Rail 2, VIA Rail HSR (Canada), California HSR, Dallas' High-Speed Transportation Connections, and Capitol Corridor (CA)
- More than 2,000 projects along the Cascadia corridor (as shown in Figure 1.3)
- Large programs, including the Ontario Line Subway, UP Express (Toronto Union to Pearson Airport Rail Link), and U.S.-Canada Gordie Howe Bridge
- WSDOT program management and GEC contracts, including METC, SR 520 GEC, I-405/SR 167 GEC, and NWR GEC

Through these projects, we have developed trusted relationships with federal, state/provincial, and local governments, including extensive work with USDOT, Transport Canada, Customs and Border Protection, Canada Border Services Agency, WSDOT, ODOT, BC MoTI, Tribes and First Nations, as well as numerous cities and counties along the corridor. This expertise means we know what challenges are ahead and have an informed plan to secure durable decisions. Whether it's working with the HSR Coordinating Structure, delivering a transformative I-5 master plan, launching an HOV pilot project, completing the seismic vulnerability analysis, developing an integrated business case framework, or completing the ramp reconfiguration study, you can rely on us to deliver.



ONE UNIFIED TEAM, READY TO SERVE WSDOT

We have carefully built our team to make sure the staff we promise have the availability needed to deliver. Because our team members have decades of experience working together, we are proven in our ability to act as one seamless team. Our approach is to provide the best available resources to WSDOT, regardless of firm affiliation.

1c Experience Working Together

HDR has strong working relationships with our teaming partners, as highlighted in Figure 1.4. To fully support the inclusion goals, we have teamed with 19 qualified DBE and MSVWBE firms, many of which have long histories working with WSDOT and HDR. To maximize opportunities for DBEs and MSVWBEs, we have not requested exclusivity from any of these firms. Additionally, we actively support new firms in gaining certification and growing their businesses. For example, we supported Kirsten L Pennington Consulting in becoming a certified DBE and worked closely with Kirsten Pennington, our team's I-5 planning lead, on the development of the HOV Lane Study for I-5.

We are excited to partner with Spur Communication, a British Columbia-based strategic communications WBE, and Deloitte Consulting, the largest private professional services provider in the North America, for the first time on this contract. We look forward to cultivating successful relationships with each so we can continue to build your pool of resources capable of delivering on this complex program and GEC assignments.

Figure 1.4 HDR's Proven Partnerships With Our Subconsultants in the Last Three Years Will Accelerate Program Startup

SUBCONSULTANT	CLIENT	PROJECT NAME	KEY SERVICES	DURATION	TOTAL PROJECTS WITH HDR
Art Anderson Associates	USACE	Cougar Dam Downstream Fish Passage	Naval Architecture, Marine Design	2019-2021	4
Berry Consulting	WSDOT	SR 520 GEC	Document Control	2011-Present	2
Clearway Environmental	WSDOT	OR GEC	Engineering, Environmental	2021-2023	9
Confluence Environmental Company	WSDOT	SR 520 GEC	Environmental, Permitting, Tribal	2007-Present	25
eComply Solutions	WSDOT	SR 520 GEC	Technology Solutions	2017-2023	2
Exeltech Consulting	ODOT	I-5 Rose Quarter Improvements	Seismic Evaluation, Wall Design	2019-2023	9
Furtado & Associates	Sound Transit	Federal Way Link Extension	Survey	2019-Present	14
Greenbusch Group	SDOT	Rapid Ride J Line	Noise Analysis	2023-Present	11
HNTB	WSDOT	I-405/SR 167 GEC	Planning, Engineering, Environmental	2002-Present	150+
Irwin Writing/Editing	WSDOT	SR 520 GEC	Technical Editing/Writing	2015-2022	2
JLA Public Involvement	ODOT	I-205 Stafford Road to OR 99E	Outreach and Engagement	2017-Present	6
Kirsten L Pennington Consulting	WSDOT	METC	Planning	2022-2023	2
Krebs Corporation	WSDOT	SR 520 GEC	Cost Estimating	2010-Present	10
Maul Foster & Alongi	ODOT	I-5 Rose Quarter Improvements	Outreach, Engagement	2016-2020	3
Osborn Consulting	WSDOT	OR-24 Fish Passage	Stormwater	2019-Present	12
Ott-Sakai & Associates	WSDOT	SR 520 GEC	Constructability	2015-Present	58
Pacific Communications Consultants	WSDOT	SR 520 GEC	Diversity Management	2014-Present	4
Parametrix	WSDOT	SR 520 GEC	Planning, Engineering, Environmental	2006-Present	150+
PRR	WSDOT	I-405/SR 167 GEC	Outreach, Engagement	2022-Present	22
R H Chen Engineering	WSDOT	SR 520 GEC	Engineering, Procurement, Construction Management	2014-Present	2
Shannon & Wilson	WSDOT	SR 520 GEC	Geotechnical	2006-Present	800+
Stepherson & Associates Communications	WSDOT	I-5 Listening Sessions	Outreach, Engagement	2022-2023	10
The Vida Agency	WSDOT	METC	Outreach, Engagement	2023	2
TranTech Engineering	WSDOT	I-82 Columbia River Bridge	Load Rating, Bridge Repair, Painting Plans	2022-Present	2
<i>HDR's Experience With Teaming Partners</i>					1.3K+ Projects

DBE/MSVWBE Team Member

"The team led by HDR has been responsive, resourceful, and innovative in resolving critical issues and delivery of all portions of the assigned work. I highly recommend HDR for future assignments on critical and complex major projects."

Julie Meredith, WSDOT Assistant Secretary Urban Mobility, Access, and Megaprograms

1d Availability

HDR has a history of successfully scaling resources up and down quickly and efficiently. Figure 1.5 outlines our availability. We are committed to appropriately staffing the Cascadia Program and have built our staffing plan with longevity in mind. Should WSDOT desire, we are ready to add new staff and partners as the contract evolves.

Figure 1.5 The Availability of Our Key Staff and Resources Allows Us to Quickly Ramp Up (Availability Shown in Hours Per Month for Each Month in the Quarter)

TEAM MEMBER ROLE (FIRM)	2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
KEY STAFF								
Rob Berman Program Manager (1)	160	160	160	160	160	160	160	160
Nicole Wang Modal Integration (6)	120	120	120	120	120	120	120	120
Bardia Nezhati Business Case/1-5 MP (20)	110	110	110	110	120	120	120	120
Peter Gertler HSR Program Startup (11)	60	60	60	60	60	60	60	60
Stacy Thomas Communications (1)	160	160	160	160	160	160	160	160
Sasha Visconty Tribal Relations (5)	50	50	50	50	50	50	50	50
Kyana Wheeler Equity (21)	50	50	50	50	60	60	60	60
Kirsten Pennington I-5 Planning (14)	120	120	120	120	160	160	160	160
Diana Giraldo I-5 Engineering (11)	50	50	50	50	70	70	70	70
Tom Horkan Delivery and Procurement (1)	40	40	40	40	40	40	40	40
Jennifer Ziegler Statewide Govt. Relations (11)	20	20	20	20	20	20	20	20
Nate Macek Funding (1)	100	100	100	100	100	100	100	100
Waleed Aboukhadra Project Controls (1)	100	120	120	120	120	120	120	120
Jason Longsdorf PEL (1)	40	40	80	80	100	100	100	100
Sam Soules HOV/Managed Lanes (11)	60	60	60	60	80	80	80	80
Rob Richardson Seismic (1)	90	90	90	90	90	90	90	90

TEAM MEMBER ROLE (FIRM)	2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
RESOURCES								
Robert Acevedo Signals/Illumination (1)	80	80	80	80	100	100	100	100
Jim Albert Survey (9)	80	80	80	80	80	80	80	80
Eric Anders MOT/Phasing (1)	20	20	40	40	40	40	40	40
Kristin Anderson Engagement - NW (25)	40	60	60	60	90	90	90	90
Lee Andrews Seismic (1)	160	160	160	160	160	160	160	160
Matt Archer Freight Rail (1)	40	40	40	40	40	40	40	40
David Asunskis Pavement (23)	50	50	50	50	80	80	80	80
Alex Atchison Traffic Operations (20)	90	90	90	90	160	160	160	160
Malia Bassett Land Use/Socioeconomics (1)	20	60	60	80	100	100	100	100
Vanessa Bauman Demographics (1)	60	60	60	60	60	60	60	60
Kevin Beireis Tolling/Technology (11)	50	50	50	50	80	80	80	80
Joe Bement Quality (1)	80	80	80	80	40	40	40	40

TEAM MEMBER ROLE (FIRM)	2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Chris Berger ESA (5)	80	70	60	80	80	80	80	80
Ken Berry Document Control (3)	100	100	100	100	160	160	160	160
Ann Boeholt Hazardous Materials (1)	40	40	40	40	40	40	40	40
Brian Bombardier Highways/Interstate (1)	130	130	130	130	130	160	160	160
Kate Bradbury Safety (20)	40	40	40	80	100	160	160	160
Matthew Budsberg Civil (8)	80	80	120	120	160	160	160	160
Justin Bychek Air Mobility Integration (11)	60	80	80	80	80	80	80	80
Peter Calthorpe Land Use Innovation (1)	20	40	40	60	60	60	60	60
Rob Cary FRA Negotiations (6)	80	80	80	80	80	80	80	80
Krista Chambers Right-of-Way Acquisition (1)	30	30	30	30	60	60	80	80
Hicham Chatila ITS/ATMS (20)	120	120	120	120	100	100	100	100
Paul Chu MOT/Phasing (11)	80	80	80	80	70	70	70	70
Mafe Cobaleda-Yglesias Media Buying (26)	60	60	60	60	80	80	80	80
Bryan Copp Urban Planning (1)	120	120	120	120	120	120	120	120
Matt Craft Virtual/Augmented Reality (1)	40	40	80	100	100	120	120	120
Chris Cziesla Fish/Wildlife (5)	50	50	50	50	50	50	50	50
Maki Dalzell Wetlands (11)	50	50	50	50	80	80	80	80
Adrienne DeDonna Engagement - SW (13)	80	80	80	80	100	100	100	100
Rick Desimone Federal Govt. Relations (1)	40	40	40	40	40	40	40	40
Cat Dobbs Grant Management - FRA (1)	80	80	80	80	100	100	100	100
Adrienne Dobrowski Graphic Design (1)	60	60	60	60	60	60	60	60
Andrew Drabick Geotechnical (1)	60	100	100	100	120	120	120	120
Chad Durand Permitting (4)	120	120	160	160	160	160	160	160
Trent Eakin Risk Management/CEVP (1)	20	20	20	40	40	40	40	40
Mooin El-Aarag Seismic (11)	50	50	50	50	70	70	70	70
Vivian Shin Erickson Built Environment (11)	50	50	50	50	70	70	70	70
Jenn Ferris Cultural Resources (1)	20	20	20	60	80	80	80	80
Jeff Frye CADD (1)	40	40	40	40	80	80	80	80
Colleen Gants Engagement - OR (21)	30	30	30	30	40	40	40	40
Linda Gehrke Grant Management - FTA (20)	40	40	40	40	40	40	40	40
Brad Ginn Utilities (2)	40	40	60	60	80	80	80	80
Regina Glenn DBE/MSVWBE Program Admin (19)	20	20	20	20	20	20	20	20
Lori Goodwin WSDOT Agreements (20)	30	30	30	30	30	30	30	30
Leesa Gratreak Historic (1)	20	40	40	40	60	60	60	60
Matt Gurrad Landscape Architecture (1)	120	120	120	120	160	160	160	160
Suryata Halim Design Manager - NW (22)	160	160	160	160	160	160	160	160
Mike Hall Natural Environment (20)	70	70	100	100	100	100	100	100
Steve Hamilton HSR Framework (6)	80	80	80	80	80	80	80	80
Natalie Hill Engagement - BC (24)	80	100	100	100	100	100	100	100
Mark Hodgson Multi-Jurisdictional Govt. (6)	80	100	100	100	100	100	100	100
Dan Holmquist Design Manager - Metro (11)	10	10	10	10	60	60	60	60
Kevin House Local Roads (20)	60	80	80	100	100	120	120	120
Henry Hu Water Crossing/Fish Passage (11)	60	60	60	60	60	60	60	60
Scotty Ireland Design Manager - OR (20)	80	80	80	80	80	80	80	80
Jill Irwin Technical Writing/Editing (12)	40	40	40	40	40	40	40	40
Saeed Javidi Structures (8)	80	80	120	120	160	160	160	160
Amanda Jellin Seismic (22)	160	160	160	160	160	160	160	160
Jennifer John Ridership Modeling (20)	30	30	50	50	100	100	100	100
Josh Johnson Traffic Operations (1)	20	40	40	40	40	40	40	40

TEAM MEMBER ROLE (FIRM)	2024				2025			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Koltom Kammerer Video/Animation (1)	40	40	40	40	40	40	40	40
Jamie Kivela Business Operations (1)	120	120	120	120	120	120	120	120
Brett Knechtel Structures (1)	20	20	40	60	60	60	60	60
Rick Krebs Cost Estimating (15)	50	50	50	50	50	50	50	50
Myron Long Scheduling (1)	80	100	100	100	100	100	100	100
Happy Longfellow Highways/Interchanges (20)	90	90	90	90	130	130	130	130
Kiernan Maletsky Grant Management - FHWA (1)	60	60	60	60	80	80	80	80
Loreana Marciante Data Analytics/Visualization (11)	50	50	50	50	80	80	80	80
Amalia Martino Equity Engagement (26)	80	80	80	80	100	100	100	100
Greg Meadows Construction Management (20)	10	20	50	80	160	160	160	160
Eddie Montejto Environmental Justice (20)	60	80	100	100	100	100	120	120
Jamie Mooney Resilience (1)	80	80	80	80	80	80	80	80
Justin Morgan Noise (10)	40	40	40	40	40	40	40	40
Kathryn Murdock Engagement - Metro (16)	80	80	80	80	80	80	80	80
Kash Nikzad Structures (27)	30	30	30	30	30	40	40	40
Jennifer Ninete Sustainability (1)	30	30	40	40	60	60	60	60
Mathew Olson Financial Modeling (1)	100	100	100	100	100	100	100	100
Jeremiah Parigi First Nations Consultation (1)	40	60	60	60	60	60	60	60
Bill Perkins Geotechnical (23)	80	80	80	80	80	80	80	80
Kathryn Petek Geotechnical (23)	50	70	70	70	130	130	130	130
Brad Phillips Design Manager - SW (20)	80	80	80	80	80	80	80	80
Ben Pierce Emerging Technology (1)	80	120	120	80	140	140	140	140
Jim Rhodes Utilities (1)	120	120	120	120	120	120	120	120
Christina Rodriguez Online Engagement (1)	40	40	40	40	40	40	40	40
Angela Rothman Section 4F/6F (11)	60	60	60	60	60	60	60	60
Pete Ruscitti HSR Planning (20)	100	100	110	110	130	130	130	130
Kevin Sakai Constructability (18)	120	120	102	120	120	120	120	120
Cameron Schaefer Reality Mesh Solutions (1)	20	80	80	100	100	100	100	100
Huey Siah File Management (7)	20	20	20	20	20	20	20	20
Smith Siromaskul Ramp Reconfiguration (1)	120	120	120	120	120	120	120	120
Erin Slayton Principal (1)	40	40	40	40	40	40	40	40
Eleanor Smith GIS (1)	40	40	40	40	80	80	80	80
Serge Stanich HSR Environmental (11)	60	60	60	60	60	60	60	60
Jason Starr Local Roads (1)	60	60	80	80	100	100	140	140
Shellie Thompson Civil (27)	80	80	80	80	80	80	80	80
Laurie Thomsen Stormwater/Drainage (17)	80	80	120	120	100	120	120	120
David Ungemah Tolling/Technology (1)	80	80	100	100	100	100	100	100
Maria Villareal Translation/Interpretation (21)	80	80	80	100	100	100	100	100
Tony Wang Traffic Forecasting (1)	100	100	100	100	80	80	80	80
Stephanie White Strategic Facilitation (1)	40	40	40	40	40	40	40	40
Scott White Permitting (5)	50	50	50	50	50	50	50	50
Chris Williges Economics (1)	80	80	80	80	100	100	100	100
Rhys Wolff Ridership Modeling (1)	30	80	80	70	100	100	100	100
Mark Yand Transit Operations (20)	100	100	100	100	100	100	100	100
Joey Yang ITS/ATMS (1)	80	80	80	80	120	120	120	120
Ronald Ying Air Quality (1)	80	80	80	80	80	80	80	80
Fred Young Complete Streets (20)	40	40	50	50	80	80	80	80
Jenifer Young Environmental/NEPA (20)	60	60	80	80	120	120	120	120
Eric Zgonina Flood Control (1)	40	80	120	140	160	160	160	160

DBE/MSVWBE Team Member | 1-HDR | 2-Art Anderson Associates | 3-Berry Consulting | 4-Clearway Environmental | 5-Confluence Environmental Company | 6-Deloitte Consulting | 7-eComply Solutions | 8-Exeltech Consulting | 9-F

1e Relevant Projects

As shown in Figure 1.6, HDR and our teaming partners offer a wide range of relevant projects where we've set bold visions, met performance goals, and consistently delivered.

Figure 1.6 Our Featured Experience Within the Last Three Years Demonstrates Our Successful Partnerships, Vision, and Commitment to Delivering



Transforming Transportation

- Strategic oversight to deliver consistent, high-quality results on WSDOT's four Megaprograms
- Nimble support of WSDOT's I-5 proviso response, including rapid delivery of a seismic risk assessment, HOV lane management concepts, listening sessions, and program recommendations
- Exceeding inclusion goals, with 31.5% DBE utilization rate to date

METC

WSDOT | 2019-Present | HDR supports a full range of staff augmentation needs and oversees WSDOT's Megaprograms, including supporting WSDOT in successfully delivering I-405, SR 520, Puget Sound Gateway, and Alaskan Way Viaduct. To meet the programs' fast-paced demands, HDR provides a flexible pool of resources that quickly mobilize and integrate with agency staff. For example, we supported the strategy and funding request in response to the Move Ahead Washington I-5 proviso. Our team assessed the seismic risk of 123 bridge structures and 38 retaining walls and embankments on I-5 from Boeing Field to Lake City Way, developing a database of key attributes and an algorithm to efficiently prioritize and establish funding needs. HDR also evaluated HOV lane management concepts and conducted 91 listening sessions with 137 stakeholder groups, including FHWA and three WSDOT Regions, to build support for an I-5 master plan.

Our work included facilitating a strategic planning process for WSDOT's UMAM group to enhance project delivery, operations, and planning. We conducted interviews and workshops with leadership and stakeholders to establish the state of the organization, develop a roadmap for improvement, and create a clear mission, vision, purpose, and values to establish strategic goals

for the next three years and guide both existing Megaprograms and the Cascadia Program GEC.

In partnership with our DBE/MSVWBE program administrator Regina Glenn of PCC, we have built partnerships with diverse groups of businesses and track compliance with federal inclusion goals. We also provide right-of-way oversight for SR 509.

Partner Experience Working Together

- HDR (\$12.3M): Megaprograms Management, Program Oversight, Advisory, Communications, Organizational Development, Engineering, UMAM Coordination, Right-of-Way
- Parametrix (\$400K): Construction Management, Technical Writing
- Berry Consulting (\$134K): Document Control
- Confluence Environmental Company (\$616K): Environmental
- eComply Solutions (\$372K): Workflow Automation, Document Maintenance
- Irwin Writing/Editing (\$41K): Technical Editing
- Kirsten L Pennington Consulting (\$62K): Planning
- Pacific Communications Consultants (\$545K): Diversity and Inclusion
- Shannon & Wilson (\$99K): Geotechnical
- Stepherson & Associates Communications (\$146K): Engagement
- The Vida Agency (\$230K): Engagement

Transforming Transportation

- Successful partnerships with design-builder, resulting in a price that was 28% below WSDOT's estimates on the Eastside HOV package
- Proactive risk management that freed \$250M in contingency funds for use on unfunded elements of the program
- Exceeding inclusion goals, with 9.79% DBE and 52.79% MSVWBE participation

SR 520 GEC

WSDOT | 2006-Present | This complex program consists of a portfolio of projects to replace a 12.8-mile area that includes an aging floating bridge and provides new continuous HOV lanes, wider shoulders throughout the corridor, a new transit station at the Montlake Lid with local and regional bus connections, two median transit stations, three large urban freeway lids, utility relocations, and construction of public space.

HDR has provided long-term program management, including environmental and planning; stakeholder, government, tribal, and regulatory agency coordination; risk management; financial planning; design; design-build procurement documents and oversight of three simultaneous design-build projects with federal and state funding; real estate services; and construction management. Our team comprises a range of consulting firms, including Parametrix, HNTB, and numerous MSVWBE and DBE partners, all co-located with WSDOT in a project office.

To respond to this program's evolving needs over the last 17 years, the team coordinates closely with stakeholders and provides creative leadership to aid in strategic thinking. WSDOT has recognized HDR numerous times for setting an example for visionary leadership in environmental planning.

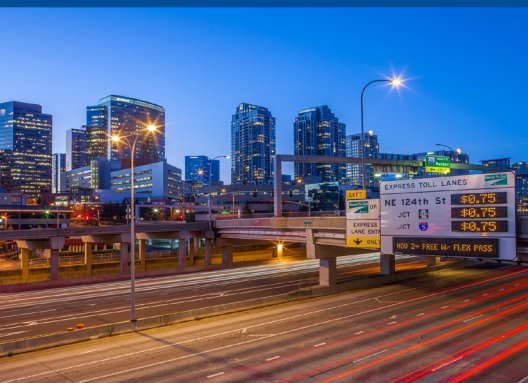


WSDOT and the SR 520 GEC team have been recognized by numerous organizations for performance, innovation, inclusiveness, and collaboration, including with ACEC's Grand Conceptor Award.

Partner Experience Working Together

- HDR (\$157M): Program Management, Planning, Traffic, Environmental, Engineering, Engagement, Constructability, Construction Management
- HNTB (\$3.1M): Fire and Life Safety
- Parametrix (\$20.8M): Planning, Environmental, Engineering
- Berry Consulting (\$1.5M): Document Control
- Confluence Environmental Company (\$9M): Tribal Consultation, Permitting
- eComply Solutions (\$1.4M): Workflow Automation, Document Maintenance
- Irwin Writing/Editing (\$42K): Technical Editing
- Ott-Sakai Associates (\$142K): Constructability, Cost Estimating, Risk, Contracting
- Pacific Communications Consultants (\$1M): Diversity, and Inclusion
- PRR (\$489K): Communications
- R H Chen Engineering (\$5M): Engineering, Procurement, Construction Management
- Shannon & Wilson (\$20.5M): Geotechnical, Hazardous Materials, Seismic, GIS

Figure 1.6 Our Featured Experience Within the Last Three Years Demonstrates Our Successful Partnerships, Vision, and Commitment to Delivering (Continued)



Transforming Transportation

- Creation of a long-term vision for corridor improvements by aligning diverse stakeholders and implementing practical design
- Development of DB best practices, including delivery of one of WSDOT's first DB projects
- Pioneering approach to equitable engagement and decision making used on the SR 167 master plan
- Exceeding inclusion goals, with 33.25% DBE utilization rate to date

I-405/SR 167 GEC

WSDOT | 2002-Present | HNTB, HDR, and several subconsultants are collaborating as a co-located GEC team to deliver transportation improvements in support of the I-405/SR 167 Megaprogram. We began by developing an action-oriented master plan grounded in extensive stakeholder coordination with a set of long-term multimodal improvements for one of Washington's most congested corridors. To date, the program has delivered more than 150 projects designed to improve travel between Lynnwood and the Renton/Tukwila area, including a corridor-wide BRT that utilizes the 50-mile managed lane system; bicycle and pedestrian paths; park and ride expansions; system to system interchange improvements on SR 167, SR 520, SR 522, I-5, and I-90; upgrades to key arterials; and new transit centers.

Our team provides a full suite of services, including program management, master planning, traffic, environmental, permitting, engineering, structures, fish passage, MOT, toll system infrastructure, tribal relations, design-build procurement, communications, engagement, real estate, contract administration, and construction management. A key aspect of program setup was planning for multiple funding scenarios, including breaking out phases for early implementation and bundling projects for efficiencies.

For the Nickel projects, we administered three separate procurements, which led to improvements through the cities of Kirkland, Bellevue, and Renton

and set the framework for WSDOT's design-build program. For the first phase of the Express Toll Lanes project, our team managed seven separate contracts, all culminating in a single same-day public use opening. We also led the SR 167 master plan to analyze existing and future conditions, incorporate feedback from stakeholders and the public, and identify multimodal transportation needs and strategies along the corridor. This involved engaging with three advisory committees, hosting two virtual open houses, and conducting a series of co-creation sessions with vulnerable and disadvantaged community representatives.

Additionally, we implemented a highly successful corridor-wide stakeholder engagement strategy and a context-sensitive solutions plan, building trust with stakeholders and resulting in ongoing program funding. Our strong partnership with WSDOT, stakeholders, and legislators has resulted in the delivery of \$4B of multimodal transportation improvements for 50 miles of freeway.

Partner Experience Working Together

- HDR (\$40.4M): Planning, Traffic, Engineering, Environmental, Procurement, Construction Management
- HNTB (\$260M): Program Management, Environmental, Permitting, Engineering, Traffic, Toll Revenue Analysis, Procurement
- PRR (\$11M): Communications, Engagement
- Clearway Environmental (\$277K): Permitting, Mitigation
- Krebs Corporation (\$1M): Cost Estimating

CLIENT PROJECT (DURATION)	FIRM (\$) KEY SERVICES
WSDOT Cascadia HSR Strategic Advisory and Grant Development Services (2022-Present)	Deloitte Consulting (\$2.8M) Advanced a vision for developing Cascadia HSR, including creating a bi-state, bi-national program; responding to federal funding opportunities in real-time, including FSP and CID; aligning multiple jurisdictions and authorities around a Coordinating Structure; and setting the foundation for scenario planning.
Brightline West I-15 HSR (2019-Present)	HNTB (\$54M) Developed preliminary design, reducing schedule by six months; coordinated with 55 utilities; and designed more than 100 rail bridges.
WSDOT I-5 Mounts Road to Thorne Lane (2009-Present)	Parametrix (\$17.3M) Streamlined NEPA; utilized multiple delivery methods; and worked closely with more than 15 agencies, JBLM, and Tribes.
	Osborn Consulting (\$1.4M) Completed preliminary design for stormwater, assisted with RFP preparation, and provided BMP siting coordination on JBLM land.
WSDOT Washington Investment Strategy (2020-2023)	Ott-Sakai Associates (\$100K) Led constructability review and cost estimating.
	JLA Public Involvement (\$406K) Collaborated with WSDOT and 16 MPOs and RTPOs to identify transportation priorities, support budgeting decisions, and prioritize investments.
BC MoTI Surrey Langley SkyTrain (2022-Present)	Spur Communication (\$225K) Designed and led public engagement in primary communities served by new SkyTrain, ensuring equitable participation.
	Deloitte Consulting (\$1.2M) Served as the financial and procurement advisor to TransLINK and TI Corp.
GDOT Midtown Connector (2021-2021)	Deloitte Consulting (\$495K) Completed a business case analysis, financial due diligence, and funding plan for a \$1.2B, 25-acre multi-purpose highway cap park.
	TranTech Engineering (\$3.5M) Managed construction for new pedestrian/bicycle bridge over I-5.
SDOT John Lewis Memorial (2016-2023)	Clearway Environmental (\$633K) Provided NEPA/SEPA, ESA, mitigation, permitting, and evaluation of more than 20 fish passage sites.
	Osborn Consulting (\$416K) Led stormwater design.
WSDOT SW Region Deck and Joint Repair (2021-Present)	R H Chen Engineering (\$500K) Provided load rating, non-destructive evaluation, and deck and joint repair plan development for three structures.
WSDOT I-405 R2B Widening and Express Toll Lanes (2019-2023)	Exeltech Consulting (\$2.4M) Worked closely with the design-build team, providing structural design, construction plans, third-party quality control and assurance, landscape architecture, and urban design services.
WSDOT SR 99 Alaskan Way Viaduct (2016-2020)	Maul Foster & Alongi (\$540K) Managed Toll Division's plan to launch tolling, coordinating efforts with agencies across the Puget Sound.
WSDOT SR 167, 70th Avenue Bridge (2020)	Greenbusch Group (\$9K) Developed the vibration monitoring plan, measured vibration data, and tracked any vibration exceedances.
WSDOT SR 202/Patterson Creek DB (2019-2020)	TranTech Engineering (\$90K) Designed three precast concrete box culverts, headwalls, and wingwalls, utilizing accelerated bridge construction.
King County NE 8th Street Pedestrian Bridge (2018-2022)	Furtado & Associates (\$100K) Provided surveying and basemaps, merging new topographical, right-of-way, easement, and utility data with existing data.
Kitsap Transit West Bremerton Transit Center (2023)	Art Anderson Associates (\$28K) Investigated water, power, and sewer utilities as part of a feasibility study for a potential new hydrogen fueling station.



ROB BERMAN ENV SP



Rob guides on-schedule and on-budget delivery of more than 850 projects ranging in construction cost from less than \$100K to nearly \$5B.



Rob's team is on track to exceed the 26% MSVWBE goal with a current inclusion rate of 31.5%.

Transforming Transportation

- 33 years of experience managing complex transportation programs
- Deeply rooted in the Washington transportation community, having forged partnerships with key thought leaders, practitioners, and elected officials
- Demonstrated ability to support WSDOT Executive Leadership

2a Recent Experience

From his WSDOT Megaprograms experience and his deep understanding of UMAM's Strategic Plan, Rob is in a unique position to create a transformative multimodal corridor that integrates HSR and I-5 while enabling each program to proceed on separate schedules. As a results-oriented, collaborative leader, Rob will apply his program management and GEC leadership expertise to help WSDOT achieve actionable, equitable, and forward-thinking decisions that support the communities served by this new program, as demonstrated in the following three examples.

The Cascadia Program is an excellent opportunity to embed equity into our design decisions and our internal operating principles."

Rob Berman, Proposed Cascadia Program Manager

WASHINGTON STATE OPERATIONS

HDR | 2019-Present | Area Manager | Rob manages HDR Washington's staff of 540, overseeing planning, environmental, real estate, engineering, and construction management services for the transportation, water, federal, buildings, and resources business groups. He consistently clarifies roles and responsibilities to amplify staff strengths in coordinated delivery processes to get the job done right and set up individual career growth. Rob has fostered long-term relationships with Washington's state legislature, WSDOT, regulators, and key Washington stakeholders. He has served as co-chairperson of the Seattle Chamber Transportation Committee and advanced key HSR initiatives, the Seattle Transportation Levy, and ST3 Implementation. Rob has expanded HDR's commitment to equity through mentor/protege relationships with new partner firms in business management, growth, and technical quality. Rob's accomplishments include:

- **Leadership:** Rob advances organizational goals; manages staffing; oversees finances; mentors staff; develops succession plans; and implements DEI objectives. He received WTS' 2022 Honorable Ray LaHood award, and his team was recognized with ACEC Washington's Champion of Inclusion Award in 2019 and 2023.
- **Responsiveness:** When Sound Transit's Real Estate On-Call team determined that staffing for four LRT packages was inadequate to meet schedules, Rob re-prioritized HDR services to focus on critical property negotiations, balancing individual team needs with an organizational focus that remained FTA-compliant.

METC

WSDOT | 2019-Present | Program Manager | Rob managed the successful delivery of 28 task orders, including overseeing GEC teams for SR 520, I-405/SR 167, Puget Sound Gateway, and Alaskan Way Viaduct (AWV). Rob demonstrated his expertise in numerous relevant skills:

- **Collaboration:** Rob has supported Julie Meredith in multiple leadership engagements since 2008, including leading a series of organizational development activities to produce UMAM's strategic plan and guide advancement of its bold vision. He participated in WSDOT's 2019 I-5 System Partnership process, maintained discourse with the Washington Roundtable to advocate for funding, advised WSDOT to include a PEL to inform the I-5 master plan, and collaborated with elected officials, the Seattle Metropolitan Chamber of Commerce, and Challenge Seattle. He brings strong relationships with Amy Grotefendt from the Seattle Chamber and Neil Strege from the Washington Roundtable, which will help accelerate our progress on the Cascadia Program.
- **Proactivity:** The METC contract requires proactive resolution of a wide range of need for expertise. When Travis Phelps required agreements support, Rob relied on past relationships to find and hire staff support. When he recognized that UMAM leadership would benefit from team building, Rob offered the HDR Learning and Organizational Development Team to run Strengths Finders workshops. Rob set up a focused process to seek MSVWBE participation as a first consideration for services.



By establishing clear roles and making sure team members “checked their logos at the door,” Rob built a high-performing team and a results-oriented culture.

SR 520 GEC

WSDOT | 2009-2012 | Planning Manager | Building on the SR 520 master plan, Rob oversaw all planning activities; federal, state, and local regulatory clearances and permits; and an integrated community design process. The GEC included pontoon construction, packages supporting the I-5 to Medina Bridge Replacement and HOV, and a design-build contract for Medina to SR 202 Transit and HOV. Highlights of his work include:

- Stakeholder Support:** Rob oversaw external engagement that gained tribal support, determined mitigation, and secured permits. He gained early consensus on WSDOT’s decision-making processes and actively supported junior staff in developing their skills, while driving schedule. Rob led a community-centered design to refine the I-5 to Medina segment, integrating community feedback and input from the Seattle Design Commission, SDOT, Seattle Parks, and elected officials.
- Durable Decision Making:** Rob managed concurrent environmental FHWA processes for the Pontoons EIS, Floating Bridge to I-5 EIS, and Eastside EA—all on different timelines but with similar staff—securing RODs and a FONSI in time for construction to begin on schedule and within budget. Using the RAC-P process, Rob coordinated with Tribes and resource agencies individually before leading larger conversations, preventing individual interests from obstructing program goals. He explored concepts to address connectivity, ecology, and sustainability, advancing design and documenting recommendations to maintain momentum.

2b Strategic Resourcing Plan

Rob’s approach to resourcing the Cascadia Program is grounded in his commitment to living UMAM values and serving WSDOT. He will employ open, honest, and consistent communication to meet program and task goals, aligning WSDOT’s needs with a proactive and strategic resourcing plan. He understands the importance of maintaining program focus and being flexible, providing the best-matched resources to WSDOT, regardless of firm. A close knit, integrated WSDOT/GEC leadership team is required to plan major processes and projects, remain open to input, and determine when to augment staff resources.

Together, WSDOT and our team will bring in the right staff, at the right time, to efficiently advance the Cascadia Program. Rob will apply the key elements shown in Figure 2.1, to empower staff, ask clarifying questions to establish outcome-focused criteria, mobilize necessary staff, and provide clear expectations of performance. For example, on WSDOT’s METC contract, Rob has worked with the WSDOT Assistant Secretary for Megaprograms, as well as GEC leadership, to support delivery of the SR 520, I-405, and Puget Sound Gateway programs, sharing best practices, driving consistent delivery, and bringing in resources strategically. When UMAM leadership needed a communications manager, Rob hired the right candidate in four weeks. When the I-5 effort needed strong communication leadership support for contractor schedule and delivery, Rob worked to free up Tom Horkan to allow him to advise WSDOT.

The capacity to accomplish the wide range of assignments under this program requires strong leaders backed by skilled team members. Rob carefully selected our team members not only for their expertise, but also their ability to listen and actively contribute to decision making on this contract. Rob and Regina Glenn, DBE/MSVWBE program administrator, have worked throughout the METC contract to seek opportunities to bring on staff from DBE and MSVWBE firms when requests for new task orders arise

Should HDR be selected for the Cascadia Program, I will conclude my Area Manager position to focus on managing this important work.”



Rob Berman, Proposed Cascadia Program Manager

Figure 2.1 Rob’s Program Strategic Resourcing Approach Is Rooted in His Knowledge of Megaprograms Best Practices



from WSDOT. Their successful relationship results in the contract consistently performing above goals. Additionally, when Rob saw a need for more highly trained DEI leaders, he partnered with Regina to develop two early career staff members who have now gained connections, learned how to get people in the room to identify opportunities, and grown in their ability to support WSDOT and the consulting firms in evolving DEI into standard practice.

To develop and implement our strategic resourcing plan for the Cascadia Program, Rob will host twice-monthly status meetings with Ron Pate and integrated leadership to discuss current and upcoming work, using a rolling six-month work plan.

Each current task lead will report on staffing needs, activities, progress toward milestones, input required, decisions needed, and items completed.

Our team will foster continuous succession development so that future leaders visualize career paths and are afforded opportunities to grow within the Cascadia Program. HDR currently is working on the talent management component of the UMAM Strategic Plan. Our team will support implementation of plan elements in the Cascadia Program. A key element of implementation will be for leadership to make the program attractive to potential new talent and consistently consider career development to support our team in growing their skills. Should staff changes be needed or new roles identified, Rob will provide resumes of candidates for WSDOT to consider within one week, unless a more urgent timeline is identified. All proposed candidates to replace existing staff will be of equivalent experience or more qualified. Options will be presented regardless of firm affiliation.

A program of this scale will continue to evolve with new opportunities as well as challenges and uncertainty. Our leadership team is ready to serve as the strategy team to support WSDOT in navigating any ambiguity to determine actions to advance the program and preparing for the annual cycle of events like budget and legislative sessions. Given Megaprograms sometimes require daily response to inquiry and input, it is key for communication with program leadership to flow through predetermined channels to facilitate clear decision making.

2c State and Federal Planning, Programs, Regulations, and Procedures

Rob's 33 years of experience have given him broad-based knowledge of NEPA/SEPA; federal requirements; WSDOT criteria and standards; and state and local government practices for highways, roadways, multimodal projects, transit improvements, land use, safety programs, and bridges. He knows that we succeed by building teams of highly functioning specialty experts and empowering collaboration to bring diverse thinking to strategy and problem resolution. Rob effectively engages with technical and policy experts to advance a cohesive vision, identify conflicting goals and standards, and establish and maintain consensus on application of the policies and regulations for various program elements. He also is at the forefront of emerging transportation and transit conversations, having served as board president of the Transportation Choices Coalition, as current co-chair of the Seattle Chamber Transportation Committee, and a member of the Bellevue Chamber Eastside Executive Business Roundtable.

Rob leverages his relationships and knowledge of local, state, and federal regulations and procedures to make the best use of transportation funds. He has been involved in the finance committees for Sound Transit and City of Seattle initiatives, participated in clarifying legislative budget provisos, provided interpretation of legislative intent, and collaborated with political advisors. Having overseen Cascadia's interim program work, Rob understands the unique challenges facing WSDOT and is experienced in applying consistent standards across complex programs.

Rob understands the importance of being able to compare metrics across a variety of projects in complex programs. To drive programmatic efficiencies on the METC contract, he used dynamic dashboards to communicate key information, including budgets, schedule, funding sources, and risks, allowing WSDOT access to analytics for multiple projects so leaders could track progress at a high level, drill into individual data, and identify variances and course corrections.

Based on his experience managing the planning and regulatory compliance process for WSDOT's SR 520 GEC, Rob recommends early and consistent stakeholder engagement to mitigate significant risks prior to beginning formal environmental documentation and before the opportunity costs of the risks amplify. Early in program development Rob will work with WSDOT to secure FHWA's and FRA's agreement regarding an integrated planning process that meets the intent of both agencies. As part of his work with our communications lead, Stacy Thomas, and our PEL lead, Jason Longsdorf, Rob has already helped WSDOT to develop the early PEL strategy for I-5. After completing the integrated planning work for the Cascadia Program, we recommend initiating an HSR PEL to assess environmental and community impacts based on route and station options. By engaging stakeholders proactively and applying the guidelines from the HEAL Act and Justice40, we will make informed decisions and aligns our work with environmental regulations and community interests.



STRATEGIC, PROACTIVE, AND THOUGHTFUL

For the Bainbridge Island Ferry Terminal, Rob navigated FHWA and FTA procedures and identified concurrence points for a master plan and NEPA that complied with state funding requirements and bridge standards, WSF terminal and operational criteria, and local government policies. He worked with Ecology and DNR on rights of use, chaired an internal steering committee with FHWA and FTA representation, and worked with the City of Bainbridge Island to incorporate community and tribal input. Though some operational leaders saw the terminal size as non-negotiable, impacts to the community and an environmentally sensitive ravine with a fish-bearing stream resulted in the determination that the terminal's holding area could be reduced if the project maximized operational efficiency, installed additional toll booths, and built an overwater structure.

2d Program Management Ability

Having delivered complex transportation programs in the Puget Sound area, Rob understands how to organize, develop, and manage a flexible, high-performing GEC, as shown in Figure 2.2.

Figure 2.2 Rob's Management Experience Underscores His Proactive Management of Scope, Schedule, Budget, and Change for Megaprograms

WSDOT | METC

Program management, planning, strategic communications, engineering, technical support, and real estate services in support of WSDOT's Megaprograms Office

WSDOT | SR 520 GEC

Full suite of GEC services, including the floating bridge, pontoon construction, Eastside Transit and HOV, Montlake Interchange, and West Approach Bridge North

WSDOT | Washington State Ferries (WSF) Program

Planning, design, and engineering for Bainbridge Island Ferry Terminal Improvement, Colman Dock, the Finance Legislation Management Team, and the Innovative Partnerships Program

SCHEDULE

A key METC role is providing staff augmentation to keep the work of divisions and Megaprograms on track, with staffing requests being immediate and requiring a high level of responsiveness. Rob works with his diversity lead on candidates for consideration, often providing staff within one week of a request. His responsiveness has resulted in keeping work on schedule, including quick burn assignments for Megaprograms environmental, construction of AWV, demolition for the WOSCA site, agreements for the Virtual Communications Center, and government relations support.

To manage schedule risk associated with differing opinions of potential effects in the Seattle Arboretum, Rob led workshops with the Arboretum Botanical Garden Committee (ABGC) to identify a mitigation strategy and gain political support from the Seattle mayor, legislators, and the community. These meetings established expectations, identified strategies in alignment with ABGC's master plan, and implemented a series of projects. This resulted in permitting progressing, including meeting Section 106 requirements.

When transit-oriented development was an emerging land use conversation, Rob led the screening of potential public-private partnership development at 19 WSF terminals, all on different schedules. A physical and economic opportunity analysis resulted in selection of three locations for additional planning and development. When the Joint Transportation Committee requested a detailed economic analysis for the Bainbridge Island Ferry Terminal, Rob reprioritized workload of qualified staff to meet the request and deliver data analysis and recommendations within three weeks.

SCOPE

In working with Julie Meredith on a cohesive delivery vision for UMAM, Rob recognized the need for organizational development expertise. He engaged HDR's advisory services and strategic communications teams and held a conversation to organize UMAM around a central purpose. A strategic planning task was set up and refined for the size, desired outcome, and key functions, resulting in a plan to lead mobility transformation and a guiding vision for all staff and project assignments under the portfolio of UMAM.

Rob helped to foster program flexibility, working with WSDOT and consultants to manage scope during planning and chart a well-defined path. For the pontoon casting basin, WSDOT had identified a preferred site, but hadn't completed a cultural resource investigation. Rob's team conducted a cultural resource impact analysis, including surveys that identified ancestral remains. Rob's flexible scope proactively managed this risk, allowing him to quickly guide the team in identifying a new site in Aberdeen, preventing major program setbacks.

Rob partnered with WSDOT leadership to support a wide range of consulting needs and scopes. For the Bainbridge Island Ferry Terminal, he was responsible for planning and design, including multimodal considerations related to the pedestrian, bicycle, transit, auto, large truck cargo, and ferry requirements. Rob integrated local agency, transit, and community desires into a long-term program for ferry facilities, resulting in early buy-in and sharing of resources and information to jointly plan the facilities and surrounding neighborhood.

BUDGET

When the four Megaprograms were combined under one Assistant Secretary, Rob recognized the inconsistencies in how each monitored budget, schedule, financial reporting, and work force tracking differently, a concern for sending a unified message to Executive Leadership, the Office of Financial Management, and legislators. Rob added controls and led the creation of dashboards with common data input and performance indicators, providing leadership in real-time spending and earned value information.

Resource agencies and Tribes expressed a desire for SR 520 to fix past impacts from the adjacent Montlake cut by installing a cold-water pumping system to lower the water temperature and improve conditions for fish. Rob led an integrated vetting of this solution with SR 520, tribal, and agency staff to reach a mitigation focused within the project bounds. This prevented significant budget impacts and resulted in agreement that the program's purpose and need were not inextricably linked to previous impacts.

Rob advised executive leadership for WSF's Finance Legislation Management team, developing adaptive management practices and a revised capital program approach. Because WSF was directed to plan without increasing terminal footprints, Rob helped to identify operational efficiencies, including implementation of online reservations for Anacortes, one of the most congested terminals, which offset the cost of buying, permitting, and managing an additional holding area, saving millions.

CHANGE

As part of our work with Julie Meredith and her direct reports to develop the UMAM Strategic Plan, it became clear that the scope and timelines for talent management tasks were inconsistent with availability. Rob directed a pivot to prioritize talent management activities, focusing on onboarding, role definition, and succession planning.

Initially, the Montlake lid was not included in the program vision. When WSDOT leadership requested the addition of a 1,200-foot lid to enhance multimodal connections, Rob facilitated an alternatives analysis, including a smaller, more cost-effective lid than the one proposed. This process prevented additional significant fire and life safety costs, saving more than \$30M in construction, as well as future costs in operations.

During Rob's role as program manager for the master plan and early NEPA/SEPA phase, WSF began examining ferry terminal design standards. Instead of waiting for a separate process to be developed, Rob worked with John White to redirect his team to use the master plan process to analyze pedestrian and vehicle holding standards in a methodology WSF could model for effects to loading times, physical facility size, and operational costs. This prevented the need to rework documentation of new facility standards.

2e Professional Licenses/Accreditations

ISI Envision Sustainability Professional (ENV SP), Issue Date: 2013

Figure 3.1 Our Key Staff Are Well-Known Program Management and GEC Leaders

3a Key Team Members Qualifications

Our key staff are proven leaders in transforming transportation on numerous similar programs, as shown in Figure 3.1.



Transforming Transportation
Offers over a decade of experience as a policy and strategic advisor on major policy reforms and global Megaprograms, including for WSDOT and Canadian agencies.

NICOLE WANG

Modal Integration | Nicole helps agencies navigate complex decision-making environments for large-scale transportation programs. Her adaptability while staying aligned with a program's vision is proven by her work with WSDOT and her business case development for more than 40 major programs.

WSDOT | Cascadia HSR Strategic Advisory and Grant Development Services | 2022-Present | Funding Strategy Lead: Nicole advanced the overall HSR project readiness, including developing federal funding applications, creating the go-forward governance model, conducting scenario analysis, and providing ongoing support for policy and technical committee meetings.

Ministry of Transportation Ontario | Province-Wide Transportation Planning Study | 2022-Present | Lead Engagement Partner: Nicole is developing a province-level integrated transportation plan, including a strategic framework. She identified priority issues and developed policy papers on long-term planning, EV adoption, the tourist economy, and intercity transit.

Infrastructure Australia | National Infrastructure Priority Framework and List | 2011-2016 | Strategic and Policy Advisor: Nicole developed policies and objectives, an infrastructure prioritization framework, assessment methodology, business case guidelines, and a funding gap analysis.



Understanding of WSDOT/Public Agency Regulations/Procedures: Nicole brings strong relationships with jurisdictional partners in British Columbia, including BC MoTI, Transport Canada, and the Canada Infrastructure Bank. As part of the Cascadia HSR program, she advised WSDOT on navigating these agencies and helped to build relationships. She has also provided policy guidance to BC MoTI and Ontario Ministry of Transportation, particularly on integrated planning.

Registrations: N/A | **Memberships/Affiliations:** IPFA Board; Toronto Region Board of Trade, Policy Steering Committee; WTS



Transforming Transportation
Demonstrated experience leading development of numerous corridor feasibility studies, master plans, and business cases for corridors more than 4,000 total interstate miles.

BARDIA NEZHATI PE, PTOE

Integrated Business Case Framework/I-5 Master Plan | Bardia brings 40 years of building business cases and master plans for major multimodal corridors. He will help WSDOT create a defensible business case and an actionable master plan, prioritizing regionally significant projects with the highest return on investment and identifying long- and near-term actions.

Caltrans and Nevada DOT | I-15 Corridor System Master Plan | 2007-2024 | Project Manager: Bardia developed a master plan to define the vision and build a program of 650 projects along this 840-mile corridor, producing a list of 28 immediate projects of interregional significance, including those with later construction dates for which to advance planning, environmental, and design efforts.

I-15 Mobility Alliance | I-11 and Intermountain West Corridor Study/PEL | 2012-2014 | Project Manager: Bardia led this bi-state project with more than 330 stakeholders across Arizona and Nevada, building a shared vision for the future of a 1,500-mile interstate trade corridor connecting Mexico to Canada.

Nevada DOT | I-11 Northern Nevada Alternatives Analysis and PEL | 2018 | Alternatives Analysis and PEL Lead: Bardia led the alternatives evaluation, PEL, and corridor selection, securing FHWA and community consensus through a series of workshops.



Understanding of WSDOT/Public Agency Regulations/Procedures: Bardia builds agency partnerships that secure consensus, developing feasibility studies to advance projects through planning/PEL, NEPA, and design that meet federal requirements. On I-11, he worked with FHWA on the Core Agency Partners committee for five geographically specific PELs. For I-15, he led workshops that included FTA and FHWA, gaining support from four state DOTs and more than 90 public and private agencies.

Registrations: Nevada PE #013482 (1998); Utah PE #363052-2202 (1998); Arizona PE #32693 (1998); PTOE #1062 (2004) | **Memberships/Affiliations:** ASCE, APWA, WTS, ITE



Transforming Transportation
Internationally recognized high-speed rail expert with demonstrated leadership experience on the country's most challenging rail development and capital programs.

PETER GERTLER

HSR Program Startup | With over 20 years on HSR, Peter has managed many GECs and provided leadership on programs valued at more than \$100B. He oversees technical analyses for HSR and builds community and stakeholder support for integrated multimodal systems. He has supported federal grant development for more than \$500M in new investments.

California High-Speed Rail Authority | California High-Speed Rail Program | 2002-2014 | Project Manager: Peter oversaw development of the framework, guidelines, and standards. He coordinated the environmental and engineering studies with five regional teams, resulting in a corridor ROD and preliminary design.

BART/CCJPA | Link 21 Strategic Advisory and Program Management | 2019-Present | Program Manager: Peter mobilized and led a team of more than 200 staff for this 21-county megaregion project. He also positioned the program for several hundred million dollars in local, state, and federal grants.

Capitol Corridor Joint Powers Authority (CCJPA) | Megaregional Vision Planning | 2016-2018 | Project Manager: Peter developed a strategic vision communication plan to deliver to Northern California Megaregional Rail, for which he built a framework to institutionalize more than 30 stakeholders who meet to assess alignment, capacity, and operational improvements.



Understanding of WSDOT/Public Agency Regulations/Procedures: Peter has worked with the FTA and FRA for more than two decades and is skilled at coordinating with MPOs, state authorities, elected officials, and other local and regional agencies to advance development of solutions and provide guidance for decision making. Having managed programs that span dozens of jurisdictions, Peter is uniquely positioned to account for input from regional leaders to position for strong funding opportunities.

Registrations: N/A | **Memberships/Affiliations:** California Association for High Speed Trains, APTA, Jack London Improvement District, Transportation Research Board, Running for a Better Oakland

Figure 3.1 Our Key Staff Are Well-Known Program Management and GEC Leaders (Continued)



Transforming Transportation
Recent experience with key stakeholders along I-5 corridor, relationships with ODOT, and strong connections with each of our geographically focused engagement leads.

STACY THOMAS JD

Communications | Stacy helped WSDOT develop UMAM's Strategic Plan, shaping its direction for the next three years. Her ability to account for program and stakeholder needs, her work on complex multimodal and passenger rail plans in Oregon, and her unique I-5 knowledge will help build a unified business case, advance an endorsed I-5 master plan, and create lasting buy-in to deliver value to the community and pave the way for years of productive decision making.

WSDOT | METC, I-5 Corridor Study | 2022-2023 | Communications Manager: Stacy conducted 91 listening sessions involving 350 individuals to inform decision making, catalog regional needs, and integrate current work. She produced a summary and supported development of legislative recommendations for the master plan, HOV efficiencies, and seismic risk analysis.

ODOT | Oregon Passenger Rail EIS | 2010-2018 | Communications Manager: Stacy managed a comprehensive public engagement and communications program for this 125-mile corridor NEPA effort focused on selecting a passenger rail route, including formation and facilitation of a 50-member corridor forum and six community advisory groups.

ODOT | Oregon Transportation Plan | 2020-2023 | Communications Manager: Stacy managed engagement on this statewide plan, conducting 43 interviews with 67 stakeholders, representing a wide range of transportation interests to shape the approach prior to starting planning.



Understanding of WSDOT/Public Agency Regulations/Procedures:

Stacy led listening sessions along I-5 involving 137 different agencies, public interest groups, and stakeholders, including FHWA, WSDOT Regions, numerous Tribes, and local municipalities. Her relationships with WSDOT and understanding of the HEAL Act give her critical insight into the agency's vision, goals, and processes. Having supported numerous EIS and NEPA efforts in Oregon, Stacy is familiar with all relevant federal regulations.

Registrations: Juris Doctorate (1996) | **Memberships/Affiliations:** WTS



Transforming Transportation
Trusted advisor who has a deep understanding of tribal concerns and is on the forefront of resolving legal issues relating to public sector agreements.

SASHA VISCONTY

Tribal Relations | For more than 15 years, Sasha has specialized in tribal consulting for WSDOT projects. She's renowned for building positive relationships, trust, and transparency with tribal governments and regulators. Her expertise includes working with numerous Washington Tribes, adeptly tailoring the tribal approach to meet specific needs. She has drafted more than 15 tribal settlement agreements, four service reimbursement agreements, and five operations protocols on behalf of WSDOT.

WSDOT | SR 520 GEC | 2006-2012, 2018-Present | Tribal/Environmental Lead: Sasha developed the ESA strategy and coordinated management of consultation with WSDOT HQ and regional administrators, as well as USFWS and NMFS staff. She created the tribal consultation plan and multidisciplinary team organization to support treaty negotiations with the Muckleshoot and Quinault tribes, resulting in significant agreements while retaining the project schedule.

WSDOT | I-405/SR 167 GEC | 2018-Present | Tribal/Environmental Lead: Sasha supports fish passage and tribal agreements in compliance with the 2013 fish passage injunction. She helped to develop a new policy on in-lieu fee mitigation for fish passage.

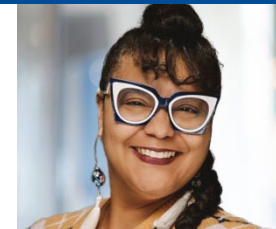
WSDOT | SR 509 GEC | 2019-Present | Tribal/Environmental Lead: Sasha completed the BA for ESA consultation and drafted a mitigation agreement for fish passage. Her work resulted in WSDOT's first in-lieu mitigation agreement with a tribal council.



Understanding of WSDOT/Public Agency Regulations/Procedures:

Co-located as WSDOT's environmental director for 18 years, Sasha is well versed in WSDOT's Environmental Manual. She brings relationships with tribal governments and agency regulators and has developed internal tribal consultation plans to integrate project activities and schedule milestones, resulting in streamlined information to maximize limited tribal availability. She provides avenues for meaningful dialogue with Tribes early on and creates governmental consultation opportunities.

Registrations: N/A | **Memberships/Affiliations:** WTS



Transforming Transportation
Skilled at building equity frameworks, gathering community input, analyzing policy impacts, training staff, and implementing anti-racist strategies for WSDOT.

KYANA WHEELER

Equity | Having managed racial equity analyses for numerous regional comprehensive plans along I-5, Kyana is well-versed in WSDOT's vision and known by local community groups. Her work cultivates trust, open communication, and mutual accountability, helping agencies implement systemic change within large complex structures.

WSDOT | Speed Camera Safety System Engagement Planning | 2022 | Equity Lead: Kyana provided anti-racist data analyses and recommendations for future equitable engagement planning, helping WSDOT receive \$6M in funding. She interviewed and compensated CBOs and produced graphics to share at WSDOT's Innovation Conference and AASHTO's Spring Meeting.

King County Metro | I-Line RapidRide | 2022-2023 | DEI Advisor: Kyana is providing strategic guidance on equitable communications, helping to co-create culturally sensitive materials and build lasting project support.

WSDOT | Commercial Aviation Coordinating Commission | 2023 | Racial Equity Analysis Lead: Kyana managed a racial equity toolkit, drafted an extensive community engagement report, studied opportunities to enhance engagement with Historically Underutilized Businesses, conducted an equity analysis, and identified strategies for achieving equitable outcomes.



Understanding of WSDOT/Public Agency Regulations/Procedures:

Kyana's relationships along the corridor, combined with her ability to develop effective equity frameworks, will result in a program vision and key performance indicators (KPIs) aligned with WSDOT's values, Washington's HEAL Act, and Justice40. Prior to joining PRR, Kyana served as the City of Seattle's Deputy Manager of the Race and Social Justice Initiative, overseeing program development and implementation.

Registrations: N/A | **Memberships/Affiliations:** N/A

Figure 3.1 Our Key Staff Are Well-Known Program Management and GEC Leaders (Continued)



Transforming Transportation
Experienced in leading GECs and complex corridor projects in the Northwest, skillfully facilitating conversations to drive decisions forward.

KIRSTEN PENNINGTON

I-5 Planning | With 24 years of planning and project management experience for WSDOT and ODOT, Kirsten has led successful plans to implement complex state-level programs. Her oversight of the planning and final report for the I-5 HOV study, paired with her background as ODOT’s Policy and Development/Planning Manager, will position I-5 for funding and efficient delivery.

WSDOT | METC, I-5 Corridor Study | 2022-2023 | Planning Lead: Kirsten directed planning, developed the final report, and created an executive summary for WSDOT to use with the legislature that identified a suite of near- and long-term I-5 HOV solutions to improve mobility in alignment with the goals of safety, equity, and climate responsibility for study in the I-5 master plan.

ODOT | Portland Area Value Pricing Feasibility Analysis; Oregon Toll Program | 2017-2023 | Project Manager/Planning Lead/Strategic Facilitator: Kirsten managed the overall project and planning strategy for the first value pricing feasibility analysis in the U.S., laying the foundation for the new Oregon tolling program as part of the Urban Mobility Office.

WSDOT | IBR | 2020-2021 | Deputy Program Manager: Kirsten oversaw a more than 100-member team with 24 subconsultants, including defining program structure, staffing, and managing engagement to complete the environmental review milestone after a several-year program hiatus.



Understanding of WSDOT/Public Agency Regulations/Procedures:

As the former Policy and Development/Program Manager for ODOT Region 1, Kirsten brings in-depth knowledge of the region’s transportation landscape and key players along I-5. Her experience working for WSDOT and leading GECs translates to an in-depth understanding of agencies, partners, the public, and elected decision-makers. She knows how to bring the right people to the right table at the right time.

Registrations: N/A | **Memberships/Affiliations:** WTS



Transforming Transportation
18 years of experience leading blended GEC teams, including delivering projects with a renewed focus on community-centered transportation with equitable outcomes.

DIANA GIRALDO PE

I-5 Engineering | Diana manages a multidisciplinary team for WSDOT’s I-405/SR 167 GEC, providing technical expertise for preliminary and final design during construction. She is skilled at anticipating short- and long-term issues, applying practical solutions, and building stakeholder support. Diana is a recognized leader in operationalizing diversity, equity, and inclusion in transportation, including applying new policies and guidelines like Justice40, the HEAL Act, and Complete Streets.

WSDOT | I-405/SR 167 GEC: SR 167 Master Plan | 2022 | Engineering Lead: Diana managed data collection and led a conditions summary of WSDOT’s assets for this 27-mile corridor. This summary, paired with her coordination with NW and Olympic Region maintenance and preservation groups, helped to recommend scenario planning and future projects.

WSDOT | I-405/SR 167 GEC: NE 85th Street Interchange and BRT Inline Station | 2017-2022 | Task Order Project Manager: Diana built stakeholder consensus during preliminary engineering for a transformative interchange, integrating multiple transportation modes. She managed coordination and agreements with Sound Transit and the City of Kirkland and is currently providing construction support.

WSDOT | I-405/SR 167 GEC: NE 6th Street to I-5 Widening and Express Toll Lanes | 2011-2015 | Design Manager: Diana oversaw the design-builder, reviewing design documents and coordinating all WSDOT disciplines. Her expertise assisted WSDOT with establishing design standards for the state’s first express toll lanes project.



Understanding of WSDOT/Public Agency Regulations/Procedures:

As engineering manager, Diana is aligning the I-405 and SR 167 master plans with WSDOT’s new strategic goals, the HEAL Act, and Justice40 to build a framework for prioritizing projects. She understands FHWA’s requirements, WSDOT’s Design Manual, AASHTO’s Green Book, and other local agencies’ manuals and best practices. She also has helped to improve WSDOT’s design and RFP development processes and trains staff on design-build delivery and practical design.

Registrations: Washington PE #43652 (2007) | **Memberships/Affiliations:** WTS, Washington State Opportunity Scholarship, Society of Hispanic Professional Engineers



Transforming Transportation
Led some of WSDOT’s largest projects, delivering more than \$5B worth of highways and bridge infrastructure over the last 10 years.

TOM HORKAN PE

Delivery and Procurement | Having worked with WSDOT for nearly three decades, Tom has held key roles on six major transportation programs, ranging in size from \$800M to \$4.5B, and provided as-needed support to Megaprograms. Tom will work with WSDOT Headquarters and its regional and divisional offices on customized delivery strategies to control costs and produce clear procurement documents.

WSDOT | METC | 2019-Present | Senior Design-Build and Construction Lead: Tom has advised on procurement document and third-party agreement development on all four Megaprograms and provided strategic construction advice to the project directors for individual design-build projects.

WSDOT | SR 520 GEC | 2011-2019 | Deputy Program Manager, Director of Construction: Tom’s strategic support on this complex and highly visible program was critical to development of delivery strategies, especially for the \$450M Montlake Phase, which used the Project Delivery Method Selection Guidance for the first time.

WSDOT | Tacoma Narrows Bridge | 1996-2002 | Project Manager: For WSDOT’s first P3 and Megaproject design-build, Tom’s expertise was critical to its success. He managed the P3; funding strategy; DEIS, FEIS, and ROD; right-of-way; conceptual engineering; value engineering; DBOM contracting; permitting; public involvement; and tolling.



Understanding of WSDOT/Public Agency Regulations/Procedures:

Tom has worked on almost every aspect of project delivery and has extensive knowledge of relevant local, state, and federal regulations, including for NEPA/ SEPA; FHWA; and WSDOT for roadway, safety, bridge, geotechnical, drainage, and traffic criteria. He uses this expertise to help WSDOT secure funding and manage delivery, interfacing with legislators and protecting WSDOT’s interests on alternative delivery contracts.

Registrations: Washington PE #34693 (1998); California PE #49197 (1992); Wisconsin PE #26423 (1989) | **Memberships/Affiliations:** ASCE

Figure 3.1 Our Key Staff Are Well-Known Program Management and GEC Leaders (Continued)



Transforming Transportation
Long history of leading advocacy efforts to pass transportation legislation, including securing of funding for the I-5 Master Plan and leading legislative efforts for construction of the SR 520 bridge.

JENNIFER ZIEGLER JD

Statewide Government Relations | Jennifer has worked with the Washington State Legislature on critical transportation issues for more than 20 years, developing strong relationships with legislative transportation leaders on both sides of the aisle. Her background serving first as state legislative staff and now a legislative advocate will enable her to provide critical information to demonstrate successful legislative investments and maintain continued legislative support.

WSDOT | I-405/SR 167 GEC | 2013-Present | Government Relations Support: Jennifer engaged in and advised advocacy efforts to secure legislative authorization for express toll lanes throughout the I-405/SR 167 corridor, as well as securing revenue to overcome funding shortfalls when toll revenues declined during the COVID-19 pandemic.

Port of Hood River | Hood River Bridge | 2021-Present | Government Relations Support: Jennifer's legislative advocacy helped the Port secure funding from the Washington State Legislature within the time-frame necessary to leverage federal funding opportunities and keep work moving.

Washington State Governor's Office | SR 99 Tunnel | 2008-2009 | Policy Advisor: Jennifer coordinated a coalition to secure passage of legislation to construct the SR 99 deep bore tunnel to replace the Alaskan Way Viaduct. She drafted legislation and coordinated negotiations with legislators and stakeholders to gain lasting support.



Understanding of WSDOT/Public Agency Regulations/Procedures:

Jennifer previously worked for WSDOT as both the agency's Director of Government Relations and the Director of Government Relations and Communications for the Toll Division. She served as the Executive Director of the Washington State Transportation Commission and as the Transportation Policy Advisor to Gov. Christine Gregoire, giving Jennifer an in-depth understanding of WSDOT's public disclosure, procurement, rule-making, and advocacy regulations and procedures.

Registrations: Juris Doctorate (1996) | **Memberships/Affiliations:** Washington Highway Users Federation, WSDOT Memorial Foundation Board



Transforming Transportation
Strong knowledge of federal, regional, and local grant best practices, resulting in robust funding strategies, effective project prioritization, and compelling applications.

NATE MACEK AICP

Funding | With two decades of experience, Nate has prepared financial plans for more than 10 major transportation programs awarded federal grants totaling \$12B. He is well positioned to assess funding strategy coordination for HSR and I-5, map project elements to specific program opportunities, consider project finance opportunities, and develop strong funding cases.

WSDOT | Cascadia Ultra High-Speed Ground Transportation Study | 2018-2020 | Funding Strategy: Nate investigated funding options, leading development of the financial planning elements of the 2019 Business Case Study and 2020 Framework for the Future report, which provided a prioritized list of local, state/provincial, federal, and private funding options/strategies.

Ohio DOT | Discretionary Grant Services | 2022-Present | Project Manager: Nate is leading development of USDOT discretionary grant applications and the associated benefit-cost analysis. He also supported screening and prioritization of projects that should pursue federal funding.

Iowa DOT | Discretionary Grant Screening and Prioritization Tool | 2022-Present | Technical Advisor: Nate supported development of a methodology to screen and prioritize projects for USDOT grants based on eligibility and merit criteria, using a modeling tool to help rank and select projects for specific applications.



Understanding of WSDOT/Public Agency Regulations/Procedures:

Nate has led funding and financing plan development for WSDOT, including support for business case development, making him adept at navigating the interplay between WSDOT, the Governor's Office, the legislature, and local governments. Knowledgeable of USDOT requirements, he fosters a holistic approach to examining existing state funding opportunities, evaluating new federal formula and discretionary funding, and considering new state or local options for filling gaps.

Registrations: AICP #019578 (2005) | **Memberships/Affiliations:** Transportation Research Board, Economics and Finance Committee; Washington, D.C. Road Gang; Eno Center for Transportation 2018 Transit Senior Executive Program; American Public Transportation Association



Transforming Transportation
Proven ability to manage controls for WSDOT at the program and project level, efficiently developing reporting tools, including user-friendly real-time dashboards.

WALEED ABOUKHADRA PhD, PMP

Project Controls | For 20 years, Waleed has provided project control services for all management levels on complex programs, including for WSDOT and ODOT. Because Megaprograms require effective oversight, he leads large controls teams to foresee challenges, mitigate impacts to agency goals, meet federal guidelines, and create clear legislative reporting.

WSDOT | IBR | 2020-2022 | Program Controls Manager: Waleed designed and implemented an innovative program management system to streamline progress tracking and reporting for multiple stakeholders, and advised on performance reviews for WSDOT, ODOT, FTA, FHWA, and the Washington and Oregon legislatures.

California High-Speed Rail Authority | California High-Speed Rail | 2017-2019 | Budget and Programming Manager: Waleed was responsible for a robust budget management system, collaborating with program controls, delivery, and finance. He also developed capital outlay reports and funding plans for the FRA.

Washington Metropolitan Area Transit Authority | Northern Bus Garage Replacement Facility | 2021-2022 | Program Controls Manager: Waleed helped to proactively identify and resolve scope and pricing variances, establishing a procedural framework for swiftly reconciling any discrepancies. He also led preparation for FTA and PMOC meetings to demonstrate progress and compliance with federal requirements.



Understanding of WSDOT/Public Agency Regulations/Procedures:

Waleed understands WSDOT's project and program controls process, procedures, and systems. He is well versed in WSDOT's and ODOT's contracting and procurement, financial, and funding regulations. He possesses extensive knowledge of agency requirements, including for FRA, FHWA, FTA, and other authorities from his work on WSDOT Megaprograms, California High-Speed Rail, and several other major transportation programs.

Registrations: Doctorate (2021); PMP #330016 (2006) | **Memberships/Affiliations:** N/A

Figure 3.1 Our Key Staff Are Well-Known Program Management and GEC Leaders (Continued)



Transforming Transportation
Strong understanding of transportation planning and design from leading dozens of PELs that secured implementation funding and moved directly into NEPA.

JASON LONGSDORF AICP

PEL | With more than 20 years of experience, Jason has led multimodal corridor PELs involving local municipalities, transit agencies, state DOTs, FHWA, FTA, and FAA that moved directly into NEPA. Prior to consulting, he led the Denver Public Works Planning Division for 11 years, managing numerous multimodal transportation planning studies and environmental review processes. Jason's experience will help intertwine the parallel processes of design, permitting, engagement, and implementation planning.

WSDOT | METC, I-5 Corridor Study | 2022-2023 | Planning Lead: Jason worked with Stacy to gather stakeholder priorities via listening sessions. Integrating this work with that completed by HDR teams for the seismic and HOV studies, he developed an interim report in response to the Legislature's I-5 proviso, cataloging current corridor projects, establishing future regional priorities, and identifying potential early work.

Colorado DOT | Santa Fe (C-470 to I-25) PEL Study | 2020-2023 | Project Manager: For this 11-mile expressway traversing six municipalities, Jason has led a PEL to reduce congestion, enhance safety, and optimize traffic with HDR's current cost savings of \$500K now being utilized for early action projects.

Colorado DOT | I-25 Central PEL | 2017-2019 | PEL Advisor: Jason helped examine alternatives to reduce overall congestion on this central, regional connection to serve existing and future needs, improving traffic operations, travel time, multimodal person-trip capacity, and safety.



Understanding of WSDOT/Public Agency Regulations/Procedures:

Jason is a national PEL expert who brings strong established relationships with key WSDOT staff from his most recent work for the agency on I-5, giving him critical knowledge of the program's stakeholders, including FHWA, FTA, WSDOT Regions, the Tribes, local municipalities, and transit agencies. His background driving planning from the municipal side for more than a decade offers an informed approach to successfully engaging with public agencies.

Registrations: AICP (2009) | **Memberships/Affiliations:** WTS; Denver Regional Council of Governments, Transportation Demand Management Coordinating Committee; American Planning Association



Transforming Transportation
Skilled at balancing key success factors for tolling given her background providing technical studies that have assessed WSDOT toll projects and operations.

SAM SOULES

HOV/Managed Lanes | With 20 years of tolling and equity policy experience, Sam has provided planning and delivery services for tolling systems for 10 U.S. agencies, including working with WSDOT's Toll Division, for organizational assessments and project management. She supported WSDOT's transition to statewide tolling, managing risk for demobilization of Tacoma Narrows Bridge tolling during deployment of tolling on SR 520.

WSDOT | Statewide Toll Implementation Program | 2009-2012 | Senior Toll Project Manager: Sam facilitated an independent quality team to assess risks and success factors to meeting state requirements for high-risk IT projects. She also supported project controls and the concept of operations for the administrative adjudication program for toll violations.

Bay Area Toll Authority | FasTrak Regional Customer Service Center Equity Action Plan | 2019-Present | Program Manager: Sam's team modernized toll collection and enforcement policies to improve equitable outcomes, developing a rapid approach to policy updates that resulted in six being put into operation in less than a year.

MTC | Regional Express Lane Network Toll Systems Management | 2012-2017 | Program Manager: Sam led program development and implementation for the first 90 miles of BAIFA's managed lane network, including strategic expansion planning, mitigating delays and system risks.



Understanding of WSDOT/Public Agency Regulations/Procedures:

Sam has delivered toll projects nationwide, including being embedded in WSDOT's NW Region Toll Division for four years, providing quality reporting and technical studies. She helped the Division align with WSDOT's larger structure and matrixed functional groups, including Finance and IT. She also supported WSDOT's transformation from a single bridge toll system to an enterprise-level, statewide program.

Registrations: N/A | **Memberships/Affiliations:** International Bridge, Tunnel, and Turnpike Association; WTS; City of Alameda Transportation Commission



Transforming Transportation
Decades of experience on WSDOT and SDOT bridge seismic programs with more than 50 seismic retrofit projects delivered in the Puget Sound region alone.

ROBERT RICHARDSON PE, ENV SP

Seismic | Rob has recently analyzed seismic risks for 123 WSDOT bridges and 38 retaining walls/embankments along the I-5 corridor. This work, paired with his more than 30 years working on seismic projects in western Washington, will allow him to efficiently develop structural performance criteria for setting goals, measuring success, and accelerating progress for early action projects.

WSDOT | METC, I-5 Corridor Study | 2022 | Project Manager: Rob delivered a detailed I-5 seismic report and funding request under budget, within a six-month schedule, by using data from previous HDR retrofit projects. This report is a critical foundational document for development of the I-5 master plan and identification of early action projects.

WSDOT | Bridge Seismic Retrofit Program | 2007-2014 | Project/Task Order Manager: Over a seven-year period, Rob led the analysis and design efforts for a study of seismic vulnerabilities that focused on the substructure elements of 52 bridges, with several located over I-5. Additionally, he designed 38 seismic retrofits, including packaging similar structures for efficient delivery.

Seattle DOT | Bridge Seismic Retrofit Program | 2007-2014 | Analysis/Design Manager: Rob led detailed seismic vulnerability studies and development of retrofit PS&E for five downtown Seattle bridges to maximize structural resiliency and minimize MOT impacts, while maintaining required clearances.



Understanding of WSDOT/Public Agency Regulations/Procedures:

Having delivered structural projects in Washington for more than three decades, Rob is an expert in WSDOT's Bridge Design Manual Seismic Design Guidelines, AASHTO's LRFD Seismic Bridge Design Specifications, and FHWA's Seismic Retrofitting Manual for Highway Structures. His understanding of seismic best practices and extensive history with various delivery methods, including Design-Build, GC/CM, and P3, will support smart decisions to create a resilient corridor.

Registrations: Washington PE #33999 (1997); Oregon PE #19531 (1997); California PE #54534 (1995); Canada P.Eng. #161000 (2023); ISI ENV SP (2013) | **Memberships/Affiliations:** ASCE, ACEC

4a Project Management

From our team's combined experience delivering more than \$15B in WSDOT Megaprograms, we know the importance of:

- Integration of WSDOT values, including equity, resilience, and workforce development, into our project management practices from the start
- A proactive quality assurance/quality control approach
- Consistent, straightforward communication
- Proactive management of scope, schedule, budget, and change
- The ability to successfully navigate a complex decision-making environment for multiple stakeholders

Thoughtful setup will allow the HSR and I-5 programs to move forward in a coordinated manner that is customized to meet the unique needs of both. An integrated WSDOT/HDR team is critical to developing consistent protocols that support communication and decision making for decades of funding and implementation. HDR's management system provides real-time information, as shown in Figure 4.1, so WSDOT can monitor and direct teams appropriately. We will integrate our established program management processes with WSDOT's Managing Project Delivery process to facilitate clear reporting to the teams and the legislature. Immediately upon NTP, we will develop our PMP, setting expectations consistent with UMAM's Strategic Plan.

QUALITY ASSURANCE/CONTROL

Our quality management system (QMS) is based on the principles and guidelines set forth by the ISO 9001:2015 international standard for quality management. The QMS includes programs, policies, and business processes that adhere to WSDOT, local, regional, and federal guidelines. Our quality program will be led by Joe Bement, building on his 34 years of experience on

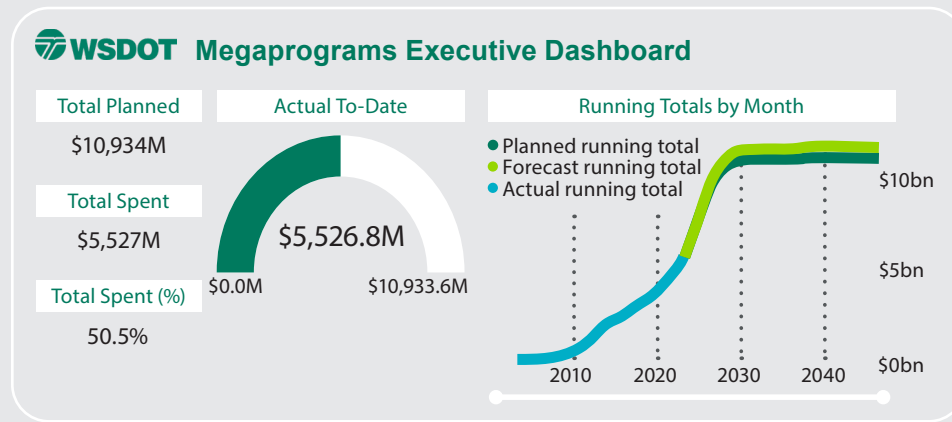


Figure 4.1 HDR's Real-Time, Interactive Megaprograms Executive Dashboards Create Transparency and Maintain Consistency

ESTABLISHED CONTROLS READY TO DELIVER

We will build on the tools developed for WSDOT on the METC contract to deliver an effective project controls system that uses accurate record keeping and quantifiable, real-time evaluation, resulting in:

- ✓ Clear status and progress updates
- ✓ Expedited issue resolution
- ✓ No misunderstandings

major programs and managing GECs, P3, design-build, and design-bid-build contracts. Joe has overseen quality for dozens of infrastructure projects with a total construction value of more than \$30B. He will partner with Rob and our delivery manager, Tom Horkan, to create, establish, and implement HDR's proven quality control process at the program, HSR, I-5, and task levels, building on his proven track record shown in Figure 4.2 on the following page.

BUDGET/SCOPE CONTROL

We recommend continuing the WSDOT GEC practice of developing performance-based scopes of work with appropriate level of effort for management, oversight, and ongoing services. Deliverable-based scopes will be used to direct work with defined products or outcomes such as design documentation. HDR's approach to scope and budget management includes real-time tracking of progress, preventing the need for extended task order review and approval processes while making sure WSDOT is spending money wisely. Our project

controls support a holistic assessment of the impacts of many scenarios; detailed analysis of total costs and cash flow to track the sources and aging of money; Work Breakdown Structures (WBS) for all scope items; phasing and financing plans to meet CPDM, OFM, and legislative expectations; and careful tracking of DBE involvement to make sure we are meeting our commitments.

Our dashboards track funding sources for each project within a program as well as by phase, with all scenario data rolling back up to show how phasing and financing options affect source funds and impact decision making. This allows us to quantify impacts and trade-offs of different options across multiple budgets and track spending curves using legislative budgets as a baseline, which will be especially useful in building support and reporting progress. Our team includes Huey Siah for file management and Ken Berry for document control, both of whom bring trusted complementary tools to monitor scope, budget, schedule, and documentation used on WSDOT's SR 520 and Puget Sound Gateway programs.

1

FEDERAL COMPLIANCE

- Develop a table to align the QMS with state and federal requirements
- Identify which policy governs when conflicts exist, prioritizing the more stringent requirement
- Draft project-specific quality plans that focus on checking each deliverable against the appropriate requirements

2

PROJECT TAILORING

- Identify all QC participants for each deliverable
- Verify schedules include enough time for all checks and reviews
- Establish a clear review process
- Provide a corrected deliverable set showing the checkers' comments, backchecker's review, corrector's updates, and verifier's sign-off

3

TRAINING

- Launch training program for all program and GEC staff, including online quizzes at project initiation and refresher trainings completed annually or more frequently, if needed
- Develop checklists for each delivery milestone
- Provide all checklists to WSDOT's quality auditors

4

INDEPENDENCE

- Establish Joe's direct reporting line to Ron Pate and submit monthly progress reports
- Draft reports to highlight both critical quality issues and exemplary QMS practices for program-wide adoption
- Develop monthly quality progress reports for proactive issue resolution

5

MONTHLY AUDITS

- Review signed documentation where discipline leads verify the completion of all QMS steps
- Discuss process improvements with leads and WSDOT to continue to refine QMS
- Independently review trends and identify gaps that require refresher trainings or process adjustments



JOE'S SUCCESS

"I oversaw federal compliance, proactively identified issues, and met accelerated deadlines as part of the program management team for WSDOT's \$4B fish passage program."

"For WSDOT's SR 101 and SR 108 Fish Passage Barrier Removal projects, I verified that the contractor-developed construction quality plan met WSDOT requirements."

"I trained more than 100 staff on the QMS for Puget Sound Gateway, developed SR 509's and SR 167's procurement documents, participated in leadership meetings, and performed quality assurance all for deliverables."

"For Puget Sound Gateway, I provided monthly quality reporting directly to WSDOT and consultant teams, including training metrics, results of audits, and trend analysis to identify recurring issues and mitigations."

"On Seattle Monorail's Green Line Design-Build, I developed robust interactive auditing checklists to accommodate efficient, schedule-driven audits, completing all audits in the project's strict five-day periods."

Figure 4.2 Our Quality Program Embeds a Culture of Excellence at All Levels

Figure 4.3 Rob's Three Scheduling Examples Demonstrate His Ability to Tailor Tools for WSDOT's Needs

	WSDOT, METC Primavera P6 and Visio
	WSDOT, SR 520 GEC Primavera P6
	WSDOT, WSF Program Primavera P6 and MS Project Refined

SCHEDULING

Rob will oversee integration of quality, budget, scope, and schedule, tailoring the use of scheduling software to the task and audience, and building on his experience highlighted in Figure 4.3. Our team will use Primavera P-6 to develop a Master Program Schedule (MPS), which Rob effectively used on WSDOT's SR 520 GEC. Our scheduling leads will create the baseline MPS and will provide monthly updates. Based on the WBS, the MPS will help us to monitor progress and identify resource needs. It will include program and GEC activities; map out key milestones; and account for contingency plans, especially for areas where stakeholders could influence the schedule. We will plan for internal and external reporting needs, providing simplified, visual, and sharable schedules that can be easily understood by a range of interested parties while remaining consistent.

INTERNAL TEAM INTERACTION

We will operate in partnership as one team and flex resources to make the most of your funding. During startup, we will collaborate with WSDOT to develop a Responsible,

Accountable, Consulted, and Informed (RACI) matrix and will establish clear expectations for collaboration and interaction, including implementing the following best practices:

- **Collaboration:** We will support each other in achieving our program vision, advancing UMAM's strategic objectives, and centering on diversity, inclusion, and equity. We will work collaboratively and within the appropriate hierarchy. All team members will seek information proactively and inform other team members about program direction and activities.
- **Buy-In:** We will follow the program decision-making protocols, while listening thoughtfully to stakeholders and honoring the unique partnership opportunities this program creates with Oregon and British Columbia.
- **Delivery-Focused:** We will focus on delivering the program work while staying within schedule and budget. We will proactively identify and resolve program risks and seek creative ways to achieve our program vision. Team members closest to any issues are expected to offer potential solutions.



Stacy Thomas has helped us navigate through some of our most challenging transportation issues using a creative and dynamic approach to find solutions that resonate with our communities."

Mike Mason, Toll Program Contract Manager, ODOT

- **Consistency:** We will protect confidential information and maintain records consistent with WSDOT procedures.
- **Growth:** We will seek and support career development and training opportunities.

Rob leads by example, following the themes shown in Figure 4.4. Rob will work with Ron Pate to establish additional guiding principles for team interaction, including protocols for electronic, virtual, and face-to-face interaction, which will be described in our PMP. As our program evolves, we will refine and communicate the latest guidelines for selecting the best tools to achieve equitable and proactive outcomes.

Rob's strong leadership and trust with the GEC team allows him to empower task order leads to form the best team to meet WSDOT's needs while applying a career advancement framework, growing experience and skills throughout the integrated GEC team, and supporting UMAM's strategic workforce goals.

Figure 4.4 Our Communication Best Practices Prevent Surprises, Confusion, and Unnecessary Rework

CLEAR AND PREDICTABLE COMMUNICATION

- ✓ **CONSISTENT**
Maintain active communication and adopt a solutions-oriented approach
- ✓ **EFFICIENT**
Employ clear meeting agendas, involve the right people, and focus on contextual decisions
- ✓ **INTENTIONAL**
Share information in a timely and productive manner, appropriate to the level of potential effect
- ✓ **DOCUMENTED**
Provide clarity in discussion topics, key decisions, action items, and attendees
- ✓ **REFINED**
Conduct quarterly culture check-ins for continuous process adaptation and improvement

CLIENT/STAKEHOLDER INTERACTION

WSDOT Interactions

Our team is built on providing WSDOT with long-term trusted service, working closely with Julie Meredith and more recently with Ron, Travis Phelps, and Jason Beloso. We will operate in partnership as one team, flexing resources to make the most of your funding. Our team's client understanding and in-depth knowledge of HSR and I-5 will result in seamless initiation of a unified program, a quick launch of the I-5 master plan, the full support of HSR funding negotiations, and a range of strategic advice and subject matter expertise. Fast-paced GEC management is best facilitated with focused, consistent, and action-oriented meetings to review information, make decisions, and keep the teams moving. Rob will host a series of structured team meetings oriented around delivery outcomes, including meeting with Ron twice a month to discuss program administration, delivery metrics, strategic direction, and emerging issues. Whether in planned meetings, informal conversations, or as urgent issues arise from our internal and external partners, we will listen first and offer quality verbal, written, and graphic communication that aligns with WSDOT preferences.

We will build on our trusted WSDOT relationships to advance a thoughtful tribal relations strategy, which will be led by Sasha Visconty. Sasha has earned the trust of WSDOT and FHWA in supporting government-to-government consultation, including working closely with WSDOT's Tribal and Federal Relations Director, Megan Cotton; the Environmental Services Office; the WSDOT Executive Committee; and the Attorney General's Office on Treaty fishing agreements and WSDOT's fish passage program. She will be supported by our First Nations consultation lead, Jeremiah Pariag, who has led Canadian First Nations/Indigenous consultation on nearly 100 projects.

Stakeholder Interactions

Our team has an excellent understanding of stakeholders from our involvement with the I-5 System Partnership, leadership of the I-5 listening sessions from Oregon to British Columbia, early HSR engagement, and delivery of numerous corridor projects, including WSDOT's SR 520, I-405, SR 167 Master Plan, I-5 Marvin to Mounts Road, Puget Sound Gateway, and Interstate Bridge Replacement.

As part of our early engagement planning on HSR, we gathered critical inputs from HSR partners, including partner agencies, the private sector, and leaders from other Megaprojects across North America and internationally. We will apply this knowledge and lessons learned from similar programs to further develop the HSR Coordinating Structure so our team is set up for effective engagement and decision making with our partners for the decades of work that is ahead of us.

Integrated planning for a multimodal system requires careful coordination in our stakeholder and public engagement to drive and inform a variety of decision-making. Stacy Thomas, our communication lead, will manage our engagement plan, clearly articulating where joint engagement will be required for integrated system-level input and decisions. She will coordinate targeted HSR and I-5 engagement, as required to meet specific program goals and objectives. Our approach includes robust conversations with U.S. and Canadian government entities, FHWA, FRA, FAA, regulatory/permitting agencies, public and community groups, Tribes/First Nations, the private sector, and local jurisdictions about how HSR and I-5 can contribute to collective megaregion goals as one integrated program.

We will work with WSDOT to proactively engage our federal partners, focusing primarily on FHWA and FRA. We will build on our team's Cascadia interim support work,

applying proven strategies to accelerate our progress. On WSDOT’s I-5 Marvin Road to Mounts Road PEL, Parametrix recently completed one of the first PELs in Washington in nine months by working closely with FHWA, the Nisqually Tribe, other governmental agencies, and local community organizations. Our FHWA grants management lead, Kiernan Maletsky, was recently recognized by WSDOT for his work collaborating with WSDOT Regions to align I-5 project priorities with federal resiliency grant criteria. Our FRA negotiations lead, Rob Cary, will apply the knowledge he has gained from working on WSDOT’s Cascadia HSR Strategic Advisory and Grant Development Services and his 30 years of experience with FHWA, FRA, FTA, MPOs, state governments, and municipalities on similar interstate and international programs.

We will engage FAA and FTA when specific needs and requirements warrant their input, resulting in targeted interactions that prevent surprises in future phases. Our air mobility integration lead, Justin Bycheck, has worked in every FAA region, on projects ranging from high-level master plans to detailed technical studies aimed at obtaining funding. Our FTA grants management lead, Linda Gehrke, is the former regional administrator for FTA’s Region 10 and has spent more than 25 years working for USDOT as a regional administrator, deputy regional administrator, and community planner.

One key tool we will use to maintain positive relationships is to quickly form the following geographic work groups, drawing from the cities, counties, provinces, planning organizations, ports, transit agencies, Tribes, First Nations, and other organizations that recently participated in the engagement on I-5 and HSR:

- **WSDOT NW:** Kristin Anderson will work with Whatcom and Skagit County stakeholders, building on her experience with Stacy on the I-5 listening sessions.
- **WSDOT Metro:** Kathryn Murdock brings a deep understanding of Snohomish, King, and Pierce County interests. Her experience includes working on WSDOT’s SR 520 GEC and UHSGT 2020 Study.

- **WSDOT OR:** Colleen Gants brings decades of history with Pierce and Thurston County and has worked on all WSDOT’s Megaprograms.
- **WSDOT SW:** Adrienne DeDona worked with Lewis, Cowlitz, and Clark County communities for 20 years. She also collaborated with Colleen on the Highway System Plan and supported M2D2’s Transportation Investment Strategy.
- **Oregon:** Stacy has 21 years of experience on significant corridors for ODOT and Oregon Metro. She led WSDOT’s I-5 listening sessions and the Oregon Passenger Rail EIS.
- **British Columbia (BC):** Natalie Hill will build on her 13 years of experience working with BC MoTI, Vancouver Fraser Port Authority, City of Vancouver, Capital Regional District, and Metro Vancouver Regional District to support BC engagement. She will collaborate with Mark Hodgson, our multi-jurisdictional governance lead, who has been a senior advisor to infrastructure owners, policy makers, and First Nations for 30 years.

Building geographic work groups will allow us to focus on local and region-specific interests and understand how each group wants to be engaged as the integrated program moves forward. Based on our team’s relationships, we have developed a closer look at one of our geographic work groups, shown in Figure 4.5, to illustrate how we will customize our approach. All geographic groups will be engaged on both the I-5 work directed by the legislature and HSR.

As part of program startup, we will work with WSDOT, program partners, other regional decision makers, and stakeholders to charter a decision-making process that supports the Coordinating Structure’s transition; manages and resolves issues as they arise; eliminates surprises; and gains lasting buy-in. Our approach will be inclusive, well-defined, and grounded in the corridor-wide feedback collected during the listening sessions. By creating a transparent and systematic process, we will gain support for our program vision and drive outcomes.

Figure 4.5 Our Experience and Relationships Will Jump-Start the Geographic Work Groups

BUILDING ON WHAT WE KNOW

Our engagement work on WSDOT’s Megaprograms includes the I-5 listening sessions, Sound Transit’s Federal Way and Tacoma Dome Link Extensions, and SR 167 master plan, which will inform the work group committee membership and key issues.

SAMPLE WORK GROUP ROSTER POOL

We will recruit 15-20 members from key regional interest groups:

- City of Lacey
- City of Olympia
- City of Tacoma
- City of Tumwater
- Intercity Transit
- Nisqually Indian Tribe
- Olympia Council of Neighborhood Associations
- Pierce County
- Port of Olympia
- PSRC
- South Sound Military and Communities Partnership
- Tacoma Fire Department
- Tacoma-Pierce County Chamber of Commerce
- Tacoma-Pierce County Black Collective
- Thurston County
- Thurston Regional Planning Council

THE OLYMPIC REGION STORY

With our long-standing relationships and data gathered to date, we will kick off the work group with a summary of trends gathered from communities across the region, capturing the history, transportation needs, and equity areas. Known priorities include:

- Reduce congestion, including evaluating HOV, managed lanes, air, and rail options
- Assess tolling and managed HOV lanes as potential barriers to low-income travelers
- Prioritize improved bus service and future high-speed rail as well as Sound Transit expansion
- Reconnect communities divided by I-5 by adding multimodal access across I-5
- Address environmental concerns tied to climate change impacts and the Nisqually Delta’s unique needs

5

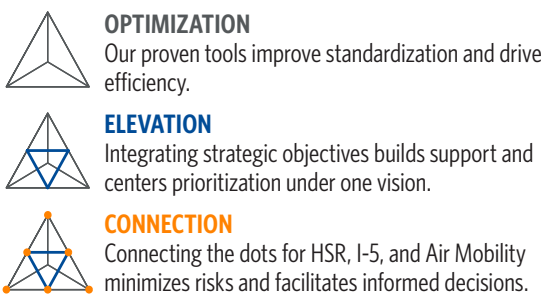
5a Work Plan

WORK PLAN CONCEPT

A once-in-a-lifetime effort, the Cascadia Program is an opportunity to transform transportation and improve the quality of life for people who live, work, and travel through the region. We will work in partnership to establish a bold program vision that reflects the values of the region; embeds equity in all aspects of the program and its investments; and enhances affordable and accessible travel options. A well-informed, comprehensive work plan is a critical tool to guide the program's integrated team.

HDR offers well-known, highly performing team members to build on our work with you on HSR, the I-5 study, and other interim program support tasks. We will quickly develop a unified work plan to accelerate startup, weaving the program, HSR, and I-5 tasks together on multiple paths, leveraging shared efforts, strategically using resources, and preventing wasted time. As with other Megaprograms, our work plan will provide the baseline for team direction and will flex to respond to emerging political, economic, community, equity, and technical needs. We have the staff resources to provide the focused attention warranted for these types of needs as they arise while keeping the overall program progressing.

Figure 5.1 Our Strategic Approach to Delivering This Unique and Complex Program



● Program Management ● HSR ● I-5

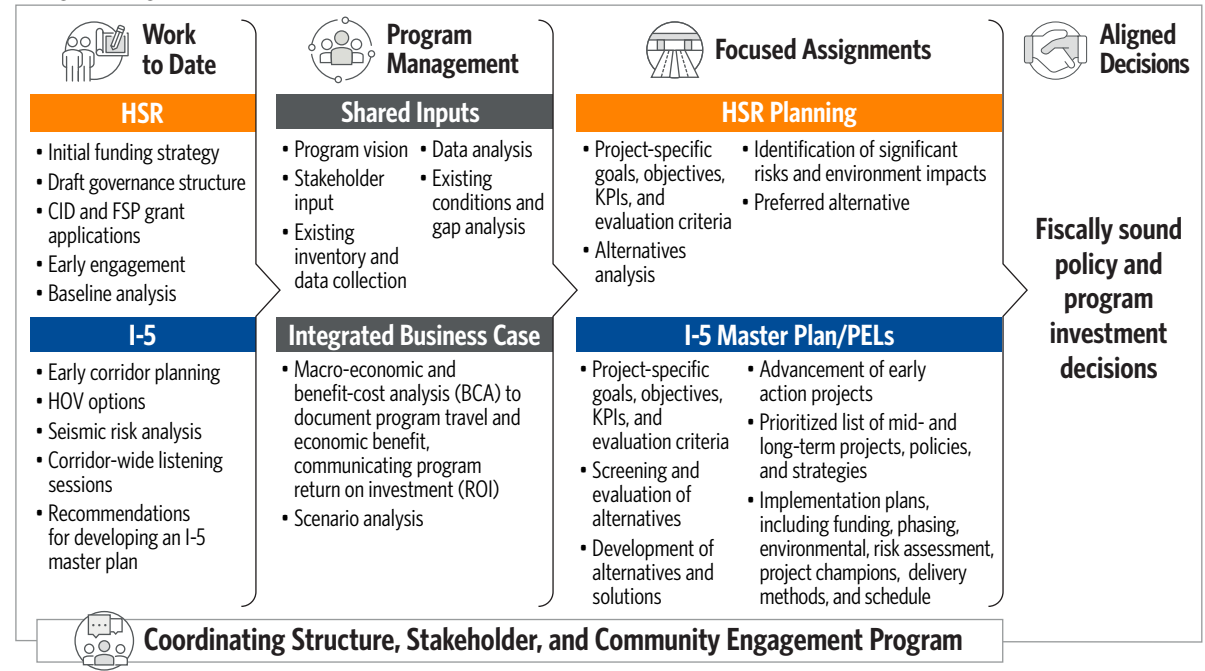


Figure 5.2 Integrating Past Efforts With Program Management, GEC, and Technical Work to Streamline Successful Delivery

We will organize the work plan around priority program management and administration tasks; integrated program inputs, such as early data collection, equity and engagement frameworks, program vision, and an integrated business case framework; and focused work that will advance HSR and I-5; meet proviso and funding requirements; build partner relationships; and engage communities.

The key tenets of our approach to successfully implementing the work plan for this unique program are shown in Figure 5.1, while Figure 5.2 summarizes how we will integrate the work to-date, key program management activities, and priority, focused GEC assignments. Rob has already mobilized a quick-start team to apply standardized program management processes, checklists, templates, dashboards, and other

customized tools. Immediately following NTP, Rob will work with Ron to establish key organizational protocols and methodologies, like task order administration, to expedite approval processes.

DECISION-MAKING PROCESS FOR DEVELOPING THE WORK PLAN

Together, we are building the foundational program structure for what will be decades of work. Rob will draw on his experience from ongoing Cascadia Program efforts, SR 520, and METC to develop our work plan, engaging WSDOT; our key team members; Jamie Kivela, our business operations lead; and our DBE/MSVWBE program administration manager, Regina Glenn. We will craft an efficient work plan that establishes strong business operations, enhances DBE collaboration, integrates shared activities, and supports

ELEMENTS OF THE WORK PLAN

rapid advancement of the HSR and I-5 efforts. Key actions include:

- Gather Input:** To make sure our work plan is responsive to WSDOT expectations, internal protocols, and expected processes, Rob will gather feedback from and regularly check in with the program leaders, including Ron, managers for HSR and I-5, and WSDOT subject matter experts, as directed by Ron. For example, we anticipate coordinating with Amy Leland on the seismic vulnerability analysis, John Himmel on forwarding a resilience program, Kerri Woehler on consistency with multimodal planning, and Jason Biggs for rail coordination details. As we develop the plan, we will infuse our understanding of partner agency and community needs. For example, we understand FRA negotiations may require the team to incorporate phase gate requirements into the work plan and the necessary collaboration with the PSRC staff and Transportation Policy Board as we evolve models for regional growth. We will develop strong relationships with WSDOT's business manager and task leads, aligning priorities and scope.
- Refine Draft Work Plan and Secure Approvals:** Rob will review key work plan elements with program leadership and WSDOT executive leadership, discussing the input we received and securing WSDOT's approval prior to finalizing the work plan. Ron will provide final approval of the initial work plan and subsequent refinements.
- Implement:** As the work plan is translated into task orders, Rob will assign a task lead for reviews and approvals while empowering each lead to build a team well-suited to meet WSDOT and the program needs. Depending on the task, our teams may interact directly with program leadership, WSDOT subject matter experts, and other consultants.
- Inform Partners:** We will keep partners and key interests informed about our work plan through venues like regular federal agency partner briefings, the HSR Executive Steering Committee, and the geographic work groups.

Key Program Tasks

Integrated Planning and Business Case Framework.

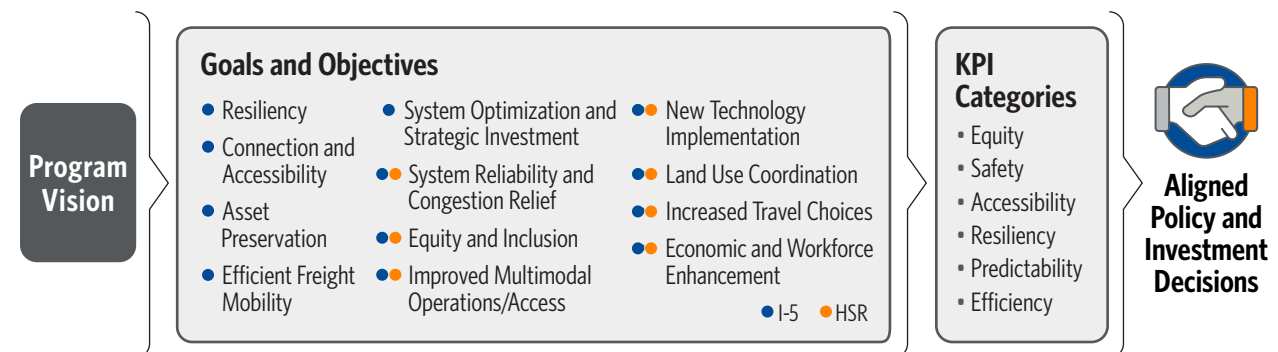
This program provides a key opportunity to develop a strong case for how we creatively meet the mobility needs of many generations to come. A truly successful integrated program will also go beyond mobility to make sure transportation, land use, and station area options are coordinated to address congestion and housing challenges, drive sustainable economic growth, and incorporate WSDOT's climate and equity goals.

Rob and Nicole Wang, our modal integration lead, will integrate our strategic planning work for HSR and I-5 at the program level, developing a bold program vision with a clear definition of success, and then cascading this vision down to the project level to drive program alignment. As shown in Figure 5.3, we will clearly demonstrate how our program vision and project-specific goals/objectives and measurable KPIs work together. We will develop a program-level business case framework to inform decisions by WSDOT and advance HSR-specific analysis that is needed to meet business case requirements set by FRA and the Canadian Government. Our team includes recognized GEC experts in developing business cases for DOTs, transit agencies, and municipalities across North America. Our team's work on Florida's Brightline, I-11 for Nevada and Arizona DOTs, and many projects across Canada will position us to

examine the programs' economic and financial return on investment (ROI), the broader transformative impact of HSR on the region, and its ability to meet social, economic, and environmental goals. For example, our integrated business case framework and I-5 master plan lead, Bardia Nezhati, has extensive experience working closely with a wide range of stakeholders to align policy and investment decisions. On the I-15 Mobility Alliance, Bardia built a strong understanding at the federal level of the purpose and priorities of the Alliance, which included California, Nevada, Arizona, and Utah. This resulted in advancing a package of high-priority projects, including the Brightline West HSR corridor, which HNTB is designing.

Our integrated business case framework will build the foundation for the HSR-specific analyses required in the future. We will leverage the work of the I-5 System Partnership and the Cascadia Innovation Corridor, demonstrating how advocates of HSR and I-5 can work together to create opportunity and prosperity beyond what we could achieve independently. As part of developing the integrated business case framework, Nicole will host a workshop with our land use innovation lead, Peter Calthorpe, and potentially outside perspectives from individuals like futurist Glen Hiemstra and academics like the University of Washington's Jan Whittington.

Figure 5.3 We Will Create a Strong Case for Investments by Developing a Unified Program Vision; Project-Specific Goals and Objectives; and a Range of KPI Categories



Building Lasting Support. Our team's history of leading large programs has solidified our understanding that building a strong, supported program requires a combination of government relations, public awareness, partner and stakeholder engagement, and actionable progress. As illustrated on pages 19-20 in Section 4 and Figure 5.4, our team has established partner and stakeholder relationships on both HSR and I-5, including developing shared early messaging and supporting the program's successful application to participate in AASHTO's Moonshot Pilot program.

We will channel our team's experience and our commitment to the HEAL Act and Justice40, creating a strategic engagement program that revolves around and connects the communities in the Cascadia region, including using the following tools:

- Collaborative paid partnerships with CBOs who work with vulnerable, overburdened, under-compensated, and underrepresented communities, including The Black Collective and Disability Mobility Initiative
- A scalable participation compensation model similar to what our team implemented on WSDOT's SR 167 Master Plan and US-2 PEL
- ADA compliant tools, such as online open houses, surveys, videos, and virtual meetings
- Pop-up events in high-traffic areas, festivals, and community meetings

- Strategies to elevate diverse voices, such as the Statewide Stories documentary series Stacy developed for the Oregon Transportation Plan that explored diverse transportation experiences and needs, sparking conversation about how we can create a system that connects and moves all of us for generations to come
- Language access plans
- Focus groups and briefings at standing meetings, such as corridor neighborhood associations

Securing Full Funding. While the Washington State Legislature committed \$40M for I-5 and \$150M in matching funds for HSR, there are many uncertainties and underfunded needs that require a strong funding strategy. Immediately upon NTP, we will support WSDOT in pre-obligation negotiations and obligation of the FRA's CID and FSP grants, while using the Coordinating Structure to organize U.S. and Canadian sources. HDR has already matched grant programs with potential I-5 projects that advance resilience, assessing competitiveness for RAISE; PROTECT; the Bridge Investment Program; INFRA; Mega; Rural; Reconnecting Communities and Neighborhoods; National Culvert Removal, Replacement & Restoration Grants; AID Demonstration; and SMART. Building on this work, we will develop a programmatic funding strategy to implement the program's vision, including refining our grants strategy for Mega/INFRA, RAISE, FSP, and other federal, state, and local funding options; considering express toll lane revenues; and evaluating value capture options.

HDR'S GRANT WRITING SUPPORT

more than

130
PROJECTS

since 2009

securing more than

\$3.6
BILLION



We will leverage best practices from past successful applications, including:

- Aligning scope with grant criteria
- Providing a clear statement of needs
- Creating compelling themes and graphics
- Matching the Benefit-Cost Analysis (BCA) with the latest USDOT guidance
- Building congressional and stakeholder support
- Mitigating NEPA risks
- Complying with Justice40 and Washington's HEAL Act

Improving System Resilience. I-5 is a vital north-south link in the region, providing access to other strategic corridors, ports, ferry terminals, military installations, medical facilities, airports, and lifeline routes. It plays a key role after a seismic event, natural disaster, or other emergency; is critical to the movement of people and goods; and is essential for national defense. Any localized vulnerability or closure threatens the overall system.

Through the I-5 listening sessions and recent support on the I-5 legislative report identifying opportunities to address resilience, we've heard many compelling needs along I-5. The list is broad and includes issues such as increased frequency and severity of flood events that close sections of I-5 in Lewis County; severe heat events that result in pavement buckling; preservation of 430 bridges requiring \$700M plus an additional \$550M for seismic retrofits throughout the corridor to maintain functionality after a major earthquake; and corridor-wide preservation needs that surpass \$2.5B.

Figure 5.4 Our Team's Relationships Will Allow Us to Quickly Build Support and Secure Durable Decisions

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Listening Sessions Identified

6 Common Themes for I-5:

- Set a modern vision for I-5
- Connect communities with better access across I-5
- Reduce corridor-wide congestion
- Center equity, inclusion, diversity, and accessibility
- Strengthen I-5 to withstand seismic and other disasters
- Improve operations and transit service for better performance

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External Stakeholder Groups

representing the voices of:

- | | |
|---|---|
| 3 Emergency Management Agencies | 8 MPO/RTPOs |
| 2 Federal Agencies | 7 Ports |
| 39 Cities and Counties | 5 Community Interest Groups |
| 13 Business and Industry Organizations | 4 Tribal Organizations |
| 11 Equity Organizations | 3 Transportation Advisory Groups |
| 9 Transit Agencies | |



KIERNAN'S SUCCESS



Matching Early Action Projects With Funding Sources

"In support of the I-5 Legislative report, WSDOT asked us to swiftly incorporate resilience opportunities due to increased federal funding. I [Kiernan Maletsky, FHWA grant management lead] led this effort, collaborating with planning leaders from WSDOT's Southwest, Olympic, and Northwest Regions. We successfully selected and analyzed 30 corridor projects for federal grant funding in just one month, earning praise for our pioneering approach, which could be applied to the Cascadia Program and other initiatives."

Our team will look at the corridor as a system to address these challenges and our communities' changing needs in alignment with funding opportunities as part of the I-5 master plan process. We will continue to support WSDOT's resilience goals through inter-agency collaboration and taking steps to increase federal grant competitiveness.

The program also has tremendous opportunity to support WSDOT's Strategic Plan goal to combat climate change and enhance healthy communities for everyone. Specifically, we will support the reduction of transportation sector GHG emissions by promoting and investing in efficient, equitable, and healthy transportation choices and supporting next steps to future-proof the program and make sure it continues to evolve along with the lower emission vehicles of the future. Future HSR service would provide a significant opportunity to reduce carbon emissions and provide new modal options.

Advancing Equitable Investments. The Cascadia Program will center the voices and perspectives of vulnerable populations and overburdened communities throughout the decision-making process. Kyana Wheeler, our equity lead, will develop our equity framework and KPIs; oversee our equity engagement lead, Amalia Martino; and support our team in applying a racial equity toolkit that informs outreach and analysis, building on our team's work on WSDOT's

SR 167 Master Plan, Highway System Plan, and proposed Speed Safety Camera System. By proactively engaging with community voices that represent overburdened and vulnerable populations and using that information to guide our decisions, we will make sure that we deliver outcomes that improve community health and transportation accessibility, options, and affordability while increasing funding competitiveness. We will:

- Clearly communicate our desired outcomes
- Acknowledge historical impacts and existing inequities
- Build team awareness around institutional barriers related to racism, bias, poverty, limited English proficiency, disability, or immigration
- Examine benefits and burdens in accordance with the HEAL Act and address infrastructure gaps, complying with Justice40
- Conduct demographic analysis, allocating budget to communities most impacted by pollutants and environmental degradation

KYANA'S SUCCESS



Equitable Investments

"On WSDOT's Highway System Plan and proposed SSCS, I [Kyana] played a role in shaping equity considerations. I analyzed community indicators, government strategies, and performance measures, aiming to optimize benefits, eliminate obstacles, and address the project's impact on community conditions. Our team embraced the PEAR (Pro-Equity Anti-Racism) model, utilizing the GARE (Government Alliance for Racial Equity) framework. We actively sought community input, consolidated data from previous projects, and collaborated with essential community-based organizations to share industry insights."

Key HSR Tasks

As reflected in the 2023 Legislative Report, WSDOT and jurisdictional partners in Oregon and Canada have made significant advancements in planning for Cascadia HSR. Given the unique scale and interconnectedness of the integrated program and its various political, economic, environmental, and governance considerations, it will be critical to maintain a strong track record of successful collaboration between Washington, Oregon, and British Columbia. Our team is well prepared to engage with new and existing federal, state/provincial, and local partners, including USDOT, FRA, and the Canadian federal government to advance a scope of work that satisfies U.S. and Canadian environmental requirements, including pre-NEPA or PEL. We will flex our team to the needs of the HSR project dependent on the final agreed-upon scope with FRA, work within your budget, and support program-level coordination and integration where needed.

Working in close collaboration with Nicole, Peter Gertler, our HSR program startup lead, will support any planning, environmental, or design tasks. Our team's global HSR strategic advisory expertise combined with our technical delivery knowledge means we are ideally suited to:

- Refine the HSR vision to show clear alignment to program and WSDOT objectives
- Prepare WSDOT for any further FRA negotiations beyond June 2024
- Build upon our CID/FSP requirement analysis, a summary of any further requirements based on Washington legislative mandates, and the anticipated requirements set forth by USDOT/FRA, making sure the project aligns with evolving standards
- Develop an initial strategic project plan based on the negotiation outcomes and requirements, which will cover governance and decision making at WSDOT and with jurisdictional partners and other stakeholders, FRA-negotiated scope of work delivery plan, and risk management plan

Pending FRA negotiation outcomes, we will advance the following priority tasks:

- A HSR-Specific Scenario Analysis:** Considering different scenarios both with and without HSR and accounting for various technological, land use, and population assumptions. These factors will impact the optimal modal mix, such as HSR, I-5, and aerial mobility, as well as critical elements like energy and climate considerations.
- A Comprehensive HSR Business Case:** While a broader business case framework will cover multimodal assets for investments across the region, a dedicated business case will be needed for decisions on HSR, including the decision by the Government of Canada on their terms of support. This will include a strategic case that evaluates needs and future demands of the HSR corridor; an economic case that analyzes the benefits and costs of the options to individuals, communities, and society, including compliance with Justice40 and HEAL Act requirements; a financial case that evaluates overall financial impact of the options, funding, and value for money; a commercial and procurement case that evaluates the range of delivery models; a management case that details the implementation plan for the chosen delivery model, including a plan to mitigate risks; an in-depth examination of ridership scenarios and projections; high-level costing; and option analysis based on pre-NEPA engineering and environmental assessments.
- An Updated HSR Governance Structure to Incorporate Participation from FRA:** This is critical for effective cross-border decision making and alignment with federal guidelines and expectations, paving the way for smooth collaboration with jurisdictional partners throughout the program's development.

We are fully committed to the success of WSDOT UMAM and stand ready to adapt as future legislative directives, GEC(s), delivery models, and operating entities become more well-defined.

Key I-5 Tasks

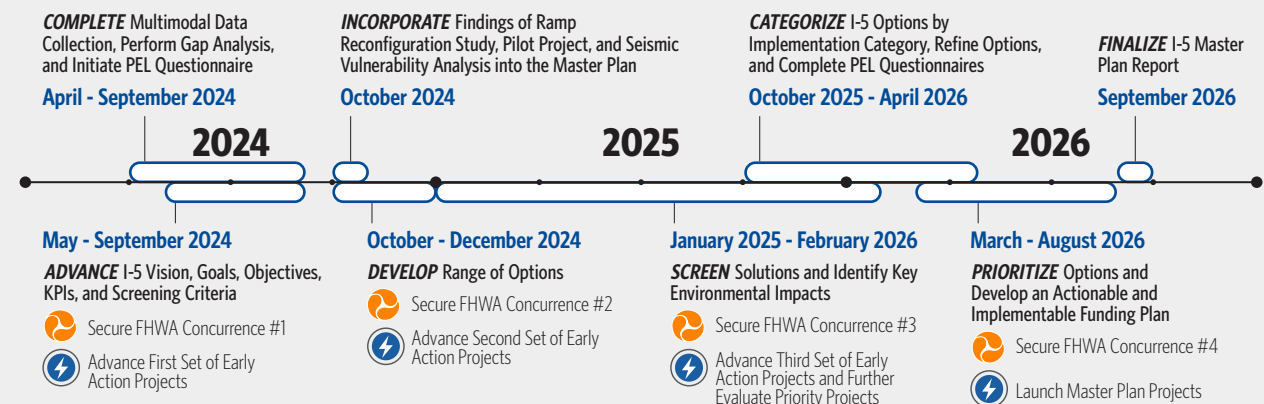
Building an I-5 Master Plan. The I-5 master plan will support continued population and employment growth through equitable investment within a transformative vision. We will build on past work, including HDR's initial corridor study and the I-5 System Partnership's Call to Action. During the I-5 listening sessions, we documented the desire for a coordinated regional approach to enhance funding options, create transparency, and resolve geographic transportation disparities. To achieve actionable policies and investments, Bardia; Kirsten Pennington, our I-5 planning manager; Diana Giraldo, our I-5 engineering manager; and Tom Horkan, our delivery manager, will focus on the following key activities, as described in Figure 5.5.

- Advance the I-5 Goals, Objectives, KPIs, and Screening Criteria:** We will establish a common understanding of past studies and previous recommendations for the corridor, jump-starting the existing conditions report and gap analysis, which will flow into a draft set of needs for the corridor and surrounding area, including systemic connectors to I-5. Concurrently, we will build on the program decision framework to develop screening criteria that represent community and stakeholder values, integrate HEAL Act

and Justice40 equity approaches, illuminate trade-offs, and shape recommendations. To streamline the environmental phase, we will start PEL questionnaires early with ample coordination meetings with FHWA. We will also capture, package, and sequence early action projects already identified. We will be able to jump-start our progress, having already analyzed 100 promising early action projects, and shortlisting 30 projects that best address resilience screening criteria. During the I-5 listening sessions, we heard from numerous stakeholders that they would like to see immediate action to advance early action projects. Our ability to progress these early projects while advancing the broader plan is key to building lasting stakeholder support.

- Develop the Range of Options:** Based on the assessment of needs and work with community groups, our team will develop a range of multimodal options consistent with the program vision and objectives for I-5, encompassing corridor-wide, regional, and site-specific policies, strategies, and projects that capture all modes.
- Screen Options and Identify Key Benefits and Impacts:** Using WSDOT's Strategic Plan, PEL, HEAL Act, and Justice40 guidance, our team will evaluate which

Figure 5.5 Our I-5 Master Plan Process Will Advance Early Action Projects and Launch a Bold Implementation Strategy



options best meet community and stakeholder values and provide the most benefits. We'll link planning to implementation by crafting evaluation criteria that align with funding criteria to maximize the chance of securing new grants. Our criteria will integrate environmental considerations to ease future environmental processes. We will first screen all options to make sure they meet the program vision and I-5's goals and objectives. Then, we will apply criteria to understand the benefits and impacts of each option, including evaluating equity and examining who receives those benefits. We will leverage our recent work on the SR 167 master plan where we infused community/equity priority areas and land use/development into the evaluation. We will document results in an easy-to-understand scorecard.

- Prioritize Options and Develop an Actionable Implementation and Funding Plan:** We will categorize options into a preferred set of policies, strategies, and projects, time-stratifying them into early, mid-term, and long-term categories, as described in Figure 5.6, and grouping them into mode-specific buckets. Our report will include the prioritized list of categorized projects, a suite of policy and strategy recommendations, an implementation and phasing plan, and additional funding sources and strategies to guide implementation. We will provide guidance on optimizing implementation, including alternative delivery options.

In the master plan, we will consider how existing space can be maximized to leverage future technology, as shown in Figure 5.7. We will evaluate technologies that will help to improve I-5's performance, including integrated corridor management, ATMS speed harmonization, back of queue warning systems, predictive incident management, and in-vehicle signage and warning systems, to name a few. With the eventual introduction of fully autonomous and connected vehicles, the number of vehicular crashes will decrease, and the occurrence of non-recurring congestion will drastically decline. We now have situational awareness of entire networks without installing expensive instrumentation and can combine data sets and patterns

1. Controlled airspace
2. Drone launch pads
3. Premium high-speed automated travel base
4. Embedded pavement sensors
5. Slow-speed electric vehicle dynamic charging lane with in-pavement inductive coils
6. Vehicle-to-infrastructure communications
7. Machine readable signs with LiDAR reflective targets for positioning
8. Conduit for power and fiber to support ITS devices and broadband
9. Dynamic adjusting modular travel lanes

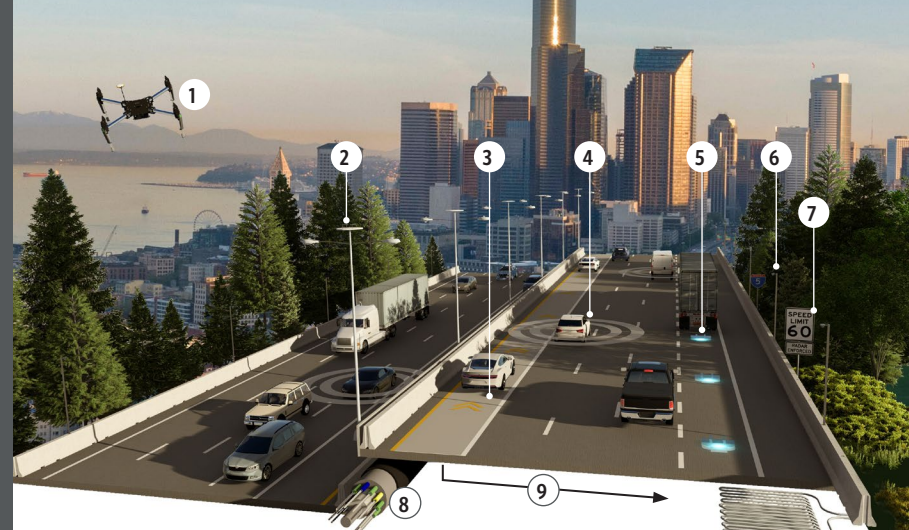


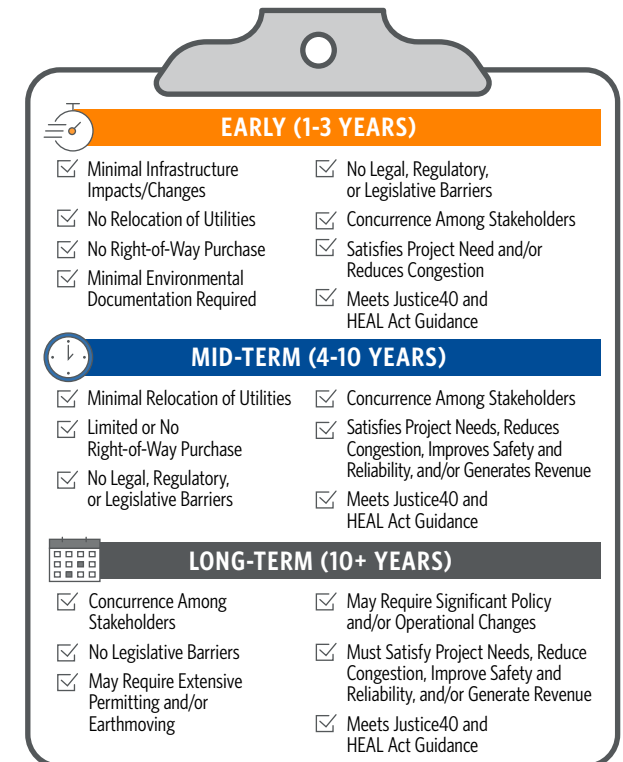
Figure 5.7 Our Innovative Design Process Will Evaluate Ideas to Maximize Corridor Space and Futureproof I-5

to better understand underlying travel behavior and create predictive models to improve operations and prioritize investments. Additionally, we will incorporate WSDOT's innovative work, including that of MoM staff, University of Washington, partners, and Washington State Patrol on the Virtual Coordination Center.

It will be important to document our assumptions about other projects and modes of transport, such as air and HSR. While WSDOT works with the commercial aviation workgroup required by the legislative proviso, our air mobility integration lead, Justin Bychek, will be available to coordinate with WSDOT and their consultant on these efforts ahead of the legislative reporting cycle. This will allow the I-5 master plan, HSR planning, and the Advanced Air Mobility Aircraft Plan to proceed concurrently, preventing concerns about the programs' inter-relations.

Analyzing the portfolio of managed lanes access, eligibility, pricing, and system management options is another critical element. When considering strategic use of managed lanes to maximize corridor efficiency, we will prioritize an evaluation of equity and enforceability to deliver tangible, sustainable, and fair benefits to users. Stacy Thomas; Sam Soules, our HOV/managed lanes lead; and David Ungemah, our tolling and technology subject matter expert, will work together to include best value solutions in the I-5 master plan.

Figure 5.6 Phasing of I-5 Master Plan Projects Will Accelerate Progress, Prioritize Equity, and Meet Community Needs



Samantha [Soules] is extremely organized and understands the importance of balancing the key success factors on any project.



Patty Rubstello, WSDOT Assistant Secretary

Advancing HOV Near-Term Projects. In response to legislative direction, we will work with WSDOT to move forward near-term HOV projects identified in HDR's recent HOV Lane Recommendations report. We will assess enforcement options, registration programs, and targeted hard shoulder running projects. Our screening will examine ease of implementation, political support, risk of throwaway work, and cost.

Integrating the Ramp Reconfiguration Study. Concurrent with startup, Kirsten and Smith Siromaskul, our ramp reconfiguration lead, will examine the ramps between Chinatown-International District and the University District. While analysis of traffic operations, safety, and air rights are important, our team will also support WSDOT in managing expectations and relationships, by working with the City of Seattle's Office of Planning and Community Development and I-5 lid champions. We will communicate how study findings will be incorporated into the master plan and discuss next steps, including factoring in the potential award of the City of Seattle's Reconnecting Communities grant.

Completing the Seismic Vulnerability Analysis. Our seismic lead, Rob Richardson, will work with the established seismic resiliency subcommittee through a series of monthly meetings to finalize seismic performance criteria and prioritize work, building on our December 2022 I-5 seismic risk assessment report (summarized in Figure 5.8). Setting seismic priorities while focusing on advancing seismic work from Boeing Field to Lake City Way in response to legislative direction will result in rapid advancement of the seismic vulnerability analysis and early packaging of priority projects.

While Boeing Field to Lake City Way is not currently part of a designated lifeline route, WSDOT's Strategic Plan's resilience goal and this segment's critical role in moving people and goods led the team to recommend a performance level that allows for quick recovery of structures after a seismic event. This higher standard reflects the current design philosophy, with heightened emphasis on resilience, indicated in WSDOT's Bridge Design Manual. If WSDOT wishes to seek a lifeline designation, this process can advance concurrently with the seismic vulnerability analysis.

Should WSDOT prioritize recovery status from Boeing Field to Lake City Way, there are several complex structures, including the Convention Center, Ship Canal, and Ravenna, where a recovery performance standard will make retrofit challenging and potentially cost prohibitive. Corridor-wide implementation of recovery performance criteria likely will lead to questions about why WSDOT would prioritize costly bridge replacements to achieve recovery status through the downtown core when the existing lifeline route bridges are not retrofitted to recovery status. If recovery

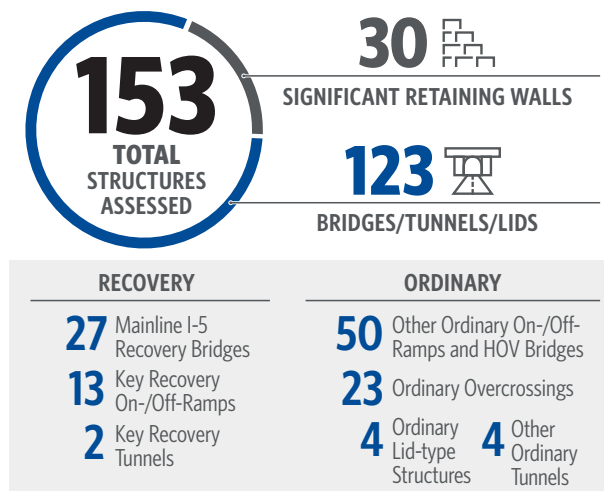
status is determined desirable, we recommend beginning with retrofitting ordinary bridges concurrently with simpler recovery bridge packages, as funding allows. For the 81 ordinary structures where a no-collapse standard applies, we recommend bundling mid-sized, smaller, and less complex structures based on geography and structure type, as WSDOT has done previously.

CONTINGENCY MANAGEMENT

We will proactively manage both program and project contingencies by listening carefully, clarifying direction, and adapting strategies as an integrated leadership team to take advantage of funding opportunities while managing risk factors. We will include contingencies based on our analysis of risk for specific task and activities, rather than a standard percentage. Our contingency management plan will be fully integrated with our program risk management strategies, incorporating early issue identification, appropriate contingency allocation through each project's lifecycle, and user-friendly dashboards to monitor progress. We will hold contingency for traditional project risks, like fish passage and geotechnical, and factor in funding scenarios so progress continues at pace with available funds, stakeholder expectations, and project risk profiles. As new concepts emerge, we will draw on our program vision and guiding principles to make informed decisions throughout planning, design, and construction.

Our delivery/procurement manager, Tom Horkan, is highly skilled at proactively managing contingency and risk. On WSDOT's SR 520 GEC, Tom managed risk and contingencies daily, including providing detailed reporting to allow WSDOT executive management to identify issues early, implement resolution strategies, account for project interfaces, and enhance accountability. He instilled a maximum exposure risk management strategy based on early identification of issues and forecasting potential impacts to allow GEC management to prepare for budget discussions with WSDOT executive management, OFM, and the legislature and plan appropriately for contingencies and risk exposure.

Figure 5.8 HDR's Experience Completing the Seismic Assessment for I-5 Will Accelerate the Seismic Vulnerability Analysis



Over their 20-year tenure, the HNTB team has continued to bring value, innovation, and technical excellence every day. Their transparent communication and collaborative efforts have built trust with our partners, stakeholders, and the public. This trust has been instrumental in the continued success of our program, ensuring ongoing support and funding."

Lisa Hodgson, WSDOT I-405/SR 167 Programs Administrator



5b Working With Multiple Corridor Resources and Partners

Having worked side-by-side with WSDOT Megaprograms staff since UMAM's inception, we offer proven strategies for proactive collaboration at every level. Our alignment process will create team cohesion built on trust, camaraderie, and shared expectations. We will host an early in-person program formation workshop to unify WSDOT and GEC team members around our common purpose, creating a culture of quality, communication, inclusion, and fun. Rob will maintain consistency across the program by holding quarterly all-hands meetings to keep team members informed of the program direction, upcoming milestones, and learning opportunities for career development.

We are skilled at collaborating among consultant teams and firms, as demonstrated by our work on METC and HDR's collaboration with the Deloitte Consulting team for the Cascadia HSR Strategic Advisory and Grant Development Services contract. While Cascadia Program efforts may be led by different firms and managers, our communications and quality programs will unify our work, include provisions for reviewing other consultants' work, and provide the appropriate oversight and consistency to protect your interests. As we have done on past programs, we will add team members, interface with other consultant teams, and collaborate with contractors, making sure we keep WSDOT's best interests first and foremost.

Because our team members have deep relationships with the Cascadia corridor's resources and partners, including ODOT/Metro, BC MoTI, cities, counties/provinces, utility companies, neighborhood groups, businesses, Tribes and First Nations, watershed committees, permit streamlining

committees, FHWA, FRA, FAA, local/state/federal permitting agencies, and private businesses, we are able to work collaboratively and strategically with each, accounting for each perspective, preventing surprises, and creating a strong coalition of supporters.

Our two primary federal partners will be FRA and FHWA, with whom Ron Pate and Rob will host regular meetings to align efforts with federal priorities and funding opportunities and adhere to federal standards and guidelines, including gaining FRA support for HSR, FHWA concurrence on the I-5 master plan, and compliance with environmental regulations, including PEL and NEPA. We will customize our FRA strategy, building on Ron Pate's strong relationships, Cat Dobbs' 12 years working directly for FRA, and Rob Cary's 30 years of experience delivering projects requiring extensive negotiations with FRA. Additionally, we will apply our decades of successful coordination with FHWA and WSDOT Region environmental and planning staff to maintain FHWA support.

We understand the importance of proactive collaboration with more specialized corridor partners. Strategically integrating more specialized corridor partners will inform planning and allow for forward compatibility with regional plans that can enhance the Cascadia corridor's functionality as an overall system. For example, with watershed committees, a critical first step is engaging with regional watershed groups such as the Water Resource Inventory Area committees, Regional Fisheries Enhancement groups, and other entities such as the Chehalis Basin Partnership to develop relationships and establish protocols for information sharing.

5c Resolving Issues and Mitigating External Risks

A culture of ownership is one of the most critical factors in avoiding or resolving issues and conflicts. As one integrated GEC team, Rob will set the tone for a collaborative atmosphere and use a program-first attitude, which will foster creative, future-focused, enduring solutions. We will set clear expectations that conflict resolution is about the issues rather than people. Every team member, from entry level to leadership, will understand that they have a responsibility to raise real or potential risks and mitigation concepts. Issues will be resolved at the lowest level with a clear process to escalate to the next level as needed.

As part of our regular discussions about budget, schedule, and deliverables, we will review any unresolved issues, working with appropriate WSDOT and consultant staff to discuss solutions. If conflicts are not resolved after two regular review meetings, HDR will facilitate a conflict resolution meeting between the appropriate team members to identify the best path forward. In addition to Rob, our principal, Erin Slayton, is available to work directly with Ron to resolve any elevated course corrections and necessary actions.

We understand that program success relies on our ability to provide strategic advice that manages external risk and avoids major issues. Building cross-border partnerships, gaining the support of the Tribes/First Nations, and reconciling significant conflicts between stakeholders, such as differences between local and system wide needs, are crucial to the program's success.

Figure 5.9 Proactive Risk Mitigation Informed by Past Success Allows Us to Deliver on Our Promises

RISK Ineffective Decision-Making Process

MITIGATION Nicole will work with Rob, Stacy, and WSDOT leadership to carefully and thoughtfully design and implement a governance and decision-making process for the integrated program that prioritizes building trust; fostering openness; providing clarity of roles and accountability; and championing benefits-led decisions, while creating a safe space for individuals and teams to thrive.

SUCCESS *“When I [Nicole Wang] was brought in to review the governance and decision-making process for UK High-Speed 2 (HS2), I quickly realized that, for a startup program of such scale, it was especially important for leadership to establish and nurture the right culture early on. We focused on building capacity and capabilities and to role-model a*

benefits-led decision-making mindset. I have been applying and promoting this learning in all the infrastructure projects I’ve been advising on, including the Cascadia HSR project for WSDOT. I have seen the power of the right mindset in building confidence and trust and winning hearts and minds, not just among the project team, but with all our partners.”

RISK Inability to Advance Early Action Projects

MITIGATION While the planning timelines of the HSR and I-5 programs are different and include varying partner priorities, an integrated business case framework will build support for the program, while the I-5 master plan will present near-term actions and the rationale for projects moving forward first, which is critical to building stakeholder support and project champions. Gaining tribal support and pursuing local matching funds will help to accelerate delivery while advancing long-term priorities.

SUCCESS *“On multi-state I-15, I [Bardia Nezhati] built consensus on priority projects with four states, demonstrating why a project in one state is a priority for another by gaining buy-in on a transparent, data-driven, and defensible evaluation process and building understanding about how projects impact each other. This same approach will result in rapidly building consensus with WSDOT and stakeholders in Oregon and BC.”*

Figure 5.9 highlights two example risks that will require ongoing collaboration to successfully mitigate. To help avoid conflicts with partners, we will use strategies such as signed methodology memos and chartering sessions to set expectations and accountability. Our team will lead an ongoing risk management process to formally track and work through unresolved issues. HDR’s approach will proactively identify, assign, and manage a wide range of program and project risks. Together, Rob; Tom Horkan, our delivery manager; and Trent Eakin, our risk management lead, will engage HSR and I-5 advisory, planning, environment, engineering, and communications team members to develop a comprehensive risk management plan for each key risk, including a register that provides a scoring method for the likelihood, severity, and level of each. We will resolve issues with external entities by following our program vision, using a clear decision-making process grounded in stakeholder engagement and strong relationships with our HSR and I-5 partners. These elements together provide tools for a meaningful dialogue and expectation setting from the start, an important step to minimizing risks.

5d Assumptions for the WBS

One of our highly valued strengths is working as an integrated team providing quality interactions, processes, and deliverables, which sets a strong foundation for the type of WBS that is most productive in GECs. Figure 5.10 lists several examples of the types of assumptions requiring discussion about ownership of deliverables. As task orders are identified, Rob will set expectations that WSDOT and consultant team members collaborate to achieve the same goals, with WSDOT maintaining appropriate approval authority. Each task order will have an assigned lead, defined team, and clear responsibilities aligned with deliverable expectations, just as we have done on all 28 of our METC tasks. Once roles are finalized, Rob will start with WSDOT’s master deliverable list to develop a project-specific WBS. With this as the base, Rob will work with Ron to engage WSDOT specialty groups to discuss tasks they may want to self-perform and expected timelines. We will use the WBS and task assignments to develop a cost-loaded schedule, which will be used for managing performance and change.

Figure 5.10 An Integrated Approach to Deliverable Ownership Optimizes Resources and Builds a Foundation for a GEC-Style WBS

WSDOT						
PROGRAM MANAGEMENT	ENGAGEMENT	ENVIRONMENTAL	PLANNING	TRAFFIC	ENGINEERING	DB PROCUREMENT (TBD)
<ul style="list-style-type: none"> Project Funding and Schedule Limitations 	<ul style="list-style-type: none"> Website Hosting Media Relations 	<ul style="list-style-type: none"> Regulatory Coordination Environmental Review 	<ul style="list-style-type: none"> Planning Studies 	<ul style="list-style-type: none"> Existing Shoulder Depths Traffic Counts 	<ul style="list-style-type: none"> Existing Bridge Plans Existing Utility Agreements 	<ul style="list-style-type: none"> Early-Work Contract Phasing RFQ/RFP Templates DB Guidelines Manual Update Specifications and GSPs
<ul style="list-style-type: none"> PMP Project Schedule Coordination Meetings 	<ul style="list-style-type: none"> Surveys Outreach Materials, Presentations, and Graphics 	<ul style="list-style-type: none"> Mitigation Plan Permitting Support NEPA/SEPA Wetlands and Stream Assessment Report 	<ul style="list-style-type: none"> Master/Corridor Plans System Plans Implementation Plans PEL/Alternatives Analysis and Evaluation Policy Development White Papers/ Research Pilot Program Development 	<ul style="list-style-type: none"> Traffic Modeling Illumination/ITS Design Channelization Plans Concept of Operations 	<ul style="list-style-type: none"> Basis of Design Drainage/Utility Design Geotechnical Evaluation Structural Concept Plan Cost Estimate Practical Design Assessment Report Survey/Basemapping Design Documentation Construction Support 	<ul style="list-style-type: none"> RFQ/RFP Draft Packages ATC Analysis Summaries Addenda Materials General Provisions Technical Reports

5e Key Issues and Critical Milestones

The Cascadia Program's key issues are diverse and significant, including:

- Modal Considerations:** While multiple options exist in the corridor, including I-5, Amtrak *Cascades* service, airports, and existing and in-development regional transit systems, motorists experience unpredictable congestion and delays on I-5; existing rail passengers are experiencing regular delays and reliability issues due to competing freight services and landslides; and some truck drivers are taking long detours, including ferry rides, to try to make delivery schedules.

- Rapid Growth:** Around 3 million people are expected to move to the Cascadia megaregion in the next 30 years, with 1.8 million coming to the Puget Sound region.
- Critical Connections:** The highest truck volumes in Washington are on I-5; major military installations and 13 ports depend on it. In downtown Seattle alone, more than 275,000 vehicles travel on I-5 on a typical day.
- Preservation and Safety:** If the I-5 system is not maintained, Washington risks losing a vital link during an emergency, and the frequency of unexpected closures due to failing infrastructure will increase.

Based on our knowledge of WSDOT, the communities along this corridor, the needs of I-5, and the vision for HSR, we have summarized the first 12 months of critical milestones in Figure 5.11, complementing the I-5 master plan timeline shown in Figure 5.5. We will adapt this plan as additional funds and information becomes available, staying true to your program vision and our guiding principles. Our strong grasp on the key issues and opportunities, summarized in Figure 5.12, means we can clearly communicate the justification and business case for the Cascadia Program. We look forward to serving WSDOT and transforming transportation in the Cascadia megaregion.

Figure 5.11 We Offer an Unparalleled Understanding of Critical Milestones That Inform Our Key Priorities in the First 12 Months

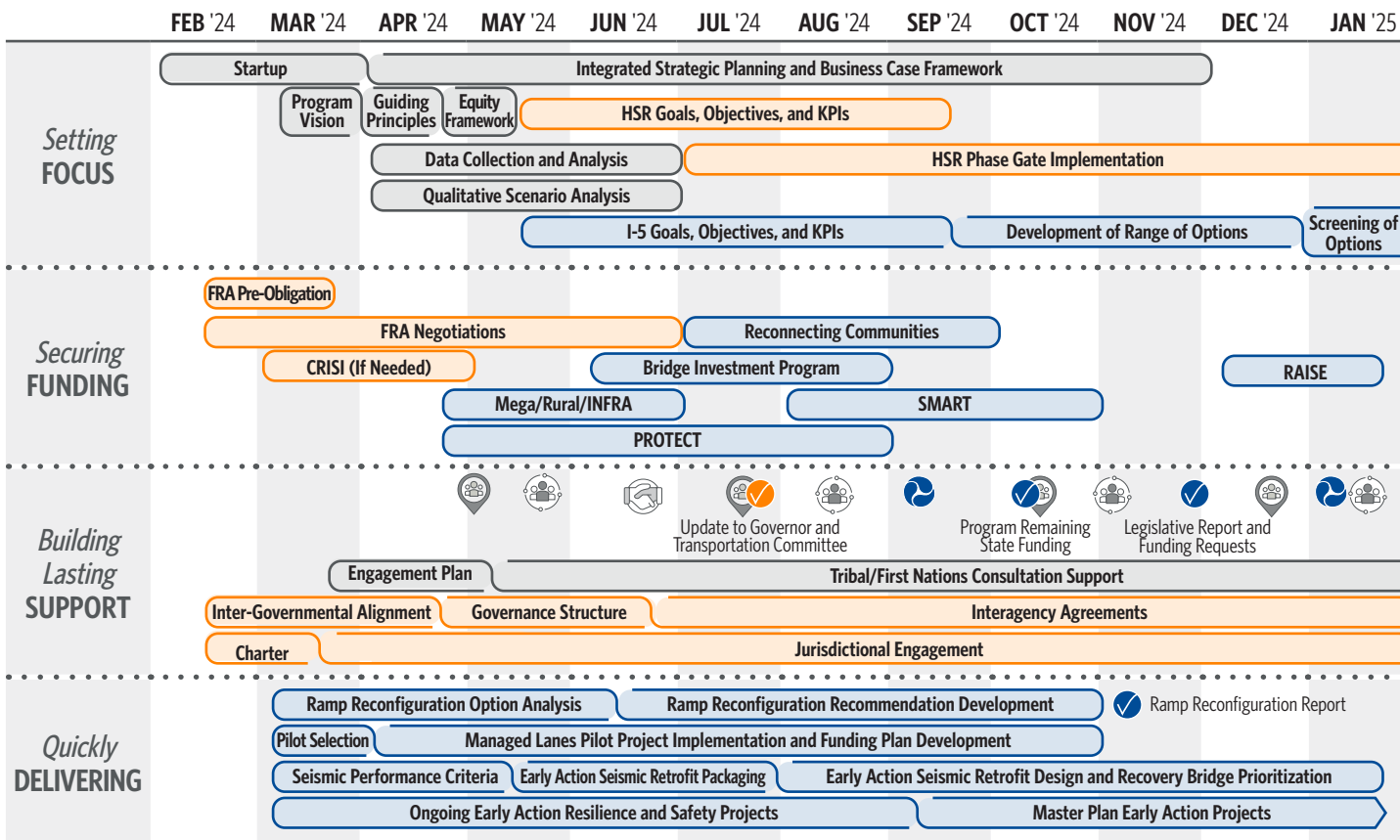


Figure 5.12 Key Issues and Opportunities

Program Management

- 3-4M** people expected to move into the Cascadia megaregion in the next 30 years
- 88%** of all statewide air cargo goes through the Puget Sound region

HSR

- HSR provides a **low/no emissions alternative** to flying and driving
- HSR would provide **1-hour** travel times from Portland to Seattle or Seattle to Vancouver
- HSR could attract **1.7-3M** annual trips by **2040**
- HSR is estimated to create approximately **40,000** temporary and **160,000** permanent jobs

I-5

- I-5 in downtown Seattle is the **busiest stretch of highway** in Washington
- Estimated cost for adding a lane in each direction of I-5 in WA was **\$108B in 2018**
- I-5 corridor-wide preservation needs surpass **\$2.5B**