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Gresham Smith







LADOTD

IDIQ Contract for Intelligent Transportation Systems (ITS), System Design, Development, Integration and Verification Services

Contract No. 4400029393 Statewide, LA | June 4, 2024



Genuine Ingenuity

10000 Perkins Rowe Suite 280 Baton Rouge, LA 70810

225.757.5849 GreshamSmith.com

Gresham Smith June 4, 2024

Ms. Paulette Territo
Consultant Contract Services Administrator
Department of Transportation and Development
1201 Capitol Access Road, Room 405-BB
Baton Rouge, LA 70802

Re: IDIQ Contract for Intelligent Transportation Systems (ITS), System Design, Development, Integration and Verification Services

Contract No. 4400029393

Dear Ms. Territo:

Gresham Smith has been honored to partner with LADOTD and local public agencies delivering projects that improve our communities. From our Baton Rouge office, and also at the corporate level, we share the responsibility that the LADOTD holds to execute its mission in the most effective manner possible. Our key local staff all have experience successfully completing safety, traffic, ITS, complete streets, road and bridge projects for LADOTD and we look forward to the opportunity to partner with LADOTD to provide ITS System Design, Development, Integration and Verification services under this IDIQ contract.

For over the past 57 years, Gresham Smith has partnered with our Transportation clients as a trusted advisor to help them deliver their programs. Our local office is supported by key staff and subject matter experts in our other 25 offices throughout the southeastern US. We deliver diversity and depth of RESOURCES rivaling those of much larger national firms, but we retain the dedicated, personalized service and RESPONSIVENESS of a local firm. Gresham Smith looks forward to continuing our great working relationship with LADOTD staff on this program.

Our key staff proposed for this program have been honored to build their careers with LADOTD, where they have gained experience with LADOTDs organizational structure, staff, and policy while instilling the mindset that puts the needs of the communities and safety of the traveling public first. The following key staff members will be your partners on this program implement coordinated and collaborative solutions for a safe and reliable transportation system.

- Herbert "Bert" Moore II, P.E., PLS, PTOE, Principal and Project Manager, as well as Gresham Smith's Louisiana
 Transportation Leader, is experienced with ITS, traffic engineering, traffic signal design, operations, and safety
 for project on the state's facilities. In his 24 years of experience as both as a consultant and as LADOTD's District
 Traffic Operations Engineer for District 61, Bert has demonstrated his knowledge of LADOTD requirements and
 preferences, which will be essential for supporting stakeholders. As the Project Principal, Bert will ensure the
 team has the expertise and resources necessary for LADOTD's successful implementation of this program.
- Kendra McCoy, Task Manager, Independent Verification and Validation lead, has 35 years of ITS project
 experience and is also intimately familiar with managing LADOTD IDIQ projects and supporting LADOTD
 staff, giving you the peace of mind that each assignment is completed on-time and under budget. As
 the Task Manager, she will oversee day-to-day project tasks and subconsultant coordination, ensuring
 that the team remains focused on project milestones that will enable ITS strategies and solutions.



- Matt D'Angelo, P.E., QA/QC Lead, as well as Gresham Smith's national ITS leader is an ITS Program and CAV subject matter expert who has navigated program implementation challenges successfully for over 25 years. As our QA/QC lead, Matt will apply our quality process and procedures to all project deliverables while also offering creative and proven approaches from his diverse ITS Integration and CAV experience supporting 16 states and FHWA.
- Meredith Cebelak, PhD, P.E., System Engineering Analyses Lead and Strategic Implementation Planning Services Lead, knows how to make the business case for ITS solutions through data-driven performance measures and applying the systems engineering process. She will be supported by our local partner Intelligent Transportation Solutions, LLC, who bring hands on device and system integration experience.
- Adrian Meads, System Development and Integration Services Task Lead, is familiar with LADOTD ITS's software
 development life cycle. He has experience in coordinating with ITS staff to identify requirements for enhancements
 and new systems. He has assisted with integrating the Video Distribution Management System (VDMS) into the 511
 system. Adrian has been part of maintenance, support, testing, and troubleshooting for the VDMS. He has extensive
 knowledge of web, mobile, front-end, back-end, and software development. Adrian will apply his comprehensive
 knowledge of LADOTD software systems to lead the System Development and Integration Services Task to ensure
 the new and upgraded systems that LADOTD procures meet the quality and reliability that LADOTD expects.
- Our team will be supported subconsultants ITS LLC, WSP, and Vectura Consulting Services who
 complement the Gresham Smith staff and add expertise both on a local and national level.
 - ITS, LLC. staff such as Jonathan Fox, PE, PTOE have been servicing the LADOTD ITS section with various roles over the past decade assisting with all facets of the ITS section.
 - WSP staff veterans, such as Frank Perry, have implemented successful and sustainable ITS and CAV deployments across the country. Frank is a national CAV deployment expert who is also provides technical support on the FHWA Connected Vehicle Pooled Fund Study.
 - Vectura Consulting Services will assist our team with System Engineering Design Plans and Technical Support during Construction. Together with Vectura, our project plan approach will exceed the project's 2% DBE goal.

The Gresham Smith team is eager, enthusiastic and available to start work immediately on this project. We respectfully ask for your consideration and appreciate the opportunity to present this proposal. Please feel free to contact me with any questions at 225.757.5849 or by email at bert.moore@greshamsmith.com.

Sincerely,

Herbert "Bert" Moore II, P.E., PLS, PTOE

State Transportation Leader - Louisiana

Gresham Smith

24-102 **Sections 1-15**



DOTD FORM: 24-102

(Revised January 1, 2023)

PROPOSAL TO PROVIDE CONSULTANT SERVICES

Prime consultant shall complete the DOTD Form 24-102 without altering the Form's text; however, the instruction and/or guidance for Sections 12 through 23 can be removed but do not remove Section title and number.

ANY CONSULTANT FAILING TO SUBMIT ANY OF THE INFORMATION REQUIRED ON THE DOTD FORM 24-102, OR PROVIDING INACCURATE INFORMATION ON THE DOTD FORM 24-102, MAY BE CONSIDERED NON-RESPONSIVE.

1. Contract title as shown in the advertisement	IDIQ CONTRACT FOR INTELLIGENT TRANSPORTATION SERVICES (ITS), SYSTEM DESIGN, DEVELOPMENT, INTEGRATION AND VERIFICATION
2. Contract number(s) as shown in the advertisement	4400029393
3. State Project Number(s), if shown in the advertisement	N/A
4. Prime consultant name (name must match as registered with the Louisiana Secretary of State where such registration is required by law)	Gresham Smith
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	EF.0003429 DUNS number: 059153676
6. Prime consultant mailing address	10000 Perkins Rowe, Suite 280, Baton Rouge, LA 70810
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	10000 Perkins Rowe, Suite 280, Baton Rouge, LA 70810
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Herbert "Bert" Moore, II, P.E., PLS, PTOE State Transportation Leader - Louisiana 225.757.5849 / bert.moore@greshamsmith.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Herbert "Bert" Moore, II, P.E., PLS, PTOE State Transportation Leader - Louisiana 225.757.5849 / bert.moore@greshamsmith.com

10. This is to certify that all information contained herein is accurate and true, and that the team presently has sufficient staff to perform these services within the designated time frame. By submitting this proposal, proposer certifies that it is not engaged in a boycott of Israel and it will, for the duration of its contract obligations, refrain from a boycott of Israel. Proposer also certifies and agrees that the following information is correct: In preparing its response, the proposer has considered all proposals submitted from qualified, potential subcontractors and suppliers, and has not, in the solicitation, selection, or commercial treatment of any subcontractor or supplier, refused to transact or terminated business activities, or taken other actions intended to limit commercial relations, with a person or entity that is engaging in commercial transactions in Israel or Israeli-controlled territories. with the specific intent to accomplish a boycott or divestment of Israel. The proposer also has not retaliated against any person or other entity for reporting such refusal, termination, or commercially limiting actions. DOTD reserves the right to reject the response of the bidder or proposer if this certification is subsequently determined to be false, and to terminate any contract awarded based on such a false response.

Signature (shall be the same person as #9):

Date: June 4, 2024

11. If a Disadvantaged Business Enterprise (DBE) goal has been set for this advertisement, indicate which firm(s) will be used to meet the DBE goal and each firm(s)' percentage.

Firm(s):

Firm(s)' %:

Vectura Consulting Services, LLC

3%

12. Past Performance Evaluation Discipline Table:

Past Performance Evaluation Categories	% of Overall Contract	Gresham Smith (Prime)	Intelligent Transportation Systems (Sub)	WSP (Sub)	Vectura (DBE) (Sub)	Each Discipline must total to 100%
ITS	100%	67%	15%	15%	3%	100%
Percent of Contract	100%	67%	15%	15%	3%	100%

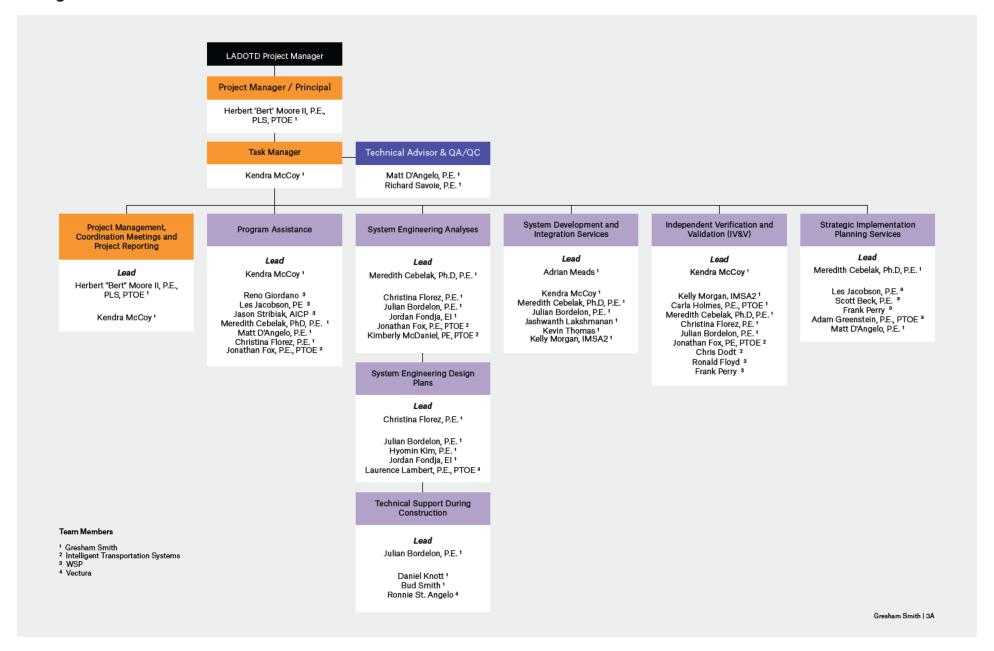
Identify the percentage of work for the overall contract to be performed by the prime consultant and each sub-consultant

13. Firm Size:

Firm Name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
Gresham Smith	Principal	1	1
Gresham Smith	Supervisor Engineer	2	6
Gresham Smith	Engineer	3	8
Gresham Smith	Engineer Intern	3	8
Gresham Smith	Computer Analyst	1	3
Gresham Smith	GIS Analyst	1	2
Gresham Smith	Supervisor – Other	2	4
Gresham Smith	Planner	1	1
Gresham Smith	ITS Technician	1	2
Gresham Smith	ITS Technician – Lead	1	2
Gresham Smith	Professional	1	4
Gresham Smith	Senior Technician	1	2
Gresham Smith	Clerical	1	1
Intelligent Transportation Systems, LLC	Principal	3	3
Intelligent Transportation Systems, LLC	Supervisor – Other	1	1
Intelligent Transportation Systems, LLC	Engineer Intern	1	2
Intelligent Transportation Systems, LLC	ITS Technician	5	5
Intelligent Transportation Systems, LLC	Clerical	1	1
Vectura Consulting Services, LLC	Supervisor-Eng	2	2
Vectura Consulting Services, LLC	Engineer	2	3
Vectura Consulting Services, LLC	Engineer Intern	0	2
Vectura Consulting Services, LLC	Inspector	1	1
Vectura Consulting Services, LLC	Senior Technician	1	1
Vectura Consulting Services, LLC	Supervisor-Other	0	1
WSP USA Inc. (WSP)	Accountant	1	5
WSP USA Inc. (WSP)	Administrative	1	5
WSP USA Inc. (WSP)	Engineer	1	3
WSP USA Inc. (WSP)	Engineer - Other		10
WSP USA Inc. (WSP)	Engineer Intern	2	2
WSP USA Inc. (WSP)	ITS Technician – Lead	2	5
WSP USA Inc. (WSP)	Planner	2	5

WSP USA Inc. (WSP)	Professional	4	10
WSP USA Inc. (WSP)	Supervisor – Engineer	1	3

14. Organizational Chart:



15. Minimum Personnel Requirements:

MPR No. (Do not insert wording from ad)	Personnel being used to meet the MPR (Individual(s) may not satisfy more than one MPR unless specifically allowed by Attachment B of the advertisement)	Firm employed by	Type of license and discipline meeting MPR / certification & number (Ex: PE # - Civil)	State of license	License / certification expiration date
1.	Herbert "Bert" Moore, II, P.E., PLS, PTOE	Gresham Smith	P.E. LA 31065 - (Civil)	Louisiana	P.E., LA 31065 Exp. 9/30/2024
			PLS LA 5043	Louisiana	PLS LA 5043 Exp. 9/30/2024
			PTOE 2728	International	PTOE 2728 Exp. 9/30/2024
2.	Christina Florez	Gresham Smith	P.E. (Electrical and Computer Engineer)	LA	P.E., LA 38799 Exp 9/30/2024
3.	Christina Florez	Gresham Smith	P.E. (Electrical and Computer Engineer)	LA	P.E., LA 38799 Exp 9/30/2024
4.	Hyomin Kim, PE	Gresham Smith	P.E. (Civil)	LA	P.E., LA 48216 Exp 3/31/2026
5.	Julian Bordelon, P.E.	Gresham Smith	P.E. (Electrical and Computer Engineer)	LA	P.E., LA 47473 Exp 9/30/2025
6.	Meredith Cebelak, Ph.D, P.E.	Gresham Smith	P.E. (Civil)	LA	P.E., LA 41963 Exp. 3/31/26
	Frank Perry	WSP	N/A	N/A	N/A
7.	Matt D'Angelo, P.E.	Gresham Smith	P.E. (Civil)	FL	P.E.,FL58586 Exp. 2/28/2025
8.	Adrian Meads	Gresham Smith	Software Developer	N/A	N/A
9.	Jonathan Fox, P.E., PTOE	Intelligent Transportation Systems, LLC	P.E. (Civil) PTOE	N/A	P.E., LA 33277 Exp. 9/30/2025 PTOE 2329 Exp. 11/7/2025
	Ronald Floyd	WSP	N/A		CCNP, CCDP, CCNA, IMSA II
10.	Kendra McCoy	Gresham Smith	System Analyst	N/A	N/A
11.	Jashwanth Lakshmanan	Gresham Smith	Database and Web Application Development	N/A	N/A
12.	Kevin Thomas	Gresham Smith	GIS Specialist	N/A	N/A

24-102 **Section 16**



16. Staff Experience	:				
Gresham Smith					
PTO	_		., PLS,	Years of experience with this firm/employer	9
Princ	cipal / Project Manag	ger		Years of experience with other firm(s)/employer(s)	16
Degree(s) / Ye	ears / Specialization	Bachelor of Scient	ence / 1999 / Civil E	ngineering, Louisiana State University	
	gistration number / ate / expiration date		A / Exp. 9/30/24 P	TOE 2728 / Exp. 9/30/24 PLS 5043 / LA / Exp. 9/30/24	
	Year registered	2004(PE); 2009(PTOE); 2010(PLS)	Discipline	P.E./Civil, PLS, PTOE	
Contract role(s) / bri		-	Meets MPR No. 1		xt.
Experience dates (mm/yy–mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders", cover the years of experience specified in the applicable MF	PR(s).
Career	has demonstrated his efficiently. Bert has s	s knowledge of LA pent the majority o	DOTD requirements of his 24-year career	s LADOTD's District Traffic Operations Engineer for District 61, and preferences, and proven adept at getting things done working with the traffic signal system and ITS equipment in the E&I and maintenance duties on these systems	
1/19 – Ongoing	LADOTD, ITS CEI Re providing Constructio	etainer, Lake Cha n Engineering Ins	arles Phase 3 ITS, C pection Services, inc	EI, Lake Charles, LA <i>Project Executive</i> . Gresham Smith is luding a Project Engineer, on-site daily/nightly inspection and construction. Bert is responsible for oversight of the entire project.	ct.
10/18 – Ongoing	Adaptive Traffic Signal signal controllers. In a largest adaptive traffic 200 traffic signals, de before travel time stu	otive Traffic Signal al System for the Laddition, 78 traffic c signal system in esign plans for 78 addies. Bert is respo	al System, Lafayette Lafayette Consolidate signals will be upgrastalled within the stated adaptive signals, impossible for overseeing	e, LA Project Executive. Gresham Smith developed an ed Government, which involved upgrading over 200 traffic ded to become adaptive traffic signals. This will be both the se of Louisiana. This project includes field inspection of over lementation of a new EVP system, integration support, and gothe, design of traffic signals, integration and QA/QC.	
4/19 – 5/20	Baton Rouge, Living	gston and Terreb	onne Parishes, LA	oping & Management, Ascension, East Baton Rouge, West <i>Principal</i> . Gresham Smith was tasked with expanding the Fibe Bert was responsible for overall project coordination and team	er
8/15 – 11/18	LA Project Execution eight-mile I-10 Twin Selectrical systems, castering health systems.	ive. Gresham Smit Span ITS project. ∃ Ibinets, camera po . Bert was respons	th developed design The project retrofitted bles, a Dynamic Mess sible for the overall p	n Span ITS-Orleans & St. Tammany Parishes, Statewide, plans along with specifications and cost estimates for the ITS equipment along the corridor utilizing existing fiber, sage Sign (DMS) structure, a communications hut and a roject management, QA/QC, traffic control plans, ddability forms and cost estimates.	

7/16 – 7/18	LADOTD, ITS Design & Integration WO#5: I-12 Ramp Meter Upgrades, East Baton Rouge and Livingston Parishes, LA <i>Project Executive</i> . Gresham Smith was tasked with performing a feasibility assessment on the existing ramp meters along I-12. The assessment included reviewing the existing system components, determining status of functionality, performing best practices research, and developing recommendations and typical layouts. Bert's responsibilities included leading the field inspections, meeting with vendors and stakeholders, project management, QA/QC, and development of recommendations.
6/16 – 9/17	LADOTD, ITS Design & Integration WO#3: ATMS.Now Design and Integration, Statewide, LA Project Executive. Gresham Smith implemented a central traffic signal software system that would increase the Department's functionality with traffic signals, improve communications to field devices and allow the back-up of signal controller configurations at a central location. Bert's responsibilities included project management, QA/QC, workshop facilitation, functional requirement development, meeting with vendors and stakeholders, assisting and documenting the training performed by vendor and assisting with the system verification.
4/17 – 8/17	LADOTD, ITS Design & Implementation WO#8: Emergency Vehicle Preemption (EVP) Devices SEA, East Baton Rouge Parish, LA Project Executive. The City of Baton Rouge incorporated the upgrade of their existing Emergency Vehicle Preemption (EVP) system within an existing safety project. The existing EVP system was outdated, utilized line of sight equipment and not installed on all intersections within the city's jurisdiction. Gresham Smith was selected to develop a SEA to upgrade EVP equipment throughout the parish. Bert's responsibilities included workshop facilitation, stakeholder coordination, and QA/QC.
Certifications (See section 20)	 DOTD Traffic Engineering Analysis Process & Report – Modules 1, 2 and 3 U.S. Department of Transportation Federal Highway Administration – DPFA Certification LADOTD – Highway Safety Manual Workshop NCHRP 17-38 Louisiana Local Technical Assistance Program – Regional Crash Data Workshop American Traffic Safety Services Association – Traffic Control Supervisor, LA State Specific

16. Staff Experier Gresham Smith	ice:				
Ke Tas	endra McCoy sk Manager / Program As rification and Validation L		ndependent	Years of experience with this employer	11
				Years of experience with other employer(s)	24
Degree(s)	Years / Specialization	Bachelor of Scie	nce / 2012 / Techni	ical Project Management, DeVry University	
Active	e registration number / state / expiration date	N/A			
	Year registered	N/A	Discipline	Systems Specialist	
Contract role(s) / b	rief description of respo	onsibilities		er / Kendra will lead the management, coordination meetings, nd reporting for each task. She will also provide technical supp MPR No. 10.	ort
Experience dates (mm/yy–mm/yy)				ntract; <i>i.</i> e., "designed drainage", "designed girders", er the years of experience specified in the applicable MPR	(s).
1/22 – Ongoing	develop a redesign of th	e East Baton Roug It System. Kendra	ge Traffic Engineerin is responsible for pro	ger. Gresham Smith performed a system engineering analysis g Office and the initial design of the East Baton Rouge Video oject management and assisted with the system engineering gh level design.	s to
1/17 – 12/22	The project consisted of	implementing the for coordinating da	mapping of ITS field ata processing, deve	ng & Management, Statewide, LA ITS Systems Specialist devices, fiber networks, and inventory and maintenance recordioping procedures/templates, coordinating workload, drafting and procedures.	rds.
10/14 – 12/20	ALDOT, TMC Operation Gresham Smith assisted Policies annotated outlin developed in the Statew	ns - RTMC, Monto I ALDOT with deve that was used to ide Architecture ar	gomery, Birminghan eloping a high-level, o develop the detaile nd further refine this	m, Tuscaloosa, Huntsville, AL ITS Systems Specialist. concept document and Standard Operating Procedures and d TMC SOPs. Other tasks include reviewing the concept to be specific to the TMC Operations. Kendra was responsible Measure Reporting to include Event and Device Management.	
4/20 – 6/20	of expanding the ITS info	rastructure and intr	roducing transit man	ecialist. Gresham Smith was tasked with evaluating the feasible aged lanes, including bus-on-shoulder along SR 386. Kendra stimate to implement managed lanes with bus-on-shoulder.	lity
7/16 – 7/18	LA ITS Systems Specialong I-12. The assessm	ialist. Gresham Sinent included review and developing rec	mith was tasked with wing the existing sys	Meter Upgrades, East Baton Rouge and Livingston Parisher performing a feasibility assessment on the existing ramp met stem components, determining status of functionality, performing typical layouts. Kendra was responsible for ITS technical supports.	ers ng
6/17 – 3/18	LADOTD, ITS Design a Gresham Smith was tas documenting existing co	nd Implementation ked with updating the nditions, performin	the ITS Strategic Bu ng benefit-cost analy	isiness Plan Update, Statewide, LA ITS Systems Specialisiness Plan which included conducting visioning meeting, sis, providing implementation strategies and recommending including benefit/cost analysis and deployment plan.	st.

2/17 – 10/17	LADOTD, ITS Design & Implementation WO#7: Signal Communications Upgrade Phase 1 – SEA, Various Locations, LA ITS Systems Specialist. Gresham Smith developed the Systems Engineering Analysis (SEA) for the Signal Communications Upgrade project. The project included developing high level requirements, concept of operations, operational strategies, and implementation plan. Kendra was responsible for ITS technical support, data collection and document development.
6/16 – 9/17	LADOTD, ITS Retainer, WO#3 ATMS.NOW, Design and integration Support, East Baton Rouge, LA Project Manager. Gresham Smith was selected to assist LADOTD with the selection and implementation of a central traffic signal software system that would increase the department's functionality with traffic signals, improve communications to field devices and allow the signal controllers to be back-upped at a central location. Kendra's responsibilities included project management, QA/QC, workshop facilitation, functional requirement development, meeting with vendors and stakeholders, assisting and documenting the training performed by vendor and assisting with the system verification.
5/17 – 8/17	LADOTD, ITS Design & Implementation WO#8: Emergency Vehicle Preemption (EVP) Devices SEA, East Baton Rouge Parish, LA ITS Systems Specialist. The City of Baton Rouge incorporated the upgrade of their existing Emergency Vehicle Preemption (EVP) system within an existing safety project. The existing EVP system was outdated, utilized line of sight equipment and not installed on all intersections within the city's jurisdiction. Kendra was responsible for ITS technical support, data collection and document development.
5/13 – 7/15	LADOTD, Retainer Contract for ITS Statewide Systems Design, Integration and System Verification Services, Statewide, LA Project Manager. Under this ITS retainer contract, Gresham Smith provided systems engineering, integration and support services, system analysis, and independent verification and validation services. Kendra supported the following task orders; Program Assistance, Video Distribution Management System, Configuration Management, ITS 511 ATIS ConOps, Advanced Transportation Management and Toll Operations Business Plan.
8/07 – 7/08	FDOT, District 4 - ITS / Traffic Operations Office, TransCore Fort Lauderdale, FL ITS Maintenance Project Manager. Responsible for reporting on the ITS Maintenance Contract including, but not limited to, Preventive and Emergency Maintenance, Utility Locate Coordination, Stakeholder Coordination, Reporting, Project Schedules and Reporting. Managed ITS Maintenance Staff to assure needs and priorities of the client and users of the ITS Maintenance System were met. Responsible for integrating and testing all communications and ITS devices into the Regional TMC, as well as, the SunGuide software. Assisted in the development of the Maintenance Inventory Management System (MIMS) to be used in the field by maintenance technicians on tablets for inventory and trouble ticket updates.
7/00 – 8/07	FDOT District 8 - ITS/Traffic Operations Office, TransCore, Pompano Beach, FL Assistant TMC Manager, TMC Manager, QA/QC Systems Development Specialist. Integral part of the establishment of Turnpike's Pompano and Orlando TMCs. Work included active roles in the central software modifications/enhancements, hiring, training, and supervising of operators, development of the TIM team and coordination with D6 TIM, RISC, and Road Ranger programs. Coordinated training with the Florida Highway Patrol and District offices to perform Incident Management Response. Responsible for leading working groups with the users of SunNav Advanced Transportation Management System software to determine needs and priorities from the user perspective for new features and changes or enhancements to existing ones. Lead weekly software development meeting to update status, track progress and prepare monthly reports. Collect all documents during the life of the Software Release Task. Creation of software test procedure steps, for requirement delivery verification and regression testing. Process Development: User liaison for reporting software problems, enhancement requests and change requirements. Identify and track Change Requests and provide status reports to client. Developed and managed the policy and procedures changes and needs that can be implemented into the SunNav software and the further development of response plans. SunNav Report Development: Created a software reporting system both within the SunNav database and linked to the SunNav database archives.

16. Staff Experience	:				
Gresham Smith					
Christina Florez, P.E. Systems Engineering Design Plans Lead				Years of experience with this employer	8
				Years of experience with other employer(s)	15
Degree(s) / Ye	ears / Specialization	Bachelor of Scie	ence / 2001 / Electric	cal Engineering, Florida International University	
	gistration number / ate / expiration date		A / Exp. 9/30/24 PE	E 65603 / FL / Exp. 2/28/25	
	Year registered	2014 (LA), 2007 (FL)	Discipline	P.E./Electrical and Computer	
Contract role(s) / brief	description of respo	onsibilities		de Program Assistance, support Systems Engineering Ana em Engineering Design Plans task. Meets MPR No. 2 an d	
Experience dates (mm/yy–mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders", over the years of experience specified in the applicable	
Career	experience includes: corridor management limit (VSL) system de management system detection, active traff	ITS engineer of re t (ICM) planning st esign, transportatio (IMS), and revers ic management, tra	cord on design-bid-b tudies, ITS design an in systems managem ible-lane plan develo avel time systems, e	neer on complex ITS projects over the past 23 years. Her uild and design-build projects for multiple DOT clients, integral disconstruction support, field inspection and testing, variable-spect and operations, systems engineering analyses, incident pment. Her ITS design projects included CCTV, DMS, radar express lanes, communications, and electrical subsystems. Childer based contracts in Louisiana and Florida.	peed-
10/21 – Ongoing	ALDOT, Statewide F RTOP will improve tra multijurisdictional cor operations and maint contractors tasked wi signals, maintenance	Regional Traffic O affic flow, safety ar ridors. Gresham S tenance. As Projec ith elevating the pe and repair of sign	Operations Program and travel time reliabili mith is leading a teal of Manager, Christina offormance of the Bir al systems and relat	(RTOP) Program, Statewide, AL Project Manager. ALDO ty through active arterial management strategies along of consultants and contractors to deliver proactive signal is responsible for leading a team of signal consultants and mingham metro-area arterials through active management of ed ITS assets including communications, support for special e coordination with ALDOT and local agencies.	
3/20 – Ongoing	established a test be scenarios. Christina	d to better underst designed the comn analysis, secured	and how vehicle auto nunication and powe grant funding, design	and Rutherford Counties, TN Lead Technical Advisor. The mation and active traffic management impacts real world driver infrastructure for the network. She also helped develop the ned, and supported the construction of the Test Bed which y.	
1/19 – Ongoing	LADOTD, ITS CEI Re providing Construction	etainer, Lake Cha on Engineering Insp	rles Phase 3 ITS, C pection Services, inc	EI, Lake Charles, LA <i>Project Manager.</i> Gresham Smith is luding a Project Engineer, on-site daily/nightly inspection and construction. Christina is responsible for oversight of the entire	,

2017 – 2020	FDOT D6 - SR 826/Palmetto Expy from E of NW 57th Ave to E of NW 42nd Ave, Miami, FL Project Manager/ITS EOR. Christina was responsible for project management, ITS design, segment coordination, discipline coordination, and QAQC. The design included CCTV cameras, DMS, arterial DMS, MVDS, and Ramp Signaling, lightning protection, fiber optic communications network and power distribution system with stand-by generator. Responsibilities – Project Management, ITS Engineer of Record
02/17 – 10/17	LADOTD, ITS Design & Implementation WO#7: Signal Communications Upgrade Phase 1 – Systems Engineering Assessment (SEA), Various Locations, LA <i>Project Manager.</i> The project consists of modifications and upgrades of the existing infrastructure to provide connectivity to various signals. Christina was responsible for project management, ITS technical support, document development, including Concept of Operations and review, ITS regional architecture review and QA/QC.
09/16 – 9/17	LADOTD, ITS Design, Integration and System Verification Services, WO#3: ATMS.Now Design and Integration, Statewide, LA Senior ITS Engineer. Seeking to replace the existing obsolete system with a more unified traffic control system, the LADOTD upgraded to Trafficware's ATMS.Now, a central management system that unified the traffic signal systems statewide and allowed more effective and efficient monitoring and control. Christina's responsibilities included ITS technical support, training oversight and document review.
10/10 – 8/17	FDOT D6, ITS Support, Miami, FL <i>Project Manager.</i> Christina was responsible for coordination, management, and technical support of all engineering services for the on-call contract. The contract included multiple task orders to support FDOT's ITS program, including providing ITS reviews for the SR 826/I-75 Express Lanes, I-75 Segment AB Express Lanes, and I-75 Systems Integrator projects; supporting FDOT's oversight and review of the ITS component plans and specifications of the Port of Miami Tunnel project; updating server room as-builts; and providing support for contract negotiations on various projects, including Okeechobee Road design and Palmetto Express design projects.
12/15 – 3/17	MetroPlan Orlando - 2016 - 03 ITS Master Plan, Orlando, FL Project Manager, Senior Engineer. Responsible for the development of the ITS Master Plan that included determination of the ITS Vision, Goals and Objections, review and documenting the existing conditions, infrastructure and inventory, identifying ITS needs, identifying applicable ITS strategies, review of the regional ITS architecture, development of the Concept of Operations, and prioritization of the ITS Master Plan. Christina's responsibilities included project management, ITS technical support, development of ITS needs, and applicable ITS strategies, and development of concept of operations.
9/15 – 9/16	Broward County MPO, Integrated Corridor Management (ICM) Planning Study, Broward County, FL Project Manager/Senior ITS Engineer. Responsible for the development of project documents, including concept of operations, high level system requirements and implementation plan; coordination with various stakeholders and facilitation of multiple workshops. The project consisted of developing a ConOps, a high-level ICM requirements report, and an implementation plan for designing, constructing, integrating, operating, and maintaining the ICM system components with the sole purpose of improving the efficiency of the multimodal transportation system along the I-95 corridor.
2009 – 2016	FDOT D6 - Section 5 - SR 826 and SR 836 Interchange Reconstruction Design-Build, Miami-Dade County, FL Project Manager/ITS EOR. Responsible for systems engineering management documentation, development of the ITS master plan, project design, development of test plans, report preparation and post-design services. The design-build project includes the design, installation and upgrade of ITS components and subsystems, including fiber-optic and wireless communications, 30 CCTV cameras, 41 microwave detectors, six freeway DMSs and 18 arterial DMSs along both SR 826 and SR 836 and two separate power distribution systems. Responsibilities – Project Management, ITS Engineer of Record, Test Plans Development, Master Plan Development, SEA Document Development, Post-Design
2006	FDOT D4 - Districtwide ITS Consultant - Pompano Beach Parking Monitoring System, Broward County, FL ITS Engineer Intern. Responsible for assisting in the development of the parking monitoring system for the Pompano Beach parkand-ride lot as part of the districtwide contract. This system included the installation of driveway detectors, CCTV cameras, power, and wireless communications and development of software. Responsibilities – ITS Technical Support

2/20 - Ongoing

1/18 - Ongoing

Gresham Smith Matt D'Angelo, P.E. 5 Years of experience with this employer QA/QC and Senior Advisor / CAV Subject Matter Expert Years of experience with other employer(s) 21 Degree(s) / Years / Specialization Bachelor of Science / 1997 / Civil Engineering, University of Central Florida Active registration number / P.E. 58586 / FL / Exp. 2/28/2025 state / expiration date Discipline | P.E./Civil Year registered 2002 (FL) Senior Engineer / Matt will provide Program Assistance, support Strategic Contract role(s) / brief description of responsibilities Planning, serve as technical advisor, and lead QA/QC. | Meets MPR No. 7. Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", Experience dates "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable (mm/yy-mm/yy) MPR(s). GDOT, SigOps Traffic Signal Operations Program for the Western Region of Metro Atlanta, Atlanta, GA | Project Manager. Gresham Smith is providing proactive and flexible support to a region with over 1,700 signals through a mix of remote and on-site signal engineers and technicians. In order to deliver this scale of support efficiently, we are leveraging 10/21 - Ongoing GDOT's investment in their traffic signal timing toolbox of applications that utilizes automated traffic signal performance measures (ATSPMs), the SigOps Metrics analytics tool, RITIS flow data, signal asset management software, and the statewide traffic signal control software with communications in place to nearly every signal in the state. ALDOT, Statewide Regional Traffic Operations Program (RTOP) Program, Statewide, AL | Innovation Lead. ALDOT's RTOP will improve traffic flow, safety and travel time reliability through active arterial management strategies along multijurisdictional corridors. Gresham Smith is leading a team of consultants and contractors to deliver proactive signal 10/21 - Ongoing operations and maintenance. As innovation lead, Matt advises ALDOT on ways to leverage third-party data to generate signal performance measures until intersections are equipped for Automated Traffic Signal Performance Measures (ATSPM). TDOT, I-24 MOTION Test Bed, Davidson and Rutherford Counties, TN | Technical Advisor. Matt serves as the lead programmatic advisor supporting TDOT with establishing a first of its kind test bed along I-24 to better understand how new vehicle automation and operational approaches impact real world driving scenarios. Gresham Smith developed the systems 3/20 - Ongoing engineering analysis report, ITS Architecture, and design of the Test Bed. We are also providing guidance on test bed best practices, big data management, deployment strategy, public relations, and a business plan. Matt is supporting outreach and the operation of the testbed through experiments with industry, other agencies, and researchers. KYTC, I-Move Design-Build, Jefferson and Oldham Counties, KY | Technical Advisor, QA/QC. The project includes the

QA/QC on project deliverables and providing ITS technical assistance.

ITS design for CCTV cameras and DMS along I-265, I-71, and I-64 in Jefferson and Oldham Counties. Matt is performing the

include new fiber optic backhaul, network hubs, radar detection sensors (RDS), dynamic message signs (DMS), road weather information sensors (RWIS), closed circuit television (CCTV) cameras, CB interrupters devices and highway advisory radio

TDOT, I-40 Cumberland Plateau ITS Deployment, Region 2, TN | QA/QC. Matt is responsible for providing technical guidance, design support, and conducting all QC reviews prior to plan submittals. Gresham Smith is currently new ITS coverage along I-40 from Cookeville east to SR 299 (Exit 338). The project includes 50 miles of ITS fiber and devices, which

	(HAR) stations. Once complete, the project will provide the Department with the ability to better manage congestion and incidents along rural sections of I-40 with challenging terrain in Putnam and Cumberland Counties.
12/19 – 12/22	City of Franklin, SR 96 Traffic Signal Improvements, Franklin, TN CAV /ATSPM Lead. Matt served as project advisor for this CMAQ-funded signal system project that will improve traffic operations at 13 signalized intersections along SR 96 as well as establish ATSPM capabilities. Design elements include enhanced vehicle detection, signals with Flashing Yellow Arrows (FYAs), upgrade of existing signal controllers to Advanced Traffic Controllers (ATCs), CV infrastructure to support SPaT message broadcasting, and ADA/PROWAG pedestrian improvements.
10/16 – 6/19	GDOT, Signal Phasing and Timing (SPaT) Challenge, Atlanta, GA Project Director, Technical Advisor. Project director and technical advisor, providing strategic guidance on project deployment activities. This project included deploying dedicated short-range communications (DSRC) roadside units at approximately 600 signalized intersections and 12 ramp meter locations in metro Atlanta, broadcasting both signal phasing and timing (SPaT) information as well as map data (MAP) messages and all systems engineering, equipment procurement/installation, testing, and applications. Matt also supported GDOT with the successful award of a \$2.5M grant from the FHWA Advanced Transportation and Congestion Management Technologies Deployment Initiative (ATCMTD) to expand the deployment.
10/16 – 6/19	Federal Highway Administration, Support Services for the Office of Operations, Washington, DC Project Director. Project director and proactive operations contract lead for this indefinite delivery/indefinite quantity contract to support FHWA's Office of Operations in the areas of transportation management/operations and freight management/operations. Deliverables included guidance documents, studies, and training for state and local agencies. Task activities included marketing and outreach support for the national Automated Traffic Signal Performance Measures initiative, analyzing the impacts of twin 33-foottrailer combinations, and developing 12 transportation systems management and operations (TSMO) case studies focusing on the different elements of the capability maturity model.
1/99 – 10/16	Central Florida Expressway Authority Expressway Management System, Orlando, FL <i>Program Manager</i> . Matt was responsible for oversight of all aspects of their \$40 million ITS program including planning, design, construction, maintenance, and operation of an expressway management system across 106 centerline miles of limited-access toll facilities. Matt guided a team of ITS professionals in an extension of staff role so the client was able to implement their ITS program with a single inhouse staff position. This nationally recognized incident management system included an agency owned fiberoptic network, 144 CCTV cameras, 35 DMS, and 111 AVI sensors used to generate travel times. Matt provided project oversight and managed multiple design consultants through the design and post-design phases. He also provided technical, integration, and testing support to the Authority's construction engineering and inspection (CEI) project manager, resulting in expeditious resolution of contractor or vendor issues. Served as a strategic advisor on emerging technologies and operational strategies.
10/08 – 2/16	FDOT, ITS General Consultant, Statewide, FL <i>Project Principal, QA & Strategic Advisor.</i> Supported ITS Strategic Plan updates and provided guidance on the future of traveler information and CV deployment opportunities. Supported all facets of ITS including program planning, ITS architecture, systems engineering, TMC software, independent technology testing, integration, operations, maintenance, performance measures, 511 traveler information, and emerging technologies. Also supported FDOT's Traffic Engineering Research Laboratory (TERL) with ITS and traffic control product testing as well as the development of statewide ITS specifications and installation plan details.
4/11 – 9/15	Utah DOT, Intelligent Transportation Systems Program Consultant, Statewide, UT Project Manager. Matt advised UDOT and project stakeholders on early deployment strategies to leverage connected vehicles to address both urban and rural problems. Urban applications included transit signal priority to improve reliability and transit/light vehicle interactions, special event information and improving dilemma zone decision making for heavy vehicles. Rural applications included commercial vehicle platooning and parking applications to improve safety and efficiency, in addition to augmented weather data collected by private fleets to close gaps in local weather reporting and to enhance maintenance operations.

16. Staff Expe							
Gresilali Silit	Meredith Cebelak, Systems Engineering Analys	•		Years of experience with this employer	9		
	Planning Services Lead			Years of experience with other employer(s)	15		
Degre	e(s) / Years / Specialization			gineering, University of Texas; Master of Science/2013/Civachelor of Science/2001/ Civil Engineering, University of Fl			
A	Active registration number / state / expiration date	PE.0039985	/ LA / Exp. 3/31/26 P	E. 65586 / FL / Exp. 2/28/25			
	Year registered	2017 (LA) 2007 (FL)	Discipline				
Contract role(s	s) / brief description of respo	onsibilities	Meredith will lead Sys Planning Services. N	tem Engineering Analyses and Strategic Implementation leets MPR No. 6.			
Experience dat (mm/yy-mm/y				tract; <i>i.</i> e., "designed drainage", "designed girders", er the years of experience specified in the applicable MPR	(s).		
Career	TSM&O projects that imp design and deployment o traveler information syste experience, Meredith has	"designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s). Meredith brings over 24 years of experience managing and designing a multitude of transportation projects that implement TSM&O projects that improve safety and mobility through traffic operations and management strategies. Her experience includes design and deployment of ITS devices for traffic management and incident detection, traditional signal retiming and optimization, traveler information systems, and design of the communication infrastructure to support these systems. In addition to her project experience, Meredith has been actively involved in the transportation research community and her areas of expertise include cutting edge ITS solutions, big data and its role in transportation planning, CAVs, and freight mobility.					
4/21 – Ongoir	LCG Johnston Street Li Government to develop of	ghting, Lafay lesign plans fo	ette, LA ITS Engineer r street lighting for the 2.	. Gresham Smith was selected by Lafayette Consolidated .3 miles section of Johnston Street (US 167) through Vermillio urrently removing the street lighting within the median of Johns			
3/20 – Ongoir	overseen the establishmen TDOT ITS Architecture. So designed the test bed facilitated the analysis of	ent of the FHW She assisted T illity covering 4 test beds best and manager	/A approved System Eng DOT with acquiring a CN miles and consists of 40 practices, the creation of ment best practices and	unties, TN <i>Project Manager, Engineer-of-Record</i> . Meredit gineering Analysis Report for the project as well as updates to MAQ funding for the design and construction of the test bed. So camera poles that support a 294 4k resolution cameras. She of the methodology and screening procedures for testing, the a business plan that addresses the operations and maintenant	the She e		
9/18 – Ongoir	management of the proje System Engineer Analysi City's ITS. Meredith will p	ct. She was re s report and w rovide the City	esponsible for the develo rill be developing the des with cost estimates for	er, Engineer of Record. Meredith is responsible for the overage pment of the City's first ITS deployment. She developed the sign plans and providing technical support for the deployment the project throughout its development. Finally, she will assist the project that meet TDOT Local Program needs.	of the		

5/18 – Ongoing	Town of Smyrna, Town of Smyrna ITS Phase 3, 4, & 5, Smyrna, TN Project Manager, Engineer of Record. Meredith is responsible for the overall management of the project. She was responsible for expanding the Town's ITS deployment. She developed the design plans and provided technical support for the Town's ITS Phases 3, 4, and 5. Meredith provided the Town with cost estimates for the Phase 3, 4, & 5 projects throughout its development. Finally, she assisted the Town with utility coordination and created the bid documents for the project that meet TDOT Local Program needs.
1/18 – Ongoing	TDOT, ITS Design Support Services WO#8: Cumberland Plateau I-40 ITS Expansion, Cookeville, TN Project Manager, Engineer of Record. Meredith is responsible for the management of the project which includes coordination between stakeholders from TDOT's ITS division, TDOT Region 2 TMC personnel, TDOT's IT department, THP, Putnam County 911 personnel, and Cumberland and Putnam County officials. Meredith led the ITS device deployment workshop that provided a platform for the stakeholders to provide insight into the operational needs of the system. This information was then used as the basis for the design. She is EOR for the design plans and specifications for the 53-mile project.
1/18 – Ongoing	TDOT, ITS Design Support Services WO#7: I-40 Nashville ITS Expansion, Nashville, TN Project Manager, Engineer of Record. Meredith is responsible for project management which includes the coordination of stakeholders from TDOT's ITS division, TDOT Region 3 TMC staff, TDOT's IT department, THP, and County officials. Meredith led the ITS device deployment workshop that provided a platform for the stakeholders to provide insight into the operational needs of the system. This information was then used as the basis for the design. She is the EOR for the design plans and specifications for the 38-mile project.
12/19 – 12/22	City of Franklin, SR 96 Traffic Signal Improvements Franklin, TN Project Manager. This CMAQ funded signal system project will improve traffic operations at 13 signalized intersections along SR 96 between Eddy Lane and Arno Road. Design elements include enhanced vehicle detection, signals with Flashing Yellow Arrows (FYAs), upgrade of existing signal controllers to Advanced Traffic Controllers (ATCs), Connected Vehicle infrastructure to support Signal Phase and Timing (SPaT) message broadcasting either via DSRC or C-V2X, and ADA and PROWAG pedestrian improvements. This project will also establish capability for Automated Traffic Signal Performance Measures.
1/20 – 11/22	TDOT, SR 386 Conceptual Study, Smyrna, TN Freight and ITS Lead. Meredith analyzed the existing ITS infrastructure and TSM&O strategies deployed as well as identified future device deployment and TSM&O opportunities that would benefit all users of the corridor, including freight and transit. This analysis was used to prepare conceptual alternatives for widening and adding transit managed lanes along SR-386 from I-65 to US 31-E.
10/19 – 12/20	TDOT Traffic On-Call 2017-2020 – Noise Study Statewide, TN <i>Task Manager.</i> Meredith is overseeing the effectiveness of the "No Compression Break" signing along I-75 near Exit 11 which is near the campus of Ooltewah Elementary School and neighborhood communities. The study gathered noise readings before and after the deployment of the signage and included a public survey to obtain resident feedback. A final report documenting the findings was created at the end of the study.
11/14 – 5/20	Town of Smyrna, Signal Optimization Smyrna, TN Senior ITS/Traffic Engineer. Gresham Smith provided signal timing and optimization for 27 signals within the town, and developed the ITS Master Plan for a multi-phase deployment of ITS devices. This included the upgrading of communication cabling and signal control equipment, as well as the installation of a central software system and CCTV cameras.
7/16 – 3/17	LADOTD, ITS Design & Implementation, WO#5: I-12 Ramp Meter Upgrades, East Baton Rouge and Livingston Parishes, LA ITS Engineer. Gresham Smith performed a feasibility assessment on the existing ramp meters along I-12 which included reviewing the existing system components, determining status of functionality, performing best practices research, and developing recommendations and typical layouts. Meredith developed the best practices for ramp metering. This review looked at ramp metering deployments across the US and included a review of the different operational strategies used and geometric layouts.
11/15 – 4/16	LADOTD, ITS Design & Implementation WO#4: I-10 Twin Span ITS, Orleans & St. Tammany Parishes, Statewide, LA QA/QC. Gresham Smith was tasked with the design and post-design of the I-10 Twin Spans ITS project. During the design period, Meredith performed QA/QC.

16. Staff Experience Gresham Smith	ce:				
	rla Holmes ior ITS Engineer			Years of experience with this employer	15
				Years of experience with other employer(s)	20
	Years / Specialization			g / Georgia Institute of Technology ng / Georgia Institute of Technology	
	registration number / state / expiration date	P.E.026696 / GA	A / 12/31/24		
	Year registered	2001	Discipline	P.E./Civil	
	ef description of respo		Validation task.	er / Carla will support the Independent Verification and	
Experience dates (mm/yy–mm/yy)				ntract; <i>i.e.</i> , "designed drainage", "designed girders", er the years of experience specified in the applicable MF	PR(s).
10/19 – Ongoing	FDOT CO, TSM&O Program Consultant, SunGuide Software Support, Tallahassee, FL Project Manager As consultant project manager Carla, supports the FDOT CO in managing the SunGuide software program. Her responsibilities include reviewing developer deliverables, monitoring SunGuide issues from identification through resolution, assisting with the development of requirements, preparing test plans and participating in Factory Acceptance Testing and Independent Verification & Validation for major releases and hot fixes. She monitors project scope, schedule, budgets and quality standards and works closely with the rest of the SunGuide Support Team to deliver this vitally important software product.				
5/07 – 7/15	statewide ITS archited	ture, the Gulf Coa	ist regional ITS arch	Transportation Engineer Gresham Smith developed the itecture, the Northwest Mississippi regional ITS architecture et al-Forrest-Lamar regional ITS architecture.	
the Jackson regional ITS architecture and the Hattiesburg-Petal-Forrest-Lamar regional ITS architecture. MDOT, ITS Task 10: Design and Specs, Jackson, MS Senior Transportation Engineer This task includes design of ITS-related projects and development of various specification documents as requested by the MDOT project manager. The task also includes evaluation and recommendations for ITS field device designs and establishing technical specifications for both field devices and various TMC systems, including traffic cameras; permanent and portable dynamic message signs (DMS); traffic detectors; video; Bluetooth and radar detection units; automated signal controllers; communications equipment; video walls; ATMS software; video distribution; 511 and smart work zone systems. Under this task, Gresham Smith prepared construction documents for the Jackson Metro incident management project, which included nine dynamic message signs and related communications equipment, including the DeSoto County incident management project.					r. amic r this
1/08 – 10/14	MDOT, ITS Integrator Gresham Smith develo	oped a concept of stakeholder need	operations specific s consistent with IT	ations, Jackson, MS Senior Transportation Engineer ally for MDOT that incorporated the selected ITS market S Architectures, and defines the various users of the syste	

10/14 – 2/21	ALDOT, Regional Traffic Management Centers (RTMCs) Staffing & Operations, Statewide, AL <i>Project Manager</i> Gresham Smith has staffed and operated RTMCs for ALDOT since October of 2014. To date, we fully staff ALDOT's RTMCs in Huntsville, Montgomery, and Tuscaloosa, and provide supplemental staff in the Birmingham RTMC. Our RTMC staff provide 24 hours a day, seven days a week operations of these four RTMCs, which are the central communications and operations hubs for ALDOT's ITS, Algo Traffic, in each region. They carry out the primary functions of traffic incident management; management of traffic during emergencies; management of traffic for planned special events; traveler information dissemination; coordination with ALDOT personnel, local public safety partners, and other stakeholders; and associated notifications, performance monitoring and reporting. Our staff of highly trained professionals gather, process, share, and disseminate all relevant data and information from a number of resources to improve the safety and efficiency of Alabama's transportation system. An integral part of staffing and operating RTMCs is hiring training, and retaining the right people. We hire competent staff with the experience nd/or education, and provide on-thejob training when newly hired, ongoing training based on individual employee needs, refresher training, training on new areas of responsibility, advanced training, and opportunities for professional development in TMC operations. We also developed and conducted an in-depth training course for ALDOT staff in the Mobile RTMC consistent with the training provided to staff at the state's other four RTMCs.
2/18 – 6/18	ALDOT, Development and Implementation of a Training Course for Mobile RTMC Operators, AL <i>Project Manager</i> Carla served as project manager for the development and implementation of a Training Course for Operators at ALDOT's Mobile RTMC. Gresham Smith developed a Training Course curriculum and materials, including Operator Training Manual, Instructor Training Manual, Presentations and Exercises, as well as a strategy for assessing and testing the RTMC Operators' change in Knowledge, Skills and Abilities based on the training. Gresham Smith also provided RTMC operations services while Mobile RTMC operations personnel participated in the three days scheduled for classroom instruction.

Gresham Smith Julian Bordelon, P.E. Years of experience with this employer 5 **Technical Support During Construction Lead** Years of experience with other employer(s) 2 Degree(s) / Years / Specialization Bachelor of Science / 2018 / Electrical Engineering, Louisiana State University Active registration number / P.E. 0047473 / LA / Exp. 9/30/25 state / expiration date Year registered 2023 (LA) Discipline | P.E./Electrical Electrical Engineer / Julian will lead the Technical Support During Construction Contract role(s) / brief description of responsibilities task as well as support other tasks. | Meets MPR No. 5. Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", **Experience dates** "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable (mm/yy-mm/yy) MPR(s). LADOTD, CEI H.013256, Scott to Lake Charles ITS, CEI, Lake Charles, LA | Project Engineer. Gresham Smith is providing Construction Engineering Inspection Services, including a Project Engineer, on-site daily/nightly inspection and 11/22 - Ongoing technical construction inspection, throughout the course of construction. Julian is assisting in contract administration, inspection and testing oversight. MDOT ITS, Meridian ITS Design, Meridian, MS | TSM&O Engineer. Gresham Smith is developing a system engineering analysis, ITS design plans, and specifications for I-59/I-20 between the I-59 @ I-20 interchange and the Mississippi state line. The project will install new ITS equipment including fiber, electrical systems, cabinets, camera poles, Dynamic Message Sign 10/20 - Ongoing (DMS) structures, and a communications hub. Julian performed system engineering analysis, ITS design, voltage drop calculations, plans preparation, and field reviews. Jefferson Parish - Train Detection System, New Orleans, LA | ITS Systems Specialist. Gresham Smith performed a 9/20 - Ongoing system engineering analysis and concept of operations to develop a train detection system. Julian is responsible for developing the background functionality of train location prediction to send to the smart phone application. LA OTS, LADOTD, Video Distribution Management System (VDMS), Baton Rouge, LA | Pre-Professional, Julian is 12/18 - Ongoing providing ITS systems software maintenance and software development support for the statewide VDMS system which includes Baton Rouge, Houma, New Orleans and Shreveport. LADOTD, LCG Adaptive Traffic Signal Design and Implementation, Lafayette Parish, LA | Pre-Professional. Julian is responsible for field verification of traffic signal inventory (TSI) of LCG system, design plans for adaptive signal control 12/18 - Ongoing intersections, and integration when the system is completed. LADOTD, CEI H.011500.6, Lake Charles Phase 3 ITS, CEI, Lake Charles, LA | Pre-Professional, Gresham Smith is providing Construction Engineering Inspection Services, including a Project Engineer, on-site daily/nightly inspection and 1/19 - 3/24technical construction inspection, throughout the course of construction. Julian is assisting in contract administration, inspection and testing oversight. TDOT, ITS Design Support Services WO#7: I-40 Nashville ITS Expansion, Nashville, TN | ITS Systems 12/18 - 10/22Specialist. Julian is assisted with the electrical design and voltage drop calculations and back checking of plans.

2/20 – 8/22	KYTC, I-Move Design-Build, Jefferson and Oldham Counties, KY <i>Pre-Professional.</i> The project includes the ITS design for CCTV cameras and Dynamic Message Signs (DMS) along I-265, I-71 and I-64 in Jefferson and Oldham Counties. Julian is assisting in the development of the typical details and plans preparation.
1/19 – 12/22	LADOTD, ITS CE&I IDIQ, Task Order #2 & ITS CEI WO #4: Fiber Optic Mapping & Management, Ascension, East Baton Rouge, West Baton Rouge, Livingston, Terrebonne, Lafayette, Pointe Coupee, St. Landry and Rapides Parishes, LA Pre-Professional. Gresham Smith was tasked with expanding the Fiber Optic Mapping & Management system to various parishes. Julian was responsible for data entry, document development and quality control.
1/21 – 4/22	GDOT, ITS Design: I-285 @ I-20 East Interchange Design Build, Atlanta, GA Pre-Professional. Gresham Smith developed design plans along with specifications and cost estimates for the I-285 @ I-20 ITS project. The project removed existing ITS equipment and installed new ITS equipment including fiber, electrical systems, cabinets, camera poles, Dynamic Message Sign (DMS) structures, and connections to existing communications hubs. Julian assisted with ITS design, voltage drop calculations, and plans preparation.
3/20 – 3/22	MDOT, SR601 ITS Design, Gulfport, MS ITS System Specialist. Gresham Smith developed system engineering analyses, ITS design plans, and specifications for two sections of the new SR601 between I-10 and 11th Street. The project installed new ITS equipment including fiber, electrical systems, cabinets, camera poles, Dynamic Message Sign (DMS) structures, Bluetooth detection, radar detection, a communications hub, and a highway advisory radio. Julian performed system engineering analysis, ITS design, voltage drop calculations, and plans preparation.
2/18 – 9/21	LADOTD, ITS CEI Retainer, Signal Communications Upgrade Phase 1, CEI, Various, LA <i>Pre-Professional</i> . Gresham Smith is providing Construction Engineering Inspection Services, including a Project Engineer, on-site daily/nightly inspection and technical construction inspection, throughout the course of construction. Julian assisted with construction contract administration, field investigations, integration and testing, and construction inspection.
12/18 – 6/21	TDOT, ITS Design Support Services WO#8: Cumberland Plateau I-40 ITS Expansion, Cookeville, TN ITS Systems Specialist. Julian is assisted with the electrical design and voltage drop calculations and back checking of plans.
12/18 – 1/19	LADOTD, ITS Design & Implementation WO #6: Fiber Optic Mapping & Management, Statewide, LA Pre-Professional. For the statewide implementation of the Fiber Optic Mapping and Management System (NexusWorx), Julian was responsible for data entry, document development and quality control. This phase of the project included Tangipahoa, St. Tammany, St. John, and Orleans parishes and the Shreveport and Houma regions.
8/23 – Ongoing	City of Helena - Train Detection System, Helena, AL <i>Project Engineer</i> . Gresham Smith is designing and developing a train detection system and mobile app for three rail road crossings in Helena. Julian is responsible for device configuration, electrical design, site detailing, voltage drop calculations, and field reviews.
1/22 – Ongoing	MovEBR - ATMC & VDMS, Baton Rouge, LA <i>Project Engineer</i> . Gresham Smith performed a system engineering analysis to develop a redesign of the East Baton Rouge Traffic Engineering Office and the initial design of the East Baton Rouge Video Distribution Management System. Julian assisted with the system engineering analysis, stake holder workshop, concept of operations, high level design, and beta testing of the VDMS webpages.
Certifications (See section 20)	 DOTD Traffic Engineering Analysis Process & Report – Modules 1, 2 and 3 American Traffic Safety Services Association –Traffic Control Supervisor, LA State Specific

16. Staff Experier	ice.				
Gresham Smith					
Adrian Meads Systems Development and Integration Services Lead				Years of experience with this employer	8
				Years of experience with other employer(s)	0
Degree(s)	/ Years / Specialization	Bachelor of Scie	nce / 2016 / Comp	uter Science, Louisiana State University	
Active	e registration number / state / expiration date	N/A			
	Year registered	N/A	Discipline		
Contract role(s) / b	rief description of respo	onsibilities		er / Adrian will serve as task lead for System Development and s. Meets MPR No. 8.	
Experience dates (mm/yy-mm/yy)				ntract; <i>i.e.</i> , "designed drainage", "designed girders", er the years of experience specified in the applicable MPR	(s).
7/16 – Ongoing	LADOTS, LADOTD, Video Distribution Management System (VDMS), Baton Rouge, LA ITS Systems Specialist Adrian is providing ITS systems software maintenance and software development support for the statewide VDMS syst which includes Baton Rouge, Houma, New Orleans and Shreveport.				em
11/18 – 5/24	LA ITS Systems Spe	cialist Adrian was	s responsible for fie	affic signal Design and Implementation, Lafayette Parisl ld verification of traffic signal inventory (TSI) of LCG's system egration when the system is completed.	
2/21 – Ongoing	LFUCG, VDMS, Lexing software developments			Adrian is providing ITS systems software maintenance and n.	
10/15 – 6/20				rt, Statewide , LA <i>ITS Specialist</i> Adrian was responsible for the statewide VDMS system.	or
8/18 – Ongoing				s, LA ITS Systems Specialist Adrian is responsible for the nand documentation of the TDS pilot project.	е
12/16 – 12/22		LADOTD, ITS – Fiber Optic Mapping & Management, Statewide, LA ITS Systems Specialist Adrian is responsible for data entry and document development.			
10/15 – 1/18	LADOTD, ITS Retainer WO #1 – ITS Integration Systems Support, Statewide, LA ITS Systems Specialist Adrian was responsible for ITS systems software development and the integration of the statewide VDMS system.			was	
6/16 – 8/17	LADOTD, ITS Retainer WO #3 – ATMS.NOW Design and integration Support, East Baton Rouge, LA ITS System Specialist Adrian was responsible for traffic signal database development and software development.			ns	
7/15 – 12/20		software maintena	ance and software), Montgomery , AL <i>ITS Systems Specialist</i> Adrian is development support for the statewide VDMS system which	

11/16 – 6/17	Transcore, Pinellas County ATMS Project Adrian was responsible for software development and maintenance support
11/10 - 0/17	for the VDMS system
	City of Helena, Train Detection System, Helena, AL TSM&O Specialist. Gresham Smith is designing and developing a
8/23 – Ongoing	train detection system and mobile app for three rail road crossings in Helena. Adrian is responsible for site selection,
	database development, software design, mobile application UI and functionality as well as beta testing.
	MovEBR, ATMC & VDMS, Baton Rouge, LA Project Manager. Gresham Smith performed a system engineering
1/22 – Ongoing	analysis to develop a redesign of the East Baton Rouge Traffic Engineering Office and the initial design of the East Baton
1/22 – Origoling	Rouge Video Distribution Management System. Adrian is responsible for software development, webpage design, and
	database development and maintenance.

16. Staff Experien	ce:				
Gresham Smith					
	rdan Fondja, El Engineer Intern			Years of experience with this employer	2
				Years of experience with other employer(s)	1
Degree(s) /	Years / Specialization	Bachelor of Scie	nce / 2022 / Electric	cal Engineering / Kennesaw State University	
	registration number / state / expiration date	E.I.1100027428	/ FL		
	Year registered	2024	Discipline	Electrical	
Contract role(s) / br	ief description of respo		Design Plan tasks		nd
Experience dates (mm/yy–mm/yy)				ontract; <i>i.e.</i> , "designed drainage", "designed girders", ver the years of experience specified in the applicable MP	R(s).
7/23 – Ongoing	MDOT, ITS, Meridian ITS Design, Meridian, MS Engineer Intern. Gresham Smith is developing a system engineering analysis, ITS design plans, and specifications for I-59/I-20 between the I-59 @ I-20 interchange and the Mississippi state line. The project will install new ITS equipment including fiber, electrical systems, cabinets, camera poles, Dynamic Message Sign (DMS) structures, and a communications hub. Jordan assisted in ITS design, voltage drop calculations, conduit sizing calculations, and plan preparation.				ate
7/22 – 12/22	conduit sizing calculations, and plan preparation. LADOTD, ITS CE&I IDIQ, Task Order #2 & ITS CEI WO #4: Fiber Optic Mapping & Management, Ascension, East Baton Rouge, West Baton Rouge, Livingston, Terrebonne, Lafayette, Pointe Coupee, St. Landry and Rapides Parishes, LA Engineer Intern. Gresham Smith was tasked with expanding the Fiber Optic Mapping & Management				
8/23 – Ongoing	system to various parishes. Jordan was responsible for data entry, document development and quality control. City of Helena, Train Detection System, Helena, AL Engineer Intern. Gresham Smith is designing and developing a train detection system and mobile app for three rail road crossings in Helena. Jordan is assisting with electrical design, sit detailing, voltage drop calculations, and field reviews.				_
7/22 – Ongoing	MovEBR, ATMC & VDMS, Baton Rouge, LA Engineer Intern. Gresham Smith performed a system engineering analysis to develop a redesign of the East Baton Rouge Traffic Engineering Office and the initial design of the East Baton Rouge Video Distribution Management System. Jordan is assisting with the backend and database development as well as beta testing of the VDMS webpages.				
2/23 – Ongoing	photometric analysis, l	lighting design, ar	nd electrical design	Lighting, Lafayette, LA Engineer Intern. Jordan assiste for 5 streets and 2 parks in downtown Lafayette, Louisiana. sswalks up to IES recommendations for lighting.	
6/21 – Ongoing	MovEBR, Sherwood photometric analysis, I Ferry Rd and propose	Forest Blvd Mult lighting design, ar d a pedestrian ligl	ti-Use Path, Baton nd electrical design nting and electrical	Rouge, LA Engineer Intern. Jordan assisted in performing for the existing system from Old Hammond Hwy to S. Harres system design between the I-12 EB and I-12 WB Ramps in drop, arc flash, conduit sizing, and short circuit calculations	ells 1

4/21 – Ongoing	MovEBR, Bluebonnet Boulevard Sidewalks, Baton Rouge, LA Engineer Intern. Jordan assisted in performing photometric analysis, lighting design, and electrical design for the existing system from Mall Drive 1 to Bluebonnet Centre Boulevard and proposed a pedestrian lighting and electrical system design between the I-10 EB and I-10 WB Ramps in Baton Rouge, Louisiana. This lighting project should brin the pedestrian accommodations up to the IES recommendations.
3/21 – Ongoing	MovEBR, Plank Road Corridor Enhancement, Baton Rouge, LA Engineer Intern. Jordan assisted photometric analysis and lighting design for the existing and proposed lighting system on Plank Road between Dawson Drive and Hooper Road. The purpose of this project is to improve the safety and mobility of both the vehicular and non-vehicular traffic through the Plank Road corridor. The roadway configuration may be revised to accommodate existing and project volumes and the traffic signals along the corridor. will be upgraded to current technologies that can accommodate connected vehicle technology and transit priority operations.
3/21 – Ongoing	MovEBR, Synch & Comm Signal Rebuilds Phase I and II Engineer Intern. Jordan assisted with the signal design and electrical design for 9 intersections in the Baton Rouge, Louisiana. Gresham Smith was selected to redesign the traffic signals for seven intersections within Baton Rouge, Louisiana. Phase 1 will replace outdated equipment with the latest technologies and improve the operations for both vehicular users. Phase II will replace outdated equipment with the latest technologies and improve the operations for both vehicular and non-vehicular users.

16. Staff Experien	ice:				
Gresham Smith					
	omin Kim, P.E. Engineer			Years of experience with this employer	2
				Years of experience with other employer(s)	9
Degree(s) /	Years / Specialization			ering / University of Texas noon University, South Korea	
Active	registration number / state / expiration date	P.E.0048216 / L	A / 3/31/2026		
	Year registered	2020 (TX) 2023 (LA)	Discipline		
Contract role(s) / bi	rief description of respo	onsibilities	ITS Engineer / Hyo MPR No. 4.	min will support System Engineering Design Plan tasks. Mee	ts
Experience dates (mm/yy-mm/yy)				ntract; <i>i.e.</i> , "designed drainage", "designed girders", er the years of experience specified in the applicable MPR	(s).
7/23 – Ongoing	engineering services for	signal rebuild to in	nstall a new traffic sig	teet, Dallas, TX Project Engineer Gresham Smith is perform anal at the intersection of Hampton Road at Leath Street in Dal solution for North Texas campus.	
1/22 – Ongoing	engineering services to	the City of Dallas to	o update their Bicycl	ct Engineer Gresham Smith was selected to provide planning e Master Plan, prepare feasibility studies for specific high prior n priority bicycle facilities.	
6/20 – Ongoing	City of Knoxville, Adva expands the City's Adva most intersection of Univ project improves traffic of connecting them via fibe detection, addresses AD	nnced Traffic Man inced Traffic Mana versity and College operations at 24 sig er optic cables to the OA and PROWAG	agement System, No gement System (ATI e across Western (SF gnalized intersections to City's TMC. Additional edestrian improvements	Middlebrook Pike, Knoxville, TN Project Engineer This project Section 1975 MS) along Middlebrook Pike (SR 169)/University from the easter R 62) to Joe Hinton on the western end of Middlebrook Pike. The salong the corridor by upgrading the existing controllers and conally, the project provides enhanced vehicle and pedestrian ments that are needed, and installs Connected Vehicle (CV)	ern
11/22 – 1/24	infrastructure to support Signal Phase and Timing (SPaT) message broadcasting. NDOT, 20th Ave/21st Ave Two-way Conversion Study and Engineering, Nashville, TN Project Engineer Project includes traffic study and engineering services for the conversion of 20th and 21st Avenues from one-way to two-way traffic operations from Charlotte Ave to Broadway Blvd. Tasks include stakeholder engagement meetings, data collection and analysis, review of existing conditions and NDOT planning documentation, providing recommendations for roadway modifications, updating typical section drawings, and providing construction plans for the recommended roadway modifications.			of	
10/21 – 10/23	design to replace Water approximately 1,500 line	Mains in three locater feet of 8-inch di placement of valvir	ations within the City ameter DR18 PVC, i	arland, TX <i>Project Engineer</i> Provided professional engineer of Garland. Existing water mains were upsized and replaced vinclusive of replacement of service lines within the public right g these existing mains, suggested traffic control plan, pavement	with of

Gresham Smith	ice:				
Ja	shwanth Lakshi ormation Technology S	•	rch Ms. I.T.	Years of experience with this employer	4
				Years of experience with other employer(s)	1
Degree(s) /	Years / Specialization	Masters of Archi	itecture, Masters of	Information Technology, Bachelors of Architecture	
Active	registration number / state / expiration date	N/A			
	Year registered	N/A	Discipline	Information Technology Innovation	
Contract role(s) / b	rief description of resp	onsibilities	l .	ology Specialist / Jashwanth will lead our database and we pment for this contract. Meets MPR No. 11.	eb
Experience dates (mm/yy-mm/yy)				ntract; <i>i.e.</i> , "designed drainage", "designed girders", ver the years of experience specified in the applicable MF	R(s).
3/24 – 4/24		oads and highway	ys by introducing PD	as a streamlit app to aid in fielding design guideline questi Fs of the Kentucky state guidelines to the bot for documer ns.	
2/24 – 4/24				Specialist . Created Electrical Python automation process	
5/23 – 9/23		ternal proprietary	· ·	Specialist . Implemented a protected artificial intelligence external training. Also, visualized employee queries to identifications.	lify
3/23 – 7/23	Gresham Smith Internal Project, PowerBI and Learning Model IT Specialist. Collected data from our industrial projects, stored in databases to be visualized in power BI and later trained with a Machine learning model to predict future trends.			iture	
2/22 – 5/23	innovative, client-focus	sed portal offers a tatistics, and sear	a comprehensive, integrals software integrals.	IT Specialist. Deployed as a Flask app, Gresham Smith teractive view of projects beyond blueprints, featuring 3D gration, setting new standards in building industry client	'S

16. Staff Experien	ce:				
Gresham Smith					
	evin Thomas S Specialist			Years of experience with this employer	1
				Years of experience with other employer(s)	4
Degree(s) /	Years / Specialization	Masters in Region	onal & City Planning	g/ Physical Planning – University of Oklahoma	
Active	registration number / state / expiration date	N/A			
	Year registered	N/A	Discipline	Transportation Planning	
Contract role(s) / br	ief description of respo	onsibilities		vin will manage GEO servers and develop GIS applications ial data feeds for this contract. Meets MPR No. 12.	5,
Experience dates (mm/yy–mm/yy)				ontract; <i>i.e.</i> , "designed drainage", "designed girders", ver the years of experience specified in the applicable MP	'R(s).
4/24 – Ongoing	TDOT, Memphis Regional Bicycle and Pedestrian Plan Planner. The Regional Pedestrian and Bicycle Greenprint Plan project is focused to implement multimodal transportation efforts through enhanced coordination and a simplified understanding of what it takes for the region to pursue sustainable, equitable, and multimodal transportation investments. Kevin was responsible for mapping data inventories as a starting point, then conducted several technical analyses (Level of Stress Analysis, Demand Analysis & Transportation System Analysis) using GIS to examine how the existing transportation system accommodates walking and bicycling based on several input factors.				
12/23 – Ongoing	accommodates walking and bicycling based on several input factors. State of Tennessee Department of Economic and Community Development, Quad County Connectivity Study, Various, TN Planner. Gresham Smith is currently supporting the Tennessee Department of Transportation (TDOT) and four counties in west Tennessee on the development of a transportation study focusing on the potential impacts of Ford's BlueOval City (BOC) development. The study will provide recommendations to state, regional, and local agencies on how anticipated growth can be managed through improved network connectivity. Kevin assisted in identifying these performance measures and quantifying them using GIS, which helped in guiding discussions regarding the impacts of development on transportation and land use in the study area, and also guide development of multimodal transportation solutions that improve mobility, connectivity, safety, and equity in the four-county study area.				
2/24 – 5/24	City of Sandy Springs (GA), Sandy Springs 2023 Safety Action Plan Planner. The Safety and Equity analyses was the basis of understanding locational and systemic safety opportunities and Challenges for the Safety Action Plan project. Kevin assisted with the review of crash data from 2018-2022, and scrubbed the data for reasonability and accuracy, normalized the crash data to traffic volume data, and overall prepared a database of crashes for the City's use consistent with the outcomes reflected in the Safety Action Plan RFP. This analysis was essential to form the basis of several additional analyses which included determination of the high injury network, prioritization of intersections and segments for further analysis, and crash summaries to determine potential correlations between contributing factors, manner of collision, crash location, and severity.				
9/23 – 2/24	State of Tennessee Do Services, Various, TN study for the West Tennessonsible in the comp	epartment of Eco Planner. Kevin f nessee project, wholetion of the West	nomic and Commu further expanded his ere he demonstrated Tennessee gap and	nity Development, West Tennessee Community Planning transportation experience through an in-depth county analysis a keen understanding of their planning needs. Kevin was alysis report which reflects his commitment to detail-oriented we ment using GIS and other mapping tools.	s

16. Staff Experien	ice:						
Gresham Smith							
	aniel Knott Technician			Years of experience with this employer Years of experience with other employer(s)	38		
Hanragiet / Yaare / Shacialization i		IMSA / Traffic Signal Field Technician Level II, IMSA / Fiber Optics Level II, Light Brigade / Fiber Optic Design, Installation, and Maintenance					
Active registration number / state / expiration date		N/A					
	Year registered	N/A	Discipline	N/A			
Contract role(s) / brief description of response			performing field in	aniel will provide technical support during construction by spection and investigation.			
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).						
11/22 – Ongoing	LADOTD, CEI - H.013256, Scott to Lake Charles ITS, CEI, Lake Charles, LA ITS Technician - Lead Gresham Smith is providing Construction Engineering Inspection Services, including a project engineer, on-site daily/ nightly inspection and Technical construction inspection, throughout construction. Dan is responsible for assisting with the daily field CE&I inspections, logging in the daily diaries, and ensuring project requirements are followed.						
12/18 – Ongoing	Lafayette Consolidated Government (LCG), Adaptive Traffic Signal Design and Implementation, Lafayette Parish, LA ITS Technician - Lead. Daniel supported field verification of LCG's TSI, design plans for adaptive signal control intersections, and integration when the system is completed.						
12/17 – Ongoing	MDOT, ITS CEI, US 49 from Florence to Scale Area, Florence, MS ITS Technician - Lead. Gresham Smith is providing construction administration and inspection services on the ITS elements included in the US 49 from Florence to the Scale Area Project. Daniel is responsible in leading the daily field CE&I inspections, logging in the dailies, and implementing project requirements.						
5/17 – Ongoing	LADOTD, ITS Design and Implementation, WO#6: Fiber Optic Mapping and Management, Tangipahoa, St. Tammany, St. John and Orleans Parishes, LA ITS Technician - Lead. Daniel was responsible for drafting updates onto the master database.						
1/19 – 3/24	LADOTD, ITS CEI Retainer, Lake Charles Phase 3 ITS, CEI, Lake Charles, LA ITS Technician - Lead. Gresham Smith is providing Construction Engineering Inspection Services, including a Project Engineer, on-site daily/nightly inspection and technical construction inspection, throughout the course of construction. Daniel assisted with the daily field CE&I inspections, logging in the daily diaries, and ensuring project requirements are followed.						
3/18 – 9/21	LADOTD, ITS CEI Retainer, Signal Communications Upgrade Phase 1, CEI, Various, LA ITS Technician – Lead. Daniel was responsible in leading the daily field CE&I inspections, logging in the dailies, and ensuring project requirements were followed.						

16. Staff Experience) <u>:</u>					
Gresham Smith						
William "Bud" Smith ITS Technician				Years of experience with this employer Years of experience with other employer(s)	5 39	
Degree(s) / Ye	ears / Specialization	N/A				
Active registration number / state / expiration date		N/A				
Year registered		N/A	Discipline	N/A		
Contract role(s) / brief	-		ITS Technician / Bud will provide technical support during construction by performing field inspection and investigation.			
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).					
11/22 – Ongoing	LADOTD CEI - H.013256, Scott to Lake Charles ITS, CEI, Lake Charles, LA ITS Technician. Gresham Smith is providing Construction Engineering Inspection Services, including a project engineer, on-site daily/nightly inspection and Technical construction inspection, throughout construction. Bud is responsible for assisting with the daily field CE&I inspections, logging in the daily diaries, and ensuring project requirements are followed.					
10/18 – 5/24	LADOTD, LCG Adaptive Traffic Signal System, Lafayette, LA ITS Technician. Gresham Smith developed an Adaptive Traffic Signal System for the Lafayette Consolidated Government, which involved upgrading over 200 traffic signal controllers. In addition, 78 traffic signals will be upgraded to become adaptive traffic signals. This will be both the largest adaptive traffic signal system installed within the state of Louisiana. This project includes field inspection of over 200traffic signals, design plans for 78 adaptive signals, implementation of a new EVP system, integration support, and before travel time studies.					
1/19 – 3/24	LADOTD CEI- H.011500.6 Lake Charles Phase 3, Lake Charles, LA ITS Technician. Gresham Smith is providing Construction Engineering Inspection Services, including a project engineer, on-site daily/nightly inspection and technical construction inspection, throughout the course of construction. Bud is responsible for assisting with the daily field CE&I inspections, logging in the daily diaries, and ensuring project requirements are followed.					
Prior to joining Gresham Smith	LADOTD, District 07, Lake Charles, LA ITS Technician. While working at LADOTD, Bud's responsibilities included overseeing and assisting in data collection needed for traffic studies, overseeing the District's Highway Beautification and Outdoor Advertising programs, analyzing information gathered and recommending traffic control and capacity improvements, receiving and responding to traffic related inquiries and requests from the general public and other government agencies, inspecting newly installed traffic signs, striping and signals to ensure compliance with the state and federal specifications, project plans and contract documents, and overseeing and assisting in maintaining current and historical records of traffic signs and signals, speed limits, and pavement markings.					

Gresham Smith	, .						
Richard Savoie, P.E. QA/QC and Grant Support				Years of experience with this firm/employer	6		
				Years of experience with other firm(s)/employer(s)	40		
Degree(s) / Years / Specialization Bachelo			lor of Science / 1978 / Civil Engineering, McNeese State University				
Active registration number / state / expiration date		P.E.00209	P.E.0020936 / LA / 9/30/24				
Voar rodictored		1983 (LA)	Discipline	P.E./Civil			
Contract role(s) / brief description of responsibilities		Senior Transportation Engineer / Richard will support the grant applications writing activities as part of the Strategic Implementation Planning Services task and perform QA/QC of Design Plans, Specifications and Construction Estimates.					
Experience dates (mm/yy–mm/yy)	Experience and qualifications relevant to the proposed contract; <i>i.e.</i> , "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).						
Career	Richard's 40+-year career includes 34 years with LADOTD in increasing roles culminating as the LADOTD Chief Engineer. As Chief Engineer, Richard was responsible for establishing engineering directives and standards, policies, budgets, expenditures, programs and procedures that guided project and program delivery, construction, and preservation of all transportation-related projects and systems.						
04/20 – Ongoing	City of Central (LA), Hooper Road (LA 408) at Sullivan Road (LA 3034) Roundabout Design Senior Engineer. Gresham Smith is tasked with the full roundabout design which will be in accordance with LADOTD's Roadway Design Manual geometric requirements and LADOTD's Complete Streets Policy to accommodate both pedestrians and bicycles through this intersection. Richard is responsible for overall Quality Control on the project. He is mentoring the engineering staff on the field evaluation requirements, reviewing all potential improvements, and will perform QC reviews on the preliminary and final design plan submissions.						
09/18 – 12/20	LADOTD, SRTS/LRSP Task Order 6 and 21: Endom Bridge Preliminary and Final Design, West Monroe, LA Senior Engineer. The project consisted of roadway realignment at the bridge approach to improve roadway geometry and safety. Right-of-way is being acquired at one quadrant of the intersection and Richard is assisting with the coordination between the right-of-way plans and the roadway requirements. Richard performed Quality Control reviews on the final preliminary design submission and was responsible for Quality Control on the final design process.						
09/18 –12/19	LADOTD, SRTS/LRSP Task Order 14: Farmerville Design, Union Parish, Farmerville, LA Senior Engineer. Richard provided quality control review for the Final Plan submission for this Safe Routes to Public Places Project. The review was to ensure that the plans were developed in accordance with standard LADOTD policy and procedure. Plans included installation of sidewalks along various local roadways, driveway adjustments to ensure ADA compliance and utility relocation avoidance.						
02/90 – 3/14	LADOTD, Project and Program Delivery. Richard was the Project Manager for the I-49 North project in Caddo Parish, from I-220 to the Arkansas State Line. The project started with the Corridor Selection Study and progressed to the Environmental Impact Study. Once the alignment was selected plan development began and thence project delivery for this \$670 million project. As the Deputy Chief and Chief Engineer, he met with program managers in the Engineering Division and approved and recommended changes to their budget partitions and project schedules.						

16. Staff Experien Gresham Smith	ice:				
- CO (1000-01101)	elly Morgan Specialist			Years of experience with this employer	8
				Years of experience with other employer(s)	6
Degree(s) /	Years / Specialization	Graduate Certific	IMSA / Traffic Signal Field Technician Level II, IMSA Graduate Certificate / 2013 /, Geographic Information Systems, North Carolina State University Bachelor of Science / 2010 / Urban Studies, Virginia Commonwealth University		
Active	registration number / state / expiration date	N/A			
	Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of resp		onsibilities	ITS Specialist / Kelly will support the System Engineering Analyses, Syste		
Experience dates (mm/yy–mm/yy)				ntract; <i>i.e.</i> , "designed drainage", "designed girders", ver the years of experience specified in the applicable MP	R(s).
10/16 – Ongoing	ALDOT, Traffic Management Center Staffing & Operations Statewide, AL, ITS Operations. Kelly assists the Project Manager on all matters concerning RTMC operations, personnel, facilities, software, equipment, and stakeholder coordination and engagement. She helps to oversee RTMC staff to ensure that all personnel requirements are being met, and job duties are being performed in accordance with established standard procedures and practices of ALDOT. She assists RTMC Managers with hiring and training employees; planning, assigning, and directing work; appraising performance; compiling performance measures data for the development of Monthly, Quarterly, and Annual Operations Reports; and maintaining RTMC Operations Manual and RTMC Training Program materials. Kelly supported ALDOT with their Capability Maturity Model self-assessment for the East-Central Region.				
11/16 – Ongoing	ALDOT, ITS SOP's Performance Measures & TIM Program Statewide, AL, ITS Operations. Kelly assisted Gresham Smith and ALDOT with developing statewide standard TMC operational procedures, statewide performance measures, traffic incident management guidelines and a traffic management center staffing RFPs. Other tasks include developing detour plans for Mobile, Montgomery and Birmingham as well as conducting stakeholder workshops to implement a statewide TIMs program. Assisted in the update of the SOPs and the creation of the RTMC Operations Manual.				
1/17 – 8/17	ALDOT, Development and Implementation of a Training Course for Mobile RTMC Operators Statewide, AL, Project Manager. Kelly led the Gresham Smith team that developed and implemented a Training Course for Mobile RTMC Operators. The team observed operations at the ALDOT's and conducted a Needs and Skills Analysis. Gresham Smith conducted a High-Level Assessment of RTMC Operator Knowledge, Skills and Abilities (KSAs). Based on assessment, observation, Operator interviews and questionnaire responses, the team developed the training curriculum, and associated presentations, manuals, training assessments and testing tools.				
12/16 – 6/17	City of Helena, MS4 Permit Support Services Helena, AL, GIS Support. Kelly provided GIS support for Gresham Smith Engineers working on the City of Helena MS4 Permit plans. Utilized ArcGIS to update shapefiles.				
3/14 – 9/15	VDOT, Traffic Management Center Staffing & ITS Operations Statewide, VA, Senior Operations Analyst. Kelly assisted by providing VDOT with management and training of statewide traffic management centers, including personnel management, staffing, creation of standard operating procedures, creation of a training and certification program. Expert knowledge and				

	reporting of TMC key performance indicators (KPIs) and service level agreements (SLAs). Provide management and training of statewide service patrols (SSP), including personnel management, asset management, staffing, creation of SOPs, creation of a training and certification program. Expert knowledge and reporting of SSP KPIs and SLAs. Provided management of an ITS device maintenance program and network operations center. Create and maintain an accurate inventory of ITS devices. Maintain an expert level of knowledge and reporting on ITS KPIs and SLAs. Participate in monthly VDOT audits for TMC, SSP and ITS. Collect, manage, analyze and report on TMC, SSP and ITS performance data.
1/12 – 3/14	NCDOT, TIM and Operations Statewide, NC, <i>Traffic Analyst & GIS Coordinator</i> . Major components of this project included providing 24/7 management and training of statewide traffic operations personnel. Collecting, managing and analyzing traffic and GIS data. Outreach with partnering agencies regarding statewide operations and major construction projects. Providing system and operational QA/QC of ATMS and ATIS.
2/13 – 3/14	NCDOT, TIM Special Projects – Statewide Operations Raleigh, NC Traffic Analyst & GIS Coordinator. Major components of this project included creation of a statewide operator training program and certification. Creation and maintenance of SOPs as procedures and policies were introduced or updated. Collaboration with DOT personnel on requests for GIS services and other special projects as they relate to traffic incident management. Production of heat maps for accident and congestion hotspots. Coordination with DOT GIS personnel to produce and maintain a real-time statewide incident map. Collaboration with NCDOT division and county engineers to produce a statewide interstate detour database.
10/21 – Ongoing	GDOT , SigOps Traffic Signal Operations Program for the Western Region of Metro Atlanta, Atlanta, GA Traffic Analyst & GIS Coordinator. Gresham Smith is providing proactive and flexible support to a region with over 1,700 signals through a mix of remote and on-site signal engineers and technicians. In order to deliver this scale of support efficiently, we are leveraging GDOT's investment in their traffic signal timing toolbox of applications that utilizes automated traffic signal performance measures (ATSPMs), the SigOps Metrics analytics tool, RITIS flow data, signal asset management software, and the statewide traffic signal control software with communications in place to nearly every signal in the state.
10/21 – Ongoing	ALDOT, Statewide Regional Traffic Operations Program (RTOP) Program, Statewide, AL Traffic Analyst & GIS Coordinator. ALDOT's RTOP will improve traffic flow, safety and travel time reliability through active arterial management strategies along multijurisdictional corridors. Gresham Smith is leading a team of consultants and contractors to deliver proactive signal operations and maintenance. As Project Manager, Christina is responsible for leading a team of signal consultants and contractors tasked with elevating the performance of the Birmingham metro-area arterials through active management of signals, maintenance and repair of signal systems and related ITS assets including communications, support for special events and emergencies, data collection and reporting, as well as coordination with ALDOT and local agencies.

16. Staff Experience: Intelligent Transportation Systems, LLC



Jonathan Fox, P.E., PTOE, PMP Senior ITS Systems Engineer and Integrator

Years of experience with this firm/employer	8
Years of experience with other firm(s)/employer(s)	14

1				Tours of experience with other minice/rempreyer(e)
Degree(s) / Years / Specialization		Bachelor of Science / 2003 / Civil Engineering		
Active registration number / state / expiration date		P.E.003	33277 / LA / Exp. 09/30/25 PT	OE 2329 / Exp. 11/07/2025
	Year registered	2007	Discipline	Civil
Contract role(s) / b	rief description of		Senior ITS Systems Engineer a and IV&V tasks. Meets MPR N	nd Integrator / Jonathan will support System Engineering Analyses Io. 9
Experience dates (mm/yy-mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders", cover the time specified in the applicable MPR(s).
Career	Jonathan has over 20 years of experience in traffic engineering and intelligent transportation systems. He currently serves as Principal at Intelligent Transportation Systems LLC (ITS LLC). His background includes traffic studies and assessments, traffic signal design, and ITS systems engineering and architecture. Jonathan's ITS-related experience includes system diagnostics and troubleshooting, system testing, management and operations, and systems maintenance. He led the design and implementation of the first adaptive traffic signal system in Louisiana and continues to be a leader in this specialty. Jonathan's varied experiences in design, ITS, traffic engineering, and program management make him an asset to the team managing the ITS ME&I program development and implementation.			
08/15 – 7/19	SASOL Lake Charles Chemical Project – Adaptive Traffic Signal Systems (Westlake) Lead Traffic Engineer. Jonathan was the lead traffic engineer on new traffic signal designs, upgrades, communication design, and integration. He oversaw developing traffic signal plans, simulation models, communication layouts, network design, surveillance, travel time management, and permit applications. Six of these intersection upgrades were integrated by Jonathan's team as the first Adaptive Traffic Signal System deployed in the state of Louisiana (System A). Jonathan has overseen the design, implementation and integration of the Sasol System B (LA 108 signal corridor) as well as LA 27 (Beglis Rd.) at LA 379 (Houston Rive Rd.). These were constructed and the adaptive functionality was turned on in July of 2019. These intersection designs used stop bar and setback radar detection as well as wireless and cellular communications. Efforts for Sasol also included design and construction support for a temporary traffic signal on Old Spanish Trail at Prater Road.			
6/18 – 7/19	US 90 Adaptive Corridor (Westlake) <i>Project Manager and Design Lead</i> . Jonathan served as the project manager and overall design lead for the US 90 adaptive traffic signal corridor in Westlake, LA. Designs included preparing updated traffic signal inventory (TSI) forms as well as communications in support of two isolated traffic signals. Equipment included in the design consisted of new radar detection and unlicensed wireless communications. Jonathan oversaw the integration of the intersections into the adaptive system in Lake Charles.			
12/14 – Ongoing	LADOTD ITS Maintenance (44-2500, 44-7102. 44-16811) (Statewide) <i>Principal Engineer</i> . Served as principal & supervisor engineer for ITS LLC under the existing ITS Maintenance Retainer contract. Roles include project management support, quality control checks, site reviews, as well as investigating options and developing concepts to improve sites.			
2007 – 2010	I-12 Ramp Metering Design and Implementation (East Baton Rouge Parish) Engineer. Jonathan provided signal layout design support, quality control and fiber optic communications design for 16 ramp meters in the Baton Rouge area, including plan			

	layouts, fiber allocations, and technical specification. He also handled construction administration, fiber inspection, fiber test review, and integration coordination. This was the first implementation of ramp metering in the state.
12/12 – 12/14	Baton Rouge ITS Phase 3 (Baton Rouge) <i>Project Manager & Design Lead.</i> Jonathan oversaw the System Engineering Analysis (SEA) document for the project in compliance with the FHWA Rule (23 CFR Part 940.11) to determine project scope and analyze implementation constraints including minimizing the impact of construction on the traveling public and using existing fiber optic communications. Several ITS deployment projects were solely focused on the core urban area leaving gaps. The solution to meet the LADOTD's goal of the Baton Rouge ITS Phase 3 Project was to supplement the area with sixteen additional closed circuit television video cameras, five dynamic message sign sites, one HUB site, 30 Bluetooth detection sites, one travel time message sign (first in the state), and eight ramp meters that cover five parishes over 50 miles to help with blind areas. He led the development of the plan set from conception to final plans.
11/12 – 12/14	H.010138 Sunshine Bridge ITS Deployment (Sorrento) Project Manager. Jonathan managed all tasks from system engineering through deployment of final design package. He oversaw the development of the project level SEA for the deployment of a closed-circuit television camera system along LA 22 and LA 70 including the Sunshine Mississippi River Bridge. He overcame project challenges including determining how permitted fiber communications assets would be used, structure mounted conduit systems, and handling ongoing bridge painting construction. He developed a conceptual design to have the camera support mount directly to the bridge pier cap instead of the bridge's steel members to reduce maintenance. He also oversaw the analysis report, developed plans, specifications, and provided cost estimates.
4/16 – 7/18	Alabama Department of Transportation (ALDOT) ITS Specifications (Statewide AL) Design Lead. ALDOT desired an upgrade of their special provisions into a standard specification to bring consistency throughout the state on ITS equipment The specifications developed included material and construction for fiber optic communications infrastructure, network switches and wireless radios, CCTV cameras, dynamic message signs, vehicle detection systems, ITS cabinets, environmental sensors, and an assortment of other related ITS items. This required assessing multiple manufacturers and models for each device type. Further, Jonathan oversaw and supported the development of material lab test provisions for the equipment as well as acceptance testing provisions

Intelligent Transportation Systems, LLC



Kimberly McDaniel, P.E., PTOE, PTP

Senior ITS Systems Engineer

Years of experience with this firm/employer	2
Years of experience with other firm(s)/employer(s)	19

4. 10				round of experience man eater minice/rempleyer(e)
Masi		Bachelo	r of Science / 2003 / Civil Eng	ineering
		Master of Science / 2005 / Civil Engineering		
Active registration number /		P.E.003	2973 / LA / Exp. 9/30/25 PTC	DE 2072 / Exp. 10/02/2025
sta	ite / expiration date	PTP 802	2 / Exp. 03/14/2025	
	Year registered	2007	Discipline	Civil
Contract role(s) / b responsibilities	rief description of		Senior ITS Systems Engineer /	Kimberley will support System Engineering Analyses tasks.
Experience dates (mm/yy-mm/yy)				contract; <i>i.e.</i> , "designed drainage", "designed girders", cover the time specified in the applicable MPR(s).
Career	Kimberly currently serves as Principal and Chief Executive Officer for Intelligent Transportation Systems LLC (ITS LLC). Most of her 20+ year career has been spent in the private industry as an engineering consultant; however, she served six years in public service at the Louisiana Department of Transportation and Development. While at LADOTD, Kimberly played a lead role in the development of state laws (Revised Statutes), policies, and programs related to Access Management, Traffic Impacts, and Complete Streets. Kimberly's experience includes performing a variety of traffic impact studies, capacity analyses, safety analyses, corridor studies, access management evaluations, environmental assessments, and pedestrian studies. She also has experience in roadway design including the design of facilities for bicyclists and pedestrians and the development of traffic control plans. Kimberly is an experienced project manager with a proven record of delivering project on time and on budget.			
7/22 – Ongoing	LADOTD, Task Order - Connected & Autonomous Vehicles (C/AV) Team and Working Group Support, Louisiana Statewide Policy Development. Kimberly is assisting with the policy development components of the Connected & Autonomous Vehicles Team. The goal of this task order is to bring various practitioners together to assess Louisiana's current climate for the implementation of connected and autonomous vehicles (C/AV), begin developing projects to make the state's infrastructure and regulations ready for C/AV deployment, create public information programs, determine infrastructure needs, propose laws and regulations statutes, and determine other mechanisms necessary to prepare the State of Louisiana for the integration of connected and autonomous vehicles on the state's highways and roadways.			
5/22 – Ongoing	LADOTD, ITS Maintenance (44-7102. 44-16811), Statewide Louisiana <i>Principal</i> . Kimberly serves as a firm Principal for the existing ITS Maintenance Retainer. Her role includes overseeing the management of the contract to ensure that the project tasks are completed on time and within budget. She works with the project team on managing resources, providing required trainings and certifications, and allocating equipment.			
12/22 – Ongoing	Ascension Parish Traffic Impact Studies IDIQ Contract Principal and Project Manager. Kimberly currently serves as the Principal and Project Manager for this IDIQ Contract. As a direct-contract consultant, ITS LLC performs traffic impact studies for proposed commercial and residential developments throughout the Parish. The scope of work includes performing traffic impact studies (TISs) for a variety of commercial and residential developments that may include subdivisions, multi-family developments (apartment homes), strip retail centers, big box stores, restaurants, office complexes, industrial facilities, and more. Each proposed development is unique and has differing requirements for the studies.			

7/22 – Ongoing	Contract No. 4400021887 – Contract for Replacement of Fifteen Bridges, LADOTD District 08 <i>Principal</i> . Kimberly serves as the Principal for this contract. The firm's work on this project includes the development of temporary traffic control plans and a Traffic Management Plan (Levels I-IV, varies) for the replacement of 15 different isolated rural bridges located in the boundaries of LADOTD District 08. The detour plans for each location are unique but collectively include the design and operation of temporary traffic signals, temporary detour roadways, and temporary bypasses using existing state routes.
10/08 – 8/14	LADOTD, Access Management Program, Louisiana Statewide Engineer VI. Kimberly developed and managed the LADOTD Access Management Program. In this role, she performed extensive research of access management policies and best practices throughout the US. Kimberly led multiple focus groups and policy development teams consisting of LADOTD employees, consulting engineers, commercial developers, residential developers, real estate agents, attorneys, municipal employees, and elected officials from around the state to develop a policy for LADOTD which would regulate the granting of access to state highways. The policy was adopted as Louisiana Administrative Code Title 70, Part I, Chapter 15. Kimberly authored the Access Connections Policy, a document expanding the criteria of the code. She developed training courses for DOTD employees, consultants, contractors, real estate professionals, and elected officials and conducted trainings throughout the state of Louisiana. Once implemented, she chaired and managed the Access Management & Traffic Impacts Appeals Board, coordinating appeals submitted by landowner/developer applicants whose requests for access were denied by the District. Kimberly served as the state's Subject Matter Expert on Access Management throughout this time.
6/12 – 8/14	LADOTD, Traffic Impacts Policy & Program, Louisiana Statewide Engineer VI. Kimberly assisted with the development of a revised Traffic Impacts Policy to be used throughout the state for studies related to commercial or large-scale residential development. The program was integral to the success of the Access Management Program as it sought to outline the requirements to study the potential traffic impacts of proposed developments and determine effective mitigation strategies for the additional traffic. Denials of these studies at the District level were also appealed to the Access Management & Traffic Impacts Appeals Board which Kimberly chaired. Kimberly coordinated traffic impact reviews with LADOTD District and Headquarters staff.

Intelligent Transportation Systems, LLC



Christopher Dodt

1.5 Years of experience with this firm/employer Senior ITS Technician

> Years of experience with other firm(s)/employer(s) 22

Degree(s) / Years / Specialization		N/A – See below for listing of certifications			
Active registration number / state / expiration date		N/A – See below for listing of certifications			
		N/A	Discipline	N/A – See below for listing of certifications	
Contract role(s) / brief description of responsibilities			Senior ITS Technician / Christo	pher will support Independent Verification and Validation tasks.	
Experience dates (mm/yy-mm/yy)				contract; <i>i.</i> e., "designed drainage", "designed girders", cover the time specified in the applicable MPR(s).	
Career	management and op also assisted LADOT project manager for to operations of ITS LLC performed. Chris also remain current with e ATTSA Traffi Louisiana Sta	r ten years of experience with Transportation Management Systems and Operations components, namely with the and operations of Traffic Management Centers (TMCs). During his time working in the TMCs of Louisiana, Chris LADOTD ITS section in troubleshooting device communication and operation within the TMC. As the current ger for the ITS ME&I IDIQ at Intelligent Transportation Systems LLC (ITS LLC) Chris manages the day-to-day ITS LLCs field technicians. This includes daily scheduling, training, advanced troubleshooting, and QA/QC of work aris also excels with repairs to a wide range of electronics, relays, power, and generators, and has a strong desire to the twith emerging technology. In addition to his experience, Chris has achieved a variety of certifications including: A Traffic Control Technician & Supervisor and State Fire Marshal – Security licensure #E26979 A, Fall Protection			
1/23 – Ongoing	LADOTD, ITS Management, Operations and ME&I Statewide (44-16811) (Statewide Louisiana) <i>Project Manager</i> . Chris serves as a project manager for the ITS ME&I IDIQ Contract. He performs routine maintenance on emergency crossover gates, travel time message system. CCTV camera sites. BVD sites, ramp meter sites as well as DMS sites. His skills include device				

2017 - 2022

Contract for Traffic Management Center (TMC) Operations, New Orleans | Traffic Management Center Supervisor & Traffic Incident Management Assistant Coordinator. Chris managed a staff of ten TMC Operators between the New Orleans and Houma TMCs in a 24/7 emergency operations call center. He was responsible for ensuring that operator staff properly disseminated traffic conditions via email and web applications to the media and the motoring public in accordance with the LADOTD TMC standard operations. Chris reviewed and approved traffic incident plans for large scale planned events and emergency conditions due to weather. He coordinated initial training and ongoing assistance to operator staff to ensure all LADOTD requirements were met. He conducted meetings with individuals from all Traffic Incident Management (TIM) responder disciplines, including law enforcement, fire/rescue, emergency medical service, towing and recovery, emergency management,

	communications, highway/transportation and dispatch within the Louisiana and neighboring states, regions, and local municipalities.
2014 – 2017	Contract for Traffic Management Center (TMC) Operations, Statewide TMC Operations Manager & Traffic Incident Management (TIM) Coordinator. Chris managed the overall operations of five Traffic Management Centers (TMCs). He produced and updated policies within the standard operating procedures and training documents. He managed a staff of approximately 30 employees statewide in 24/7 emergency call operations centers. Chris provided detailed monthly billings to client and ensured that all client expectations were met or exceeded. He actively researched different avenues to maintain efficient operation of TMCs with a high level of accuracy and accountability. He conducted meetings with individuals from all TIM responder disciplines, including law enforcement, fire/rescue, emergency medical service, towing and recovery, emergency management, communications, highway/transportation and dispatch within the Louisiana and neighboring states, regions, and local municipalities.
2012 – 2014	Contract for Traffic Management Center (TMC) Operations, New Orleans Traffic Management Center Supervisor & Traffic Incident Management Assistant Coordinator. Chris managed a staff of ten TMC Operators between the New Orleans and Houma TMCs in a 24/7 emergency operations call center. He was responsible for ensuring that operator staff properly disseminated traffic conditions via email and web applications to the media and the motoring public in accordance with the LADOTD TMC standard operations. Chris reviewed and approved traffic incident plans for large scale planned events and emergency conditions due to weather. He coordinated initial training and ongoing assistance to operator staff to ensure all LADOTD requirements were met. He conducted meetings with individuals from all Traffic Incident Management (TIM) responder disciplines, including law enforcement, fire/rescue, emergency medical service, towing and recovery, emergency management, communications, highway/transportation and dispatch within the Louisiana and neighboring states, regions, and local municipalities.
2009 – 2012	Contract for Traffic Management Center (TMC) Operations, New Orleans Traffic Management Center Operator/Senior Operator. Chris actively monitored the roadway for abnormal traffic patterns, vehicle crashes, debris, etc., by use of Closed-Circuit Televisions (CCTV). He disseminated traffic conditions via email and web applications to the media and the motoring public. He also produced traffic incident plans for large-scale planned events and emergency conditions due to weather. He provided initial training and ongoing assistance to operator staff to ensure all requirements of the LADOTD were always met or exceeded.
2000 – 2009	Law Enforcement for Kenner Police Department, Kenner Police Officer. Chris performed uniform patrol duties in a community with a population of 75,000 people. As a Correctional Peace Officer, Chris operated various criminal history databases and video surveillance equipment setups, provided accurate booking and comprehensive care, custody, and control of the inmate population at the municipal jail. As a Property Management Officer, he installed specialized video and audio surveillance equipment, installed and repaired emergency communications and lighting equipment on police vehicles, scheduled and performed general and technical maintenance on the police fleet, and conducted inventory of specialized police equipment, uniforms, and weapons. Throughout his time as a law enforcement officer, Chris regularly provided court testimony in City, Parish, and State courts and is certified by the United States Attorney's Office for courtroom testimony. He was awarded the 2008 Police Officer of the Year by the Kenner Rotary Club and received numerous commendations from the Department for exemplary performance as a police officer and for his investigative skills and achievements.

WSP USA Inc.



Reno Giordano Senior ITS Strategic Planner	Years of experience with this firm/employer				
,	Years of experience with other firm(s)/employer(s)	3			

Degree(s) / Years / Specialization			2007 / Transportation Technol 2001 / Mechanical Engineering	ogy & Policy / University of California-Davis ı / Cornell Universitv	
Active registration number / state / expiration date		N/A			
	Year registered	N/A	Discipline	N/A	
Contract role(s) / brief description of responsibilities			Senior ITS Strategic Planner / Implementation Planning Service	Reno will support Program Assistance tasks and Strategic ces.	
Experience dates (mm/yy-mm/yy)		ualifications relevant to the proposed contract; <i>i.</i> e., "designed drainage", "designed girders", ection", etc. Experience dates should cover the time specified in the applicable MPR(s).			
Career	Reno is a seasoned applied researcher and consultant in TSMO and the application of advanced technologies to transportation systems. He has significantly helped advance the understanding and state-of-the-practice application of agency business process and institutional arrangements that allow transportation agencies to conduct more effective TSMO activities. These include contributions to a suite of foundational TSMO research and implementation projects that originated the capability maturity model (CMM) self-assessment process and workshop to TSMO, support for 35+ CMM workshops around the country, and most recently authoring portions of the forthcoming AASHTO Transportation Operations Manual. He has applied this expertise directly to TSMO planning and research assignments for state DOTs, often addressing a wide range of TSMO implementation considerations through the development of TSMO strategic plans or program plans. During this time, Reno has been a TSMO subject matter expert leading various tasks for the FHWA Office of Operations. He currently manages WSP's five-year on-call contract with the Office of Operations supporting various programs and initiative. His work has included workshops, implementation planning support, guidance development, peer exchanges, and training.				
08/19 – 10/22	National Cooperative Highway Research Program (NCHRP), 03-126, Transportation Operations Manual, Washington, DC Task Lead/Co-Author for the development of the AASHTO Transportation Operations Manual, which will serve as the definitive source on all aspects of TSMO from planning to tactics to emerging trends. Coauthored 11 chapters on strategic and programmatic TSMO topics including TSMO program planning and all dimensions of TSMO capability maturity. The Manual will be balloted by AASHTO and will be comparable to A Policy on Geometric Design of Highways and Streets (Green Book), but for TSMO.				
NH: 11/22 - 3/23 KY: 08/21 –	State DOT TSMO Program Planning: Mr. Giordano has applied his research and state of the practice knowledge to assist state DOTs in the preparation of TSMO program plans. • New Hampshire DOT TSMO Strategic Plan. Concord: Subject Matter Expert/Author of NHDOT's 2024–2032 TSMO				

Ongoing NE: 08/20 - 08/21

MN: 02/18 – 07/19 OR: 08/17 - 07/18 SD: 07/15 - 06/16

- New Hampshire DOT TSMO Strategic Plan, Concord: Subject Matter Expert/Author of NHDOT's 2024–2032 TSMO Strategic Plan. Worked closely with NHDOT TSMO Bureau leadership to complete the plan in a short timeframe, consisting of strategic, programmatic, and tactical elements. The plan revisited and significantly revised previous TSMO plans, focusing on new strategic objectives, programmatic recommendations to improve TSMO program function, and set of TSMO tactics to consider for implementation during the plan timeframe.
- Kentucky Transportation Cabinet (KYTC), TSMO Program Plan, Frankfort, KY | Team Member to prepare the Kentucky Transportation Cabinet's (KYTC) first TSMO program plan consisting of a strategic plan and business plan. Worked with a

- multidisciplinary stakeholder group within KYTC to establish a set of TSMO strategic objectives and identify programmatic improvements to implement the objectives and advance the KYTC TSMO program.
- Nebraska Dept. of Transportation (NDOT), TSMO Strategic Plan, Lincoln, NE | Project Manager to prepare a TSMO Strategic Plan for Nebraska DOT (NDOT). Following industry and FHWA practice, the plan includes strategic, programmatic, and tactical elements to guide NDOT's TSMO program over a 10-year timeframe. Guided the development of a strategic vision and objectives, programmatic recommendations to improve business processes and organization, and tactical ITS investments as input into future project programming cycles. Managed and conducted literature review activities, stakeholder engagement, and interaction with a TSMO Executive Council that provided plan preparation input and oversight.
- Minnesota Dept. of Transportation (MnDOT) TSMO Program Planning Support, Minneapolis, MN | Task Lead to develop a TSMO program plan for Minnesota DOT comprising strategic, implementation, and business plans. Contributed to development of the strategic plan and leading the development of the business plan. The business plan identifies programmatic recommendations to execute the identified strategic objectives and the strategies identified in the implementation plan, including changes in business processes, collaboration, resources, and organization. Presented national best practice at a strategic planning workshop. Facilitated a business planning workshop to identify program strengths and challenges, and recommendations to improve. Currently beginning a new task to revise the strategic plan and develop a framework for TSMO strategy tactical plans.
- Oregon Dept. of Transportation (ODOT) Operations Program Plan, Salem, OR: Team member to develop an Operations program plan for Oregon DOT. The project included extensive engagement with stakeholders through a survey, a series of interviews, and ongoing meetings during project. Helped guide development of a TSMO definition for Oregon DOT along with TSMO program mission and vision statements and a set of goals for the program. Drew on national experience with these program elements to inform Oregon's. Contributed to identification of gaps in current practices and procedures that led to development of a TSMO action plan for overall program improvement.
- South Dakota TSMO Program Plan, Pierre, SD | Project Manager/Principal Investigator to prepare a TSMO Program Plan for South Dakota DOT (SDDOT). The plan guides business planning and strategic decision-making to advance SDDOT's informal TSMO program to one with a more effective and formalized approach to incorporating TSMO into the department's mission, goals and objectives, future planning initiatives at all timescales, and day-to-day activities. It presents a series of recommendations in the form of actions, tasks, and implementation steps, as well as the "business case" for committing to the recommendations, suitable for internal, decision-maker, and public audiences.

Application of the Capability Maturity Model to TSMO: Reno contributed to a foundational suite of projects for SHRP 2, NCHRP, and FHWA that originated the application of CMM to improving transportation agency effectiveness in TSMO, including guidance development, online self-assessment, and design and delivery of the CMM self-assessment workshop.

- Institutional Architectures to Advance Operational Strategies, SHRP 2 L06 | Deputy Project Manager for Phase II of this project now regarded as foundational research to agency TSMO capability improvement. Managed the five Phase II, FHWA-sponsored workshops with select DOTs and regional partnerships that evolved into those formally used in SHRP 2 Reliability Implementation.
- AASHTO Transportation Systems Management and Operations Guidance, NCHRP 03-94 | Deputy Project Manager
 responsible for the final content and functionality of the AASHTO TSMO Guidance website and self-assessment tool
 (aashtotsmoguidance.org), which has underpinned all TSMO CMM workshops and inspired TSMO strategy-specific
 Capability Maturity Frameworks developed by FHWA.

2009 - 2012 2010 - 2013 2011 - 2017

16. Staff Experience: WSP USA Inc.

Leslie (Les) Jacobson, P.E. Senior ITS Advisor

Years of experience with this firm/employer	19
Years of experience with other firm(s)/employer(s)	26

Degree(s) / Years / Specialization				ring / university of California-Berkeley ersity of Washington
	gistration number / ite / expiration date	P.E. 22161 / WA	/ Exp. 5/10/2025	
	Year registered	2023	Discipline	P.E./Civil
Contract role(s) / bri	ef description of res	ponsibilities	Senior ITS Advisor Implementation Plant	r / Les will support Program Assistance tasks and Strategic anning Services.
Experience dates (mm/yy–mm/yy)				ed contract; <i>i.</i> e., "designed drainage", "designed girders", d cover the time specified in the applicable MPR(s).
Career	Over his 45+ year career, Les has provided strong leadership in resolving transportation challenges by applying solutions in transportation systems management and operations; intelligent transportation system planning, architecture and deployment; traveler information systems; traffic management systems, including active traffic management, ramp metering, and transportation management center operations; road weather information systems; managed lanes; tolling; and intelligent transportation system standards. Les began his career with the Washington State Department of Transportation. He was with Washington State Department of Transportation for 22 years, leading technology implementation for many of the innovative transportation programs initiated in the Seattle area.			
08/21 – Ongoing	Kentucky Transportation Cabinet (KYTC), TSMO Program Plan, Frankfort, KY Team Member to prepare the Kentucky Transportation Cabinet's (KYTC) first TSMO program plan consisting of a strategic plan and business plan. Worked with a multidisciplinary stakeholder group within KYTC to establish a set of TSMO strategic objectives and identify programmatic improvements to implement the objectives and advance the KYTC TSMO program.			
2018	Oregon Dept. of Transportation (ODOT), Transportation Systems Management and Operations (TSM&O) Program Plan, Portland, OR Project Manager for an effort to develop a transportation systems management and operations (TSMO) program plan for the Oregon Department of Transportation (ODOT). This project includes extensive engagement with stakeholders through a survey, a series of interviews, and on-going meetings throughout the life of the project. Input from the survey and interviews will guide the development of a TSMO definition for ODOT along with TSMO program mission and vision statements and a set of goals for the program. The Team will identify gaps in current practices and procedures that will lead to the development of a TSMO action plan. That action plan will provide the basis for the ODOT TSMO Program Plan. WSP is developing a Transportation Systems Management and Operations (TSM&O) Program Plan that lays out the steps needed to improve ODOT's maturity in TSM&O dimensions. WSP is engaging a stakeholder groups to build consensus on TSM&O mission, vision, and goals and a solid definition of ODOT's TSM&O program, to understand program strengths and weaknesses, and to develop a prioritized list of actions needed to continue to improve and mature the ODOT TSM&O Program.			
2020 – 2021	Nebraska Departme Lincoln, NE, <i>Techni</i>	nt of Transportat cal Lead for the st	ion (NDOT), Transp rategic element of th	ortation Systems Management and Operations Strategic Plan, e transportation systems management and operations program nent and operations strategic plan for the Nebraska Department of

	Transportation. The primary objectives are to document and disseminate a vision for transportation systems management and operations throughout the transportation network; identify issues, concerns, and conditions that Nebraska Department of Transportation should consider in its development of transportation systems management and operations; prioritize issues and
	concerns; document statewide transportation systems management and operations program policies that provide a framework for planning efforts; identify transportation systems management and operations program priorities and recommend specific transportation systems management and operations and intelligent transportation systems initiatives and investments for implementation over a 10-year period; and identify business process, institutional, and other challenges, and propose
	strategies for meeting those challenges. National Cooperative Highway Research Program (NCHRP), 03-126 Transportation Operations Manual, Washington,
2019 – 2022	DC <i>Project Manager/Principal Investigator</i> for this project to develop the Transportation Operations Manual for American Association of State Highway and Transportation Officials balloting. This manual is the first of its kind. WSP is developing this manual, which will cover transportation systems management and operations from several perspectives: strategic context for transportation systems management and operations, transportation systems management and operations program planning, and relationship to agency project development and programming, as well as specific tactics implemented in the field to improve transportation operations. Significant outreach was included in the project.
10/19 – 11/20	Federal Highway Administration (FHWA), Organizing for Reliability, Assessment and Implementation Plan Development, Nationwide Workshop Facilitator that assists state departments of transportation and partner agencies assess organizational transportation systems management and operations maturity. The primary objectives of this task order were to assess organizational transportation systems management and operations maturity of 20 state and regional transportation agencies and develop an implementation plan for each of these early implementers to advance their transportation systems management and operations program. This effort grew out of the Strategic Highway Research Process 2 L06 effort, "Institutional Architectures to Advance Operational Strategies." The workshops include identification of agency transportation systems management and operations strengths and challenges, self-assessment of the agencies' capability in six dimensions of transportation systems management and operations capability, and the development of an implementation plan that will help the agencies progress from one maturity level to the next.
02/18 – 7/19	Minnesota Dept. of Transportation (MnDOT), Transportation System Management and Operations Program Planning Support, Minneapolis, MN Project Manager for an effort to develop a transportation systems management and operations (TSMO) program plan for the Minnesota Department of Transportation. This project includes extensive engagement with stakeholders through workshops, interviews, and ongoing meetings throughout the life of the project. Input from the stakeholders will guide the development of all aspects of the project. The team will develop a TSMO strategic plan, a TSMO implementation plan, and a TSMO business plan. WSP is developing a transportation systems management and operations (TSMO) strategic plan, implementation plan, and business plan that will provide overall direction and strategic outcomes for the Minnesota Department of Transportation's (MnDOT) TSMO Program.
2010 – 2013	AASHTO Transportation Systems Management and Operations Guidance, NCHRP 03-94 Project Manager responsible for the final content and functionality of the AASHTO TSMO Guidance website and self-assessment tool (aashtotsmoguidance.org), which has underpinned all TSMO CMM workshops and inspired TSMO strategy-specific Capability Maturity Frameworks developed by FHWA.

16. Staff Experience: WSP USA Inc.



Frank Perry CAV Subject Matter Expert

Years of experience with this firm/employer	5
Years of experience with other firm(s)/employer(s)	30

12				rears of experience with other min(s)/employer(s)	30
Degree(s) / Years / Specialization				Management / University of Detroit Mercy ngineering Technology / University of Toledo	
	gistration number / ate / expiration date	N/A			
	Year registered	N/A	Discipline	N/A	
Contract role(s) / bri	ef description of res	ponsibilities		Expert / Frank will support CAV/ system analysis, design and s. Meets MPR No. 6.	
Experience dates (mm/yy-mm/yy)				d contract; <i>i.e.</i> , "designed drainage", "designed girders I cover the time specified in the applicable MPR(s).	s",
Career	Frank has over 30 years of program management and systems engineering experience, including 19 years deploying, testing, and operating connected vehicle (CV) systems. Frank led the deployment, testing, system verification, and operations of the original U.S. Department of Transportation (USDOT) CV Testbed in Michigan, CV device interoperability testing for the USDOT Safety Pilot Project, deployment, testing, and operations of the MnDOT Smart Corridor, and system verification for the Smart Columbus Connected Vehicle Environment. He is currently the Test Lead for the ODOT US33 Smart Mobility Corridor and a V2X Subject Matter Expert in several projects for the Michigan DOT, Ohio DOT, Maricopa County Arizona, and the Pool Fund Study Connected Intersection Program. He has been part of SAE and the Institute of Electrical and Electronics Engineers (IEEE) DSRC standards development since 2004 and is an executive member of the OmniAir Consortium Board of Directors, driving the policy, processes and procedures for testing and certifying CV devices.				
2/22 – Ongoing	Pooled Fund Study-Connected Intersection Message Monitoring System Project Manager and CV SME for the V2X System Requirements and testing support for a prototype software system. This project is assessing V2X Signal Phase and Timing (SPaT) and MAP messages for conformance to the ITE Connected Intersections Implementation Guide 4501, SPaT and MAP messages related to traffic signal status, roadway geometry utilizing V2X Basic Safety Messages (BSM) broadcast by vehicles, and notifying the system operator if an anomaly is detected.				
10/20 – 12/22	Connected Vehicle-Pooled Fund Study Connected Intersection Project Project Manager and CV SME for the CV testing support for verifying a 3 to 4 V2X roadside unit (RSU) corridor. This project conforms to ITE Connected Intersections Implementation Guide 4501. Corridors were tested in Georgia, Utah, and Ohio. Frank was also the SCMS Manger liaison for the project, representing the Pooled Fund Study Panel's interest related to V2S Security requirements.				
10/16 – 5/21	Smart Columbus, C 100 vehicle-to-everyt (SRM), signal status (RTCM) messages. V	olumbus, OH Co hing (V2X) roadsid messages (SSM), VSP provided syst	onnected Vehicle Ender units broadcasting traveler information tems engineering and	nvironment Test Lead. Supporting the testing and verification signal phasing and timing (SPaT), Map, signal request messanessages (TIM), and Radio Technical Commission for Maritim owner's representative for four of the Smart Columbus project smart street lighting, and transit pedestrian safety.	ages ne

3/19 – 2/22	Michigan Dept. of Transportation, Intelligent Transportation System Program Office Connected Vehicle Support Principal Investigator in supporting the Michigan Department of Transportation (MDOT) with services including connected vehicle research and reporting, planning, deployment and maintenance, regulatory evaluation, training and outreach, and system operations at the request of the MDOT
	 project manager. WSP is providing intelligent transportation system services for Michigan Department of Transportation connected vehicles on an on-call basis throughout the state. WSP is responsible for conducting all engineering and technical connected vehicle support services.
7/15 - 7/19	Ohio Department of Transportation (ODOT), US33 Smart Corridor RSU Integrator Connected Vehicle Test Lead supporting the test and verification of ~60 V2X Roadside Units broadcasting SPaT, Map, Signal Request Messages (SRM), Signal Status Messages (SSM), Traveler Information Messages (TIM), and Radio Technical Commission for Maritime (RTCM) messages
2/21 – Ongoing	Ohio Department of Transportation (ODOT), US33 Smart Corridor OBU Integrator Connected Vehicle Test Lead, supporting the test and verification of ~200 V2X vehicle On-Board Units supporting Red Light Violation Warning, Work Zone Warning, and Traveler Information warning applications.

WSP USA Inc.					
Roi	nald Floyd			Years of experience with this firm/employer	3
ITS I	Engineer			Years of experience with other firm(s)/employer(s)	27
Degree(s) / Ye	ears / Specialization	Associates / 199	7 / Electronics Engi	neering / ITT Technical Institute	
	gistration number / ate / expiration date	Cisco Certified, I	IMSA II		
	Year registered	N/A	Discipline	N/A	
ontract role(s) / bri	ef description of res	ponsibilities		Expert / Frank will support CAV/ system analysis, design and s. Meets MPR No. 6.	
Experience dates (mm/yy–mm/yy)				d contract; <i>i.e.</i> , "designed drainage", "designed girders' I cover the time specified in the applicable MPR(s).	",
Career	installation and integr closed-circuit (CCTV) matrix switches, as w Ethernet networks wi	ration in the Midwe) cameras, routers, vell as fiber optic, w th wireless, fiber op or Georgia Departr	est, East, and Southe , switches, video dete vireless, and copper i ptic, and copper med ment of Transportatio	in network engineering, intelligent transportation system (ITS) ast. Experience integrating countless wireless Ethernet network cition systems, dynamic message signs (DMS), radars and vide infrastructures. In addition, has designed and managed hybrid ia that utilized live video and data over Ethernet. Extensive his in (DOT), South Carolina DOT, Virginia DOT, Illinois DOT, ssee DOT.	ks, eo
2/22 – Ongoing	Major Mobility Improvement (MMIP), Georgia DOT, Statewide Engineer. Responsible for reviewing, inspecting, integrating, testing, CEI and specifications for all projects. This is for all projects that has ITS devices which included CCTVs, DMSs, VDSs, Radars, Traffic Signals and Access Control System. The integration services included coordination with GDOT's IT department to obtain or validate IP addresses for all devices. He validated the programming and configuration of all devices to ensure communication at all aggregation points, hub buildings and GDOT's Transportation Management Center (TMC). Developed contract ITS documents, Designed the Wide Area Network (WAN), Local Area Network (LAN), fiber optic and wireless information technology (IT) infrastructure for ITS applications. Performed technical deployment, integration, testing and maintenance of ITS components and information technology devices. Served as a lead for the deployment of fiber optic communications, wireless communications, field sensors, CCTV cameras, dynamics message signs, traffic signal controller integration and other ITS telecommunications infrastructure deployment. Developed and maintained IP addressing plans for ITS devices. Reviewed technical reports, proposals and documents, and assured plans complied with IT technical specifications and system architecture; assisted with project scope definition, technical procurement issues and contract management. Deployed, installed, tested, and integrated switches, routers, and other active electronic devices into the network to support wired and wireless communications.				
10/20 – 12/22	integration of ITS site systems, providing w	e 2 Design Build, es associated the p ireless routing and	Statewide, LA Eng project. Also, respons site path analysis, a	ineer. Responsible for performing wireless site surveys and sible for integrating the ITS network electronics and wireless and providing recommendation for communication systems. rk (LAN), fiber optic and wireless information technology (IT)	

	infrastructure for ITS applications. Performed technical deployment, integration, testing and maintenance of ITS components and information technology devices. Prepared, reviewed and assessed IT network expansion plans for ITS and provides LAN and WAN network design, integration, maintenance and troubleshooting. Served as a lead for the deployment of fiber optic communications, wireless communications, field sensors, CCTV cameras, dynamics message signs, traffic signal controller integration and other ITS telecommunications infrastructure deployment. Developed and maintained IP addressing plans for ITS devices. Reviewed technical reports, proposals and documents, and assured plans complied with IT technical specifications and system architecture; assisted with project scope definition, technical procurement issues and contract management. Deployed, installed, tested, and integrated switches, routers, and other active electronic devices into the network to support wired and wireless communications.
10/16 – 5/21	ALDOT, ITS Wireless Communication Design Build I-10, Statewide, AL Engineer. As a part of the Alabama DOT Hurricane Katrina repair effort, designed and installed a wireless system in two stages. The first stage consisted of installing a wireless Ethernet solution that provided 100-mps duplex bandwidth between the Traffic Management Center (TMC) and Cochran Bridge (over 3 miles). The second stage included installing and integrating a total of 61 devices over an 8-mile section of the I-10 byway. Designed the Wide Area Network (WAN), Local Area Network (LAN), fiber optic and wireless information technology (IT) infrastructure for ITS applications. Performed technical deployment, integration, testing and maintenance of ITS components and information technology devices. Prepared, reviewed and assessed IT network expansion plans for ITS and provides LAN and WAN network design, integration, maintenance and troubleshooting. Served as a lead for the deployment of fiber optic communications, wireless communications, field sensors, CCTV cameras, dynamics message signs, traffic signal controller integration and other ITS telecommunications infrastructure deployment. Developed and maintained IP addressing plans for ITS devices. Reviewed technical reports, proposals and documents, and assured plans complied with IT technical specifications and system architecture; assisted with project scope definition, technical procurement issues and contract management. Deployed, installed, tested, and integrated switches, routers, and other active electronic devices into the network to support wired and wireless communications.
3/19 – 2/22	ITS Project Integration Phase 1 & 2, Nashville, TN ITS Technician. Responsible for expanding the TMC's Vicon video matrix switch to provide the capability to handle 128 CCTV cameras and 40 video monitors. Integrated local NBC, ABC, CBS, and FOX affiliates with the TMC to grant limited access to camera feeds. Provided project management and supervision to other technicians and contracted workers. Designed, configured, and deployed local and wide area networks (LANs, WANs) and systems, including routers, hubs, switches, wireless technology and other associated hardware to ensure safe and reliable operation for fulfilling project objectives. Monitored network performance and performed troubleshooting procedures as needed.
7/15 - 7/19	ITS Project Integration throughout I-74 and I-474, Peoria, IL ITS Technician. Responsible for Installing and configuring three Proxim Tsunami wireless Ethernet bridges for the City of Peoria. Police, emergency medical services, and fire department networks were connected to the ITS system to provide DVD-quality video and Voice or IP for instant communications between departments. Provided project management and supervision to other technicians and contracted workers. Designed, configured, and deployed local and wide area networks (LANs, WANs) and systems, including routers, hubs, switches, wireless technology and other associated hardware to ensure safe and reliable operation for fulfilling project objectives. Monitored network performance and performed troubleshooting procedures as needed.

WSP USA Inc.



Scott Beck, P.E. Senior ITS Engineer

Years of experience with this firm/employer	4
Years of experience with other firm(s)/employer(s)	19

				Totale of experience man enter min(e), empreyer(e)
Degree(s) / Years / Specialization Active registration number / state / expiration date		Bachelor of Scie	ence / 2000 / Civil Er	ngineering / California Polytechnic State University
		P.E. 41455 / AZ	P.E. 41455 / AZ / Exp. 9/30/2025; P.E. 64943 / CA / Exp. 6/30/2023	
	Year registered	2004 2003	Discipline	P.E./Civil
Contract role(s) / bri	ief description of res	ponsibilities	Senior ITS Engine Services.	er / Scott will support Strategic Implementation Planning
Experience dates (mm/yy–mm/yy)	1 -			ed contract; <i>i.e.</i> , "designed drainage", "designed girders", d cover the time specified in the applicable MPR(s).
Career	Scott provides technical and jurisdictional experience for transportation systems management and operations (TSMO). His background spans 23 years of broad experience from regional transportation planning to traffic analysis and operations to public sector asset and staff management. Prior to joining WSP, Scott held the position of assistant state engineer for the Arizona Department of Transportation within the TSMO division. He oversaw all regional traffic engineers, the statewide traffic safety section, and traffic maintenance units.			
04/20 – 2/21	Town of Gilbert, Tradevelopment of the T staffing requirements and operations plans Transportation Syste continued evolution of investment program, future. WSP will help	own's transportation Systems own's transportation in terms of roles as set priorities to more minfrastructure around it has been and is looking for the verage the Marie	ems Management a on systems manager and responsibilities for ve the Town forward and staff resources. Wert's transportation sy this transportation sy copa Association of O	nd Operations Plan, Gilbert, AZ Peer Reviewer. for the ment and operations plan and assisted the Town in developing or the new organization. The transportation systems management in active traffic operations and to better use existing Intelligent SP, as a subconsultant, is assisting with the planning and system. The town has a solid infrastructure basis, sound capital stems management and operations (TSMO) plan to guide the Governments Systems Management and Operations Plan to help form investments, resource development, and local/regional
08/19 – 10/22	National Cooperative DC Contributor to Management and Operation strateger on how to effectively transportation system management and operative in the strateger of the strateg	the American Asso perations for transp ic, programmatic, a incorporate operat ns management ar erations, transport opment and progra	ociation of State High portation agencies. The and tactical elements tions in the decision- and operations from se ation systems managamming, as well as s	RP), 03-126 Transportation Operations Manual, Washington, way Transportation Officials Manual on Transportations Systems ne manual will include information, effective practices, and potential of transportation operations. A key aspect of the document will be making process. WSP is developing this manual, which will cover everal perspectives: strategic context for transportation systems gement and operations program planning, and relationship to pecific tactics implemented in the field to improve transportation etc.
09/17 – Ongoing	Arizona Dept. of Tra	ansportation (AD	OT), Loop 101 Mobi	ity/Transportation Systems Management and Operations, ation, coordinating with Arizona Department of Transportation staff

	in the inventory, assessment, and evaluation of the ramp metering equipment and operations. WSP, as a subconsultant, is providing transportation system management and operations support for the Arizona Department of Transportation's Loop 101 Mobility project. The project goal is to develop and implement a series of improvements to support Integrated Corridor Management along a 61-mile interstate route in Phoenix, Arizona. WSP involvement has focused on evaluating and modifying ramp metering to adaptive operations.
2018 – Ongoing	Federal Highway Administration (FHWA), IDIQ, Intelligent Transportation System/Transportation Systems Management and Operations (TSMO) Improvement Support, Washington, DC Lead Author. in this ongoing research project for the U.S. Department of Transportation Federal Highway Administration. The project team, in coordination with state departments of transportation, identified specific challenges that are experienced between Internet Technology and Transportation Systems Management and Operations departments and recommended effective practices. WSP is providing services for this project to strengthen the effectiveness of transportation systems management and operations programs. The team will work to improve the coordination of IT activities and programs with transportation systems management and operations activities and programs and to help bridge the gaps that often exist between IT and intelligent transportation systems/transportation systems management and operations efforts in state and local agencies. The objective of this project is to provide helpful information, best practices, tools, and customized technical outreach to support state and local agencies in improving their IT-intelligent transportation system/transportation systems management and operations coordination, such that the interests of both perspectives can be achieved in an efficient and productive manner. The project will fill key gaps in the Federal Highway Administration Organizing and Planning for Operations program by strengthening agency institutional foundations.
08/18 – 9/22	lowa Dept. of Transportation, Des Moines Integrated Corridor Management, Des Moines, IA Technical Role. developing Concept of Operations documents for the overarching programmatic-level integrated corridor management structure, as well as strategy-level implementations. Ongoing tasks include developing advanced freeway management Concept of Operations with a focus on improved safety and efficiency using technology. WSP is providing data collection, needs assessment, implementing integrated corridor management and selected capacity improvements, stakeholder/public engagement, and project management and coordination. We provided a needs assessment and worked with stakeholders to develop a vision, goals, and set of performance measures.
2010 – 2013	AASHTO Transportation Systems Management and Operations Guidance, NCHRP 03-94 <i>Project Manager</i> . responsible for the final content and functionality of the AASHTO TSMO Guidance website and self-assessment tool aashtotsmoguidance.org), which has underpinned all TSMO CMM workshops and inspired TSMO strategy-specific Capability Maturity Frameworks developed by FHWA.

WSP USA Inc.



Jason Stribiak, AICP Senior ITS Planner

Years of experience with this firm/employer	13
Years of experience with other firm(s)/employer(s)	6

A				i cano or experience man canor minicoprempies (e)		
Degree(s) / Ye	ears / Specialization		999 / Community and Regiona 001 / Transportation / Iowa St	al Planning / Iowa State University ate University		
	egistration number / ate / expiration date	AICP (•			
	Year registered	n/a	Discipline	AICP		
Contract role(s) / bri responsibilities	ef description of		Senior ITS Planner / Jason	will support Program Assistance tasks.		
Experience dates (mm/yy–mm/yy)				d contract; <i>i.</i> e., "designed drainage", "designed girders", d cover the time specified in the applicable MPR(s).		
Career	includes a variety of management, active management, and warchitecture to detail Operations, Require was the co-author of for Traffic Management.	freeway transpo ork zon led systements, fFHWA ent Cen	management applications and retation and demand manager emanagement, among others em requirements. Jason has pland Implementation Plans. Jasponsored guidebooks on Raters, and Active Traffic and D	emand Management.		
08/21 – Ongoing	was the co-author of FHWA sponsored guidebooks on Ramp Management and Control, Migration Plans and Procedu for Traffic Management Centers, and Active Traffic and Demand Management. Kentucky Transportation Cabinet (KYTC), TSMO Program Plan, Frankfort, KY Team Member to prepare the Kentuck Transportation Cabinet's (KYTC) first TSMO program plan consisting of a strategic plan and business plan. Worked with a multidisciplinary stakeholder group within KYTC to establish a set of TSMO strategic objectives and identify programmatic improvements to implement the objectives and advance the KYTC TSMO program.					
08/18 – 9/22	lowa Dept. of Trans supporting the lowa I Des Moines, IA Metro include the regional I required for ICM proje	portatio Departmo opolitan CM prog ects. Jas	n, Des Moines Integrated Co ent of Transportation in establis Area. Jason served as task lea ram, individual freeway manag on is also supporting developn	rridor Management, Des Moines, IA Task Lead. Jason is shing an integrated corridor management (ICM) program for the d and co-author for numerous Concept Operations documents that ement strategies, and traffic management center enhancements nent of two system requirements documents, one for proposed mance management reporting system.		
02/18 – 7/19	Support Planning the next five years. The Plan, and business Plant tactical decision makes and develop a screer planning, Jason will in	Lead. The Prog Plan. Jassing, Jassing tool dentify a es and ac	nis project will develop a TSMC ram Plan, which builds from or son is responsible for leading the on will identify how MnDOT has to effectively integrate TSMO of comprehensive listing of service	tation System Management and Operations Program Planning Program Plan that sets the direction of TSMO in Minnesota over agoing efforts, consists of a TSMO Strategic Plan, Implementation the tactical decision making and implementation planning tasks. For thistorically made funding decisions, identify gaps in this process, considerations into project funding decisions. For implementation these and activities that can advance the MnDOT TSMO program. The decision-making process to develop an interim, prioritized		

04/21 – 12/21	Texas Dept. of Transportation (TxDOT), Interstate 10 Truck Parking Availability System Concept of Operations, Crockett County, TX Task Support. As a subconsultant, WSP provided ITS planning services to the Texas Department of Transportation. WSP was responsible for developing a Concept of Operations for a new, yet to be built truck only parking facility on I-10 in Western Texas. Jason was primary author of the document and led stakeholder outreach to understand stakeholder needs and to gain consensus on the desired operations of the truck parking availability system. The ConOps document defined the operational environment, stakeholders, high-level system operational concept, and various scenarios under which the system is expected to operate including stakeholder roles and responsibilities.
09-22 – Ongoing	North Carolina Dept. of Transportation (NCDOT), Coordinated and Adaptive Ramp Metering Implementation Plan, Raleigh-Durham Metropolitan Region, NC Task Support. WSP is supporting the North Carolina Department of Transportation (NCDOT) with implementing Active Traffic Management (ATM) strategies, including but not limited to Coordinated Adaptive Ramp Metering (CARM), in the Raleigh-Durham Metropolitan Region. As part of this effort Jason was responsible for developing a CARM Implementation Plan as well as an ATM Concept of Operations for a segment of I-40. The Implementation Plan provides a roadmap of considerations for implementing CARM in the region and ultimately other parts of the state. The Plan specifically identifies prerequisites for implementation as well as operational and design options that ought to be considered prior to implementation. The I-40 ATM ConOps will document desired operation of ATM strategies including agency roles and responsivities for operating and maintaining specific ATM strategies.
07/20 – 6/21	Nebraska Dept. of Transportation, Transportation Systems Maintenance and Operations (TSMO) Strategic Plan, Statewide, NE Task Support. Jason served a task support for the tactical element of the Nebraska Statewide Transportation Systems Management and Operations Strategic Plan. The Plan guides statewide TSMO activities for the next 10 years and lays out Strategic, Programmatic, and Tactical aspects of TSMO in Nebraska. Jason was responsible for helping to define a decision-making process for identifying and evaluating potential projects, services, activities, and other investment that supports the Statewide TMSO mission, goals, and objectives defined in the Strategic and Programmatic elements of the Plan. Jason was responsible for helping to identify how NDOT has historically made funding decisions, identifying gaps in this process, and developing a stakeholder-driven prioritization process to integrate TSMO consideration more effectively into funding decisions.
07/20 – 9/20	Indiana Dept. of Transportation (InDOT), Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) Grant Application for the I-465 Active Traffic Management (ATM) Project, Indianapolis, IN Task Lead. WSP supported the Indiana Department of Transportation by developing an application in response to the USDOT's ATCMTD grant opportunity. InDOT's I-465 ATM concept included ramp metering, variable speed limits, and enhanced vehicle detection and probe data to improve safety and travel reliability along a vital segment of the I-465 corridor. Jason was responsible for lead the technical aspect so the grant applications and overseeing content development.
12/09 – 4/12	Federal Highway Administration (FHWA), Active Traffic Management Program Technical Assistance and Support Primary Author. Responsible for authoring a FHWA-sponsored Guidebook on Active Traffic Management (ATM). The Guidebook will serve as a high-level reference for public agencies to use to identify the technical, institutional, and organizational aspects associated with the planning, designing, and implementing of active traffic management strategies and applications. The Guidebook will be developed in two phases. The first phase will develop a white paper that provides high-level, but timely information that agencies use as they consider deploying ATM strategies. The second phase will further develop the white paper into a more detailed guidebook that describes among other topics; the ATM concept, consideration factors for feasibility evaluation, thresholds for ATM deployment, and current practices and challenges implementing ATM strategies.

16. Staff Experience WSP USA Inc.	:				
Ada	Adam Greenstein, P.E., PTOE ITS Engineer Years of experience with this firm/employer		7		
		140 /0000 /	0: 15		
Degree(s) / Ye	ars / Specialization		Civil Engineering / Per Civil Engineering / Was	nnsylvania State University	
	gistration number / ate / expiration date	P.E. 907227 3/31/2024	/ DC / Exp. 8/2023; P.E	E. 44291 / MD / Exp. 8/8/2023; P.E. 0402064994 / VA / Exp. ineer: 4258 / US / Exp. 2023	
	Year registered	DC 2013 MD 2013 VA 2022 Traffic 2017	Discipline		
Contract role(s) / bri	ef description of res	ponsibilities	ITS Engineer / Adam	will support Strategic Implementation Planning Services task	(S.
Experience dates (mm/yy-mm/yy)				ed contract; <i>i.</i> e., "designed drainage", "designed girders'd cover the time specified in the applicable MPR(s).	",
Career	customer relations, a include design, anal involvement in revie transportation mana multimodal traffic en Department of Transpolaware River Port	and project maysis, operation wof engineerir gement plans, gineering studisportation (MD Authority (DR	nagement. Adam has s, concept planning, an ng plans and documen and project managem ies. He brings experier OT), the City of Philado	g, highway safety, intelligent transportation systems (ITS), over 14 years of experience working on various projects, what standards development. His experience also includes ts, including traffic impact studies, project impact reports, ent plans. Adam has extensive experience in the completion are working with numerous public agencies, including Maryla elphia, Pennsylvania Department of Transportation (PennDC al Highway Administration (FHWA), National Park Service thority (WMATA).	n of and
9/22 – Ongoing	Maryland Dept. of T Lead. Prepare mate update strategic plan partners. Assisting and parties consider workshop of over 20 answer key question multimodal traffic en	ransportation rials for period nning initiatives MDOT running Expression participants for MDOT's agineering, with Council and CA	(MDOT), Connected/A ic working group and s s, and coordinate with o statewide working gro ns of Interest for CAV to on addressing workfore near-, mid-, and long-to foundation built on ins	Automated Vehicle Support, Maryland Traffic Engineering specialty sub-group meetings to help refine Department's goal other state and local agencies as well as private output meetings, workshops, and outreach events for stakeholds esting and deployment. Prepared and ran whiteboard for virtue needs for CAV, collaborating ideas from various parties to the erm action plans for CAV. Subject matter expertise provided sights from ITE technical activity volunteering (liaison betwee e) and NCUTCD membership (Bicycle Technical Committee,	ers tual in
1/17 – 12/18	Maryland Transpor Lead. Developed st	rtation Author rategic plan do	cument to guide agend	Plan for CAVs, Maryland Engineering and Planning cy actions for operations, maintenance, staffing, workforce anized and led internal focus group meetings geared towards	.

	developments of strategies to plan for future CAV needs based on division of agency's major roles and
	responsibilities. Led focused discussions tied to traffic control device needs related to future CAV operations on agency
	roadways, including operations near and through toll plazas.
3/20 – 9/20	Maryland Dept. of Transportation, State Highway Administration (MDOT SHA), Interstate 695 Transportation System Management and Operations (TSMO), Baltimore, MD Lead Traffic Safety Engineer developed a matrix of potential safety improvements, developed and refined Highway Safety Manual model and Crash Modification Factor applications. Reviewed and did quality assurance/quality control for VISSIM modeling. WSP is performing the concept design and traffic analysis for this multimillion-dollar project to develop system and operational improvements to improve traffic flow and safety in this 19-mile corridor of Interstate 695 from Interstate-70 to Maryland State Route 43. The project involves the design and implementation of part time shoulder lane in the existing inside (center) median area. The part time shoulder implementation includes shoulder cross-slope modifications, drainage improvements, concrete median barrier modifications, the implementation of Lane Use Control signs and an Automated Incident Detection system.
3/17 - 11/18	Maryland Transportation Authority (MdTA), Bay Bridge Lane Closure Analysis, Annapolis and Stevensville, MD Traffic Operations Analyst. Developed tool to analyze and summarize appropriate lane closure schedules under current and future volumes, utilizing TSMO and ATM strategies for lane use control signal system and DMS operations. Incorporated travel forecasting methodologies to predict future traffic demand. Designed queuing tables for hours-of-day by day-of-week for each month of the year and coded table to highlight when queues exceeded 0.5-mile, 1 mile, and 2 miles. Verified travel forecasting applications using combinations of historical trends and forecasts for both Chesapeake Bay Bridge and other MDTA facilities. Also develop automated processes for analyzing volumes on Bay Bridge for lane closure analysis screening tool. Goal to automatically update screening tool spreadsheets with new volumes and automate selection of lane closure scenarios to determine appropriate construction schedules with at least one lane closed. Considers daily, monthly, and seasonal variation in hourly traffic patterns.
9/16 – Ongoing	Maryland Transportation Authority (MdTA), US 301 Governor Harry Nice / Senator Thomas Middleton Bridge Replacement General Engineering Contractor Services, Charles County, MD Lead Traffic Safety and Operations Manager. TMP, MOT, TCD, Lighting, and ITS/ATM Review – reviewed TMP report, MOT plans, signing and pavement marking plans, lighting plans, and ITS/ATM plans for bridge construction and road work. Developed Lane Use Control Signals Development Needs report - discuss function of lane use control signals on new bridge to confirm why MdTA is interested in implementing these systems and how to cost-effectively and efficiently implement, including gantry spacing/design, signing and
	marking needs, power and communications layout, impacts to safety and trip reliability, and costs.



Vectura Consultin	g Services, LLC				
La P1		s Lambert, l	II, P.E., PTOE,	Years of experience with this firm/employer	7
Sei	nior Traffic Enginee	r		Years of experience with other firm(s)/employer(s)	18
Degree(s) / Ye	ars / Specialization		ce / 2006 / Civil Enginee nce / 1997 / Civil Engine	<u> </u>	
	gistration number / ite / expiration date	PE. 0029901 / L	A / 3/31/2024		
	Year registered	2001	Discipline P.E	E. / Civil	
Contract role(s) / b	rief description of re	esponsibilities	Laurence will provide t Meets MPR No. 4.ree	raffic engineering support for System Engineering Design F c	Plans.
Experience dates (mm/yy–mm/yy)				ract; <i>i.e.</i> , "designed drainage", "designed girders", "designed of experience specified in the applicable MPR(s).	gned
6/23 – Ongoing			ous Vehicles (C/AV) Te slation related to C/AV.	am and Working Group Support. Laurence is a member	of the
1/23 – 2/24				manager for a System Engineering Analysis Report, Engir ation Management Plan.	neering
3/21 – 3/22	existing and future a	agreements betwe		aurence completed an ITS System Inventory, identified all ations participating in the ITS operations in the Lafayette related in the Lafayette resistance.	
10/21 – 3/22	Traffic Management	t Plan (TMP) for th n, LOS determina	ne construction of ITS ed	ngineer). Laurence was the lead traffic engineer for a Leve quipment along I-10. The plan included a safety strategy the lane closure recommendations based on a queue analysis	at
9/18 – 2/19	the task leader for the project. The goal of along the I-110 corri (TMCs), installing fit	ne Constraints & A the project was to idor from US 190 per optics along the	Alternatives Analysis as deploy Close Circuit Te to US 61. To communic	nalysis (Project Manager). As a sub-consultant, Laurence well as the Projects & Procurement Strategy portion of the elevision (CCTV) cameras and one Dynamic Message Signate with the field devices from the Traffic Management Centermended. The fiber optics also allow communication to to C.	n (DMS) nters
6/12 – 12/12	Laurence conducted Dalrymple Drive and	d a feasibility stud d LA 73. The stud	y to deploy ramp meters y consisted of analyzing	and Ascension Parishes, Louisiana (Project Manager) along the Interstate 10 (I-10) Corridor in Baton Rouge bet 17 on-ramps under differing design conditions, which inclu mp Meter, and 2012 Ramp Meter with Recommendations.	ween

	Laurence's role in this project as project manager was to oversee all QA / QC measures and interpret the results from the model. Laurence coordinated with the local agencies to obtain all current proposed projects in the area, which included DOTD I-10 Widening Project Phases 1 and 2, the Green Light Plan (GLP) Essen Lane Widening Project, and the GLP Highland Road Widening Project.
7/11 – 7/15	H.4400001465 Retainer Contract for ITS Traffic Incident Management (TIM) Program Transportation Management Centers (TMC's) Operations Staffing Support and Systems Engineering (SE) Statewide. Laurence was the overall project manager of this multi-year, \$15,000,000 contract that included providing staffing support, developing Standard Operating Procedure Manuals, Traffic Incident Management program support, ramp meter feasibility and design, TMC Concept of Operations, ITS system requirement documentation and Systems Engineering Analysis and Documentation. Laurence coordinated with the DOTD and TMC staff at the following TMC locations: DOTD Headquarters Annex Building, Baton Roue TMC on Harding, New Orleans, Shreveport, and Houma.
3/10 – 6/10	Bonnet Carre Spillway Speed Study, New Orleans, Louisiana (Project Manager). Laurence analyzed the existing speeds on this facility and various forms of enforcement to ensure safety. Laurence led our efforts for this project, which consisted of a speed study to provide data to the DOTD managers to examine the current speed limit on the Spillway. He investigated other means of speed-limit enforcement, variable speed limits applicability, and managed lane options. 50%, 85%, and 95% speed analyses were performed with the speed data.
8/09 – 12/09	I-12 Ramp Metering Public Outreach, Baton Rouge, Louisiana (Project Manager). Laurence prepared exhibits and 3-D models and facilitated three public meetings to educate the public about ramp metering and its implementation. Several stakeholder meetings were held to educate the elected officials and civic groups. Laurence gave a formal presentation at each meeting to describe the benefits of ramp meters and the project specifics.
7/08 – 7/11	SPN 700-99-0413 Retainer Contract for ITS Transportation Management Centers (Project Manager). Laurence was the overall project manager of this 3-year contract that included providing staffing support, developing Standard Operating Procedure Manuals, Traffic Incident Management program support, ramp meter feasibility and design, TMC Concept of Operations, ITS system requirement documentation and Systems Engineering Analysis and Documentation. Laurence coordinated with the DOTD and TMC staff at the following TMC locations: DOTD Headquarters Annex Building, Baton Roue TMC on Harding, New Orleans, Shreveport, and Houma.
1/07 – 8/07	I-12 Ramp Metering Study, Baton Rouge, Louisiana (Project Manager). Under the ITS retainer contract, Laurence provided analysis and evaluations of potential ramp metering at six interchanges along this corridor. The scope also included analysis of existing traffic conditions, evaluation of proposed solutions, and creation of micro-simulation models of existing and proposed conditions. An existing micro-simulation model was obtained from DOTD to analyze and visually represent the existing traffic conditions. The existing conditions model was calibrated and used as a base to develop models of ramp metering. Laurence presented the findings to DOTD, including an overview map of the interchange area, a schematic of existing volumes, a Microsimulation of the existing conditions, a summary table of LOS for existing conditions, micro-simulations of proposed solutions, and a summary table of LOS for each solution. Laurence also submitted a formal report of the findings.
3/06 – 10/06	New Orleans Regional Transportation Management Center SEA (Project Manager) Laurence served as the project manager for the Laurence ITS Design Team that handled the New Orleans Regional TMC project. Laurence provided the Systems Engineering Analysis (SEA) for the operations of the new TMC, which included a conceptual layout of the RTMC data, audio / video, personal computers, and computer equipment including wiring.

Vectura Consultin	g Services, LLC					
	onald St. Ange	elo			Years of experience with this firm/employer Years of experience with other firm(s)/employer(s)	1 48
Degree(s) / Ye	ars / Specialization	High School Dip	loma / 1975			
	gistration number / ate / expiration date	N/A				
	Year registered	N/A	Discipline	N/A		
Contract role(s) / b	rief description of re	esponsibilities	Senior ITS Technic including inspection		Ronnie will provide Technical Support during Constructio d testing.	n
Experience dates (mm/yy–mm/yy)					ract; <i>i.e.</i> , "designed drainage", "designed girders", "designed generated by a contract of experience specified in the applicable MPR(s).	gned
2/23 – 4/23	troubleshooting cons numerous traffic sign an estimator for bidd hundreds of local, st New Orleans, Baton up, to include base construction plans to experience in installi	struction issues in nal related project ding traffic signal / tate, and federally Rouge, and Lafa signal installation o ensure proper in ing all forms of tra	the field such as ut is and oversaw a tea ITS equipment proj funded traffic signa yette. During this tin in, signal control elec- istallation requiremental iffic signals during a	lity of ects. I / IT me, I trica nts \ I cor	zed in programming traffic signal controls / ITS equipment conflicts and traffic signal issues. He was a project manage of field technicians for signal related construction projects. He Ronnie worked extensively throughout the state of Louisians projects, to include major metropolitan areas, such as Gonnie worked projects that built intersections from the ground installation, and signal termination. Read and interpreted were met for span wire and mast arm installation. Extensive instruction phases. Assisted site inspectors with confirming and verifying controller data collection and timing checks.	er for He was ana on reater ound
7/75 – 1/3	City of Baton Rouge Parish. Construction power service. In the the controller evolve damage from collision that included LADO	e. Ronnie performe n included traffic si e earlier part of his ed to steady-state ons or extreme we TD intersections.	ed numerous constrignal poles, signal his career, the traffic stechnology. In additeather, While employennie started his c	uctio eads igna ion, l ed i aree	s a certified IMSA Level 1 & 2 Technician while employed in tasks in relation to traffic signals within East Baton Rougle, signal wiring, vehicle detection, traffic signal controller / or I controllers consisted of mechanical parts. As time progres Ronnie performed traffic signal tasks related to maintenance the city, Ronnie was tasked with maintaining over 300 signal the City of Baton Rouge as a Technician, then Traffic States also responsible for programming traffic signal controller	eabinet essed, ce after gnals Signal

24-102 **Section 17**



Gresham Smith Past Performance Evaluation Discipline(s)*

LADOTD, Video Distribution Management System

Firm responsibility (prime or sub?) | Prime

Project number	H.005730.5, H.011900.1, H.011979.1, 6 years support under OTS	Owner's name	Louisiana Department of Transport	ation and Development	
Project location	Statewide, Louisiana	Owner's Project	Manager	Rosalinda Deville	
Owner's address, phone, email	1201 Capitol Access Road	d, Baton Rouge, LA /	225.379.2523 / Rosalinda.deville@la	a.gov	
•		0044		4.0001.)	4077

Services commenced by this firm (mm/yy)	2014	Total consultant contract cost (\$1,000's)	\$277
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	\$277

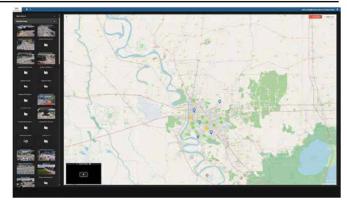
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.) *If there is more than one past performance evaluation category included in the advertisement, then indicate which past performance evaluation discipline(s) this project is being used to represent.

Gresham Smith has designed and implemented an award-winning and industry recognized Video Distribution Management System (VDMS) for various Departments of Transportation (DOTs) and city government agencies in the Southeast, including Mississippi DOT (MDOT), Louisiana Department of Transportation and Development (LADOTD), Alabama DOT (ALDOT), City of Baton Rouge, Lexington-Fayette Urban County Government (LFUCG), and Pinellas County Department of Environment and Infrastructure in Florida. The innovative and secure video system, which leverages H.264 technology and media servers, allows various agencies to share live streaming video from their network of Closed Circuit Television (CCTV) cameras with the traveling public and partner agencies—both internal and external conveniently via the internet and on mobile devices. Gresham Smith's VDMS solution reduces network bandwidth, equipment needs, costs, and system complexity along with power and

energy consumption. The VDMS provides agencies a better way to manage congestion, enhance mobility and improve safety for the traveling public. It also enables more effective coordination between first responders, such as faster evaluation and clearance of incidents—saving time when seconds can mean saving lives.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.

Firm members involved include: Bert Moore, Kendra McCoy, Christina Florez, Adrian Meads, Julian Bordelon, Matt D'Angelo and Daniel Knott.





Gresham Smith		Evaluation Disciplin	ne(s)* ITS			
LADOTD, ITS Design and Implementation Services, Traffic Control Software SEA, Design and Integration			Firm respons	Prime		
Support						
Project number	H.011566.1, H.011566.6	Owner's name	Louisiana Departme	ent of Transport	ation and Development	•
Project location	Statewide, LA	Owner's Project	Manager	Lucy Kimbeng		
Owner's address, phone, email	1201 Capitol Access Roa	d, Baton Rouge, LA /	225.379.2528 / lucy.l	kimbeng@la.go	V	
Services commenced by this firm (mm/yy)		01/15	Total consultant contract cost (\$1,000's)		\$230	
Services completed by this firm (mm/yy)		2017	Cost of consultant services provided by this firm (\$1,000's)		\$230	

Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.) *If there is more than one past performance evaluation category included in the advertisement, then indicate which past performance evaluation discipline(s) this project is being used to represent.

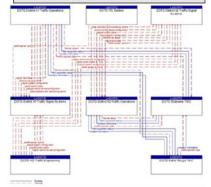
Gresham Smith developed a Systems Engineering Analysis (SEA) document for the Traffic Signal Control Software Project in compliance with the FHWA Final Rule (23 CRF Part 940.II) for project implementation. The project defined the high level requirements and concept of operations. The SEA document detailed how the software should be integrated with the existing ATMS, identified any additional hardware or software requirements, and how it may be implemented and used internally by various groups within LADOTD as well as externally by partner agencies. This task included developing an Operational Concept, Physical Architecture (using Turbo Architecture), Requirements (High Level Requirements, Regional-Architecture Functional Requirements, User Needs/Requirements, and Traffic Signal Control Software Functional Requirements), Procurement Methods, Alternative Analysis Configuration, and High Level Design. Seeking to replace the existing obsolete system with a more unified traffic control system, the LADOTD is upgrading to Trafficware's ATMS.Now, a central management system that will unify the traffic signal systems statewide and allow more effective and efficient monitoring and control. To ensure compliance with LADOTD's Concept of Operations (ConOps) as well as High Level Functional Requirements, we provided oversight and management for the duration of the upgrade process. All documents. submittals, and receivables were reviewed and approved. Our team was present for all implementation procedures, including installation of ATMS. Now software licenses, upgrade of existing ATMS. Now servers, and integration of the new ATMS. Now system with the standing Delcan ATMS. Additionally, Gresham Smith provided quality assurance during the training and testing phases. We visited each of the Districts during the burn-in period to confirm system performance.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.

Firm members involved include: Kendra McCoy, Bert Moore, Daniel Knott, Christina Florez, Adrian Meads, Julian Bordelon, John Weres, Meredith Cebelak, Matt D'Angelo, Rebecca Murray.

Scope Elements

- Project management
- Concept of Operations
- Physical Architecture
- System Requirements
- Procurement Alternatives Configuration



Gresham Smith		Past Performance	e Ev	aluation Disciplin	e(s)* ITS		
•	Statewide Syster ication Services	ns Design, Int	eg	ration and	Firm respons	ibility (prime or sub?)	Prime
Project number	Various	Owner's name	Lo	uisiana Departmer	nt of Transportat	tion and Development	
Project location	Statewide, Louisiana			Owner's Proje	ect Manager	Rosalinda DeVille	
Owner's address, phone, email	/ L 1201 Canifol Access Road, Baton Rollde, LA /USO2 / 225 379 2523 / Rosalinda deville@la dov						
Services commend	ced by this firm (mm/yy)	10/12	То	tal consultant co	ntract cost (\$1,	,000's)	\$1,535
Services complete	d by this firm (mm/yy)	03/18	Co	st of consultant	services provid	led by this firm (\$1,000's)	\$1,535

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Under two separate LADOTD Integrator Retainer contracts, Gresham Smith provided systems engineering, integration and support services, systems analysis, independent verification and validation services (IV&V), and developed system designs, specifications and cost estimates. Gresham Smith also provided services to support the DOTD ITS program for the video distribution system, traveler information services, data validation and dissemination, and the ATMS for the statewide and regional ITS Traffic Management System (TMS).

Task work orders included:

- Program Assistance ITS/TMS diagnostics, troubleshooting, testing and integration
- Video Distribution Management System (VDMS) design, implementation and support
- System Configuration Management for ITS systems
- 511 ATIS Concept of Operations
- Advanced Transportation Management System (ATMS)
- Toll Operations Business Plan
- Integration Systems Support
- Emergency Vehicle Preemption System SEA
- ATMS.Now SEA, Design and Integration Support

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.

Firm members involved include: Bert Moore, Kendra McCoy, Christina Florez, Adrian Meads, Julian Bordelon and Daniel Knott.

Project Highlights

- Systems Engineering
- Business Plan Development
- IV&V
- Software Development
- Software Integration
- Software Testing
- Software Maintenance

Past Performance Evaluation Discipline(s)* **Gresham Smith** LADOTD, ITS Design and Implementation Services: Fiber Firm responsibility (prime or sub?) Prime Optic Mapping and Management (FOMM) H.012381.5. **Project number** H.012381.6, H.012816-Owner's name Louisiana Department of Transportation and Development **Project location** Statewide, Louisiana **Owner's Project Manager** Lucy Kimbeng, P.E. Owner's address, 1201 Capitol Access Road, Baton Rouge, LA / 225.379.2528 / lucy.kimbeng@la.gov phone, email \$1,273 Services commenced by this firm (mm/yy) 2016 Total consultant contract cost (\$1,000's) Cost of consultant services provided by this firm 2023 \$1,273 Services completed by this firm (mm/yy) (\$1,000's)

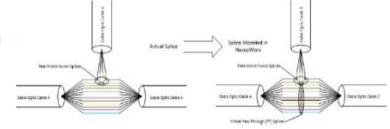
Describe the project including the firm's role and members involved. (Highlight staff to be used in this proposal.)

Gresham Smith conducted a pilot project for LADOTD which included developing preliminary policies for the ITS Field Asset Management System (FAMS). Tasks included identifying and collecting data from LADOTD's fiber and communications system and field site equipment; recording data into the system asset information; and developing a template for gathering asset information along with sequence for which data is to be collected. Additional tasks included developing final requirements for inventory data collection, data collection schedule, data reporting requirements and QA/QC procedures. Gresham Smith delivered an evaluation report of how the pilot project was performed,

summarizing the issues that arose and identifying how those issues were addressed during the process. As a result of this initial pilot project, LADOTD recognizes the value of the fiber optic asset management and has subsequently issued numerous additional work orders to map more of the LADOTD fiber optic network. The pilot project has led Gresham Smith to receive additional task orders to implement the system statewide.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.

Firm members involved include: Bert Moore, Kendra McCoy, Daniel Knott, Christina Florez, Adrian Meads, Kofi Ampofo-Twumasi, Jordan Fondja, Rebecca Murray and Julian Bordelon.



Scope Elements

- Project Management
- Policy Development
- Data Collection Requirements
- QA/QC Procedures
- Identify Challenges
- Software License Requirements
- ITS Field Asset Inventory
- Data Collection Coordination
- Data Entry

Gresham Smith		Past Performance Evaluation Discipline(s)* ITS							
I-24 MOTION	Test Bed			Firm respons	ibility (prime or sub?)	Prime			
Project number	N/A	Owner's name	Tennessee DOT	•					
Project location	Nashville, TN	u	Owner's Proj	ect Manager	Lee Smith, P.E.				
Owner's address, phone, email	505 Deaderick Street, Suite	e 300, Nashville, TN /	615.253.6705 / lee.j.s	smith@tn.gov					
Services commend	ced by this firm (mm/yy)	03/20	Total consultant co	ntract cost (\$1	,000's)	\$439			
Services complete	ces completed by this firm (mm/yy) Ongoing Cost of consultant services provided by this firm (\$1,000's)) \$302						

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

The I-24 corridor between Murfreesboro and Nashville is the location of Tennessee's first Integrated Corridor Management (ICM) project known as the I-24 SMART Corridor. The I-24 SMART Corridor integrates freeway and arterial facilities with technology and operational strategies to actively manage traffic. TDOT established the I-24 Mobility Technology Interstate Observation Network (MOTION) Test Bed within the I-24 SMART Corridor to better understand how new vehicle automation technologies and operational approaches impact real world driving scenarios. The Test Bed is a first of its kind in the US and recently supported the largest CAV test ever conducted in live traffic.

TDOT's I-24 Test Bed includes a 40-pole camera system generating 4K resolution video that is processed to create anonymous vehicle trajectory data. The Test Bed provides a mechanism for TDOT to partner with the research community and industry to better understand how connected and automated vehicles (CAVs) influence driver behavior and analyze the interactions between CAVs and general traffic. The Test Bed will also provide TDOT with a deeper understanding of how to optimize strategies such as ICM to influence traffic behavior.

Gresham Smith developed the Systems Engineering Analysis report that defines the needs, requirements, and ITS Architecture for the Test Bed. Additionally, Gresham Smith designed the I-24 MOTION test bed field infrastructure and provided support through the procurement and construction phases. We also provided guidance on test bed best practices, big data management, deployment strategy, public relations, and a business plan.

Construction of this project was funded by a CMAQ grant that Gresham Smith successfully wrote for TDOT. Gresham Smith is now supporting test bed operations, including outreach and oversight of experiments with industry, other states and researchers.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.

Firm members involved include: Matt D'Angelo, Meredith Cebelak, Christina Florez, Kendra McCoy.

Relevance: CAV/Emerging Technology, Industry and University Partnerships





Intelligent Transportation Systems, LLC Past Performance Evaluation Discipline(s)* **Bonnet Carre ITS Upgrades** Firm responsibility (prime or sub?) Sub Project number H.015137.1 Louisiana Department of Transportation and Development (LADOTD) Owner's name St John the Baptist, St Charles and Ben Nichols **Project location Owner's Project Manager** Jefferson Parishes, Louisiana Owner's address. 1201 Capitol Access Road; Baton Rouge, LA 70802 phone, email

Services commenced by this firm (mm/yy)	6/2023	Total consultant contract cost (\$1,000's)	\$72.6
Services completed by this firm (mm/yy)	Ongoing	Cost of consultant services provided by this firm (\$1,000's)	TBD

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

ITS LLC is providing services related to the development of a Systems Engineering Analysis (SEA) to improve mobility and safety in the I-10 and I-310 corridors by improving the services delivered using intelligent transportation systems (ITS). ITS LLC assessed the existing ITS infrastructure which included a visual assessment and site inventory, communications assessment with OTDR testing, electrical assessments with voltage data recorders, and structural assessment based on observations and unmanned aerial vehicle (UAV/drone) imagery. An operational concept was developed by the pproject team which identified the roles an dresponsibilities of participating agencies and stakeholders as well as required LADOTD officials, Louisiana State Police, and the New Orleans Regional Planning Commission. The development of project physical architecture inovled the use of the System Engineering Tool for Intelligent Transportation (SET-IT).

Nature of firm's responsibility: Sub-Consultant

irm members involved include: Jonathan Fox, Colin Francis, Chris Dodt



Intelligent Transportation Systems, LLC Past Performance Evaluation Discipline(s)* I-10 Scott to Lake Charles Firm responsibility (prime or sub?) Sub Louisiana Department of Transportation and Development (LADOTD) **Project number** H.0132561 Owner's name Acadia, Jeff Davis, and Calcasieu Parishes. **Project location Owner's Project Manager** Alaa Shams, P.E. LA Owner's address. 1201 Capitol Access Road; Baton Rouge, LA 70802 phone, email Services commenced by this firm (mm/yy) 11/2020 Total consultant contract cost (\$1,000's) \$9.9 Services completed by this firm (mm/yy) Cost of consultant services provided by this firm (\$1,000's) Ongoing TBD

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

ITS LLC provided support during construction for this project as a subconsultant. This included attending preconstruction and monthly progress meetings, repsonding to Requests for Inforamation (RFIs), reviewing

equipment technical submittals, and attending constrcution layout visits at each site.

In the initial stages of the project, ITS LLC perform utility coordination tasks, FCC height assessments, and field assessments to location fiber and fiber pull boxes. Additionally, plans for construction were developed which indicated existing and proposed facilities for fiber optics and other communications conduit runs and hubs. Pole locations were evaluated and located such that guardrail would not be required. Generator options were identified and specified.



Once the project design was complete, ITS LLC began to perform CE&I support. This effort is ongoing as the project is still under construction.



Firm members involved include: Jonathan Fox, Colin Francis, Chris Dodt, Ajalon James, Jeremy Garrett

Intelligent Transp	ortation Systems, LLC	Past Performance	e Evaluation Disciplin	e(s)*	ITS			
Lafayette Regional ITS Architecture				Firm r	esponsibility (prime or sub?)	Sub		
Project number	H.014513	Owner's name Louisiana Department of Transportation and Development (LADOTD)						
Project location	Lafayette, LA		Owner's Project Ma	nager	John Kelly			
Owner's address, phone, email	1201 Capitol Access Road; Baton Rouge, LA 70802							
Services commenced by this firm (mm/yy) 4/2021		Total consultant contract cost (\$1,000's)		\$29.9				
Services complete	d by this firm (mm/yy)	10/2022	Cost of consultant s	ervice	s provided by this firm (\$1,000's)	\$29.9		

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

The scope of the Lafayette ITS Regional Architecture Project is to update to the regional intelligent transportation systems (ITS) architecture planning document for the Lafayette MPO area, located in southern Louisiana, and will guide the deployment of ITS in this region. The purpose for developing and maintaining a regional ITS architecture is to help implement systems that are relevant to user needs and furthermore to make projects or programs that come out of the process eligible for federal funds. By using the national ITS architecture framework, ITS LLC was able to advance facilitates integration and interoperability with other regional ITS architectures and deliver a system that meets stakeholder needs. All work performed conformed to the Federal Highway Administration (FHWA) Final Rule 940 Part 11 which mandates that projects planning to utilize federal dollars in their ITS deployments must have established an ITS Architecture for the region.

Within the regional architecture development, ITS LLC assisted the prime firm in the development of an ITS System Inventory to catalog the exisitng technology and coverage across the defined region. This included CCTV cameras, PTZ cameras, dynamic message signs, vehicle detection systems, queue warning systems, traffic signal systems, and all associated communications. In additional, the firm helped to identify "blind spots" that may benefit from additional CCTV coverage along both I-10 and I-49, two critical interstate corridors that bisect the Lafayette Region. Consideration was also given to the integration of connected and autonomous vehicles and the amount of existing ITS infrastructure that may support that growing trend.

System interfaces and operational concepts were evaluated and further developed for future expansion of the Region's ITS system capabilities and functionalities. Incident management, a critical component to ITS systems, was also included in the Architecture Update. And ITS Deployment Plan was then developed to inform stakeholder decision-making of outstanding needs of an ITS system for the Lafayette Region. Information flow and sharing is another element addressed in the Architecture Updates. Having strong agreement in place with interoparational agencies is key to the success of regional systems. The review of the region's ITS Maintenance plan was the final step in the update process.

Nature of firm's responsibility: Sub-Consultant Firm members involved include: Jonathan Fox

17. Firm Experience:

WSP USA Inc. Past Perform			e Evaluation Disciplin	e(s)*	ITS, Planning, Traffic, Road, Other	(Research)	
AASHTO Tra	nsportation Opera	tions Manual		Firm r	responsibility (prime or sub?)	Prime	
Project number	NCHRP 03-126	Owner's name	Transportation Research Board, National Cooperative Highway Research Program (NCHRP)				
Project location	tion Washington, DC		Owner's Project Manager		Zuxuan Deng, Senior Program Officer, Transportation Research Board, Cooperative Research Programs zdeng@nas.edu 202-334-2305		
Owner's address, phone, email The National Academies of Sciences, Engineering, and Medicine 500 Fifth Street, NW, Washington, DC 20001 zdeng@nas.edu 202-334-2305							
Services commenced by this firm (mm/yy) 08/19		08/19	Total consultant contract cost (\$1,000's)		\$750		
Services completed by this firm (mm/yy) 10/22		10/22	Cost of consultant services provided by this firm (\$1,000's)			\$750	

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

WSP developed the first-ever Transportation Operations Manual for AASHTO that was balloted in fall 2022 and is set to be published in 2023. The nearly 700-page document provides a strategic context for TSMO; analyzes TSMO program planning and its relationship to agency project development and programming; and offers guidance on specific tactics that improve transportation operations when implemented in the field. Overall, the manual provides a holistic view of the operation and management of the transportation system. Its development relied upon an exhaustive compilation of effective industry practices, examples, and references to countless resources from FHWA, AASHTO, industry associations, public agencies at all levels government, and the private sector. Significant outreach was included. The manual also features comprehensive consideration of diversity, equity, and inclusion (DEI) throughout all chapters, ensuring that TSMO concepts, planning activities, programmatic considerations, and tactics duly incorporate our growing understanding of DEI issues in transportation delivery. The manual is envisioned as more than a one-time product. It is intended to play a key role in the transportation arena, evolve in its application to the TSMO user community, and be integrated within the overall transportation industry framework of guidance, eventually serving as an authoritative companion to the AASHTO Green Book and other accepted industry guidance. The manual is structured in five parts to allow different users to efficiently access the guidance they need when they need it and providing linkages among the parts:

- Strategic including foundational concepts regarding the definition of TSMO, basic operational concepts, functions, performance potential, business case arguments related to public policy, and stakeholder interests.
- Programmatic focusing attention on key dimensions of an effective program such as business and technical processes, organizational and workforce configuration, and collaboration.
- Project development recognizing that progress has often been hampered by challenges related to project development (in both traditional and TSMO projects). Key project development concepts include relationships to the capital program, the project development process, and funding.
- Tactical encompassing the full range of TSMO strategies and supporting concepts, technologies, and procedures that address recurring and nonrecurring causes of congestion, safety issues, and environmental impacts. The manual considers multiple modes and provides implementation information and effective practices.
- Industry trends including the rapid introduction of new technologies (e.g., CV, big data, AI) and evolution of TSMO-related institutions, business models, and concepts (e.g., MaaS, Smart Cities). While many of these trends are at early stages of development or at the cutting edge, they need to be acknowledged because they may significantly affect strategic, programmatic, and tactical aspects of the manual.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.

Firm members involved include: Reno Giordano, Les Jacobson, Scott Beck

17. Firm Experience:

WSP USA Inc.	Past Perl	ormance Eva	luation Discipline(s)* Plannii	ng, ITS	
•	ansportation Cabinet, Trar agement and Operations F	•		Firm respo	onsibility (prime or	Prime
Project number	Letter Agreement #3 under Statewide Planning Services On-Call	Owner's name	Kentucky Transpo	ortation Cabin	net (KYTC)	
Project location	Frankfort, KY	Owner's Project	Owner's Project Manager Stephen De Witte, P.E.			
Owner's address, phone, email	KYTC Division of Planning 200 Mero St., 4th Floor, Frankfort, KY stephen.dewitte@ky.gov, 502-782-505					<u> </u>
Services commend	ced by this firm (mm/yy)	08/21	Total consultant	contract cos	st (\$1,000's)	\$245
Services complete	d by this firm (mm/yy)	06/23 (expected)	Cost of consultar	nt services p	provided by this firm	\$245

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

WSP has been at the forefront of planning for TSMO, developing TSMO strategic plans and TSMO program plans for several state DOTs. Through its Statewide Planning contract, WSP is currently completing a TSMO Program Plan for the Kentucky Transportation Cabinet. KYTC had been implementing an increased number of ITS projects and TSMO strategies in a relatively uncoordinated manner over the past several years. It also undertook an FHWA-led CMM workshop in 2019, and from subsequent discussions with WSP, determined that a TSMO Program Plan was necessary to increase the effectiveness of the program and TSMO outcomes. The goals of this project are to highlight how TSMO aligns with the mission of KYTC, help identify where TSMO currently exists in the cabinet (albeit under a different name) and support the integration and centralization of TSMO so that it becomes a part of the culture and supporting processes at KYTC, recognizing that TSMO benefits all areas of the state, both its large rural areas and metropolitan regions. As of April 2023, a final draft of the plan has been approved, and several supporting implementation resources have been developed. Over the course of the project WSP:

- Identified a core internal TSMO Stakeholder Group & Champion for TSMO.
- Derived TSMO Strategic Objectives from the new Department of Highways Operations Plan.
- Developed 10 Programmatic Recommendations to meet KYTC's goals focusing on 1) foundational elements like training and outreach, 2) capital program elements like integrating TSMO into the planning and project development processes, and 3) other business processes such as asset management and data sharing.
- Created a Roadmap to implement the programmatic recommendations based on prioritization criteria (perceived highest impact for advancing TSMO and perceived highest level of effort to complete).
- Presented the above in a TSMO Strategic Plan and TSMO Business Plan.
- Developed near-term implementation materials including a TSMO training curriculum, factsheet on the role of MPOs in enhancing TSMO, and factsheet on the relationship between TSMO and ITS architecture.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract.

Firm members involved include: Reno Giordano, Les Jacobson, Jason Stribiak

17. Firm Experience:

WSP USA Inc.		ormance Eva	luation Discipline(s	21" '	ITS, Planning, Traffic, Road, Other (Research, Transportation Modeling)		
•	way Administration Purchase Agreeme		•	ations	Firm respo	nsibility (prime o	Sub & Prime (BPA)
Project number	693JJ322A000006 (current prime)	BPA as	Owner's name	Federal Highway	Administratio	n (FHWA)	·
Project location Vancouver, WA				Owner's Project Manager James Mikell, Team Lead/Co Officer			eam Lead/Contracting
Owner's address, phone, email	USDOT Federal Highway 610 E 5th Street, Vancouve james.mikell@dot.gov, 360-	r, WA 9866		Acquisition & Grants	Managemen	t	
Services commenced by this firm (mm/yy)			2010; 2016; 2022	Total consultant	contract cos	st (\$1,000's)	\$2,950 (2016–2021); \$1,480 (2022)
Sarvicas complated by this tirm (mm////)			2015; 2021; 2026 (BPA)	Cost of consultar firm (\$1,000's)	nt services p	provided by this	\$2,950 (2016–2021); \$1,480 (2022)

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

WSP has been a major subcontractor on the FHWA Office of Operations IDIQ from 2010 to 2021 and now serves as prime contractor under the office's current 5-year BPA. As a subcontractor, we were actively engaged in 26 tasks, several of which are highlighted below, and are working on 4 tasks as prime. These task orders leveraged our work leading foundational research for the Strategic Highway Research Program (SHRP2) that identified the critical components of successful agency TSMO programs and applied the CMM to TSMO improvement. We then developed TSMO guidance and the CMM self-assessment process and tool under NCHRP Project 03-94 and used that to develop the CMM workshop concept, since applied in nearly every state DOT.

Building on this work in supporting FHWA's role to implement SHRP2 research, we supported over 30 CMM workshops under the FHWA task orders Organizing for Operations Regional Workshops and Organizing for Reliability TSMO Workshops, by contributing to development of the Making the Business Case for Institutional, Organizational, and Process Changes for TSMO guide and leading development of an NHI-based online training of the guide. We cofacilitated the 2020 Organizing for Operations Peer Exchange resulting in a current accounting of state DOT and MPO operations advancements and challenges. We also worked in more specific, supporting practice areas such as in Leveraging and Coordinating Technology Resources for TSMO, where we developed helpful information, best practices, tools, and customized technical outreach to support agencies' IT-ITS/TSMO coordination. We have also led tasks on effective practices in other TSMO areas such as the application of active transportation and demand management strategies, managed lanes, traffic analysis tools, and TSMO asset management.

Our current task orders as prime include, among others, developing web-based training courses on TSMO 101, using the CMM, and conducting TSMO benefit-cost analysis and developing technical resources that share effective practices on leading-edge traffic management systems on behalf of TMC Pooled Fund Study members.

Nature of firm's responsibility: Prime Consultant; Overall responsibility for entire contract. / Subconsultant; handling 26 task orders for TSMO Firm members involved include: Reno Giordano, Les Jacobson, Scott Beck, Jason Stribiak

17. Firm Experience

,,,,,,							
Vectura Consulting Services, LLC Past Performance Evaluation Discipline(s)* CE&I / OV							
EBR Comput	erized Traffic Sigr	nal, PH VB		Firm responsibility (prime or sub?)		Sub	
Project number	H.007160	Owner's name	LADOTD				
Project location	East Baton Rouge	Owner's Project Manager Desmond Sam, P.E.					
Owner's address, phone, email 8100 Airline Highway, Baton Rouge, LA 70815, (225) 231-4123, Desmond.Sam@LA.GOV							
Services commenced by this firm (mm/yy) 1/21 Total consultant contract cost (\$1,000's)						\$603	
Services completed by this firm (mm/yy) Current Cost of consultant services provided by this firm (\$1,000's)						\$93	

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Vectura is a sub-consultant to provide traffic signal equipment inspection for 24 traffic signals under the following scope:

- Signal Equipment Inspection (2 visits per intersection), Tracking the Sampling and Testing of required Traffic Signal Materials / Attend and Review Fiber Optic Test Results
- · Coordinate Review and Approval of all Shop Drawings
- Provide Traffic Signal Support Services / Troubleshoot traffic signal equipment related problems such as foundation / utility conflicts / Field visits (10 months)
- Assist in preparing Change Orders for DOTD / City Parish (2 Separate Forms)
- Attend Monthly Progress Meetings Assist with Monthly Progress Meeting Agenda & Minutes (10)
- Compile As-built Plans from Contractor
- Final Inspection Field Visit to all intersections / Assist with developing punch list / Final Field Visit verification

Personnel Utilized on this project: Brin Ferlito, Laurence Lambert, and Reece Rodrigue (100% performed in Louisiana)

17. Firm Experience

Vectura Consulting Services, LLC Past Performance Evaluation Discipline(s)* Traffic & CE&I / OV								
Belle Chasse Bridge & Tunnel Replacement PPP Firm responsibility (prime or sub?)								
Project number H.004791 Owner's name LADOTD								
Project location	Belle Chasse, LA	Owner's Project Manager Nickolas Olivier, P.E.						
Owner's address, phone, email 1201 Capitol Access Road, Baton Rouge, LA 70802, 225-379-1133, Nicholas.olivier@la.gov								
Services commenced by this firm (mm/yy) 4/18 Total consultant contract cost (\$1,000's)						Unknown		
Services completed by this firm (mm/yy) Current Cost of consultant services provided by this firm (\$1,000's)						\$211		

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Vectura is providing the traffic engineering services for the Belle Chasse Bridge & Tunnel Replacement Project for improvements along LA 23. Vectura is responsible for the following tasks:

- Preliminary and final traffic studies
- Temporary and final traffic signal plans
- Assist the Prime with Traffic Management Plan (TMP)
- Response to request for information (RFI's)
- As-built plans for the traffic signals

Personnel Utilized on this project: Brin Ferlito, Laurence Lambert, and Reece Rodrigue (100% performed in Louisiana)

17. Firm Experience

17. I IIIII Experies	100			_				
Vectura Consultin	ng Services, LLC	Past Performance Evaluation Discipline(s)* Traffic						
I-10 ITS Scot	t to Lake Charles			Firm respons	ibility (prime or sub?)	Sub		
Project number	H.013256.5	Owner's name	LADOTD					
Project location	oject location I-10 (District 07)			ect Manager	Roy Esteven, P.E.			
Owner's address, phone, email	/ LIZUI Canifol Access Road, Baton Roude LA /USUZ ZZ-3/9-Z3Z ROV EsteVen/0)LA dov							
Services commenced by this firm (mm/yy) 1/21 Total consultant contract cost (\$1,000's)						Unknown		
Services complete	d by this firm (mm/yy)	3/21	Cost of consultant	services provid	led by this firm (\$1,000's	\$20		

Describe the project including the firm's role and members involved. (Highlight members to be used in this proposal.)

Vectura is a sub-consultant to provide traffic signal equipment inspection for 24 traffic signals under the following scope:

Signal Equipment Inspection (2 visits per intersection), Tracking the Sampling and Testing of required Traffic Signal Materials / Attend and Review Fiber Optic Test Results

Coordinate Review and Approval of all Shop Drawings

Provide Traffic Signal Support Services / Troubleshoot traffic signal equipment related problems such as foundation / utility conflicts / Field visits (10 months)

Assist in preparing Change Orders for DOTD / City Parish (2 Separate Forms)

Attend Monthly Progress Meetings Assist with Monthly Progress Meeting Agenda & Minutes (10)

Compile As-built Plans from Contractor

Final Inspection Field Visit to all intersections / Assist with developing punch list / Final Field Visit verification

Personnel Utilized on this project: Brin Ferlito, Laurence Lambert, and Reece Rodrigue (100% performed in Louisiana)

24-102 **Section 18**



18. Approach and Methodology:

Project Goals and Understanding

LADOTD is poised to implement its next generation of mission critical traffic management and traveler information systems. Successful implementation of a new statewide Advanced Traffic Management System (ATMS) and 511 service will require an IDIQ ITS Integration partner with a proven approach to deliver complex systems. Gresham Smith commits to be your ITS Integration partner that will **manage software risk** and **ensure TMC end users' and stakeholders' requirements are met** through a **software system development life cycle approach** that supports you at every key decision point, project milestone and implementation step.

Software System Development Life Cycle Approach

We understand the importance of **gathering requirements and analysis** from all stakeholders including ITS operations, maintenance, TMC operators, service patrol drivers, external partners and the public. Once these requirements are gathered, it is important to establish consensus on the **system engineering analysis and design** through coordination with the LADOTD ITS Section. This is a critical early activity to ensure legacy systems and equipment seamlessly integrate with new software systems as well as incremental feature expansions in planned software releases. The Gresham Smith team has deep experience in the development of software systems and will provide technical guidance by working side-by-side with ITS staff.

New software deployment risk is mitigated by sequencing system rollout in testable phases.

Initial releases are separated from the live production system for stand-alone testing and load testing in a controlled environment so daily TMC operations is not interrupted. Upon satisfaction of this step, the conformed and tested module is carefully merged into the production environment with **system** integration testing, quality assurance, and documentation of all ITS device drivers and system level interfaces through APIs and custom system interfaces that leverage open standards to the greatest extent possible such as the Traffic Management Data Dictionary (TMDD). We perform this phased testing and quality assurance through identification of power users to form beta testing groups, regression testing and rigorous documentation of test results.

Gresham Smith has provided continuous maintenance and support of LADOTD's VDMS since 2013, so we understand the value of timely application of security critical updates and system resource tracking to validate the system can handle burst usage without impacting uptime during the most critical events



such as hurricane evacuations. Managing changes to integrated software systems is complex, so we will manage bug fixes and incremental releases consistently to deliver the system quality and reliability that LADOTD expects from mission critical systems. A system is only useful if the users know how to use it effectively. We have developed user guides and trained both LADOTD and local stakeholders on LADOTD's VDMS and Fiber Optic Mapping and Management (FOMM) System.

Gresham Smith has provided life cycle **software project management support** on large scale programs with the Florida Department of Transportation (FDOT) through their SunGuide ATMS, Statewide Express Lane Software (SELS), and the Vehicle to Everything (V2X) Data Exchange Platform. In this role, we track system updates, enhancements, and hotfixes to address issues, and bugs reported by users. We also support FDOT's Configuration Management Board, and software specific user group meetings to continuously incorporate stakeholder feedback for quality control and end user satisfaction. Once updates are scheduled into releases, we support all IV&V testing prior to release in 13 regional and local traffic management centers across the state. We recently supported FDOT with preparing their procurement package for their next SunGuide ATMS project. We have experience **developing dashboards** for incident management performance measures, ITS device uptime, and traffic signals that are connected to the ATMS.Now system.

System and field asset documentation is critical for ITS expansion project planning, coordinating future ITS connectivity, broadband initiatives and maintaining uptime of devices and communication infrastructure. Gresham Smith has supported LADOTD ITS with documenting their existing infrastructure since 2016. We have spearheaded implementing the FOMM system as well as populating ITS information for the major metropolitan areas: Baton Rouge, New Orleans, Shreveport, Houma, the North Shore, Alexandria, Lafayette, and Lake Charles. We are ready to help you fill gaps in this asset inventory such as leased fiber connecting the metro areas as well as keep existing metro areas up to date as construction projects relocate devices and fiber optic cable. The FOMM architecture also has the capability to document communication circuits between signalized intersections as LADOTD expands connectivity along arterial state routes.

Project Management & Coordination

Gresham Smith will serve as prime consultant and provide all project management, coordination, and project reporting. Our Task Manager, Kendra McCoy, offers the ideal combination of a 35-years of ITS experience and is intimately familiar with LADOTD's IDIQ contracts, organizational structure, and staff who will be project stakeholders. She has been working with the LADOTD ITS staff since 2013. Gresham Smith has delivered eleven task orders under two previous retainer contracts for ITS System Design, Development, Integration and Verification Services, statewide, and nine under the contract for ITS Design and Implementation Servies. The tasks include the design, implementation and support of the VDMS since 2013. Gresham Smith has successfully completed multiple CEI project tasks for the construction of large ITS design projects.

Through these task orders, Gresham Smith understands that setting a project up for success begins with establishing a clear understanding of expectations, so our scope and estimate aligns with the product delivered. As this is a statewide contract, we have anticipated the possibility of concurrent Task Orders (TOs) with our staff approach.

Our team offers five task leaders who all have managed TO contracts. Our task teams have redundancy of skill sets with staff available for any request. As Project Manager (PM), Bert Moore will manage the assignment of staff from these teams to support multiple TOs. From a scheduling perspective, it is important to know when critical path items are due so that we identify and anticipate areas where TOs may need additional support.

To do this, we:

- Build a schedule outlining tasks based on critical path items.
- Use a master schedule tool to track TOs at the program-level to ensure deadlines for each TO are met.
- Maintain clear and open lines of communication between project team members, LADOTD staff and stakeholders.

We recognize that meeting frequency will vary by the nature of the task assigned. In the case of design tasks with defined deliverables, we will coordinate with our team by holding monthly status calls to ensure nothing is behind, check on QA/QC, mitigate potential risks, and determine if additional resources are needed. On more programmatic support tasks, such as developing System Engineering Analyses (SEAs), we will facilitate calls with the LADOTD task PM based on schedule critical activities. At a minimum, we will communicate with our LADOTD Project Manager and/or other project partners by submitting monthly progress reports, sharing studies and data using SharePoint or Newforma (which provides a simple link to download files), and sharing design concepts and design plans with ProjectWise to keep our team on track. We also will not overlook the importance of providing accurate invoices and supporting material needed the first time to respect your time.

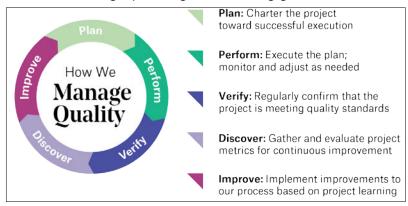
Lastly, it is critical that each TO is kept on schedule and within budget with no surprises. To keep a project on schedule and budget, we closely coordinate with agencies and owners to avoid delays in data collection, permitting and identifying utility locations. Our goal will always be to stay ahead of issues. In the event there is a schedule delay, which can happen dependent on or when working with third parties, we will let you know as soon as we are aware, so the LADOTD has the most options available to recover schedule time and coordinate with LADOTD staff across departments.

Team Experience

As a firm and as individuals, our task leads have worked on many projects relevant to the scope of this contract. Both Kendra McCoy and Carla Holmes have experience with ATMS software development and testing. Carla is the Consultant Project Manager with the FDOT's Central Office supporting the development of enhancements, and bug fixes to the SunGuide users. She also participates in Factory Acceptance Testing and Independent Verification & Validation (IV&V) for major releases to SunGuide. Kendra, with support from Adrian Meads and Julian Bordelon, has performed statewide device configuration management and VDMS design, implementation, and integration into the existing 511 system for LADOTD. Christina Florez, with support from Julian and others, has successfully completed several ITS design projects for multiple DOT clients including LADOTD. Christina, Kendra, and Julian have provided technical support during construction through multiple ITS CEI projects for LADOTD in the Lake Charles area. Julian, Kendra, Christina, and Bert have also developed SEAs for LADOTD including Signal Communication Upgrade and Emergency Vehicle Preemption Devices. Adrian has developed multiple software systems including LADOTD's VDMS and mobile applications. Matt D'Angelo serves as the lead programmatic advisor supporting Tennessee Department of Transportation (TDOT) with establishing a first-of-its-kind test bed along I-24 to better understand how new vehicle automation and operational approaches impact real world driving scenarios. Meredith Cebelak developed the system engineering analysis, wrote the successful grant application, and served as the engineer of record for the I-24 MOTION test bed. She will apply the same resolve to support LADOTD with strategic planning and securing grants.

Quality Control

Our overall Practice Excellence model includes a Quality Management System that is built-in to our processes throughout a project life cycle. Successful projects require the development and implementation of a plan that is focused on delivering desired outcomes and built on a proven method of project delivery, clearly defined roles and responsibilities, frequent and effective communications, and continuous monitoring and control. We have a 5 step QA/QC process, including off-team independent reviewers, that avoids repeat review comments and minor errors thus saving time.



Innovation

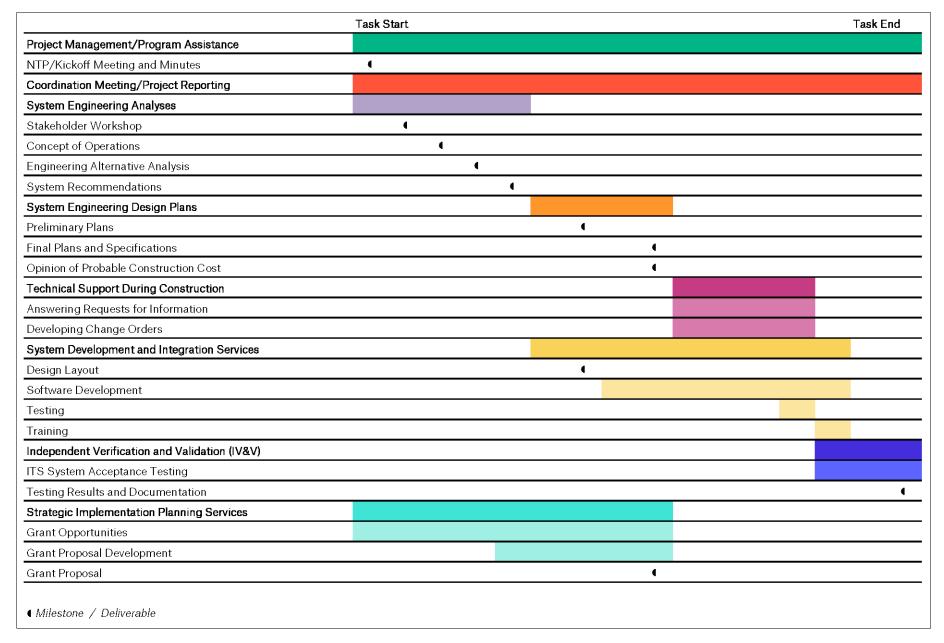
Genuine Ingenuity is Gresham Smith's brand promise and tagline. It means that our clients, employees, partners and community organizations can always expect authentic, personable people who produce highly functional and highly creative solutions. Two prime examples of this are the MPATH and the Train Detection System. Gresham Smith developed created the system engineering analyses and software development for these innovative smart phone applications. MPATH is a ground-breaking technology that records users' perceived level of safety and stress at specific locations to make better informed design decisions. Using this technology, we now have a method to quantify what has only been anecdotal experience, providing us with better insights on why and how users respond to our infrastructure. The Move Metairie Tracking Forward Train Detection System is a first-of-its-kind technology. Our team used vehicle detectors and cameras outside of the railroad right-of-way. These detectors determine presence, speed, and direction of a train and transmit that information. The system determines the train's estimated arrival time to nearby crossings, how long the train will block the tracks, and shares this information to the public via an Android and Apple iOS mobile app.

Why Gresham Smith

With our LADOTD tested and proven team, LADOTD can be confident we will execute tasks from concept to completion with minimal impact to LADOTD staff. We commit to be flexible, proactive and agile thinkers who offer creative programmatic solutions to get schedule-critical projects implemented. We take seriously our responsibility to be good stewards of your ITS program when working with LADOTD staff as well as local agency and MPO partners.

Program Timeline Option

The example IDIQ schedule illustrates a potential timeline for the overall IDIQ project. Most of these tasks are independent and can be completed concurrently. Such as System Engineering Analyses, System Engineering and Design Plans, Technical Support During Construction, System Development and Integration Services, Independent Verification and Validation and Strategic Implementation Planning Services.



24-102 **Sections 19-23**



19. Workload:

Firm All firms must be represented in this table	Past Performance Evaluation Disciplines(s) *	Number	Project Name	Remaining unpaid balance**
Gresham Smith	Traffic	H.012018.5	Lafayette Adaptive Traffic Signals	\$9,750
Gresham Smith	Road	H.013720.5	LRSP/STRPPP Bonner Street Bridge Pedestrian Improvements	\$1,544
Gresham Smith	Road	H.013073.5	LRSP/STRPPP Greenwells Springs & Wooddale Sidewalks	\$16,270
Gresham Smith	Traffic	H.015086.5	LRSP/STRPPP LA 14	\$13,158
Gresham Smith	Road	H.013714.5	LRSP/STRPPP Valhi Boulevard Shared Use Path Signing and Striping	\$45,616
Gresham Smith	Road	H.015196.5	LRSP/STRPPP DeSoto Signing and Striping	\$15,783
Gresham Smith	Planning	H.010074.1	LA 70 at LA 3089 Stage 0	\$118,565
Gresham Smith	CE&I / OV	H.009308.6	TO#1 New Orleans DPW SRTS Sidewalk Project	\$1,924
Gresham Smith	ITS	H.013256.6	I-10 Scott to Lake Charles ITS CEI	\$6,881
Intelligent Transportation Systems, LLC	ITS	H.013256.6	I-10 ITS Scott to Lake Charles – Construction	0
Intelligent Transportation Systems, LLC	ITS	H.013710.6	I-10: US 61 to LaPlace Deployment	\$18,961
Intelligent Transportation Systems, LLC	ITS	H.007160	EBR Computerized Signal Phase VB	\$19,995
Intelligent Transportation Systems, LLC	ITS	H.001234.6	LA1 Port Allen Canal BR Replacement	\$14,291
Intelligent Transportation Systems, LLC	ITS	H.013868.6 (A)	ITS Routine Maintenance Engineering and Inspection (ME&I)	\$129,583
Intelligent Transportation Systems, LLC	ITS	H.013868.6 (B)	ITS Responsive/ Emergency ME&I Statewide	\$48,280
Intelligent Transportation Systems, LLC	ITS	H.013868.5	ITS Maintenance Program Management and Operations	\$2,679
Intelligent Transportation Systems, LLC	ITS	H.011504	Alexandria Phase 2	\$27,685
Intelligent Transportation Systems, LLC	ITS	H.002424.6	LA 70: Sunshine Bridge – LA 22	\$18,768
Intelligent Transportation Systems, LLC	ITS	H.003047	Pecue Lane/ I-10 Interchange Phase III	\$22,841
Intelligent Transportation Systems, LLC	Traffic	44-24461	LA 385 – Ryan St Intersection Improvements	\$180,000
Intelligent Transportation Systems, LLC	Traffic	44-21887	Replacement of Fifteen Bridges	\$79,573
Intelligent Transportation Systems, LLC	ITS	H.006474.1	Shreveport Immediate ITS SEA/Design	\$18,760
Intelligent Transportation Systems, LLC	ITS	H.012845.1	CAV Team Support	\$140,307
Intelligent Transportation Systems, LLC	ITS	H.013482	I-10 WBR Queue Warning	\$122,508
Intelligent Transportation Systems, LLC	ITS	H.013866	I-12: LA 21 to US 190	\$8,678
Intelligent Transportation Systems, LLC	ITS	H.014515.5	511 & ATMS SEA	\$77,385
Intelligent Transportation Systems, LLC	ITS	H.015136.1	Northshore Regional Architecture	\$19,757

Firm All firms must be represented in this table	Past Performance Evaluation Disciplines(s)	Contract Number & State Project Number	Project Name	Remaining unpaid balance**
Intelligent Transportation Systems, LLC	ITS	H.015137	Bonnet Carre ITS Upgrades SEA	\$32,384
Vectura Consulting Services, LLC	Traffic	4400017293 H.010616	I-20: LA 544 Overpass Replacement	\$74,429
Vectura Consulting Services, LLC	Traffic	4400005484 H.005168.2	New Orleans Rail Gateway Avondale EA	\$92,995
Vectura Consulting Services, LLC	CE&I / OV	4400020018 H.007160	EBR Computerized Traffic Signal, Ph VB	\$33,910
Vectura Consulting Services, LLC	Traffic	H.004791	Belle Chasse Bridge & Tunnel Replacement PPP	\$14,740
Vectura Consulting Services, LLC	Traffic	4400021519 H.012030.5	KCS RR Overpasses HBI	\$572
Vectura Consulting Services, LLC	Traffic	4400023075 H.013522	S. Lewis Street Widening	\$7,499
Vectura Consulting Services, LLC	ITS	4400016364 H.015136.4	Northshore Regional ITS Architecture Update	\$11,421
Vectura Consulting Services, LLC	ITS	4400017922 H.012845.1	C/AV Team and Working Group Support	\$13,949
Vectura Consulting Services, LLC	ITS	44000020058 H.011507.1	Monroe Phase 3 SEA	\$29,217
Vectura Consulting Services, LLC	Traffic	4400018271 H.014746.5	LA 383 Stage 0 Corridor Study	\$22,388
WSP USA Inc. (WSP)	Bridge	H.010253.5	ELEC. & MECH. ENG. ON CALL TO9	\$109,387
WSP USA Inc. (WSP)	Planning	H.003931.5	LADOTD P3 Advisory Services On-Call TO2	\$40,552
WSP USA Inc. (WSP)	Planning	H.003931.5	LADOTD P3 Advisory Services On-Call TO3	\$884,763

20. Certifications



LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD

(LAPELS)

9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291

www.lapels.com

Mr. Herbert Eugene Moore II

License/Certificate Type - Number

Expiration Date

PE.0031065

09/30/2024

Status: Active

Certificate of Completion

presented to

Bert Moore

for completing the

Traffic Engineering Analysis Process & Report Module 1

Oate June 4, 2018

Location Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded 4

Edy & Colone



Old Bunks



Certificate of Completion

presented to

Bert Moore

for completing the

Traffic Engineering Analysis Process & Report Module 2

Oate June 11, 2018

Location Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded 4

Authorized Instructor



Authorized instructor



Certificate of Completion

presented to

Bert Moore

for completing the

Traffic Engineering Analysis Process & Report Module 3

October 18, 2018

Location Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded 3

Authorized Instructor

Authorized Vistructor

Authorized instructor













LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD

(LAPELS)

9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com

Mr. Julian Van Bordelon

License/Certificate Type - Number

Expiration Date

PE.0047473

09/30/2025

Status: Active

Certificate of Completion

presented to

Julian Bordelon

for completing the

Traffic Engineering Analysis Process & Report Module 1

Oate July 1, 2019

Location Baton Rouge, Louisiana

Professional Development
Hours (PDHs) Awarded 25









Certificate of Completion

presented to

Julian Bordelon

for completing the

Traffic Engineering Analysis Process & Report Module 2

Date July1, 2019
Location Baton Rouge, Louisiana

Professional Development
Hours (PDHs) Awarded 35

Authorized Instructor







Certificate of Completion

presented to

Julian Bordelon

for completing the

Traffic Engineering Analysis Process & Report Module 3

Date July 2, 2019

Location Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded 35

Authorized Instructor



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LOUISIANA STATE CIVIL SERVICE

acknowledges that

Julian Van Bordelon

has successfully completed the training course:

CPTP SCS Cybersecurity WBT

or

June 03, 2024

This document is intended to be used solely for the purpose of documenting the individual's completion of SCS's web-based training:

CPTP SCS Cybersecurity WBT





LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)

9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com

Ms. Christina Marie Florez

License/Certificate Type - Number

Expiration Date

PE.0038799

09/30/2024

Status: Active

Certificate of Completion

presented to

Christina Florez

for completing the

Traffic Engineering Analysis Process & Report Module 1

Oate July 16, 2018

Cocation Baton Rouge, Louisiana

Professional Development
Hours (PDHs) Awarded 2







Certificate of Completion

presented to

Christina Florez

for completing the

Traffic Engineering Analysis Process & Report Module 2

Oate July 23, 2018

Location Baton Rouge, Louisiana

Professional Development
Hours (PDHs) Awarded 3

Authorized Instructor







Certificate of Completion

presented to

Christina Florez

for completing the

Traffic Engineering Analysis Process & Report Module 3

December 3, 2018

Location Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded 3

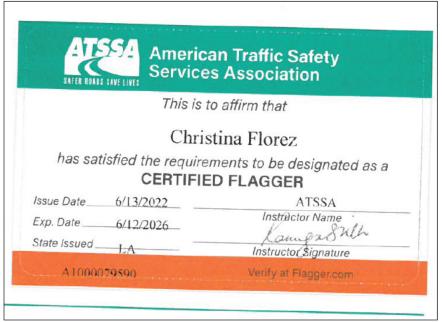
Authorized Instructor



Authorized instructor





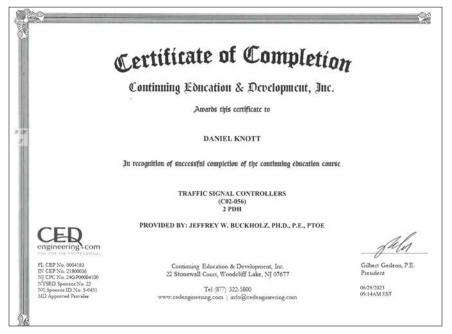








American Wick Drain Cornoration 1209 Airport Road Monroe, NC 28110 PH 800.242.9425 EX 704 296 0690 The individual named below attended the continuing education program as described. Name Daniel Knott Registration # State Organization Gresham Smith + Partners Address 1000 Perkins Rowe Suite 280 City /ST / Zip Baton Rouge, LA 70810 5/15/2018 Course Date Title Of Registered Content Developmen **Contact Hours Provider Name** Format Geocomposite Drains American Wick Drain Corporation Lecture in Civil Design **Grade Received** Course Number Material Resources and Welfare Development (if exam used) PowerPoint AWD-007 Presentation Learning Objectives: The attendee will learn the differences between conventional drainage design with pipe and how its performance compares to designing with geocomposites. The course will cover the history of geocomposites for drainage, the basic principles of drainage design, the installation methods and various drainage applications. Topics discussed will include soil permeability, soil weight and lateral earth pressure and the overall effect drainage has on the design approach. Applications discussed will include landscape area, planting beds, retaining walls, green roofs and sports fields. The appropriate product for each application will be presented for commonly encountered soil types in most geographical areas. Attendees should expect to understand basic drainage principles, and be able to choose and specify a geocomposite drainage design for most common civil design applications.









Gresham Smith



Certificate of Completion

presented to

Kendra McCoy

for completing the

Traffic Engineering Analysis Process & Report Module 1

Date July 1, 2019

Location Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded 25

Authorized Instructor







Certificate of Completion

presented to

Kendra McCoy

for completing the

Traffic Engineering Analysis Process & Report Module 2

Date July 1, 2019

Location Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded 3 5

ed Instructor Authorized Instructor



Oly Burle



Certificate of Completion

presented to

Kendra McCoy

for completing the

Traffic Engineering Analysis Process & Report Module 3

Date July 2, 2019
Location Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded 3 5

Authorized Instructor







LOUISIANA STATE CIVIL SERVICE

acknowledges that

Kendra Lee McCoy

has successfully completed the training course

CPTP SCS Cybersecurity WBT

on

June 04, 2024

This document is intended to be used solely for the purpose of documenting the individual's completion of SCS's web-based training CPTP SCS Cybersecurity WBT



LOUISIANA STATE CIVIL SERVICE

acknowledges that

Adrian Maverick Meads Jr.

has successfully completed the training course:

CPTP SCS Cybersecurity WBT

οn

June 04, 2024

This document is intended to be used solely for the purpose of documenting the individual's completion of SCS's web-based training:

CPTP SCS Cybersecurity WBT





LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD

(LAPELS)

9643 Brookline Avenue, Suite 121 Baton Rouge, LA 70809 Phone (225) 925-6291 www.lapels.com

Mr. Richard Linton Savoie Jr.

License/Certificate Type - Number

Expiration Date

PE.0020936

09/30/2024

Status: Active



Office of the Secretary
PO Box 94245 | Baton Rouge, LA 70804-9245
PH: 225-379-1200 | FX: 225-379-1851

John Bel Edwards, Governor Eric Kalivoda, Secretary

June 22, 2023

Vectura Consulting Services, LLC Attn: Sheelagh Brin Ferlito PO Box 14269 Baton Rouge, LA 70898

Dear Sheelagh Brin Ferlito,

The Louisiana Department of Transportation and Development (LADOTD) Compliance Programs Section has received your firm's Disadvantaged Business Enterprise (DBE) and Small Business Element (SBE) annual affidavit. Based on the information, which you provided, it has been confirmed that your firm continues to meet the eligibility requirements of our program and remains certified for only the following specific work categories that fall under the listed NAICS codes:

NC488490 - Other Support Activities for Road Transportation

C14-Transportation Planning

C33-Traffic Counting and Data Collection

C74-Construction Management NC541330-Engineering Services

C09-Engineering Services

C96-Traffic and Transportation Engineering

NC541340-Drafting Services

C43-Computer Assisted Drafting

Please note that per the federal regulations, suppliers only receive 60% goal credit towards the materials they provide. Also, note that any contractor performing work in excess of \$50,000 with the exception of electrical, mechanical and plumbing requires A Louisiana Contractor's License, which are required to have a license if work is in excess of \$10,000. You may contact the State Licensing Board for Contractors at (225) 765-2301 for more information. All participants of the Louisiana Unified Certification Program will recognize your firm's certification. This includes all entities receiving federal transportation funding within the boundaries of our state.

You will be required to submit an annual affidavit with all supporting documents (Business taxes with all attachments, such as 1098, 1099, K-1's and/or W-2's) stating your firm continues to meet the eligibility requirements of the program. An email informing you to submit the necessary documentation will be forwarded to you approximately six (6) weeks prior to your anniversary date of June 30, 2024. However, should you not receive notification from this office for your annual affidavit, it is your responsibility to contact us. Additionally, you must notify our office immediately regarding any changes, which affect the social and economic disadvantage, size, ownership or control of your firm.

Louisiana Department of Transportation and Development | 1201 Capitol Access Road | Baton Rouge, LA 70802 | 225-379-1200

An Equal Opportunity Employer | A Drug-Free Workplace | Agency of Louisians.gov | dotd.la.gov

Vectura Consulting Services, LLC June 22, 2023 Page 2

The LADOTD has contracted SJB Group, LLC to provide DBE Supportive Services to all certified DBEs, in the LAUCP, at no cost to you. This consultant can offer your firm assistance and guidance on areas such as marketing, estimating, bidding, financial preparations, etc. Contact Jackie des Bordes or Kenyatta Sparks with the SJB Group, LLC at (225) 769-3400 for any assistance needed to grow your organization.

The Louisiana UCP certifying entity reserves the right to withdraw this certification, if at any time, it is determined that DBE and SBE certifications was knowingly obtained by the submission of false, misleading or incorrect data. The Louisiana UCP certifying entity also reserves the right to request additional information and/or conduct an on-site visit at any time during your certification period.

We are pleased to have you as a participant in the LAUCP and wish you much success.

If you have any questions regarding the content of this letter, contact the LADOTD DBE Certification Unit at (225) 379-1382.

Respectfully,

Rhonda Wallace

Rhonda Wallace DBE/SBE Programs Manager

Enclosure (Certificate)

Transportation Professional Certification Board Inc.



1627 Eye Street, NW • Suite 500 • Washington, DC 20006 USA • Tel: 202-785-0060 • Fax: 202-785-0609 • www.tpcb.org

Mr. Laurence L. Lambert, II, P.E., PTOE, PTP Vectura Consulting Services, LLC PO Box 14269 Baton Rouge, LA 70898-4269 USA

Thank you for renewing your certification as a Professional Traffic Operations Engineer® (PTOE). The Transportation Professional Certification Board (TPCB) congrats you for your continued commitment to your profession. As a PTOE you will be recognized as one of a specialized group of professional Traffic Operations Engineers with the set of skills and expertise needed to build better communities.

Your certification is renewed through 2/3/2025.

You will not be receiving a new certificate as the one sent to you does not indicate an expiration date and can be displayed as long as you are a certified PTOE. Note that your certificate shows your original certification date.

At the end of the three-year period, your certification will be renewed without examination provided you have met the continuing education requirements described in the enclosed attachment.

Prior to the expiration of your PTOE, you will be notified of your renewal deadline. Additional examinations are not required if you renew within three-months of your expiration date 2/3/2025. Failure to renew within the 3-month grace period will result in a certified inactive letter and penalty fees for renewal. Visit our website for more information. http://www.tocb.org/PTOE/feeschedule.asp

TPCB seeks to maintain the highest level of quality for its certification programs. Since its inception, the TPCB has required its certificants to maintain records with regard fulfillment of continuing education requirements. Please be advised that as of January 1, 2018, TPCB is phasing in a policy in which 20% of certificant renewals will be randomly selected for audit and the certificant will be required to provide documentation (certificates of completion, course syllabus, meeting agenda/registration, etc.) to demonstration fulfillment of continuing education requirements. The professional record-keeping system available from TFL, provides a resource to record the dates of completion of continuing education and maintain the necessary supporting documentation.

The TPCB continues its efforts to grow and enhance the value of the PTOE and its other certifications. In 2019 the TPCB web site was redesigned and a new certification – the Road Safety Professional – was launched. Going forward the TPCB is committed to expanding the awareness of its certification programs, encouraging jurisdictions to give preference to certificants and growing the number of certified professionals.

The TPCB distributes a quarterly newsletter and highlights the value of the its certification programs through the tpcb, org website. If you would like to contribute to the newsletter or website, please send any items of interest to: certification@tocb org.

Thank you for your continued PTOE certification and best wishes in the coming years.

Sincerely.

Deborah L. Snyder, P.E., PTOE

Chair, Transportation Professional Certification Board Inc.







LOUISIANA UNIFIED CERTIFICATION PROGRAM

Disadvantaged Business Enterprise Program (DBE)

Small Business Element (SBE)

This is to certify that under Title 49, Part 26 of the Code of Federal Regulation
& under the State of Louisiana United Certification Program (LAUCP)

Vectura Consulting Services, LLC

Is a Certified Disadvantaged Business Enterprise (DBE) & Small Business Element (SBE) in the following specialties:

NC488490, NC541330, NC541340

NOTE: There may be other approved NAICS Codes. The online DBE Directory includes a complete list of approved codes.

Certificate Eligibility: June 2023 to June 2024

This certificate is valid through the above date provided. This firm meets the engoing programmatic standard and fulfills the annual update requirement to remain in good standing as a DBE. This certification is subject to

Rhonda Wallace

Rhonda Wallace, DBE/SBE Programs Manager

Louisiana Department of Transportation & Development

21. QA/QC plan and/or Work Plan:

If the advertisement requires submission of a QA/QC plan, include it here. Otherwise, leave this section blank. If a QA/QC plan is included in this section and was not required by the advertisement, it will be redacted.

22. Sub-consultant Information:

Firm Name (Name must match as registered with Louisiana's Secretar of State)	Address	Point of Contact and email address	Phone Number
Intelligent Transportation Systems LLC	37302 Commerce Lane Prairieville, LA 70769	Kimberly D. McDaniel, P.E., PTOE, PTP kimberly@itsanswers.com	225.751.9300
WSP USA INC.	8212 Kelwood Avenue, Suite B LA 70809	Max Nassar max.nassar@wsp.com	225.753.2561
Vectura Consulting Services, LLC	4467 Bluebonnet Blvd, Suite A, Baton Rouge, LA 70809	Sheelagh Brin Ferlito; bferlito@vecturacs.com	225.223.6685

23. Location:

If location is an evaluation criterion for this advertisement and the prime consultant intends to establish a local presence, describe the plan for doing so. Otherwise, leave this section blank. Any information included in this section will be redacted if not required by the advertisement.



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