

PACKET A

May 19, 2023

WSDOT TOLL DIVISION

Roadside System Implementation Support



Challenging today. Reinventing tomorrow.

CRITERIA 1: QUALIFICATIONS/EXPERTISE OF FIRMS ON TEAM

The right experience. For more than 13 years as the General Tolling Consultant (GTC) team, our team worked alongside Washington State Department of Transportation (WSDOT) to help deliver tolling to the Puget Sound. Our collective WSDOT program management experience is unparalleled. For this \$19.8 million roadside program, we have assembled a Roadside System Implementation Support (RSIS) team to meet WSDOT expectations and deliver a program that will double the existing tolling facilities in just 4 years. Drawing on our team's experience delivering the West Coast's most formative tolling projects together, we bring a depth of program management skills, tolling technical expertise, and staff with trusted relationships at the Toll Division and WSDOT. We also bring strong relationships with all the major vendors. These established relationships, combined with our tailored delivery expertise, will make this program a success.

The right team. For over a decade (see *Figure 1-1*), our team has served as WSDOT's GTC. We are excited to extend the continuity of staff you know and trust and maintain the project management expertise of Matt Ringstad and Jennica Ottenbreit. Matt and Jennica have thoughtfully assembled the team to provide the right mix of new and familiar staff with the availability and technical skillsets that allow for successful staff preservation and succession planning on this long-term program. Together, the team stands ready with the knowledge required to help WSDOT tackle the operational, technical, financial, and political challenges facing today's transportation infrastructure programs.

Our full-service team comprises WSP, Maul Foster & Alongi (MFA), TRAC, Dossier, eVision and Disadvantaged Business Enterprises (DBEs) LEAD and Silicon Transportation Consultants (STC), with a demonstrated track record of supporting programs of this magnitude. With LEAD

in a key role leading toll infrastructure, and STC supporting the team in various subject matter expert (SME) functions, **our team will meet WSDOT's 14 percent DBE goal.**

The right approach. We bring you continuity, with institutional knowledge and a strong understanding of your internal processes and policies, from our current work on the GTC for WSDOT. We understand your upcoming programs and can offer scalability, with our proven ability to efficiently ramp up and ramp down our staffing to meet your needs as the programs are delivered. We have been your partner in developing the GTC, with proven ability to take up a new program with minimal direction from WSDOT, and providing local presence as needed. This experience will allow our team to begin immediately with no onboarding and training requirements for WSDOT. Jacobs' and WSP's proven track record of delivering the most qualified staff, both locally and globally, provides a distinct advantage to the WSDOT tolling program in achieving your goals.

Our team's collective WSDOT Tolling experience is unprecedented. Jacobs and WSP have served as your partner for the GTC since 2010.

LEAD is a *woman-owned DBE small business*, and STC is a *DBE small business* with years of demonstrated experience supporting the GTC in partnership with Jacobs.

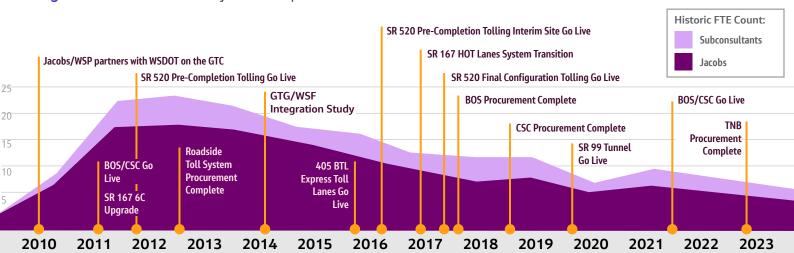


Figure 1-1. Jacobs and WSP – your trusted partners on the WSDOT GTC since 2010

WSDOT Toll Division Roadside System Implementation Support

Evolving, scaling, and adapting to the WSDOT

GTC's needs. As you double the size of WSDOT operations over the next 6 years, our team will bring you proven ability to scale as required. We offer adaptability, as demonstrated when our team brought on STC to address the need for interoperability. We will continue to scale and adapt, bringing on SMEs as required to progress your business, with expanded facilities and evolution of technology, supporting all phases of development and operations for years to come, and promoting the state of Washington as a leader in total miles and revenue on the West Coast.

A. EXPERTISE

Figure 1-2 shows our combined team's expertise and **Figure 1-3** includes our team members' offices in the State of Washington (including Greater Portland Metropolitan Area), number of employees and expertise at each location.

Jacobs

Since 1965, Jacobs has served the Northwest from our offices in Seattle, Bellevue, Richland, Spokane, Yakima, and Portland. Our Washington staff of nearly 1,500 professionals have completed some of the area's most significant infrastructure projects. Our local teams are backed by a worldwide network of professionals whose skills we can draw upon to support your needs.

Figure 1-2.

Our combined team's expertise.	Jacobs	WSP	MFA	TRAC	LEAD (D	STC (DB	Dossier	eVision
Firm Years' Experience	76	138	27	40	1*	8	2	14
Toll Systems Implementation	30+	25+	11	-	5	8	-	8
New Technology Concept of Operations & Procurement	20+	10+	-	-	-	8	-	5
Transponder Procurement	15+	10+	11	-	-	8	-	-
Roadside Procurement	30+	15+	-	-	5	8	-	1
Performance Monitoring	15+	20+	11	30+	5	8	-	
Data Reporting	15+	10+	11	30+	-	8	-	10
Operational Support	15+	10+	11	20	10	8	-	-
Program Management/ Coordination	30+	30+	11	-	20	8	-	14
Project Development	30+	30+	11	-	20	8	1	14
Project Controls, Project Management Plans	30+	30+	11	-	20	8	-	14

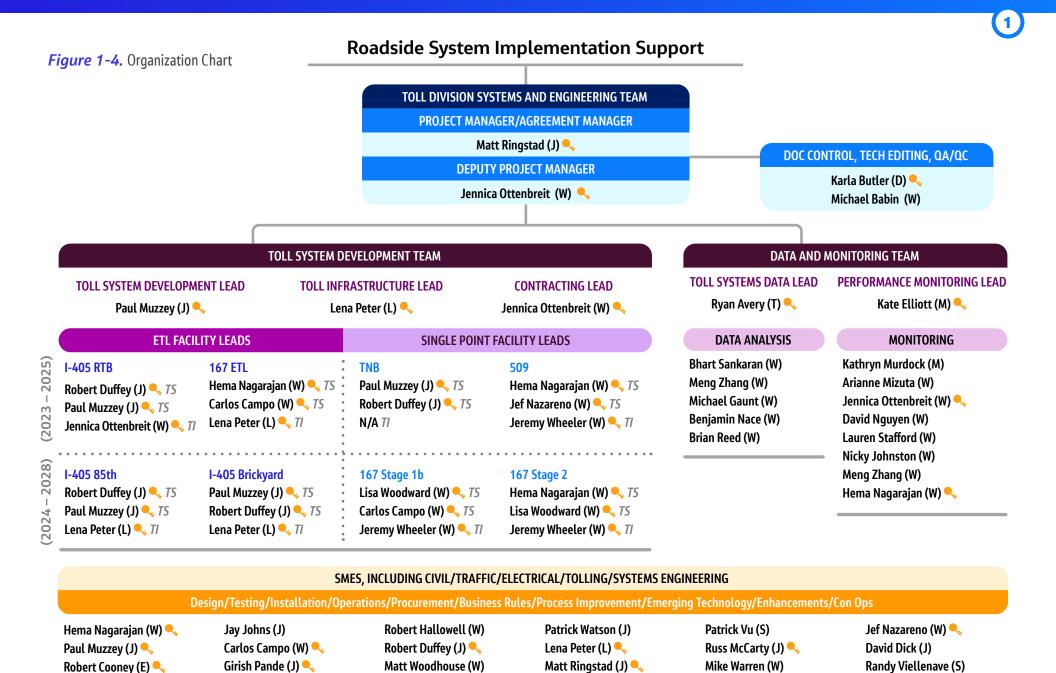
*The company LEAD has 1 year of experience; all the other numbers refer to owner Lena Peter's relevant experience.

Our combined GTC team brings WSDOT a strong local presence, with seven of the eight firms being local, as shown in *Figure 1-3*.

Figure 1-3. Jacobs and Subconsultants' Office Resources in the State of Washington (including the Greater Portland Area)

Firm Name	Office Location (Washington, Nationwide)	# of WA Employees	Type of Expertise
Jacobs	Seattle: 87, Bellevue: 504, Richland: 19, Spokane: 61, Yakima: 39, Portland: 708; Nationwide: 32,000+	1,418	Program and project management/coordination, engineering*, quality, operations management, planning, project controls, administrative support, designers, scientific, consulting, geospatial information, interior design, communications, architecture, HSE, IT, accounting and finance
WSP	Seattle: 235, Federal Way: 121, Redmond: 106, Kirkland: 39, Lynnwood: 9, Vancouver: 40, Portland, OR: 80; Nationwide: 13,000+	630	Planning, permitting, engineering, design, architecture, project and program management, and construction management
MFA	Seattle: 21, Bellingham: 7, Vancouver: 61, Portland, OR: 45, Lake Oswego, OR: 9; Nationwide: 143	143	Engineering, environmental, planning, communications, health and safety, GIS
TRAC-UW	Seattle: 9; Nationwide: 80 (including principal investigators)	9	Transportation research, performance monitoring, data reporting and analysis
LEAD	Bothell: 1; Nationwide: 1	1	Project management, transportation design, toll infrastructure, traffic signal design, signing
STC	Greater Seattle Area: 4; Nationwide: 7	4	Task management coordination, project administration, and project control services; toll systems implementation; new technology concept of operations and procurement; roadside procurement; performance monitoring; data reporting; operational support; program coordination
Dossier	Seattle: 4; Nationwide: 4	4	Document control/project administration
eVision	Nationwide: 1	0	Task management coordination, project administration and project control services; toll systems implementation; new technology concept of operations and procurement; roadside procurement; data reporting; program coordination
	TOTAL	2,209	

*Engineering includes Traffic, Tolling, Civil, Electrical & Systems Engineering, as well as expertise in Toll Operations & Management, Traffic Engineering & Operations and Civil Design Review



Robert Kopelk (S) 🔍

Les Jacobson (W)

Tracy Trexel (S)

ORGANIZATION CHART

Our integrated team (see *Figure 1-4* on the previous page) is led by **Project Manager Matt Ringstad**, who has extensive WSDOT project management experience. Matt will work with our senior management team—Deputy Project Manager and Contracting Lead, Jennica Ottenbreit; Toll System Development Lead, Paul Muzzey; Toll Infrastructure Lead, Lena Peter; Toll Systems Data Lead, Ryan Avery; and Performance Monitoring Lead, Kate Elliott—to provide WSDOT with cohesive program and technical delivery management. Express Toll Lanes (ETL) Facility Leads and Single Point Facility Leads will provide expertise for each roadway facility (Interstate 405 Renton to Bellevue [I-405 RTB], 167 ETL, Tacoma Narrows Bridge [TNB], 509, I-405 85th, I-405 Brickyard, 167 Stage 1b, and 167 Stage 2). Our team will continue its current full support for I-405 RTB, TNB, and State Route (SR) 167 upon contract execution, resulting in no lost time on these critical deployments. Our approach focuses on providing you with staffing that we tailor to the specific programs and facilities, as they are delivered.

As demonstrated in *Figure 1-1*, we have delivered resources as needed throughout the 13-year life of the current GTC contract, rising to as many as 20 FTE in 2014 and drawing down resources when no longer needed to save you money. Our GTC leadership team can access any resource or skillset required from our combined pool of 120,000 employees. This structure has proven to be efficient when we need to quickly assemble teams to deliver multidisciplinary GTC needs. Combined with our experienced leadership, this broad expertise and flexibility allows for staff to be allocated as needed to support different facilities and multiple simultaneous projects. This approach provides WSDOT with the resources needed to solve complex delivery and roadside tolling issues quickly and consistently.

Our data and monitoring team brings essential experience from working alongside WSDOT and clients across the country, providing tools such as automated reports to save staff time, dashboards to optimize operations, and targeted queries to support business needs and analysis of issues. We will carry forward our local performance monitoring team from prior Go Lives, enhancing them with additional team members with leading edge technical skills and lessons learned from Bay Area implementations.

Our team is complemented by DBE subconsultants LEAD and STC. Lena Peter from LEAD (also a Minority/Women Owned Business Enterprise [MWBE]) will take on a leadership role as Toll Infrastructure Lead, while Robert Kopelk from STC will provide system development and operations expertise. Finally, subconsultant firms MFA, TRAC, Dossier (SBE/MBE/OMWBE) and eVision will build on their years of demonstrated experience, most in partnership with Jacobs and WSP, to continue supporting WSDOT's GTC Roadside Program Operations.



B. TEAM MEMBER'S OFFICES WITHIN THE STATE OF WASHINGTON

Please refer to *Figure 1-3* above for each team member's offices within the state of Washington (and including the Greater Portland Area), including the total number of employees within each location and the types of expertise that is available at each location.

C. PROJECTS WORKED ON WITH SUBCONSULTANTS IN PAST 3 YEARS

Jacobs' teaming partners provide resources with unique and relevant skills, and they have often worked together alongside WSDOT staff. These working relationships have yielded efficiencies that only come from collaborating well over time. In the table on the next page (*Figure 1-5*) we demonstrate our effective collaboration on projects similar in size and scope and performed in the last 3 years.

Figure 1-5. Projects that Our Team has Worked on Together in the Last Three Years

General Toll Consultant, WSDOT | Jacobs: Prime, Project and Program Management

Subconsultant; project management; toll system design and testing oversight; toll infrastructure review and coordination; data analysis, queries and reporting; traffic and toll trends performance monitoring; concepts of operations; toll policy, planning and rate setting support; RFP and contract specification development; project financial planning; and toll-related environmental strategy (2010 to 2023)

General Toll Consultant, WSDOT Toll Division Jacobs: Prime, Project and Program Management Subconsultant; communications support, project coordination, performance monitoring for: Government Relations (2016-Current) (2019-2021); 2025 Toll Commencement Planning Support (2023-Current) (2019-2021); <i>Good To Go!</i> Back Office System (BOS) Transition (2017-2021) (2019-2021); SR 99 Tunne Performance Monitoring (2017-2019) (2018-2021)	
N/A. Please note that Ryan Avery, key staff from TRAC, was previously employed with WSP under the GTC contract	
SR 509/I-5 to 24th Avenue South – New Expressway Project, WSDOT Jacobs: Lead Design-Build Subconsultant to Atkinson Construction Subconsultant (Lena Peter, prior engagement); task lead for design of 20+ monotube sign structures, toll gantries, several retaining and noise walls; collabo with intelligent transportation systems (ITS) and signage task lead on overhead guide and toll signs (2021 to 2022)	rated
General Toll Consultant, WSDOT Jacobs: Prime, Project and Program Management Subconsultant for: Roadside Tolling System Operations Support: deployment of new posting software; implementation of new host equipment and upgradin network equipment; liaison with third-party vendors; operational support; oversight of system/software integration and testing (2022 to Present) Interoper and Emerging Technology: 6C transponder technology, regional and national toll interoperability, and emerging technologies (2016 to present)	•
Stride Bus Rapid Transit (BRT), Sound Transit Jacobs: Prime, Project and Program Management, Final Design and Construction Subconsultant; document control management for BRT program, including transmittal of submittals, tracking design reviews, technical editing, document production, transcribing meeting minutes and SharePoint site maintenance (2022 to present)	
General Toll Consultant, WSDOT Jacobs: Prime Consultant Subconsultant for: Back Office System Implementation: RFP development; oversight of design and development of system integrations; planning and manage transition to new BOS (2015 to 2021). Tacoma Narrows Bridge Roadside System Procurement: development of business/technical requirements; RFP prepar technical advisor, system implementation (2022 to 2023)	

D. CURRENT AVAILABILITY OF KEY STAFF AND RESOURCES

Figure 1-6 below illustrates the number of hours of availability per month, per key staff, for each quarter throughout the duration of the contract. Our Program Manager, Matt Ringstad, who understands the capabilities and capacities of the firms on our team, will monitor workloads so the right resources are available when WSDOT needs them.

Figure 1-6. Key Staff Availability

MFA

LEAD* TRAC

STC*

Dossier

eVision

Team Member (J-Jacobs, W-WSP, M-MFA, T-TRAC, L-LEAD, S-STC,		2023		2024			2025				2026				2027/2028/2029			
D-Dossier, E-eVision) Role	Q3	Q4	Q1	02	Q3	Q4	Q1	02	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Matt Ringstad, PE (J) Project Manager/Agreement Manager	80	80	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Jennica Ottenbreit, PE (W) Deputy Project Manager/Contracting Lead	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Paul Muzzey (J) Toll System Development Lead	80	80	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120
Lena Peter, PE (L) Toll Infrastructure Lead/ETL Infrastructure Coordination	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145	145
Ryan Avery, PE (T) Toll Systems Data Lead	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Kate Elliott (M) Performance Monitoring Lead	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Robert Duffey (J) Facility Co-Lead/SME	80	80	80	120	120	120	160	160	160	160	160	160	160	160	160	160	160	160
Jef Nazareno (W) Facility Co-Lead/SME	32	32	40	40	40	40	40	40	40	40	48	48	48	48	48	48	48	48
Lisa Woodward (W) Facility Co-Lead/SME	48	64	64	64	64	64	80	80	80	80	80	80	80	80	80	80	80	80
Hema Nagarajan, PE (W) Facility Co-Lead/SME	64	64	80	80	80	80	80	80	80	80	100	100	100	100	100	100	100	100
Russ McCarty, PMP (J) System Development and Operations SME	80	80	80	80	80	80	80	80	80	80	120	120	120	120	120	120	120	120
Carlos Campo, PE, PMP (W) Facility Co-Lead/SME	60	60	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Girish Pande (J) System Development and Operations SME	32	32	32	32	64	64	80	80	80	80	80	80	80	80	120	120	120	120
Robert Kopelk, PMP (S) System Development and Operations SME	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Karla Butler (D) Document Control and Technical Editing	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160	160
Robert Cooney, PMP (E) System Development and Operations SME	48	48	64	64	64	64	64	64	64	64	80	80	80	80	100	100	100	100
Arianne Mizuta, PE (W) Performance Monitoring	40	40	80	80	80	80	80	80	120	120	120	120	120	120	120	120	120	120
Jeremy Wheeler, PE (W) Single Point Toll Infrastructure	32	32	32	32	96	96	96	96	96	96	128	128	128	128	128	160	160	160

E. SIMILAR RELEVANT PROJECT EXPERIENCE

CURRENT GTC TEAM (JACOBS, WSP, MFA, STC, EVISION)

The current GTC team has worked with WSDOT since 2010, providing ongoing operational support for your statewide toll system, as well as procurement and implementation support for newly tolled roads and extensions for back office and roadside systems.

WSDOT GENERAL TOLLING **CONSULTANT (GTC)**

PAY BY 2 AXLES \$4.30 \$6.30

WSDOT, 2010-Present Budget: \$62M (total), \$39M (Jacobs), \$9.8M (WSP), \$320K

(MFA), \$550K (eVision), \$830K (STC) | Firms: Jacobs, WSP, MFA, eVision, STC | Personnel: Matt Ringstad, Jennica Ottenbreit, Paul Muzzey, Robert Duffey, Girish Pande, Russ McCarty, Jay Johns, Tim Arnold, Yang Yang, Les Jacobson, Ryan Avery, Michael Gaunt, Arianne Mizuta, David Nguyen, Jeremy Wheeler, Matt Woodhouse, Hema Nagarajan, Benjamin Nace, Meng Zhang, Kate Elliott, Robert **Cooney, Robert Kopelk**

- ✓ Toll System Implementation
- New Technology
- **Project Controls/Project**
- Program Management/ **Coordination; Project** Management
- **Management Plans Transponder Procurement**
- **Roadside Procurement** J ✓ Operational Support

Our current GTC team is providing Program Management and Strategic Business Advisory Services throughout the state of Washington under a multi-year General Tolling Consultant (GTC) contract with WSDOT Toll Division. The GTC assists the Toll Division with the management of toll planning, development, and delivery, toll operations, and toll maintenance across the state. During our time as General Tolling Consultant, the Toll Division has implemented five toll projects, including: SR 520 (temporary toll system), SR 520 (ultimate toll system), I-405 ETL from Bellevue to Lynwood, SR 99 Toll Tunnel, and SR 167 Extension.

Specific program management and toll-related services under this program include, but are not limited to: contract management, strategic advisor to the Toll Director, WSDOT staff development in national toll practices, toll project management and controls, technology standards development, toll facility standards development, toll payment enforcement, adjudication process assistance, toll operations element identification and definition, toll operations cost analysis, all-electronic tolling (AET) best practice(s) identification and definition, system and projectlevel concept of operations, procurement development, procurement implementation support, toll payment methods assessment, business rules development, toll rate and feesetting, and traffic and revenue forecasting.

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Additional toll development services include planning, pre-design, toll system design, procurement, acceptance and evaluation of toll lanes, active traffic management, and customer service software/programs.

This project demonstrates our ongoing resourcefulness and commitment to WSDOT Toll Division in the critical areas of toll system implementation, data reporting, and performance monitoring.

JACOBS AND WSP

Program Management/Strategic Planning: Provided more than 70 tasks, more than 10 subconsultants, and over 200,000 hours in support of the Toll Division creation. Delivering research, planning and oversight of the central elements to implement and maintain the Back Office System (BOS) and all facility commencements to date.

Tolling Vendor Oversight and Management: The Toll Division organization relies on the procurement and continuous management of three key vendors: the enterprise-level customer account management system supplier (ETAN), the toll facility system providers (Kapsch and TransCore), and the Customer Service Center Operations Vendor (Shimmick). All three require specialized subject matter expertise. Jacobs and WSP have provided key staff to support WSDOT, strategic planning and oversight of these vendors prior to and through the contract lifecycles. Jacobs and WSP have successfully supported all phases of each vendor's growth, from request for proposal (RFP) development, procurement, award, design, implementation, testing, transition, commencement/Go Live, and ongoing operations.

Contractor Coordination (Civil Contractor): Jacobs, with WSP's support, has successfully provided necessary toll infrastructure and contractor coordination for SR 520, I-405, SR 99, and SR 167. This coordination is not limited to just the prime and subcontractors of a given facility, but also the WSDOT Megaprograms office to verify that the necessary equipment installed meets the vendor and Toll Division requirements.

Document Control/Subject Matter Reviews: The GTC team dedicated to the WSDOT Toll Division has been providing subject matter reviews for over a decade. As a general best practice for managing software development vendors, we measure the project progress by a series of defining documents that track through the software development lifecycle, providing clear intent and execution of the system being installed. Jacobs and WSP not only provide critical reviews and recommendation of approval, the team leverages Jacobs QA/QC standards, and has installed a rigorous review structure to track, manage, respond to, and incorporate edits back to the vendor.

Change Control: As with many programs, directives, funding, and even external stakeholders can alter a particular approach at any moment. Jacobs has supported and documented key change management, not only by shifting necessary support to new priorities within the program, but also through oversight and contract management that governs each vendor.

Go Live: Jacobs and WSP have helped deliver eight Go Lives, which include all active roadway tolling facilities, back offices, and customer service center (CSC) Operations vendors.

Concepts of Operations: WSP has supported Toll Division system planning by preparing a Toll Division programmatic Concept of Operations with corridor specific supplemental Concepts of Operations, and additional updates as facilities are added to major corridors.

Data Reporting: Jacobs and WSP have provided ongoing data reporting, largely in back office operations reporting as well as support for roadside, finance, and customer service. WSP recently automated the time-consuming reporting processes, resulting in savings to WSDOT of nearly one FTE. WSP also developed bespoke dashboards to help WSDOT operations staff more quickly identify system issues.

Performance Monitoring: Jacobs and WSP have performed pre- and post-tolling stakeholder coordination, data collection, planning and reporting around roadway, back office and customer service Go Lives. Post-Go Live reports are co-developed with WSDOT traffic, toll operations, and communications staff.

MFA

Communications and Government Relations: MFA serves as an extension of the Toll Division team and works directly with the Toll Division director, WSDOT secretary, and assistant secretary to support division initiatives and coordination with partner agencies, and works with the Office of Financial Management and the Office of the Governor tomaintain consistency with statewide priorities and incorporate ongoing legislative and statutory requirements. MFA also assists the division with budget and business planning efforts.

Performance Monitoring: MFA provided project management support, stakeholder coordination, reporting coordination and communications coordination during the multi-phase performance monitoring reporting of the SR 99 tunnel opening to traffic and then the SR 99 tolling Go Live. **Go Live Plan:** MFA developed a complete Go Live plan inclusive of multiple disciplines and coordinated efforts with the City of Seattle, King County Metro, Port of Seattle, and Sound Transit.

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MFA also provided government relations support to communicate Go Live issues to relevant policy makers, communicating proactively so that they were aware of potential concerns and how WSDOT is working to address them.

<u>STC</u>

Interoperability and Emerging Technology: STC provides support to WSDOT in: 6C transponder technology, regional and national toll interoperability, and emerging technologies. STC supports WSDOT's membership in the Western Region Toll Operators Committee (WRTO), California Toll Operators Committee (CTOC), and National Interoperability meetings to create national electronic toll collection interoperability. STC is updating the WRTO/CTOC Tolling Technical Specification document, which specified how West Coast toll operators' systems interface. For 6C transponder technology, STC updates 6C specifications and supports WSDOT's membership in the 6C Coalition.

Roadside Tolling System Operations Support: STC is providing operational support to the five facilities including coordinating daily activities, confirming tasks are completed on time, and contract/change order management.

STC provides oversight of system/software integration and testing of any new functionality manages issues. Specific operations support efforts included managing deployment of new posting software on toll rate signs, coordinating implementation of new host equipment, and upgrading toll network equipment, including liaison with third-party vendors.

EVISION

Back Office System Implementation: eVision's Robert Cooney assisted in developing business and technical requirements and preparing the RFP for the WSDOT Toll Division's new BOS. During implementation, Robert provided oversight of the design and development of the BOS integrations. He also served as WSDOT's Transition Manager. Robert's close collaboration with each stakeholder group and careful planning and execution of the transition process resulted in a smooth transition to and start-up of operations in the new BOS.

Tacoma Narrows Bridge (TNB) Roadside System: Robert led development of business and technical requirements and assisted with preparation of other sections of the RFP for the new roadside system for TNB. He is currently assisting WSDOT as a technical advisor during system implementation.

JACOBS

WSDOT GTC - Please refer to the project description above.

NHDOT STATEWIDE TOLL ON-CALL



New Hampshire Department of Transportation (NHDOT), 2010-Present | Budget: \$2.02M (total), \$2.02M (Jacobs) | Firms: Jacobs | Personnel: Paul Muzzey, Robert Duffey, Girish Pande, Jay Johns, Patrick Watson

Toll System Implementation Program Management/

Coordination; Project Management

 Roadside Procurement **Operational Support** ✓

As NHDOT's prime consultant providing on-call toll system consulting services, we have provided procurement and implementation support for multiple Toll Collection System(s) (TCS) and a BOS. Under this program, we manage a portfolio of tasks to achieve NHDOT's tolling goals, including AET program planning, policy and business rules development, RFP development for roadside and BOS procurements, oversight of implementation, as well as toll operation risk mitigation analyses. Recently Jacobs provided oversight support to the NHDOT for the upgrade and replacement of their legacy TCS and is now currently supporting a renewal and replacement of that system. Efforts included the development of functional and technical requirements for and preparation of an RFP, procurement and negotiations support.

Program Management/Strategic Planning: Jacobs has coordinated in parallel multiple disciplined task orders ranging from risk analyses, AET planning to oversight of several vendor implementations.

Tolling Vendor Oversight and Management: Throughout our tenure on this project Jacobs has provided oversight and supported two statewide TCS replacements, several vendor technology upgrades and implementation of a new BOS and CSC.

Document Control/Subject Matter Reviews: Jacobs has provided numerous reviews ranging from vendor designs

This project represents our continued dedication in providing the full range of toll system implementation services while at the same time continuing to build a trusted relationship with our client.

NY MTA TOLL **ON-CALL SERVICES**

New York Metropolitan Transportation Authority (NY MTA), 2014-Present Budget: \$9.95M (total), \$6.97M

(Jacobs) | Firms: Jacobs | Personnel: Paul Muzzey, Robert Duffey, Girish Pande, Jay Johns, Patrick Watson

- Toll System Implementation New Technology
- Program Management/ Coordination; Project
- **Roadside Procurement** ✓ Operational Support

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Management

Since 2014, under a Toll Support Services Contract, we've provided tolling project management, consulting, and project oversight services for the MTA's Bridges and Tunnels (B&T) department. Most notably, we've supported the B&T's systemwide conversion to AET, from early piloting of cashless tolling at the Henry Hudson Bridge to supporting the eventual system-wide migration to AET. We also provided oversight of the toll system vendor during software and hardware upgrades of their lane systems to accommodate new functionality such as credit card payment, automation of collector activities, and lane processing.

Tolling Vendor Oversight and Management: Jacobs provided oversight to both Kapsch during implementation of a cashless tolling pilot and to TransCore during a full systemwide conversion to AET.

Document Control/Subject Matter Reviews: In addition to both system and infrastructure design reviews Jacobs also provided on-site staff to assist in post-Go Live performance monitoring and key performance indicator (KPI) verification.

Catastrophic Event Management System (CEMS): Under a current task order, Jacobs is providing planning and oversight of a CEMS to supplement or recover toll collection operations in the event of a major systemwide failure and preserve revenue collection.

Program Harmonization: Under a current task order, Jacobs is supporting a harmonization study to assess the impacts of the MTA's tolling operations and the planned congestion pricing program in Lower Manhattan with a focus on mitigating conflicting business rules and impacts to customers as they traverse both facilities.

This project represents not only our ability in providina vendor oversight and implementation services but also our capability to proactively identify larger overarching program needs such as the CEMS and harmonization.



WSP

WSDOT GTC - Please refer to the project description above.



REGIONAL EXPRESS LANES PROJECT

Bay Area Infrastructure Financing Authority (BAIFA), 2018-Present | Budget: \$9.9M (total), \$5.1M WSP | Firms: WSP, STC | Personnel: Jef Nazareno, Hema Nagarajan, Carlos Campo, Arianne Mizuta, Lauren Stafford, Nicky Johnston, Lisa Woodward

- ✓ Toll System Implementation
- Project Controls/Project Management Plans
- Program Management/ Coordination; Project Management
- ✓ Roadside Procurement
- ✓ Operational Support

This contract is third in a succession of program management contracts WSP has held supporting BAIFA to plan and implement the Bay Area Express Lanes network. WSP provides technical and strategic support for the planning, implementation, and operation of the program. WSP supports the toll vendor toll system implementation and operational readiness when opening new express lanes, preparing for changes in technology or business requirements, developing procurement strategy, providing public education and program controls, coordinating and facilitating the flow of information and lessons learned between projects, and providing contract management and administration. WSP supports management of schedule, risk, and budget, while also focusing on best practices for toll systems and the systems engineering process. WSP also works closely with Metropolitan Transportation Commission (MTC) and facilitates ongoing knowledge transfer.

Through this contract, WSP has supported the I-880 corridor, which introduced access restrictions and occupancy changes, I-680 North, the SM-101 Express Lanes, and the Solano I-80 Express Lanes, in close coordination with Caltrans, Contra Costa Transportation Authority (CCTA), San Mateo County Express Lanes Joint Powers Authority (SMCELJPA), and State Transit Assistance (STA) and their final design teams.

This project demonstrates WSP's experience as a trusted toll advisor for planning, implementation and operations of dynamic toll system portfolios.

INTERSTATE 5 BRIDGE REPLACEMENT PROGRAM

WSDOT, 2020-Present | Budget: \$92M (total), \$35M WSP | Firms: WSP | Personnel: Jef Nazareno, Carlos Campo, Matt Woodhouse

- ✓ Toll System Implementation
- Program Management/ Coordination; Project Management
- Project Controls/Project Management Plans
- Roadside Procurement
- ✓ Operational Support

WSP is serving as an engineering consultant for the Interstate 5 Bridge Replacement (IBR) Program, a bistate effort to replace the Interstate 5 (I-5) bridges across the Columbia River. The IBR program team consists of an integrated team of consultants and staff from both the Oregon Department of Transportation (ODOT) and WSDOT.

WSP provides an array of toll advisory services on this project, such as identifying and assessing funding and revenue sources, performing legislative analysis and coordination, and operations and maintenance planning. The team also reviews ODOT's managed toll system approaches for deployment on the I-5 Bridge crossing and provides toll infrastructure planning and procurement recommendations to the IBR team. WSP manages the IBR program dashboard and risk matrix for toll activities, provides input to the master schedule and work package division, and assists IBR staff with overall coordination with ODOT's General Toll Consultant.

This project exemplifies WSP's experience working as an integrated team with WSDOT and other stakeholders providing high-quality program coordination and toll advisory services.

MFA

WSDOT GTC - Please refer to the project description above.

INTERAGENCY COORDINATION

WSDOT, 2023-2027 | Budget: \$600K Firms: MFA | Personnel: Kate Elliott

MFA stood up a process, planned and led all aspects of interagency coordination for Puget Sound area constructions activities with WSDOT Megaprograms, cities of Seattle and Bellevue, Port of Seattle, Northwest Seaport Alliance, King County Metro, Community Transit, Pierce Transit and others. The outcome of this effort is a coordinated effort to plan and organize regional construction projects to keep traffic moving, while building awareness and support between WSDOT and our interagency partners. *This interagency process is similar to the outreach and coordination required for launching a new toll facility and performance monitoring*.

TRAC

Ryan Avery brings lead database analysis experience on the WSDOT GTC project, and expertise working with TRAC UW on WSDOT's Tolling Programs.

TOLL EQUITY ANALYSIS OF WSDOT'S TOLLING PROGRAMS

WSDOT, 2022-2023 | Budget: \$200K from WSDOT | Firms: TRAC | Personnel: Mark Hallenbeck, Angela Kitali, Samuel Ricord, Ryan Avery, and Yinsheng Kou

This project is an extension of previous Toll Equity work performed by TRAC for WSDOT. It expands the analysis of toll equity to include all five WSDOT toll facilities, including two dynamically priced high-occupancy toll (HOT lanes) (I-405 and SR 167), two static, time-of-day priced facilities (SR 520 and SR 99), and one traditional toll facility (SR 16). The project also expands techniques to include the analysis of Location Based Services data on trip origins and destinations along with route choice to examine who is using each of the toll facilities, who is making similar trips but not using the toll facilities, and how often each of those uses is occurring. Results are summarized by income and geographic location. *WSDOT and the State Transportation Commission will use the outcomes in direct consultation with the Legislature as part of ongoing reviews of tolling policy.*

LEAD (DBE)

LEAD's Lena Peter has extensive toll infrastructure system development and operations experience. LEAD brings the DBE perspective to our team.

SR 509/I-5 TO 24TH AVE SOUTH – NEW EXPRESSWAY PROJECT

Atkinson, 2021-2022 | Budget: \$295M (total), \$1M+ (prior engagement, subconsultant to Jacobs). Firms: Jacobs | Personnel: Heather Weeks, Cory Caywood, Lena Peter

Managed the design of all 20 monotube sign structures and supported the Task Lead for Intelligent Transportation Systems (ITS) on the design of the Toll Gantries. Participated in weekly WSDOT task force meetings, weekly design team meetings and coordinated with all other disciplines, especially with roadway, drainage, illumination, and signing. During the construction phase, coordinated with the prime contractor on requests for information (RFIs), contractor submittals, and shop drawings. *This project involved frequent team collaboration among various disciplines along with the owner, contractor, and vendors. As a result, the construction plan submittals were technically excellent, thorough, and well sequenced*.

SR 167/I-5 TO SR 509 – NEW EXPRESSWAY PROJECT

Atkinson, 2022 | Budget: \$376M (total), \$1M+ (prior engagement, subconsultant to Jacobs) | Firms: Jacobs | Personnel: Eric Crowe, Jim Telepak, Lena Peter

Managed the design of the underground joint utility trenches for the project's electrical and communications system. Attended routine coordination meetings with the utility owners (City of Fife, Comcast, Lumen, and Tacoma Public Utilities [Power and Hybrid Fiber/Coaxial network]). Attended weekly utility coordination meetings, produced exhibits of various design alternatives for discussion and decisions, attended weekly design team meetings, and coordinated with all other disciplines, especially with roadway, drainage, illumination, and sewer. During the construction phase, coordinated with the contractor on RFIs, contractor submittals, and shop drawings. *This project involved multi-jurisdictional agency coordination and fostered an environment of effective collaboration. It was also successful in overcoming technical challenges within the compressed construction schedule.*

STC (DBE)

STC, as another DBE, will also enrich our joint team's expertise, contributing to this project by bringing their system development and operations knowledge and experience.

WSDOT GTC - Please refer to the project description above.

ELECTRONIC PAYMENT SYSTEMS (EPS) CONSULTANT ASSISTANCE SERVICES

Bay Area Toll Authority (BATA), 2016-Present | Budget: \$750K (total) | Firms: STC | Personnel: Patrick Vu, Robert Kopelk, David Pope, Randy Viellenave

BATA tasked STC with supporting efforts to change BATA's toll collection system for its seven bridges, including Dumbarton Bridge, to accommodate 6C transponders in addition to the existing Title 21 transponders. STC supported BATA staff with requirements development, vendor oversight of design, testing and installation. BATA contracted STC to provide support for itself and the members of the California Toll Operators Committee (CTOC) in planning for and implementing the transition from the Title-21 transponder protocol to the 6C transponder protocol and for advancing Western Region tolling interoperability. Patrick Vu supported Caltrans with rulemaking changes to the Title-21 Regulation, economic analysis and public outreach, which resulted in California adopting 6C in January 2018. STC also supports BATA on national tolling interoperability efforts as well as providing subject matter expertise for CTOC and Western Region Toll Operators (WRTO). Being at the forefront of national interoperability, new emerging technologies, such as occupancy verification technologies, and 6C standards development allows our team to better advise WSDOT on industry trends and help future proof selection of technologies and approaches as WSDOT's tolling network expands.

REGIONAL EXPRESS LANES PROJECT

Metropolitan Transportation Commission (MTC)/Bay Area Infrastructure Financing Authority (BAIFA), 2015-Present | Budget: \$1M (total subcontracted via WSP), \$760K (spent) | Firms: STC, WSP | Personnel: Patrick Vu, Randy Viellenave

The Regional Express Lanes project consists of supporting BAIFA from concept through operations of a network of express lanes on I-680, I-880, I-80, and US 101. The project included developing regional tolling business rules for the express lanes, drafting toll system procurement documents, creating a change order for the FasTrak Regional Customer Service Center (RCSC), and updating the System Engineering Management Plan (SEMP). After supporting BAIFA's evaluation of responsive vendors and overseeing design, developed and did test planning of the toll collection system and RCSC change. This project includes close coordination with CCTA on the I-680 corridor and Caltrans on all MTC express lane corridors. STC has delivered project deliverables on time and within budget. BAIFA's pursuit of more modular roadside toll system functionalities aligns well with WSDOT's approach to having more open standards and transparency in system performance. Our team's experience and lessons learned gained from procuring, implementing, and operating these express lanes can be applied to WSDOT's network buildout.

DOSSIER

Dossier brings document control and technical editing experience for WSDOT and other agencies' projects to benefit the team.

WSDOT NORTHWEST REGION GENERAL ENGINEERING CONSULTANT (GEC) SERVICES

WSDOT, 2023-Present | Budget: \$50M, \$534K (Dossier) | Firms: Dossier | Personnel: Karla Butler

This project serves staffing and engineering services for multiple WSDOT projects, including full design through plans, specifications and estimate (PS&E) and design services during construction. Karla created a document control system on SharePoint to allow for expedient coordination between WSDOT and the GEC team on design submittals. Along with administering the document system protocol, she confirms that project information is readily available to the team. She is also responsible for technical editing, document production, and managing the submittal review process. *This project enhanced Dossier's knowledge of WSDOT record management requirements and deliverable procedures.*

1

STRIDE BUS RAPID TRANSIT (BRT) GENERAL ENGINEERING CONSULTANT (GEC)

Sound Transit, 2022-Present | Budget: \$1.8B | Firm: Dossier, Jacobs | Personnel: Karla Butler

Sound Transit's BRT is a new fast, frequent, and reliable bus service connecting to light rail and to communities north, east, and south of Washington. Within each service line, LEAD provides direction and guidance for the document control specialists assigned to each individual contract. This includes liaison with partner agencies such as WSDOT. *The outcome is the effective management of a program-wide document management system with over 1,600 client deliverables.*

EVISION

eVision's relevant project experience in system development and operations will benefit our team and your project. They have been an important team member to Jacobs and WSP on the WSDOT GTC BOS Implementation and the TNB Roadside System; please refer to the GTC project description above.

WSDOT GTC - Please refer to the project description above.

ENTERPRISE RESOURCE PLANNING (ERP) AND RELATED MANAGEMENT SYSTEMS

West Virginia Department of Transportation (WVDOT), 2020-Present | Budget: \$3.7M (total), \$1.7M (eVision). | Firms: Mott MacDonald, eVision | Personnel: Robert Cooney

eVision assisted WVDOT to define requirements, prepare RFPs, and support solution selection and negotiations for a new maintenance management system, fleet management system, and safety management system, including required integration points with the statewide ERP system. Following selection of solutions, eVision has served as a technical advisor and owner's representative for WVDOT during implementation of each of the new systems and a new program and project management system. eVision's close collaboration with the various WVDOT stakeholder groups assisted in defining the key requirements needed in the new systems to support solution selection, as well as identifying opportunities to reengineer business processes to drive increased efficiency as part of the system implementation effort.

CRITERIA 2: QUALIFICATIONS OF PROJECT MANAGER AND DEPUTY PROJECT MANAGER

"The Jacobs team is great. Staff provided have been appropriate in number and skill set. The Jacobs team are considered members of the WSDOT team, providing significant support, and developing very good relationships. Matt is a fantastic asset."

- Ed Barry, Director of Toll Divison, WSDOT GTC Customer Satisfaction Survey 2022

PROJECT MANAGER MATT RINGSTAD, PE

Commendable history of program oversight and

understanding of WSDOT and partner processes. To deliver the Toll Division Roadside System Program, Project Manager Matt Ringstad, PE, will draw on 12 years of supporting and 3 years leading the GTC Contract, and 22 years of experience leading contracts, coordinating with key stakeholders, and designing mega design-build projects, all for WSDOT. He will also act as the Agreement Manager. Matt has formed his team based on established partnerships, core local presence, bestin-class expertise, direct WSDOT experience, and a proven delivery model. To support future growth for WSDOT and mitigate and promote agility around change, he will leverage relationships across the toll division to create a comprehensive process and integrated change management team.

Matt's most recent role is overseeing WSDOT's General Tolling Consultant (GTC) as Program Manager to implement AET on five corridors across the region. Matt understands how to work with WSDOT's stakeholders to keep projects moving. He emphasizes responsiveness, collaboration with partners, identification and management of complex program risks, consensus-building, and proactive strategic scheduling to move third-party approvals off the critical path.

Experience managing multidisciplinary resources on similar contracts. Matt is adept at working with multidisciplinary teams with expertise from infrastructure design to enterprise systems to meet project objectives. He guides project teams through the project, advising best practices, contract and pricing reviews, navigating challenges, and evaluating project performance metrics. He currently oversees \$80M+ WSDOT contracts serviced by Jacobs (Olympic Region GEC), while managing the Toll Division GTC. He provides continuity of a trusted resource manager who can successfully leverage a team's diverse capabilities to optimize the responsiveness needed for this program.

Holistic vision to meet WSDOT's project delivery goals. Matt will leverage his recent experience initializing and growing a program for the Olympic Region GEC, using established tools and processes to set up task order delivery at start-up and as programs progress. He has established an efficient scoping and budget process to move from anticipated need to task order execution in under 30 days. He will anticipate, address, and track needs on the critical path, and begin placing staff within 30 days of selection and developing a 90-day start-up plan. This forethought establishes the architecture, priority of key resources, documentation, and readiness necessary to successfully manage concurrent facility onboarding at a system-wide scale.

A. EXAMPLES OF PRIOR EXPERIENCE

The GTC program has been a multi-phased 13-year program. Matt has served in several roles, taking increasing responsibility; he is now the Program Manager/Program Executive. In partnership with WSP, MFA, STC and eVision, the GTC has successfully supported WSDOT in building the toll division onboarding roadside infrastructure spanning five current facilities, two generations of back-office systems, and two customer service centers that generate approximately \$200 million in WSDOT revenue annually.

GTC Program, Phase 3, WSDOT. Program Manager/ Program Executive (2019-2022)

Matt led WSDOT's implementation of the tolling BOS, which was challenging due to an under-resourced vendor, which caused a delay to the design, development, and implementation. He led the management team tracking risks and isolating issues, while also pursuing cost savings, monitoring contract compliance and contract amendments, managing the budget, and providing strategy. Matt expanded his Jacobs and WSP consultant team, providing technical and management expertise within the vendor team to foster transparency and alleviate the vendor's sliding schedule. This approach led to a successful onboarding of the new system in July 2021. This phase simultaneously added the SR 99 facility and produced a new procurement for the TNB Roadside Tolling Facility. In 2022, the program scaled to support system operations, financial management, data reporting, facility expansion and program management.

Benefit to WSDOT: Matt's agile and scalable leadership will sustain large, complex programs through unforeseen circumstances. Matt can adapt and improve open, collaborative team-building while maintaining intra- and inter-agency trust.

GTC Program, Phase 1 and 2, WSDOT.

Deputy Program/Project Manager (2011-2019) Matt helped WSDOT deliver the work plan by organizing the program controls to deliver the resources needed to task, manage, and track multiple concurrent task orders simultaneously. He was instrumental in the mobilization and administration of multidisciplinary teams to deliver more than 20 concurrent program tasks; the team's support extended into WSDOT, outside agencies, and two vendor teams. Emphasis on central management, leadership structure, and building the right communication cadence were key to a successful deployment. Matt developed tools and management processes to initiate, maintain, and track the success of each task order to get ahead of emerging issues or schedule priorities. Matt collaborated with and supported the Toll Division to create a GTC that was both nimble and scalable. He directly coordinated with Consultant Services Office (CSO), Toll Division business group, and project managers to streamline and track the process to respond quickly to any need.

Phase 2 added four toll roadways. WSDOT priorities shifted based on technological advances in the industry and limits of the existing system. Matt quickly established key support tasks to develop cost estimates, budgets, procurement documents, and support WSDOT in selecting next generation vendors for both the operations and customer service back office. Matt's task execution, tracking, and management tools became essential to WSDOT in developing and maintaining the workplan. He led the BOS RFP development, meeting the legislative schedule, and acted as procurement chair, managing both the WSDOT scoring team and consultant support team, successfully awarding the new Back Office Vendor in July 2017.

Benefit to WSDOT: Matt knows Toll Division and WSDOT processes and can quickly mobilize task orders to provide Tolling access to multidisciplinary teams with the right technical experts.

Alaskan Way Viaduct Replacement, WSDOT and Seattle Department of Transportation (SDOT). Project Manager – Document Control (2008-2010)

For this \$3.5 billion program, Matt established critical leadership skills and grew his understanding of WSDOT processes as well as extensive stakeholder coordination in a politically charged setting to negotiate controversial design deviations. The final documentation approval included preliminary plans, major deviations, estimates, and risk assessment. Matt supported the design for the SR 99 Bored Tunnel design concept and draft EIS. He administered design/deviation coordination between Federal Highway Administration (FHWA), WSDOT, and Seattle Department of Transportation (SDOT) leadership to develop and process required project design documentation and deviation approval between stakeholder agencies.

Benefit to WSDOT: Matt understands how to effectively navigate complicated stakeholder coordination and approvals to move large-scale projects forward.

B. FAMILIARITY WITH RELEVANT STATE AND FEDERAL REGULATIONS AND/OR PROCEDURES

Matt is a licensed Professional Engineer in the state of Washington who has worked on WSDOT and Tolling projects for the last 22 years. He is an expert agreement manager on task establishment, amendments, and exclusively managing and tracking through the WSDOT Consultant Service processes. He has personally executed the process for over 100 tasks and amendments servicing the Toll Division. Matt also brings design experience implementing state and federal processes and has applied the following WSDOT Manuals in his designs: Organizational Conflicts of Interest (M 3043) | Std Specs – Road, Bridge, & Municipal Construction | Consultant Services Manual (M 27-50) | Standard Plans (M 21-01) | Plans Preparation Manual (M 22-31) | Agreements Manual (M 22-99) | Design Manual (M 22-01) | Construction Manual (M 41-01) | Roadside Manual (M 25-30) | Roadside Policy Manual (M 3110) | Local Agency Guidelines (LAG)

C. ABILITY TO MANAGE SCHEDULE, SCOPE, BUDGET, AND CHANGES

WSDOT GTC Program. Deputy Program Manager/Program Executive, (2011-2022)

Matt supported tolling leadership to develop work plans, and budgets to scope and respond to the evolution of the program. Projects included alternatives analyses, PS&E packages, and QA/QC. Beginning in 2017, Matt led the design, development, and implementation phases of the next generation BOS replacement project, completed in 2021. His team included diverse technical disciplines to manage and oversee the selected vendor. Matt and his team worked seamlessly with the WSDOT tolling division, accounting and finance, Attorney General's Office, WSDOT IT, more than 10 third-party interfaces, and an array of stakeholders to provide reviews of all deliverables to meet all WSDOT requirements.

Adhere to project schedule: Matt and his team used Microsoft Project to develop a baseline schedule at the point of execution. Updated schedules were then provided with monthly project invoices, including a progress of actions and deliverables under each task order. During the BOS replacement, Matt authored the WSDOT project schedule and ultimately assumed the ownership of the vendor project schedule, which increased vendor transparency and shored up the correct work breakdown structure (WBS) to give WSDOT a clear forecast of the progress made and level of effort remaining at any time.

Adhere to scope of work/avoid scope creep: During the GTC program, Matt worked with WSDOT and consultant teams to develop metrics and reporting mechanisms, including task order weekly project updates, and a biweekly bulletin for the internal consultant team and tolling executives to track task order progress. The bulletin was a full-transparency, one-page tool designed to assess responsiveness (time from task order initiation to execution); task order progress and assignments; and task order contract budgets, status, and remaining budget. The tool was then applied to all active Jacobs GECs in the Northwest, enabling WSDOT to assess upcoming activities, lessons learned on deliverables, DBE percentages, subconsultant usage, and processing times for all parties, including a "ball in court" for pending actions that was especially helpful in coordinating with CSO.

Matt oversaw monthly project reviews and internal controls to maintain accountability during the entire process, applying a "no surprises" approach on projects. Reporting was not limited to tasks, but also supported WSDOT reporting needs within the projects. Matt routinely used project presentations and status reports to communicate progress to WSDOT Executive Steering Committees, Legislative Staff, Office of the Chief Information Officer, Washington Transportation Commission and Office of Financial Management. Matt developed a project workbook, used to standardize and formalize project management best practices, which includes planned project aging and compares actuals to planned expenditures monthly for management of WSDOT, consultants, and vendors.

Communicate regarding budget issues: Matt provided monthly progress reports to each WSDOT project manager with invoicing and during a monthly contract officer review of all task orders with a detailed breakdown of metrics, progress, risk, and change. These reports summarized contract amount, remaining budget, the amount expended to date, earned value analysis (if necessary), and estimate at completion. Jacobs also included summary information of all task orders, budgets, burn rates and GTC progress in a one-page biweekly summary. These tasks were fully transparent and available in a detailed format for all project managers (across Tolling) and the WSDOT Contract Manager. As the program evolved, Matt developed, reviewed, and/or negotiated the majority of GTC task orders (over 100 in total), including working with WSDOT and more than 10 task order managers to create or review the scope, schedule, and budget and to set tools and expectations for managing quality and risk.

2

Manage changes that arise throughout the life of the project: Matt employed a risk register on larger task orders, or a risk list on smaller task orders. Forecasting potential risk helped inform the WSDOT project manager, contract officer, and team, who worked collectively to manage potential triggers. Regular communication facilitated discussions at appropriate levels within WSDOT and avoided surprises. Once a change was acknowledged and resulted in a scope revision, increase in budget, or time extension, it was moved from a risk to a change and tracked as a task order amendment as part of the progress report, contract review, and biweekly task tracker. Changes occurred as WSDOT evaluated needs and requested additional services. For example, the toll division needed a variety of staff to support legislative required reporting. Matt responded by providing two communication and two technical leads to establish the necessary cornerstone reports and communication channels.

Matt believes managing task orders to budget and schedule helps reduce or eliminate scope creep. However, sometimes circumstances change or WSDOT directs change. Matt established formal tools and processes that required acknowledgment and approval of scope change, including a change management log for each task order and regular reporting to show how changes impact budget, schedule, and deliverables. Matt developed a management reserve sub-task under complicated GEC tasks and projects. The reserve was available for client-directed changes that provided maximum flexibility and resulted in budget revisions that minimized administrative amendments. This enabled the project to progress without requiring a change order. Matt would initiate a conversation with WSDOT, and if approved, the change was tracked in the change management log and applied to the existing budget as an approved allocation of the management reserve. Providing a management reserve and process for use was a solution to keep projects moving.

D. LICENSES AND ACCREDITATIONS

BS in Civil Engineering/Natural Resource (Transportation and Road Design emphasis), University of Washington | Professional Engineer, (Civil): WA, #43706, June 2007 | Project Management Advancement Program and Certification, 2018 | Lean Six Sigma – White Belt Certification | Jacobs Certified Project Manager/Manager of Projects, 2021. "Jennica is extremely well-organized, responsive, an excellent communicator, a great team player, and always goes the extra mile to accomplish the goals of the project. I have thoroughly enjoyed having her as part of my team."

- Jennifer Charlebois, Deputy Director, WSDOT Toll Division

DEPUTY PROJECT MANAGER JENNICA OTTENBREIT, PE

Deputy Project Manager and Contracting Lead Jennica Ottenbreit is experienced in project management, electronic tolling, intelligent transportation systems, traffic signal, and traffic operations projects. She currently serves as WSP's agreement manager and deputy program manager for the WSDOT General Toll Consultant contract, as well as deputy project manager for toll infrastructure to the WSDOT project manager for the I-405 Renton to Bellevue ETL toll system implementation project. Jennica has served as extension of staff to state DOT clients providing tolling program management and project management support, toll system contracting, development oversight, toll infrastructure coordination, performance monitoring, and concepts of operation. Jennica will work directly with Matt to support future growth for WSDOT, leveraging centralized project workbooks to track risks, deliverables, issues, budget, and changes that are available to the integrated WSDOT and RSIS team and scale consistently across the spectrum of concurrent projects.

Sections A to D below correspond to RFQ Scoring Criteria 2, A-D for the Deputy Project Manager.

A. Jennica has performed project and program management, implementation oversight, operations support, performance monitoring and concepts of operations. These projects highlight her project management skills:

- WSDOT GTC I-405 Renton to Bellevue Implementation (2020-Current): Interim WSDOT project manager and then deputy project manager for infrastructure responsible for managing budget, schedule, contract adherence, and toll infrastructure coordination. Prepared the project management plan, facilitated standing meetings for internal team and project management coordination, led reviews, and managed change orders.
- WSDOT GTC SR 99 Performance Monitoring (2017-2020): Team lead, responsible for SR 99 tunnel and tolling performance monitoring. Developed and updated the project workbook and status gauge. Led planning and implementation of the Performance Monitoring Plan, Data Collection Plan, and daily, weekly and periodic summary reports. Jennica also served as the liaison to key partner Seattle Department of Transportation (SDOT) and coordinated supplemental data collection of volumes and turning movement counts on local arterials.

 WSDOT GTC SR 99 Implementation (2012-2019): Co-lead and then interim project manager for SR 99 toll system oversight and toll infrastructure coordination as well as overall Roadside Toll System testing support and change order development. Jennica led collaboration with the project office and tracked risks, issues, action items, and progress in the implementation phase.

B. Jennica has extensive familiarity with WSDOT and tolling from her time with the Toll Division GTC and prior projects preparing WSDOT RFPs, and traffic signal and ITS design. As WSP's current agreement manager on the GTC, Jennica is also familiar with task establishment and amendments, and helps lead development of scope and estimates for GTC task orders.

C. Within the WSDOT GTC project, Jennica has performed project management of GTC resources as well as the Toll Vendor and toll infrastructure coordination, including the following:

Adhere to Project Schedule: Jennica prepares and maintains schedules for change order, procurement, and monitoring efforts. She regularly reviews and provides input to the toll vendor's schedule and escalates delays when applicable. She also monitors the design builder schedule for coordination across contracts and progress towards toll commencement.

Adhere to Scope of Work/Avoid Scope Creep: Jennica has prepared the scope and budget for change order support, roadside implementation, and performance monitoring task orders. She also helped prepare the scope of the toll vendor's implementation work and routinely checks toll vendor deliverables relative to the contract.

Communicate Regarding Budget Issues: Jennica tracks monthly GTC expenditures for the Renton to Bellevue and Tacoma Narrows Bridge implementation task orders. She also maintained the I-405 RTB budget aging tracker while acting as the WSDOT interim project manager.

Manage Changes that Arise: Jennica tracks potential and actual changes on WSDOT roadside implementation projects in the form of issues tracking, RFIs, decision letters, contract change orders, and contract amendments.

D. BS in Civil & Environmental Engineering (Transportation emphasis), University of Washington | Professional Engineer, (Civil): WA, #43207, Dec 2006 | Lean Six Sigma – White Belt Certification.

CRITERIA 3: KEY TEAM MEMBERS QUALIFICATIONS



For Key Staff in Criteria 3: "Relevant Understanding" refers to their Understanding of WSDOT, General Tolling Systems and Public Agency Regulations/Procedures.



Paul Muzzey (Jacobs) | Toll System Development Lead

√	Design
✓	Testing

✓ Installation✓ Operations

Business RulesEmerging Tech

Paul is a civil engineer with over 30 years' experience in traffic engineering, ITS, and tolling systems projects. He is experienced with systems engineering processes and handson systems integration delivering ITS and tolling solutions.

General Tolling Consultant (GTC), WSDOT | 2022-2023.

Technical Advisor, I-405 RTB Express Lanes; Deputy PM/ Technical Advisor – TNB Toll System Replacement

I-405 RTB: technical review and approval of project deliverables; on-site inspection, systems testing and commissioning; advising on compliance with contractual requirements. TNB: for organizing/conducting internal WSDOT Team meetings; project deliverables technical review and approval; on-site systems inspection, testing and commissioning.

Statewide Toll On-Call Services, NHDOT | 2022-2023.

Owner's Representative, Technical Advisor - TCS Replacement Project and AET Deployment Project

TCS: technical review and approval of deliverables, participation in NHDOT and Contractor meetings, leading all test phase activities (factory acceptance testing, site acceptance, commissioning), conducting system performance evaluations. AET: supports expansion of NHDOT facilities to include new AET sites and new hosting facilities.

Toll Collection System Replacement Project, Rhode Island Turnpike and Bridge Authority (RITBA) | 2007-2016. Project Manager - Toll Collection System Replacement Project

Led project team in execution and delivery of two upgrade/ replacement projects and managed follow-on warranty and maintenance services. Fast track project with less than 10 months from NTP to Open to Tolling; delivered project 2 weeks ahead of schedule.

Relevant Understanding. Paul is ideally suited to support WSDOT with experience both as an agency's owner's representative and as a contractor. He is experienced in the operating procedures of public agencies and in project delivery. His industry experience and his current support to WSDOT on the I-405 RTB and TNB projects allow him to apply technical solutions while complying with contract requirements, regulations, and WSDOT policies. Lena Peter, PE (LEAD) |

Toll Infrastructure Lead; ETL Infrastructure Coordination

✓ Project Management
 ✓ Operations
 ✓ Design
 ✓ Traffic Engineer

✓ Civil Engineer✓ Data Management

Lena is a licensed civil engineer in the state of Washington and has over 25 years of experience providing professional consulting services in management, transportation design, transportation planning, and civil engineering. She is a senior transportation manager and design engineer. She has broad experience with GEC, planning, design-build, and designbid-build contracts for state DOTs, transit agencies, tollway authorities, airports, and municipalities. She also has extensive experience with operations management and focuses her efforts on solving problems effectively and efficiently.

Maintenance Management Consultant, North Texas Tollway Authority (NTTA) | 2012-2015. On-Site Project Manager

Project development, scheduling, budgeting, cost estimating, procurement, design review, preparing contract documents, and construction administration. Managed several planning, design, and construction projects for NTTA, including the design and construction of a \$3M project to improve lane configurations along 3 main lane toll plazas. Coordinated construction closely with other ongoing projects, especially on toll rate signs and toll gantry modifications.

SM Wright Parkway, TxDOT | 2018-2021. Deputy Project Manager and Senior Traffic Engineer

Led weekly coordination with all 6 subconsultants on this traditional design bid build project converting worth \$80M in construction costs. Responsible for all project quantities and the engineer's construction cost estimate. Engineer of record for the design of all 14 signalized intersections. Led coordination support services during construction.

Relevant Understanding. Lena has obtained extensive operational, technical, and managerial experience in delivering transportation projects for public agencies such as state DOTs (including WSDOT), tollway authorities, transit agencies, and municipalities. Her attention to detail to the agency's processes, design standards, and construction specifications and her collaborative spirit have resulted in teams achieving customer satisfaction with greater effectiveness and efficiency.



Ryan Avery, PE (TRAC) | Toll System Data Lead

 ✓ Project Management
 ✓ Traffic Engineer ✓ Civil Engineer
✓ Data Management
✓ Performance

Monitoring ent

Ryan is a senior research engineer at the Washington State Transportation Center (TRAC) at University of Washington. He specializes in large-scale data analysis, applying database and programming knowledge to analyze massive datasets to support public transportation agencies. He is the lead architect for data reporting in the vendor environment for the WSDOT Toll Division, where he has supported data reporting efforts since 2014.

GTC, WSDOT | 2014-2019; 2021-2023.

Lead Database Analyst

Lead database analyst for reporting and data analysis for tolled facilities in the Puget Sound. Leads a team writing and automating SQL database queries to support standard reports and ad-hoc data requests; summarizes results for decisionmakers. Most recently, worked with Toll Division stakeholders to understand new BOS and redeploy automated reporting processes for the new environment, including refining leakage definitions, tracking escalation of toll bills, and identifying vendor system issues, and saving hundreds of staff hours. As a result, Ryan's team is trusted and valued by WSDOT Toll Division staff across the agency.

Toll Equity Study, WSDOT | 2021-2023. Consultant

Responsible for interfacing with research teams from University of Washington and Stanford to provide detailed transaction-level data while safeguarding personally identifiable information (PII). Also served as a primary point of contact for questions related to data from research teams.

Relevant Understanding. Ryan has worked with WSDOT Toll Division since 2014 and has a deep knowledge of your operations and finance needs. As the lead architect of WSDOT data reporting in the new ETAN environment over the last 2 years, he has a unique understanding of the internals of the ETAN database system, and uses this knowledge to efficiently respond to data inquiries, assist WSDOT with identifying vendor system defects, and perform troubleshooting.



Kate Elliott (MFA) | Performance Monitoring Lead

Project
 Management

Emerging
 Technology

 Performance Monitoring 3

With more than a decade of experience managing communications for some of Washington's largest transportation projects, Kate's priority is cultivating collaborative and trusting relationships with clients and stakeholders.

2025 Toll Commencement Planning Support, WSDOT Toll Division | 2023. Project Coordinator

In 2025 the Toll Division will launch three new tolled facilities at the same time—SR 167 upgrade, I-405 Renton to Bellevue Express Toll Lanes, and SR 509. As part of the Jacobs GTC, Kate will assist in planning, preparing, and tracking progress in launching the facilities. Deliverables include risk register outlining risk for each group within the Toll Division relating to facility launches in 2025, project list of Toll Division projects between 2023-2028, staffing plan for all groups to identify staffing needs through 2025, and budget requests.

Good To Go! Back Office/Customer Service System Transition, WSDOT Toll Division | 2019-2021. Project Coordinator

Transiting *Good To Go!* tolling system to a new vendor, switching more than 1.8 million customer accounts over and one week of system downtime for the website and CSCs. Led weekly coordination meetings with internal team; developed Go Live Plan, with overview of the system transition sequence, project team roles and responsibilities, and milestones for executive oversight; and planned/coordinated a workshop with all partner agencies in preparation for this major transition.

SR 99 Tunnel Performance Monitoring, WSDOT Toll Division | 2017-2019. Project Coordinator

Convened, coordinated, and led a group of data scientists and traffic engineers from WSDOT, the City of Seattle Department of Transportation, King County Metro Transit, Sound Transit, the Port of Seattle, and a team of consultants to gather traffic data on SR 99 and the surrounding street grid in order to understand and communicate the changes to the traffic grid and the traveling public in downtown Seattle as WSDOT closed the SR 99 Viaduct, opened the SR 99 Tunnel, and began tolling on SR 99.

Relevant Understanding. Kate has worked with WSDOT on multiple megaprograms and supported the Toll Division for over a decade (see projects above). Kate has supported all elements of performance monitoring, understanding reporting requirements and procedures to gather data and collate information into public and legislator-friendly reports, and gaining a deep understanding of the agency's communications standards, protocols, and style.



Robert Duffey (Jacobs) | Facility Co-Lead/SME

Robert has 16 years of transportation management and construction experience. He has worked on both ORT and mixed-mode systems for a diverse range of clients nationwide. His expertise includes toll collection systems installation, integration, commissioning, and maintenance; HOT/ORT/AET; managed lanes; installation and maintenance of ITS solutions; and designing ORT, AET, ITS, and mixed-use tolling solutions.

- Tacoma Narrows Bridge, WSDOT | 2019-Present. Senior Toll Systems Project Manager
- Rhodeworks Truck Tolling Project, Rhode Island Department of Transportation (RIDOT) | 2019-Present. Senior Toll Systems Project Manager
- Central Business District Tolling Program (CBDTP), Manhattan, New York, TBTA/MTA | 2019-Present. Senior Toll Systems Project Manager

Relevant Understanding. Since 2008 Robert has supported WSDOT both as an integrator (Kapsch) and since 2019 as a consultant supporting the TNB project. Leveraging these differing roles while for the same client (WSDOT) provide Robert with the intimate knowledge of both the General Tolling Systems and Policies governing WSDOT activities.



Lisa Woodward (WSP) | Facility Co-Lead/SME

Lisa is a vice president of toll facility operations and project manager. She is experienced in tolling, traffic demand management, systems engineering, bus signal priority, and has worked on various ITS and integrated corridor management projects in the U.S. Lisa's focus on client satisfaction and system accuracy results in successful deployments. She has spent 10 years of her career working for a tolling systems integrator, giving her a unique perspective and insight into systems requirements, integration, testing, acceptance and operation.

- I-15 Express Lanes, Riverside County Transportation Commission (RCTC) | 2018-2024. System Integration Lead
- I-105 PS&E Express Lanes, LA Metro | 2021-Present. Toll, Electrical and Communication Lead
- I-405 Renton to Bellevue ETL, WSDOT | 2016-2018. Project Manager

Relevant Understanding. Lisa is very familiar with WSDOT and the Toll Division from her time working on I-405 ETL and brings related experience working with other toll authorities and public agencies within the U.S.



Jef Nazareno (WSP) | Facility Co-Lead/SME

Jef brings electronic tolling and automatic fare collection expertise and is an experienced program manager, having deployed and operated both single point and multi-point tolling systems. He leads system design and procurement projects for the development/deployment of new toll systems, and assists public agencies and departments of transportation with planning, evaluation, and implementation of toll operations. Previously, Jef led automatic fare collection technical implementations, maintaining system functionality and upgrades.

- I-5 Managed Lanes Improvement Project, Caltrans | 2023-Present. Consultant, Toll Systems SME
- AET Implementation Program Advisor, Bay Area Toll Authority (BATA) | 2021-Present.
 Deputy Project Manager
- I-5 Bridge Replacement Project, Interstate Bridge Replacement (IBR) Program | 2021-Present. Consultant

Relevant Understanding. Jef has gained familiarity with WSDOT supporting the IBR project and in his previous role as Golden Gate Bridge's technical representative for both CTOC and WRTO. Jef is well versed in tolling systems implementation and operations and has worked directly for public toll agencies.



Hema Nagarajan, PE (WSP) | Facility Co-Lead/SME

Hema is a project manager and transportation engineer with a focus on ITS and toll systems, from testing and implementation, leading Go Live planning, operations support, asset management, to performance enhancement and monitoring, with special interests in upcoming technology. She is an avid proponent of big data and visualization to support performance monitoring, decision-making, and reporting. She developed the dynamic pricing setup process for BAIFA that eliminated their need for manual pricing overrides to react to traffic.

- Bay Area Express Lane Network Program Management Services, Metropolitan Transportation Commission (MTC) | 2017-Present. Operations Support Lead
- I-15 Program and Construction Management, RCTC | 2017-Present. Tolling Operations Lead
- I-880 Corridor Performance Evaluation for Means-Based Toll Discount Pilot, MTC | 2022-Present. Project Manager

Relevant Understanding. Hema has gained familiarity with WSDOT on the TNB project and has worked extensively on other toll projects and with public agencies in California and Texas.



Russ McCarty, PMP

System Development and Operations SME

Russ is the director for the Jacobs Revenue Systems Solutions (RSS) practice and has extensive experience leading and driving high-profile, cutting-edge transportation technology projects to successful conclusion. These include FasTrak Toll Roads in Southern California; the TNB project, the first deployment of electronic tolling in Washington; and the SR 520 variable AET facility and statewide back office in Seattle.

- Tacoma Narrows Bridge (TNB) Toll System, WSDOT | 2018-Present. Project Manager/SME
- Good To Go! CSC Operations Procurement, WSDOT | 2017-Present. SME/Procurement Specialist
- Metro ExpressLanes O&M Technical Oversight Support, LA Metro | 2013-2020. SME/PM/Technical Lead

Relevant Understanding. Russ has supported the WSDOT toll program since its inception, including planning and rollout of the SR 167 HOT Lanes, the original Statewide BOS and CSC, the current CSC, the SR 99 toll system, and the new TNB toll system. He brings a strong understanding of the GTC program, WSDOT processes and policies, including strong relationships with your internal teams, and all relevant regulatory agencies in the Greater Washington area.



Girish Pande (Jacobs) |

System Development and Operations SME

Girish has 30 years of experience in business systems implementation, revenue collection programs for transit and tolling agencies, including 16 years in Electronic Toll Collection project implementations. As a systems SME, he brings experience in business and functional analysis, project costing and budgeting, system and interface design, data analysis and migration, and software development and engineering.

- GTC Services, WSDOT | 2010-Present. System Lead/SME/Technical Specialist
- Statewide Toll On-Call, NHDOT | 2015-Present. SME
- Ohio Back Office Procurement and Implementation Support, Ohio Turnpike and Infrastructure Commission | 2018-Present. SME Consultant

Relevant Understanding. Girish has supported WSDOT tolling program since 2010 with systems and business implementation for both original statewide and new BOS CSC and Roadside Toll Systems for SR 520 bridge, I-405 Express Lane, SR 99 toll system and the new TNB toll system. He brings strong working relationships with the WSDOT team and has detailed knowledge of WSDOT processes, procedure and policies.



Carlos Campo, PE, PMP (WSP) | Facility Co-Lead/SME

Carlos is recognized as an expert in toll roads and managed lanes and is experienced in all phases of toll programs. His responsibilities have included formulating business rules and technical requirements, coordinating infrastructure and system design, and overseeing systems integration. In addition to his advisory and delivery experience in several largescale programs, Carlos was the operations manager of the Georgia I-85 Express Lanes, which pioneered technology and enforcement models.

- Bay Area Express Lanes Advisor, San Francisco Bay Area, Bay Area Infrastructure Financing Authority (BAIFA), CA | 2017-Present. Toll Systems Lead
- Innovate 680 Contra Costa County Transportation Authority (CCTA) Pleasant Hill, CA | 2019–Present. PM and Systems Integration Manager
- Open Tolling Architecture, Oregon Department of Transportation (ODOT), Salem, OR | 2018–2019. Toll Systems Lead

Relevant Understanding. Carlos has worked directly with WSDOT and is a nationally recognized toll systems subject matter expert.



Robert Kopelk, PMP (STC) | System Development and Operations SME

Robert has nearly a decade of experience in tolling and traffic engineering, planning, highway operations, software and systems development, and construction management. His tolling expertise includes procurement, concept of operations, cost estimation, system design, mobile app development, civil coordination, project controls, toll operations, and enforcement. He oversaw the successful delivery of the SR 99 tunnel toll system and toll projects on the I-405 and SR 167 express lanes corridors. At LA Metro, Robert managed toll system O&M contracts for the I-10/I-110 express lanes.

- Roadside Tolling System Operations Support, WSDOT | 2022-Present. Vendor Management Support
- Interoperability and Emerging Technology, WSDOT | 2022-Present. Advisor
- Electronic Payment System Support 6C Protocol, Bay Area Toll Authority (BATA) | 2021-Present. Advisor

Relevant Understanding. From role as WSDOT Toll Systems Development Manager and current role supporting Roadside Tolling Systems Operations, Robert has direct experience with WSDOT tolling and public agency regulations/procedures.



Karla Butler (Dossier) |

Document Control and Technical Editing

Karla is a senior technical editor/document control specialist with 10 years of experience assisting with technical editing, quality audits, and information management. She has managed project records and information for capital projects, including Sound Transit's Stride Bus Rapid Transit program. She manages SharePoint sites and user access, conducts training sessions, and has served as a communications specialist, writing and editing technical reports.

- GTC, WSDOT | 2012.
 Document Control Specialist
- I-90 Tunnel Inspections, WSDOT | 2012. Document Control Specialist
- Alaskan Viaduct Seawall Replacement, WSDOT | 2009-2011. Document Control Specialist/Archivist

Relevant Understanding. As a subconsultant to Jacobs on the WSDOT GTC Team, Karla assisted WSDOT in formulating a standard procedure for document controls that directly applied to the tolling office. She recorded official meeting minutes for the Road Tolling Systems project and maintained their conformed documents against contract change orders.



Arianne Mizuta, PE (WSP) | Performance Monitoring

Arianne is a professional engineer experienced in delivering transportation projects with an emphasis on traffic design and freeway operations. Design expertise includes roadway signing, roadway markings, illumination systems, and maintenance of traffic design. Recent experience with performance monitoring involved complementing WSDOT personnel and serving as an integrated team player to plan, implement, and lead the reporting for the SR 99 tunnel Go Live and SR 99 tolling multi-agency performance monitoring.

- Statewide GTC |SR 99 Traffic Performance Modeling and SR 99 Toll Operations Go Live, WSDOT | 2018-2021. Reporting Lead
- Statewide GTC: I-405/SR 167 Express Toll Lane Corridor Concept of Operations Update, WSDOT | 2019-2020. Co-author
- I-880 Tolling Express Lanes Program Management Services, BAIFA | 2020. Traffic Engineer

Relevant Understanding. Arianne has supported WSDOT tolling planning and reporting and she also has experience with WSDOT traditional and alternative delivery projects.



Robert Cooney, PMP (eVision) | System Development and Operations SME

Robert has 36 years of experience leading large-scale public sector technology and business change. He was Testing Manager and provided project management support to WSDOT during the first statewide BOS (ETCC RITE) implementation; led the definition of business and technical requirements for the second-generation BOS (FASTLane); and was WSDOT's Transition Manager during implementation of FASTLane. For the TNB, he assisted with defining requirements for the new roadside system.

- Back Office System (BOS) Implementation, WSDOT | 2015-2021. Transition Manager
- Tacoma Narrows Bridge (TNB) Roadside System
 Procurement, WSDOT | 2022-2023. Technical Advisor
- Enterprise Resource Planning (ERP) Implementation, SANDAG | 2022-Present. Program Manager

Relevant Understanding. In the past 13 years, Robert worked with WSDOT Toll Division as a Testing Manager and Transition Manager. He served as a technical advisor during implementation of a new BOS for the Illinois Tollway and assisted 4 tolling agencies and 15 state departments of transportation with planning for and implementing new financial systems.



Jeremy Wheeler, PE (WSP) | Single Point Toll Infrastructure

Jeremy is a professional engineer experienced in delivering transportation projects, focused on traffic design and solutions. His expertise includes toll infrastructure, ITS, traffic signal and maintenance of traffic design. He has delivered small task orders for design-bid-build projects to larger multiyear design-build projects including Link light rail extension and interchange improvement projects with WSDOT.

- I-405/Northeast 132nd Street Interchange Project Design-Build, WSDOT | 2022-Present.
 Work Zone Traffic Engineering Manager (WTEM)
- Federal Way Link Extension Design-Build, Sound Transit | 2019-2021. Lead Traffic Engineer
- East Link Extension E360 Contract Design-Build, Sound Transit | 2016-2020. Lead Traffic and Roadway Engineer

Relevant Understanding. Jeremy worked in the Puget Sound region for 7 years as a discipline lead or project manager for WSDOT, Sound Transit, and SDOT. He has experience with WSDOT projects, related public agency projects within WSDOT right of way, and serving in roles in the public sector enacting public agency regulations.



FIRM'S PROJECT MANAGEMENT SYSTEM

We know the Toll Division has specific performance standards and expects consultants to provide superior project management, deliver high-quality work, and adhere to best practices. Jacobs is a project-centric organization that focuses on sustained client loyalty; our staff and our team partners have a proven track record of delivering excellence to WSDOT for nearly three decades. Project Manager Matt Ringstad and Deputy Project Manager Jennica Ottenbreit have diverse delivery experience from managing WSDOT and Toll Division projects over the past 20 years. They bring a strong understanding of the management systems and internal WSDOT Toll Division processes needed to efficiently deliver this program. This ability to seamlessly toggle between WSDOT and Jacobs is a central feature of our team that will benefit the program. Being able to manage the program through both lenses allows them to leverage their expertise and experience to efficiently clear the way for our teams to accomplish Toll Division priorities.

Jacobs has a disciplined project management system that we use on all projects, as summarized in *Figure 4-1* to the right. This system establishes success standards, procedures, and protocols and focuses on driving predictability and certainty into project delivery to foster the success of our project teams through consistent use of best practices.

Matt has developed a program workbook (initially produced for the GTC) that has also been a proven and scalable tool throughout the WSDOT programs that Jacobs currently serves. This workbook houses critical day-to-day information related to all active tasks including, task development, task status, resource needs, subconsultant management, financial tracking, invoicing tracking, and task-level action items. The workbook will be updated weekly and will serve as the central repository for access to all the Project Management Plans developed for the program. As the program progresses through critical stages, we'll reflect on each task to yield lessons learned and continuously improve as we go forward.

Quality Assurance/Quality Control (QA/QC)

Processes: Paramount to executing an effective QA/ QC process are work planning and the effective definition and sequencing of deliverables. In conjunction with Project Manager Matt Ringstad and System and Infrastructure Leads, our document manager, Karla Butler, will support the development and execution of a QA/QC plan tailored to the deliverables of this program. The plan will define the schedule and scope for all quality checking and review activities from the program tasks, while providing a clear process to complete

Figure 4-1.

Our proven project management approach

Client Expectation Survey

- Sets project goals/objectives with WSDOT
- Defines how we are expected to perform
- Establishes communication protocol

Project Management Plan

- Documents all critical project management information in one location
- Quickly brings team up to speed

Quality Management Plan

- Defines review procedures for all deliverables to ensure end product meets WSDOT's standards
- QA/QC process is clearly documented at every step & is audited

Project Controls

- Earned Value system to track project schedules, budgets, & staffing
- Monthly progress reports and invoices
- Monthly update of estimate to complete (ETC)

Operational Project Reviews

- Monthly project review with PM, accounting, & project controls staff
- Focus on problem identification, prevention, and resolution

Continuous Improvement

6

• Deliver, measure, & demonstrate value to WSDOT by increasing your return on investment

Client Satisfaction Survey

- Periodic feedback mechanism
- Ensures we are performing in accordance with expectations

consistent and comprehensive review of the documents. As project leads, Paul Muzzey, Lena Peter, Jennica Ottenbreit are ultimately responsible for the team-level application and execution of this plan. The fundamental tenets of our project specific QA/QC process are:

- Pragmatic approach: use the tools at hand (Teams, SharePoint) to maximize usability, accessibility, transparency and progress
- · Perform the work correctly the first time
- Check all deliverables with a qualified second set of eyes using a defined process
- · Audit for compliance against defined criteria

Where We've Done It. For our WSDOT Olympic Region GEC and Toll Division GTC, we prepared a program-level quality management plan (QMP) and Project Procedures Manual (PPM), respectively, that defined roles and responsibilities, deliverables matrix, check/review, and assurance verification procedures, and applied it to all

program task orders. All staff receive the QMP/PPM during onboarding, giving them a consistent set of QC procedures across all projects, enabling efficient assurance verification.

Scope/Budget Tracking Process: For each task order, we develop internal project execution plans (PEP) aligned to the work plan that confirm the scope of work, budget, project team, schedule, roles and responsibilities, communication protocols, work breakdown structure (WBS), quality plan, risk management, change management, and safety protocols that will govern our work. The PEP provides the foundation for all measurement and monitoring of scope and budget and ties in with the project schedule by producing an earned value metric to track progress against the deliverables. On a monthly basis, Matt will participate in internal operational project reviews (OPR) with task order managers, senior management, and our internal project controls to review status of all elements of the PEP.

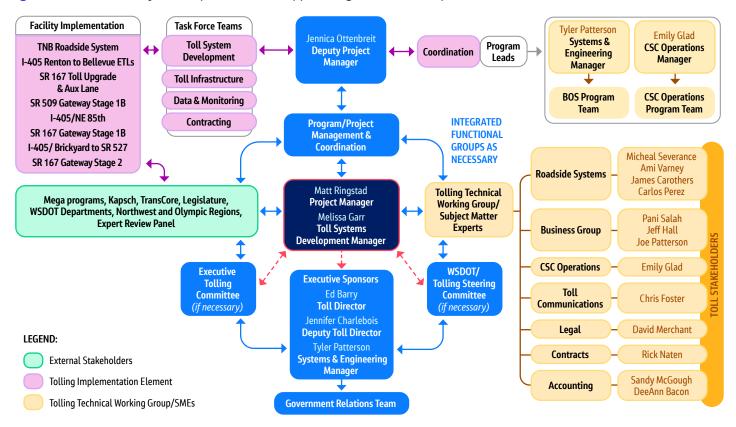
Scope Monitoring: We will divide the program scope into a logical selection of task orders with assigned WBS of subtasks, aligned with your Work Op codes. Each task order and WBS includes a responsibility matrix, assumptions, activities, and deliverables. We will track each of these key components on a project baseline schedule and in periodic meetings with the Toll Division project managers. This enables us to break the program into manageable pieces, anticipate and mitigate scope creep, feed percentage complete into the Microsoft Project program schedule, and keep you fully informed on our progress. **Budget Monitoring:** Matt will use Jacobs' toolbox of web-based resources to manage the project finances. Project financial information is updated weekly, allowing Matt and to clearly see charges expended on the project. On a monthly basis, we review project expenditures, status physical percent complete, and forecast an estimate to complete (ETC) for each WBS of each task order, which allows us to monitor the health of each project in the program. The program executive reviews the project status and ETC prior to finalizing our internal workflow.

4

Where We've Done It. Matt has produced over 100+ total tasks in the past and is successfully demonstrating this management ability currently with 12 active GTC tasks. More than 10 years ago, Matt began his journey with the GTC as the deputy program manager to specifically streamline a cumbersome task management and execution process. Currently, all Matt's tasks are scheduled and forecasted to be under budget. Matt developed a PEP for each task and participates in monthly project reviews.

Scheduling Program/Process: Jacobs primarily uses Microsoft Project to support project scheduling needs. We build schedules with the understanding that they will be used to communicate time and logic elements of the project with the teams, Toll Division, and a wide range of stakeholders. The program schedule will define all work activities, durations, and constraints, including all external interfaces, at the task level. It will also provide "rollups" of work items so they are clear and can be used by all project participants. The anticipated





WSDOT Toll Division Roadside System Implementation Support

upcoming work plan, as shown in Criteria 5, illustrates the priority work elements expected over the course of the program. In order to address the unprecedented "Thrive in '25" and beyond, Jacobs and WSP will maintain a consistent approach with both the systems and teams. We accomplish this with a clear WBS structure and reporting process to effectively identify the status of elements and predict downstream impact.

Where We've Done It. Matt provided regular schedule updates for the TNB Toll System procurement schedule The procurement was executed successfully through award, on time and on budget. Matt has also successfully used Microsoft Project to aid the Toll Division in managing the BOS vendor, providing transparent insight into the implementation progress. Matt, along with Jennica and the Infrastructure and System Leads, will spearhead the effort for development of the Project schedule for delivery of the program.

Interaction with Internal Team: *Figure 4-2* on the previous page shows the internal team, client, and stakeholder relationships and how our team will integrate with WSDOT Tolling team. We have structured our team with program-wide management and SMEs who will provide consistency and solve complicated program challenges. This management team will mobilize and direct facility teams focused on individual facility implementations and cross-program coordination.

Effective, targeted communication is critical for efficient, timely project delivery. Working in an interdisciplinary team, we communicate frequently and openly to share information crucial to the project. We have structured our team to be effective, consistent, and nimble in order to successfully deliver a roadway work plan that is both aggressive and with many moving parts which carry risk of change over time. Our team, combined with the programmatic structure of our successful WSDOT GTC, has the ability to reprioritize quickly. The tools we use to promote clear communication with our internal project team include:

- Our senior management team will work with Matt to conduct programmatic reviews of the Toll Division Roadside Implementation work plan; define the goals, milestones, and program sequence; update the work plan schedule; and build task order facility teams.
- Our program element taskforce leads are industry SMEs with tolling and roadside implementation expertise who will work between our senior management team and our facility delivery teams to provide the technical recommendations, coordinate the toll division technical standards for the vendor system design efforts, apply a common roadside toll system governance, address new issues that arise, develop solutions, and disseminate those solutions to the task order facility teams for consistent implementation.

- Facility design teams will conduct field investigations as needed, review plans, specifications and estimate (PS&E) packages, and coordinate with the Civil Contractor on all Tolling-related infrastructure. We hold kickoff meetings at the start of each task order project assignment to confirm expectations, goals, and objectives, quality plans, communication protocols, staff roles and responsibilities, and performance measures.
- We provide PEPs to all team members, so that everyone is on the same page at the start of each project.
- We hold coordination meetings regularly to review project progress and provide opportunities to proactively identify and address any concerns.
- Electronic systems. As our team is working in a hybrid remote/office setting, we will use email, file transfer protocol sites, Microsoft Teams, and SharePoint sites to communicate with the project team, set up meetings, share ideas, disseminate information, facilitate reviews, and share electronic documents.

Interaction with Client: We view the relationship between the Toll Division and Jacobs as a valued partnership. where we manage and deliver projects together. We know that for us to be successful, we need to be aligned. We have selected a project manager and senior management team that has successfully worked with WSDOT and Toll Division for more than 12 years and knows how to effectively coordinate the team, schedule, and needs of the program. Matt will be the primary point of contact for all task order and contractual discussions and consultant team management. He will work with you, in collaboration with the senior management team, to establish the program's scope, schedule, and budget. Our team members will integrate and interact with WSDOT staff following communications protocols established in our PEP, including the means, methods, and frequency of our interactions with Tolling/WSDOT's staff.

Interaction with Stakeholders: We will work with the Toll Division team to design a comprehensive program integrated into the practical solutions approach to inform and involve the full range of stakeholders see *Figure 4-2*. The goal will be to achieve buy-in from stakeholders by engaging them early, communicating with them consistently, informing them when opportunities to participate will occur, understanding how their input is used to make decisions, and confirming they are heard and integrated appropriately into the project team as partners in the decision-making process. The GTC currently facilitates standing WSDOT project management meetings and earned the trust to act on WSDOT's behalf to directly coordinate and keep s takeholders informed.

A. WORK PLAN APPROACH

DEVELOPING A WORK PLAN

The key elements within the work plan come from understanding the milestones ahead and aligning them to the strengths and organization of our extensive team. Establishing a thorough work plan begins with an efficient program startup, established processes, innovative organization, insight to the upcoming work, and informed program governance.

Award/Contract Execution and Management: Upon award, Matt and Jennica will work with WSDOT to execute the contract and scope early task orders. Early task orders will focus on confirming the program goals and schedule, project administration, and providing continuous roadside support. The vision, goals, and schedule developed by the team will drive development of the work plan with an updated critical path and associated timelines.

Start-Up: In parallel, our team will review and update standards and guidance specifically for the program, including Health and Safety Plan, QA/QC Plan, and Standard Operating Procedures, in preparation for supporting roadside work. The team will work closely with WSDOT to address all key components that require updating. Once we finalize these documents, any onboarding will start. To support WSDOT's DBE goal, our team will engage with LEAD and STC and incorporate them in building the work plan.

The Jacobs process workflow to develop a comprehensive work plan takes a ground-up approach:

- The first step is to develop a task order, by organizing the discrete piece of work, establishing a first draft inclusive of scope, work breakdown, historical planning already conducted, and associated timeline. This will be the initial deliverable to engage the working groups for their initial review.
- Second, we assemble the core subject matter experts to review the work breakdown structure and provide feedback. These working groups represent not only subject matter expertise but also the Toll Division as a whole.
- Third, after we consolidate, categorize, and initially review the comments, the working groups and leads will conduct a walkthrough of all comments and proposed responses and allow for consensus-building on the level of detail, identify any comment resolution needed, or key relationships within the steps of the work plan.

• The final work plan for the segment of work will then be delivered from the

team level up to the lead and project management level for review and incorporation into the programmatic work plan. This provides an overall viewpoint that includes the interrelationships both within the roadside program and activities conducted outside of Toll Division.

With this process, WSDOT will be able to manage and maintain a work plan that can provide transparent flexibility to change while highlighting interdependencies, giving a clear impact to the road ahead.

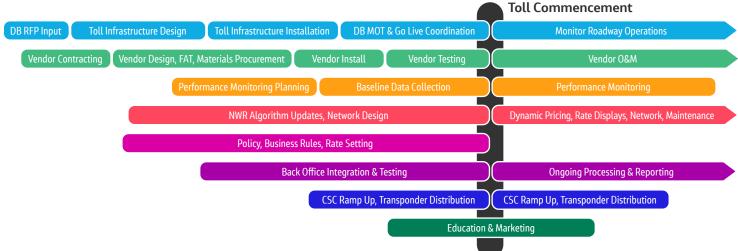
WORK PLAN DECISION MAKING

A key component for success is identifying and engaging decision-makers early in the development of the work plan. For the Roadside work plan, we acknowledge the work plan is already underway and the Toll Division has made significant strides in identifying and framing their program. As owners of this planning, the WSDOT decision-makers will be involved, not only during initial development for verification, but also, when approved, in tracking the work plan throughout the project. Our approach involves leveraging our team organization to develop the work plan components and apply a deployment strategy team to provide a consistent layer of subject matter expertise representing all areas of the Toll Division. This integration layer will provide transparency to the process, and provide a place to integrate functional groups, while offering a forum to highlight risks and mitigation. *Figure 5-1* on the next page overviews typical facility implementation phases and categories of work.

Key decision-making roles in developing and managing the work plan:

The WSDOT Toll Division System and Engineering Manager or delegate: Toll Systems Development Manager will be responsible for approving the project work plan on behalf of the Toll Division. This role will continue as the primary point of contact and provide guidance and oversight program wide. We envision the System and Engineering Manager collaborating directly with Matt and Jennica in reviewing draft programmatic work plan materials, confirming that we have accounted for program goals and have a precise information conduit for maintaining status and escalation with a Toll Steering committee or leadership. It will also be the role of the Toll Systems Development Manager and System





Operations Manager to escalate or engage with other Toll Division or WSDOT stakeholders where the work plan may require additional guidance or input. By establishing a clear and regular communication channel with all levels of decisionmakers, the program is positioned to be proactive and able to anticipate potential change to the work plan as needed.

Jacobs Project Manager: In this role, Matt will be responsible for overseeing the day-to-day development, evolution, and management of the work plan. Matt will work closely with the Toll Systems and Engineering, System Operations and Systems Development Manager to identify and assign resources to assist in the work plan development. Equally, Matt will coordinate and work with this Roadside leadership team and Deputy Project Manager Jennica Ottenbreit as the work plan develops, so that effort outside the specific program tasks can be identified and included as potential areas of risk to the plan. Matt will be responsible for final decisions when working with Jennica, the assigned Roadside task teams and gaining concurrence with the key tolling managers.

Work Plan Integration Strategy Team: Includes representation from all areas and disciplines of the Toll Division to provide a consistent point of review at the programmatic level. The working group will consist of the following: Civil Engineering, Toll Engineering, CSC Operations, Traffic Engineering/ITS, Policy, Communications, and BOS. The team will be supplemented with Jacobs core team members with cross-functional expertise who understand both operations and systems. We expect that the Toll System Development and Infrastructure Leads will act as liaisons between this team and the task-level teams to streamline the individual breakdowns and address key assumptions.

RSIS Toll System Development and Infrastructure Leads: Based on direction and guidance from the Work Plan Integration Strategy Team and Jacobs Project Managers, the leads will be involved in directing the process for each task team developing their discrete work plan. The work plans will then be combined and reviewed with the task teams before being submitted to initiate the next review cycle.

RSIS Facility Teams: The task teams will be the primary source in developing the detail of a discrete work plan based on the task-level work. To support those leads, both performance monitoring and data management teams will also be consulted for key activity input.

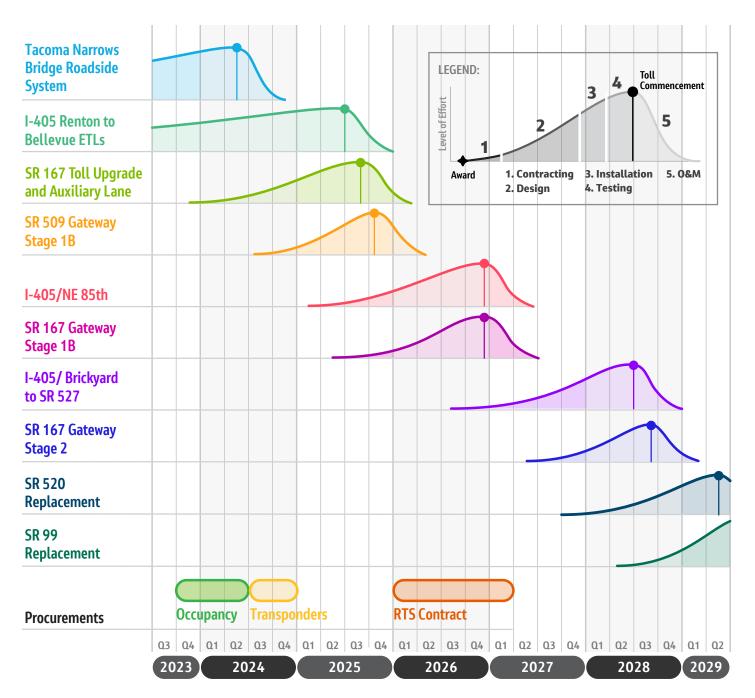
ELEMENTS OF THE PROPOSED WORK PLAN

The milestones for the program and of the work plan are built around the region's rapidly expanding infrastructure. With potentially 3 toll commencements in 2025 and up to 10 implementations within the 6-year window, the program must rely on people, processes, and clear direction to successfully usher in the next generation of toll facilities. However, the program is not limited to just implementations; WSDOT has also prioritized upcoming procurements to stay abreast of advancing technology to better serve its customers. Procurement planning and execution for the RTS itself, enhancements for occupancy detection and transponders to best fit customer movements throughout the future tolling network—these are all examples of key work that will run in parallel to and have interdependencies with the facility implementations. Risk management daylights the potential issues that could arise and by embedding risk workshops into any work development, the associated mitigations can provide a path forward with minimal interruption.

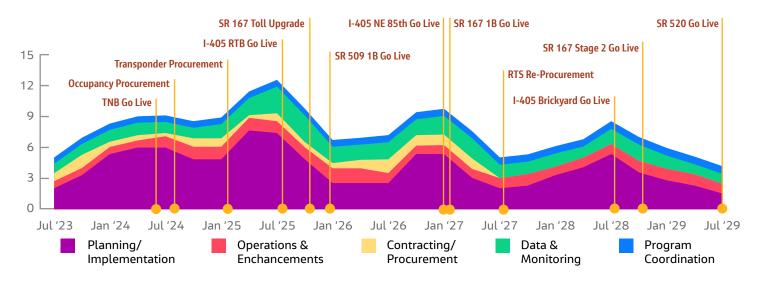
Each of these facility implementations are projects in themselves and require a consistent approach and dedicated personnel to maintain schedule. Jacobs will leverage the key planning support already underway in 2023. Supporting TNB's implementation, RTB Implementation, contracting consolidation of the RTS, and implementation planning support for SR167 and SR509 are all active tasks under the current program. We have now taken the next step to think through the necessary organizational structure to complement the work plan. While our focus remains on how to bring on multiple tolling facilities at the same time, a more detailed analysis of each facility as a standalone work element finds that they extend beyond overlapping vendor implementation activities; they require coordination with all areas across the Toll Division, WSDOT, contractors, vendors, and key external stakeholders. In *Figure 5-2* below, we present the sequencing of our effort, as required to support WSDOT's Toll Program. In the subsequent *Figure 5-3* (on the next page), we show the anticipated FTEs for our Roadside System Implementation support.

5









ADDRESSING CONTINGENCIES THAT MAY ARISE DURING THE PROJECT

Contingency planning is part of Jacobs' philosophy while we work on any project; the Jacobs team has extensive experience in building out contingencies for project implementation work plans. While supporting the current Roadside System Development and Operations alongside WSDOT, we have been involved in onboarding implementations for many of the existing roadways, and most recently, we participated in various planning or preliminary implementations for the upcoming core work. This allows us to use lessons learned gained over that time and anticipate potential contingencies. We prepare and co-maintain risk registers for each project together with WSDOT and implement mitigation strategies, such as identifying long lead items and accounting for procurement contingency in the Vendor's schedule due to supply chain risks. For these types of delays, the program must remain nimble by adjusting staff to accommodate the change in anticipated effort. We also use our technical knowledge to expedite reviews, facilitate system updates, and potentially address any budgetary funding gaps. We will continue to do so with all our functional areas under this work plan as and when the contingency is required.

Apply lessons learned and change management to address contingency: The GTC team has experience in supporting different agencies, such as New Hampshire Department of Transportation, Illinois Tollway, LA Metro, BATA, BAIFA, Florida Turnpike, NY MTA, and New Jersey Turnpike Back Office System Operations. We will apply lessons learned from the past 25 years, along with the lessons learned with WSDOT Roadside System Implementation and Operations to improve operations efficiency, scalability, and change management. With strong procedural knowledge and expertise in handling change management with WSDOT and for tolling agencies across the U.S., we will support WSDOT in implementing comprehensive change management processes and procedures under this work plan. While the RSIS work plan's primary focus is to plan for and mitigate change within the comprehensive facility expansion, change can come from a multitude of areas and the RSIS change management approach would incorporate all potential lines of work including considering other known influences like RUC, WSF, TRAINS, system enhancements and policy adjustments from WSTC.

Integrate data analysis with new analytical tools: Jacobs and WSP have in-house expertise in the analytical intelligence toolset, including Power BI, Tableau, and Excel. With legacy experience and full understanding of the underlying dataset, Jacobs is in a unique position to support Roadside System data analysis and to support WSDOT in developing tailored reporting. We will also use the dataset analysis to feed our continuous improvement and efficiency of the Roadside System Operations.

Budget planning and operational cost to collect: The GTC team has already supported WSDOT in analysis of the cost to collect tolls and will continue to do so, including with yearly budget planning for the upcoming infrastructure expansion.

New Roadside initiatives: The GTC team has extensive experience in supporting clients in developing RFPs and working with them through the procurement process with the vendor selection. We have already supported WSDOT in re-procurement of back office system and Customer Service Center Operations, as well as procurement and reprocurement of roadside toll vendors, and will continue to do so as required by WSDOT. We will also support WSDOT Roadside Operations in scaling up as new facilities are added to the tolling system, by providing guidelines and a work plan on ramping up the resources. We will also work with the technical system group in analyzing any system scalability and updates required to support the operations. Please refer to *Figure 5-7* at the end of Criteria 5, which illustrates our approach to the various phases anticipated for WSDOT re-procurement.

B. RESOLVING ISSUES WITH THE PROJECT TEAM, CLIENT(S) AND STAKEHOLDERS

Ideally, we can mitigate issues or conflicting ideas in advance through clear communication and early establishment of expectations. We commonly refer to this as 'managing expectations' and it is an integral part of the Jacobs project management philosophy.

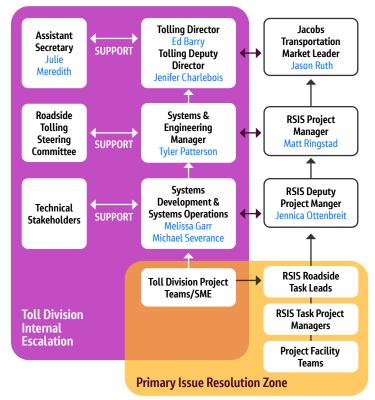
We do, however, fully understand that as programs, projects, and even smaller task efforts progress, there is always the chance for an issue to arise where people or organizations may have differing opinions. In such cases, our approach in achieving resolution is systematic, while at the same time scalable, to handle the magnitude of the issue at hand.

In keeping with the Project Execution Plan (PEP) discussed in Criteria 4, our approach follows these fundamental steps:

- 1. Identify the issue
- 3. Determine a resolution
- 2. Communicate the issue with impacted parties or specific individuals
- Engage with stakeholders
- 5. Monitor progress

As our experience has shown us, we can address many issues quickly by giving the project the correct attention and monitoring for risk management and mitigation. Even in more substantially impacted circumstances, the correct resolution plan can be completed in a timely and effective manner. *Figure 5-4* shows the proposed escalation ladder for emerging roadside issues. Fundamentally, the focal point of all issues is to resolve them at the lowest possible level. The Task Leads and Facility Team level is where we want the majority of resolution to occur. By doing this, we also form a foundation of team communication that can work effectively even with many perspectives. However, in all projects, some issues are complicated and require further discussion, and escalation is necessary and healthy as a support structure to keep projects moving forward.





C. ASSUMPTIONS FOR WORK BREAKDOWN STRUCTURE

The GTC provides the capacity and flexibility to advise and augment WSDOT as needed and as desired. For this contract, we will provide support across program management, project management and controls, procurement, toll system development and enhancements, toll system operations, concepts of operation, data management, performance monitoring, and related work efforts, as needed.

We will work with WSDOT during the scoping phase of each task order to determine key work elements and deliverables and confirm that any applicable division of responsibilities is clear and understood. Project work plans for smaller tasks and project management plans for larger tasks, along with project workbooks, will also document roles within the integrated team and clarify relationships between WSDOT and Roadside System Implementation Support (RSIS) team members. In general, WSDOT and GTC co-develop and manage many aspects of the work, but WSDOT performs all formal project approvals and provides formal project direction. *Figure 5-3* provides a sample facility implementation schedule and *Figure 5-5* on the following page provides an overview of the planned work breakdown structure.



D. KEY ISSUES AND CRITICAL MILESTONES FOR THE PROJECT

In *Figure 5-6* below, we have identified the following key issues and will address them proactively through effective communication, coordination, and training; if necessary, we will implement the resolution steps below.

Figure 5-6. Key Issues

KEY ISSUES

LARGE RESOURCE DEMAND



Planning for and managing the volume and variability of resource needs will be an ongoing effort throughout this project. Already having a comprehensive understanding of the project schedules and WSDOT's toll program, as well as regular dialog with WSDOT, we will be able to adjust accordingly. We will also use tools such as detailed tracking of staff by task orders (previous, current, and planned). *Figure 1-1* and *Figure 5-2* respectively illustrate our historical and future adaptability to meet the program need. We have assembled a broad bench of qualified staff/SMEs to meet any need and still provide consistency and continuity across key areas of support for WSDOT.

POTENTIAL FOR CHANGE



Equally important to the amount of work the Toll Division has planned are the unplanned or unexpected deviations. Change Management will be a key component of our work plan and will be incorporated into day-to-day program management, focusing on internal and external risks factors and ways to mitigate these in advance or to support WSDOT in any sudden shifts in program priorities (for example, if a facility toll commencement date is advanced by one year).

Our team will incorporate Change Management both for the RSIS contract as well as Toll Division's program of work including ties with other WSDOT departments. Together with WSDOT, we will conduct regular change control reviews to manage schedule, budgets, risks, and issues.

Effective process controls will also be a key component of our work plan. Leveraging our team's experience, we will not only continue to support your process controls but also continuously look for process improvement, such as in documentation review or team coordination.

VENDOR PERFORMANCE



Our team will diligently monitor Vendor performance relative to the scope and schedule, and support WSDOT in holding the Vendor accountable to quality and on time delivery. To monitor and mitigate toll vendor(s) related risk throughout each phase of the implementations, we will use monthly tracking of activities, schedule, issues, and risks, assigning impact and probability ratings and then escalating concerns through WSDOT and the applicable toll vendor executive levels if necessary.

MAINTAINING VISIBILITY WITH DESIGN-BUILD (DB) PROJECTS



Design-Build projects are inherently complex and fast paced, and there is risk that some toll stakeholders will be unintentionally omitted from important notifications and coordination. We will support WSDOT in being proactive partners in development of the toll infrastructure and implementation of toll rollout for each facility. We will invest time at the start of each project to confirm mutual understanding of roles and processes, and effect ongoing efficient coordination, distribution, and reviews between the DB and Roadside teams.

SPECIAL REQUESTS



As the Toll Division's program continues to grow and evolve, it is inevitable that special requests will arise.

Whether these are highly technical in nature or broader efforts, such as white paper studies, our team brings you a deep bench of SMEs to address these needs, while maintaining focus on delivering the program.

Figure 5-6. Key Issues (Continued)

KEY ISSUES

VENDOR CONTRACT COMPLEXITY



With a program of this size and complexity, the dynamics of managing vendor contract procurements and change orders can become overwhelming in volume. Building off our current experience with WSDOT, we will continue to employ rigid document control processes to ensure efficiency and reduce any potential burden on WSDOT where possible.

STAFFING CONTINUITY



We understand the importance of knowledge and resource continuity and how that must be maintained through the term of the project. As we've done under the current contract, we will continue to build a succession plan that allows the best SMEs to be available to WSDOT in key roles. Additionally, we will incorporate a mentoring plan that will encourage growth of junior staff as the program grows. As such, WSDOT can be assured of having sufficient technical resources and continuous knowledge transfer throughout the life of the program.

PROGRAM COORDINATION



Coordination with WSDOT's other programs and efforts, such as Interoperability, Data Warehouse, CSC Operations, BOS Enhancements, Collections, and TRAINS replacement will be equally critical to the success of the overall program. We understand this potential volume of work and the coordination that will be required to successfully deliver on each of them. Our team is uniquely capable of working closely across multiple programs to facilitate coordination, integration, and planning.

TECHNOLOGY EVOLUTIONS



Toll systems are rooted in technology which is constantly evolving. From changes to plate types, transponders, occupancy verification, and infrastructure-light roadside installations to potential integration with road user charging, electric vehicle charging, and geofencing, the possibilities are unlimited. Our team, backed up by 120,000+ global employees focused on technology solutions, brings expertise in emerging technology, interoperability, road user charging, asset management, and systems engineering processes Ξ to support WSDOT in continuing to be a leader in the toll industry.

In *Figure 5-7* below, we have identified four critical milestones the program will face. We will prepare for each proactively through effective communication and coordination with WSDOT and vendor staff as described below.

Figure 5-7. Critical Milestones

CRITICAL MILESTONES

TOLL COMMENCEMENTS



Each individual facility toll commencement requires substantial planning to fully prepare for Go Live. Figures 5-1, 5-2, and 5-3 illustrate the long and overlapping lead times of each facility go-live and representative activities required to fully prepare for toll commencement. Such activities include design, installation, testing, commissioning, acceptance, and operations.

We will facilitate the planning and smooth execution of the activities through close coordination with WSDOT, Kapsch/TransCore, ETAN, and others during development leading up to Go Live. Following Go Live, we will provide a period of hypercare during which we will closely monitor operations, identify issues that arise, and prioritize solutions with the vendors. This will be particularly important, as some toll commencements may occur within several months of each other. This agile monitoring will further assist in isolating issues to a particular roadway Go Live and means that we can achieve early mitigation.

BOS ENHANCEMENTS

Several enhancements are planned for the BOS following system acceptance. Among these are creation of a data warehouse for improved reporting, interoperability with Western states (initially) and all states (later), collections, discount programs, previously deferred functionality, and business rule support. Each of these can be considered individual Ξ projects with their own milestones, each requiring close coordination and collaboration with Roadside Operations and CSC Operations. We will provide this coordination with the BOS, Roadside, and CSC Operations teams so that the design of each enhancement fully considers the impact on Roadside Operations, as well as CSC Operations.

RTS VENDOR RE-PROCUREMENT



Re-procurement of the next RTS vendor will require extensive planning. As several of the current facilities implemented under the Kapsch contract will reach end-of-life this decade, the initial step will be to determine timelines for replacements and whether extensions to current operations and maintenance phases will be needed. From there the timeline of the re-procurement and can be established. We will work with WSDOT and the RSIS team to begin addressing these re-procurement planning tasks, including:

- Procurement Timeline and Go Live Schedule. This will involve the development of an overall procurement timeline, beginning with the early planning efforts through vendor selection as well as an estimated vendor delivery timeline leading to multiple Go Lives.
- Establish/Confirm Goals and Objectives. Here we will focus on initial establishment of the overall goals and objectives of the new RTS vendor. These will not only be used in the RFP solicitation but will also be important in providing consensus and a guide for the RSIS team as the re-procurement progresses.
- Existing Documentation Gathering. As a preliminary step in developing the RFP documents, this effort will focus on collection and compilation of existing materials that may be needed 1) to assist the Roadside System Implementation team in development of the RFP and 2) as reference/exhibit material to be included with the RFP solicitation.
- Identify Deficiencies, Concerns, and New Functionality. In a combined effort, along with establishing the goals of the next procurement, the RSIS team will also take a deeper dive into the current/past operations with an intent to focus on what could be improved or what new functionality may be desired.
- Preliminary Procurement Strategy. We will review the previous procurement approach and perform analysis of the overall contract performance to see where any changes may be needed. This may include such aspects as the scoring/selection process, pricing/payment terms, and contract terms (such as length, optional terms).

NEW TECHNOLOGY AND TRANSPONDER PROCUREMENTS

~ New technology procurement for occupancy detection and transponder procurement are needed to support the success of Thrive in '25 with three new toll facilities going live in the same year. We will incorporate many of the procurement tasks noted above under RTS re-procurement to plan the appropriate timeline, interdependencies, goals, processes, and successful implementation of each of these procurements.



Matt Ringstad, PE

Project Manager

1100 112th Ave NE, Suite 500 Bellevue, WA 98004 Cell: 206.852.8864 Matt.Ringstad@jacobs.com