AECOM

Proposal for Engineering and Related Services

IDIQ Contract for Transportation Systems Management and Operations (TSMO) Program - Statewide

Contract No. 4400025921

Submitted by:
AECOM Technical Services, Inc.

Delivering a better world

AECOM

AECOM
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Louisiana Department of Transportation and Development
1201 Capitol Access Road, Room 405-E
Baton Rouge, LA 70802
DOTDConsultantAds80@la.gov

April 11, 2023

Ref: Contract No. 4400025921 IDIQ Contract for Transportation Systems Management and Operations (TSMO) Program - Statewide

Dear Members of the Selection Committee:,

AECOM Technical Services, Inc. (AECOM) is a national leader in providing the complete life cycle of TSMO services from planning to operations. Over the years, we have provided ITS services to clients in 48 of the 50 states as well as abroad. The AECOM team includes Intelligent Transportation Systems, LLC, G.EC., Inc., and Vectura Consulting Services, LLC. Our team brings the following credentials that will benefit the Department in developing and implementing the Statewide TSMO program.

- **Firm Experience on Similar Projects:** AECOM has recently provided TSMO services for the Texas DOT, Florida DOT, Maryland DOT, and New Hampshire DOT. Based on AECOM's performance on the 5-year TxDOT TSMO contract, we were ranked number one and reselected as prime consultant for another five years to implement the TSMO strategies and tactical plans we recommended during the planning phase – the only Louisiana firm that could make that claim.
- **Staff Experience on Similar Projects:** AECOM's proposed staff have specialized skill sets in providing a wide range of TSMO services such as conducting Capability Maturity Model workshops; applying the results in developing TSMO Strategic, Program, Tactical, and ITS Implementation Plans; updating ITS Architectures; developing performance dashboards; creating comprehensive TSMO training programs; developing outreach materials including TSMO videos, brochures, FAQs, and more. Furthermore, our staff provides the complete range of TSMO operations as evidenced by being retained by the Georgia DOT as prime consultant on the Signal Operations and Statewide TMC Operations contracts (unseating the long-term incumbent in both cases) as well as providing CHAMP Operations for multiple terms (13 years).
- **Firm Size as Related to the Project:** AECOM is ranked Number 1 by ENR in Transportation with a total staff of 47,000 throughout the world. We have maintained offices in Louisiana (Baton Rouge and New Orleans) since the early 1970s with a multidisciplinary staff including traffic engineers, highway engineers, and transportation planners.
- **Past Performance on Similar DOTD projects**: AECOM earned a 4.1 evaluation rating on the LADOTD Statewide ITS On Call contract where we developed the ITS Strategic Plan, prepared the ConOps and System Requirements for the ATMS software, and conducted an inventory of statewide ITS assets including communications.
- **Current Workload with DOTD:** AECOM's current workload related to traffic and ITS services is low as show in Section 19. Our organizational chart in Section 14 demonstrates our team's significant staff resources with availability to perform this work. We provide additional capacity and bench strength to perform numerous task orders simultaneously. AECOM currently maintains a staff of approximately 225 personnel in Louisiana.
- **Approach and Methodology:** AECOM applies a workshop driven approach in developing TSMO Strategic Plans. This enables our staff to exchange best practices with LADOTD in building consensus on actionable TSMO strategies to be included in the plan. Our methodology will be a modified version of the approach we used to prepare the LADOTD ITS Strategic Plan in 2010.

AECOM brings worldwide experience in TSMO, combined with our local subconsultants who have served LADOTD for many years on ITS projects. On behalf of AECOM, we look forward to serving the Department in advancing the TSMO program to improve the safety, mobility, and reliability of our statewide transportation system. If you have any questions regarding our submittal, please contact Jonathan McDowell, our principal-in-charge, at 225.922.5934 or jonathan.mcdowell@aecom.com, or our project manager, Victor De la Garza, at 915.701.8796 (mobile) or victor.delagarza@aecom.com.

Yours sincerely, AECOM Technical Services, Inc.

Victor De la Garza, PE, Project Manager

Jonathan McDowell, PE, Principal in Charge, Associate Vice President

Sections 1-11

Southeast Florida Managed Lanes

AECOM operates the managed lanes in Southeast Florida. The managed lanes use the dynamic pricing software developed by AECOM.

(Revised January 1, 2023)

DOTD FORM: 24-102

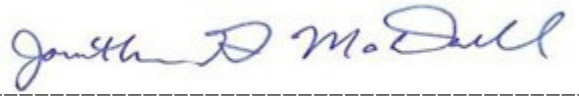
PROPOSAL TO PROVIDE CONSULTANT SERVICES

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 Name as shown in the advertisement	IDIQ Contract for Transportation Systems Management and Operations (TSMO) Program - Statewide
2. Contract Number(s) as shown in the advertisement	4400025921
3. State Project Number(s), if shown in the advertisement	NA
4. Prime consultant name (name must match as registered with the Louisiana Secretary of State where such registration is required by law)	AECOM Technical Services, Inc.
5. Prime consultant license number (as registered with the Louisiana Professional Engineering and Land Surveying Board (LAPELS) if registration is required under Louisiana law)	AECOM Technical Services, Inc. (AECOM) LAPELS No. EF.0002331
6. Prime consultant mailing address	8555 United Plaza Boulevard, Suite 300 Baton Rouge, LA 70809
7. Prime consultant physical address (existing or to be established, if location is used as an evaluation criteria)	8555 United Plaza Boulevard, Suite 300 Baton Rouge, LA 70809
8. Name, title, phone number, and email address of prime consultant's contract point of contact	Victor De la Garza, PE, Project Manager 915.701.8796 (mobile) victor.delagarza@aecom.com
9. Name, title, phone number, and email address of the official with signing authority for this proposal	Jonathan McDowell, PE, Associate Vice President, Principal-in-Charge 225.922.5934 jonathan.mcdowell@aecom.com

Prime consultant should enter the firm name in the footer at the bottom of this page. (It will carry over to subsequent pages.)

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 above shall be the same person listed in Section 9:: Date: April 11, 2023
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 6%

Sections 12-15

TxDOT Smart Work Zones

AECOM developed Smart Work Zone ITS Standards, Specifications, and Design Guidelines for the Texas Department of Transportation.

12. Past Performance Evaluation Discipline Table:

As indicated in the advertisement, insert the completed table here. The percentages for the prime and sub-consultants must total 100% for each past performance evaluation discipline, as well as the overall total percent of the contract.

The only past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other (please specify).

Past Performance Evaluation Discipline(s)	% of Overall Contract	AECOM	Intelligent Transportation Systems	GEC	Vectura Consulting Services, LLC	Each Discipline must total to 100%
ITS	65%	60%	40%			100%
Traffic	10%	40%			60%	100%
Planning	20%	80%	20%			100%
CE&I/OV	5%	20%		80%		100%
Identify the percentage of work for the overall contract to be performed by the prime consultant and each subconsultant.						
Percent of Contract	100%	60%	30%	4%	6%	100%

13. Firm Size:

For all firms that are part of this team, indicate the approximate number of personnel to be committed to this contract, by DOTD Job Classification and the total number of personnel within the firm that could provide support, if needed. If a specialized job classification is required and not included on the DOTD job classification list, specify "Other (please specify)" and include the classification title inside the parentheses.

The DOTD Job Classification(s) to be used can be found at the following link:

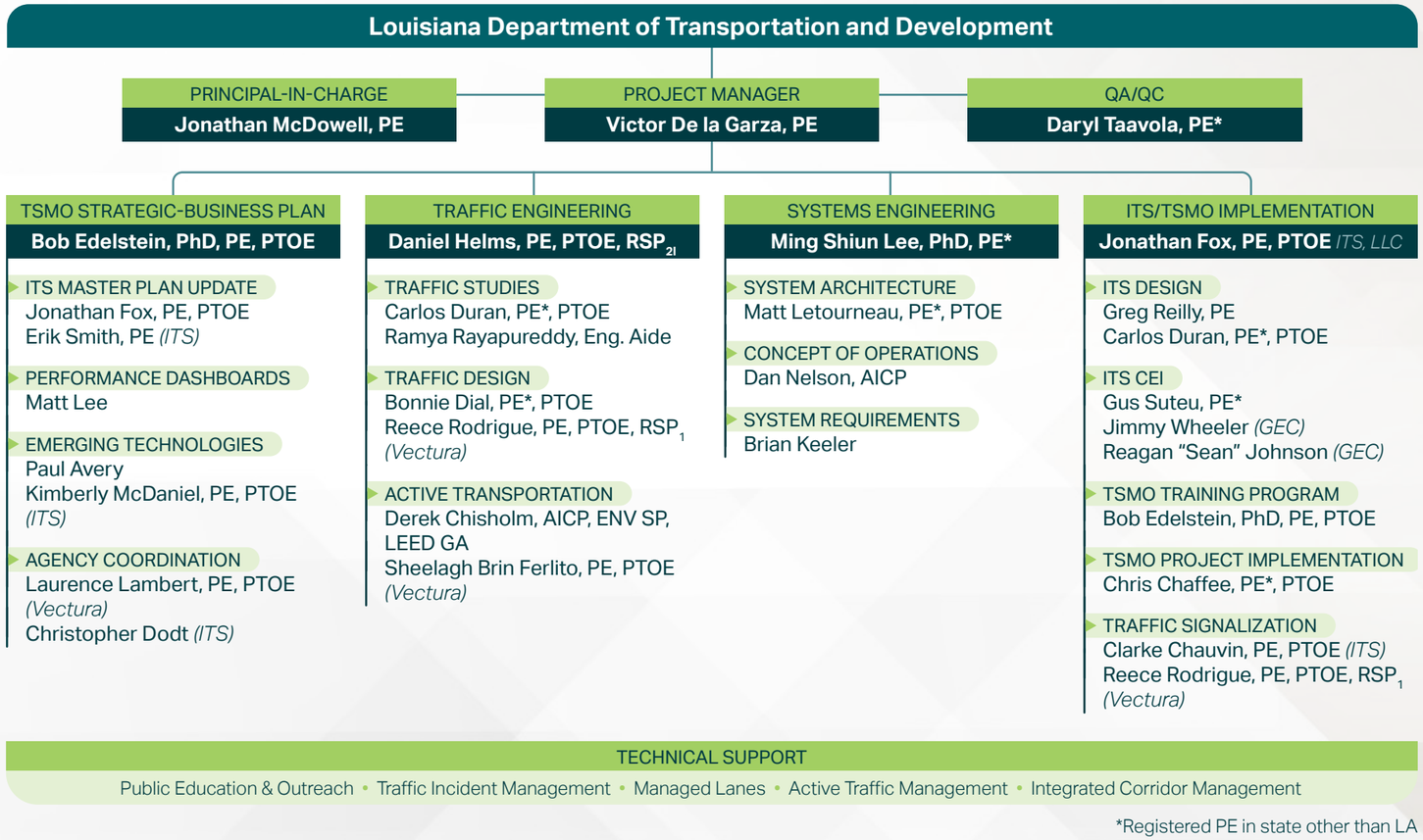
http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Job_Qualification/Job%20Classifications%20with%20Descriptions.pdf

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
AECOM	Principal	1	2
	Supervisor-Other	6	9
	Supervisor-Engineer	3	7
	Engineer	2	6
	Engineer Intern	2	2
	Engineer - Other	6	10
	Engineering - Aide	1	2
	Senior Technician	2	3
	Planner	1	3
	Administrative	2	2

Firm name	DOTD Job Classification	Number of personnel committed to this contract	Total number of personnel available in this DOTD Job Classification (if needed)
INTELLIGENT TRANSPORTATION SYSTEMS®	Principal	2	3
	Supervisor Engineer	1	1
	Engineer	1	1
	Engineer Intern	0	1
	Technician	0	6
	Other	1	5
GEC	ITS Technician – Lead	2	4
VECTURA CONSULTING SERVICES, LLC	Supervisor	2	2
	Engineer	1	5
	Technician	0	4

14. Organizational Chart:

Provide an organizational chart showing ALL relevant prime consultant and sub-consultant (if applicable) personnel assigned to the contract, area of project responsibility for each, and reporting lines for the purposes of this contract. An individual's role does not necessarily have to match their DOTD job classification identified in Section 13. If applicable, identify all personnel performing traffic engineering analysis and/or QC of traffic engineering analysis by placing an asterisk next to their name. Include the certificates required by the Traffic Engineering Process and Report Training Requirements article of the Advertisement in Section 20. It is acceptable to use an 11x17 format for Section 14.



*Registered PE in state other than LA

15. Minimum Personnel Requirements:

Use the table below to identify both prime consultant and sub-consultant staff designated to work on this contract meeting the Minimum Personnel Requirements (MPRs) specified in the advertisement. Ensure the résumé reflects the required experience stated in the MPR. Make sure the P.E. discipline is also listed (highlighted in table) that is meeting the MPR; e.g. professional civil engineer should show the discipline of the license as civil if meeting that MPR.

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, 2	Jonathan McDowell, PE	AECOM	PE Civil/PE.0030508	LA	03/31/2025
3	Victor De la Garza, PE	AECOM	PE Electrical and Computer / PE.0047470	LA	09/30/2023
4	Carlos Duran, PE, PTOE	AECOM	PE Civil/PE.125531	TX	12/31/2023
			PTOE / 4108	N/A	04/30/2026
	Bonnie Dial, PE, PTOE	AECOM	PE/PE.108550	TX	03/31/2024
			PTOE/3577	NA	11/302025
5	Bob Edelstein, PhD, PE	AECOM	PE Civil /PE.0023959	LA	09/30/2023
			PTOE/1205	N/A	11/19/2024
	Daniel Helms, PE, PTOE, RSP_{2I}	AECOM	PE Civil/PE.0042486	LA	09/30/2024
			PTOE/2820	N/A	04/14/2025
			RSP_{2I}/11	N/A	12/09/2025
6	Greg Reilly, PE	AECOM	PE Electrical/ PE.0047409	LA	03/31/2025
7	Jonathan Fox, PE, PTOE	Intelligent Transportation Systems, Inc.	PE Civil/PE.0033277	LA	09/30/2023
			PTOE/2329	N/A	11/07/2025
	Dan Nelson, AICP	AECOM	AICP/024115	N/A	12/31/2023
8	Erik Smith, PE	Intelligent Transportation Systems, Inc.	PE Civil/PE.0029085	LA	09/30/2024
	Clarke Chauvin, PE, PTOE, PMP	Intelligent Transportation Systems, Inc.	PE Civil/PE.0041770	LA	09/30/2023
			PTOE 4337	N/A	11/20/2023
	Jonathan Fox, PE, PTOE	Intelligent Transportation Systems, Inc.	PE Civil/PE.0033277	LA	09/30/2023
			PTOE/2329	N/A	11/07/2025
9	James "Jimmy" Wheeler	G.E C., Inc.	N/A	N/A	N/A
	Gus Suteu, PE	AECOM	PE/60766	FL	02/28/2025

Section 16

I-95 Ramp Metering

For the Florida DOT, AECOM prepared the I-95 Ramp Metering Feasibility Study, provided CEI services and currently operates ramp meters within Miami-Dade and Broward Counties.

Staff Experience
MPR 1-9

16. Staff Experience:

Résumés shall be provided for all prime and sub-consultant personnel listed in Sections 14 and/or 15 of the proposal. Résumés of personnel not identified in Section 14 or Section 15 of the proposal should not be included and will not be evaluated. Résumés should be limited to 2 pages per person. Any certificates required by the advertisement are to be placed in Section 20.

Firm	**AECOM**		
Jonathan McDowell, PE ***(MPR 1, 2)*** Principal-in-Charge		Years of Relevant Experience with this Employer	18
		Years of Relevant Experience with Other Employer(s)	6
Degree(s) / Years / Specialization	BS / 1996 / Civil Engineering		
Active Registration Number / State / Expiration Date	PE.0030508 / LA / 03/31/2023 | PE.18686 / MS / 12/21 | PE.19772 / AR / 12/21 | ATSSA Traffic Control Supervisor–LA State Specific (2023) | LADOTD Traffic Process and Report Parts 1, 2 and 3 (2018) | NEPA and Transportation Decision Making (2011) | AASHTO Highway Safety Manual (2013)		
Year Registered	2003	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**MPR 1, 2. Role: Principal-in-Charge.** *Jonathan will provide project oversight and work with the project manager and team to dedicate resources to the contract tasks.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
01/11–01/13	**Stage 0 Feasibility Study and Report, LA 935, LADOTD, Ascension Parish, LA (H.009998.1).** Engineer. AECOM, as a subconsultant, performed a Stage 0 Feasibility Study in accordance with the results of the Roadway Safety Assessment (RSA). The study area is approximately a 4–mile segment of LA 935 from LA 431 to LA 22 in Ascension Parish. From the RSA three proposed alternatives were to be considered for a Stage 0.
08/12–07/14	**Stage 0 Feasibility Study and Report, Johnston Street Study (US 167), LADOTD, Lafayette Parish, LA. (H.009997.1).** Analyzed crash data to identify trends and suggest countermeasures for development of alternatives to improve safety within the corridor of an urban arterial with heavy bicycle traffic. Evaluated the proposed alternatives using Crash Modifications Factors provided in Part D of the Highway Safety Manual. Determined benefit costs for each alternative for use in the evaluation of the alternatives.
09/20–Ongoing	**Feasibility Study and Report / TEPR, College Drive, City of Baton Rouge / Parish of East Baton Rouge, Baton Rouge, LA.** Project Manager for the Design Study, Traffic Study, and Preliminary Plans for the completion of capacity and safety improvements that also include Complete Streets and Green Infrastructure enhancements on College Drive and adjacent facilities between Perkins Road and Bawell Street including the I-10 interchange. Documented preliminary alternatives using LADOTD Stage 0 Project and Scope and Environmental Checklists to apply for state and federal funding grants. Developed preliminary concepts. QC Reviewed the Safety Analysis.

09/07–07/15	**Stage 0 Feasibility Study and Report and EA, LA 511 Red River Bridge at Jimmie Davis Highway, LADOTD, Baton Rouge, LA. (H.001779.5 & 700-08-0114).** Project Manager and Lead Road Design Engineer for the Stage 0 Feasibility Study; Lead Road Design Engineer and co-author of the engineering report for the EA. Designed geometric layout alternatives for capacity improvements and pedestrian and bicycle accommodations for the bridge crossing of the Red River and along Jimmie Davis Highway (LA 511) from the Red River to US 71. Tasks included the development of the purpose and need statement, the project design criteria, and the geometric alternatives of the bridge, interchange ramps on each side of the bridge, and roadway approaches. Developed a median U-turn alternative and off corridor access improvements to improve corridor connectivity for LA 511 between the Arthur Teague Parkway and US 71.
07/15 - Ongoing	**I-49 Connector, Lafayette Regional Airport to I-10/I-49/US 167 Interchange, LADOTD, Lafayette Parish, LA. (H.004273.5).** Project Manager, Leadership Team Member, and Railroad Coordination & Design Task Manager for a NEPA Supplemental EIS and Design of a 5 mile urban freeway corridor. The project includes a Context Sensitive Solutions process that is occurring concurrently with the environmental process. The project includes a signature bridge and an urban master plan for local road and frontage road connections. The project has considered implementation strategies, potential railroad alignment modifications, potential replacement of up to three at-grade crossings with underpasses, and possible modifications to an Amtrak station platform. Highway overpass for the mainline viaduct and the interchange ramps are being considered as well. In addition, Jonathan will also perform tasks associated with highway geometrics, highway traffic, and environmental and public involvement tasks.
03/15 -01/17	**Stage 0 Feasibility Study and Report, Westside Expressway, Iberville Parish Government, West Baton Rouge, Iberville, Ascension, and St James Parishes, LA.** Project Manager and Lead Roadway Designer for the planning and development of a high level corridor study to locate a new highway that connects I-10 west of Baton Rouge to LA 3127 with a spur to connect to LA 30 using the Iberville Parish bridge crossing location identified in the Baton Rouge Loop EIS and a secondary bridge connection to I-10 utilizing the Sunshine Bridge (LA 70). Coordinated TransCAD model data with CRPC. Utilized traffic data published in available versions of the Baton Rouge Loop EIS. Completed DOTD Environmental Inventory and Stage 0 Scope and Budget Checklists for each identified independent segment of utility. Presented proposed alignments to LADOTD, Iberville and Ascension Parishes, and various stakeholders identified by Iberville Parish.
09/15–04/17	**Multimodal Transportation and Traffic & Safety Analysis, and Transportation Plan (NODTA), City of New Orleans Department of Public Works, New Orleans, LA.** Design Engineer. Multimodal transportation analysis and plan for the New Orleans Downtown and historic French Quarter neighborhood. Dozens on bicycle, pedestrian and vehicular alternatives were developed and evaluated and selected improvements were programmed, based on the integrated modal-access analysis, including pedestrian LOS modeling around transit stops. Extensive curb-use revisions, car-free zones, and other innovations were developed for the Quarter and CBD.

Firm	AECOM		
Victor De la Garza, PE *(MPR 3)* Project Manager		Years of Relevant Experience with this Employer	4
		Years of Relevant Experience with Other Employer(s)	20
Degree(s) / Years / Specialization	MS/2003/Computer & Electrical Engineering BS/2000/Computer & Electrical Engineering		
Active Registration Number / State / Expiration Date	PE / PE.0047470 / LA / 09/30/23		
Year Registered	2023	Discipline	Electrical and Computer Engineering
Contract Role(s) / Brief Description of Responsibilities	**MPR 3. Role: Project Manager.** *Victor will be responsible for all aspects of project management (i.e., quality, budget, schedule, coordination). He has prepared TSMO Program Plans in Texas for five districts; supported development of the TxDOT Statewide TSMO Strategic Plan; facilitated Capability Maturity Model Workshops; prepared ITS Implementation Plans; designed a wide range of ITS devices; and managed TMC operations.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
04/19-08/22	**Transportation System Management & Operations (TSMO), TxDOT, El Paso, TX.** Project Manager. Led the development of the TSMO program plan for El Paso region. This included extensive coordination with region stakeholders from New Mexico and Mexico counter parts and representatives from local, state and federal levels. Victor in responsible charge of ITS design and processes and his team were able capture TSMO strategies to be implemented in the near future. This project consisted on multiple outreach meetings, surveys and one-on-one conversation with key stakeholders. Project included Capability Maturity Model evaluation, Capability Maturity Framework and State of the Practice report. Concurrently, Victor led the development and develop Plan Sheets, Specification and Estimate for Wrong Way Driving Systems that provided TxDOT the option to trigger automatically or manually a message on a DMS alerting of wrong way vehicle detected.
03/20 - 08/20	**Transportation System Management & Operations (TSMO), TxDOT, Odessa, TX.** Victor served as a Project Manager for the development of the TSMO program plan for Odessa region. With extensive coordination with region stakeholders that included representatives at local, state and federal levels. Victor and his team were able capture TSMO strategies to be implemented in the near future. This project consisted on multiple outreach meetings, surveys and one-on-one conversation with key stakeholders. Project included Capability Maturity Model evaluation, Capability Maturity Framework and State of the Practice report.
04/19-01/20	**ITS Master Plan, El Paso, TX.** Project Manager. Led the development/design of the TXDOT's ITS Master Plan for the next ten years. Work consisted on analyzing existing ITS network and identify gaps in CCTV coverage, vehicle detection, and communication to travelers via DMS. This plan also included ITS elements to keep drivers engaged and alert while driving in rural high-speed areas within the El Paso district. Plan recommended emerging ITS technologies and systems and data communication upgrades to improve TMC operations and emergency personnel response time.

03/16 - 02/19	**Border Highway West Loop 375 Design-Build Toll Road ITS, Tolling, and Traffic Signal Design Lead, City of El Paso, TX.** ITS design lead manager for this $600 million project that included 8 miles of new toll road from Delta St. to IH-10. Victor served as design lead manager for traffic elements such as signing and striping and traffic signal design which included the first Single-Point Urban Interchange (SPUI) in Texas located on LP375 at Executive Center, an elevated traffic signal on SPUR 1966 and LP375, signing and striping, railroad coordination, telecommunication company utility relocations. Victor was responsible for the design and integration of Intelligent Transportation System which consisted of CCTV Cameras, Dynamic Message Sign, Non-intrusive vehicle detector systems such as Radar and Video Imaging Vehicle Detector Systems, Bluetooth readers and full system integration of this roadway into the City of El Paso and TransVista Traffic Management Center. (prior to AECOM)
04/20-12/20	**Wrong Way Driver Countermeasure LP375, El Paso, TX.** Project Manager. Directed the design that consisted of ramp reconfiguration along LP375 at two of El Paso's downtown exits. Included median improvements along Oregon St, roadway illumination, improved signing and pavement markings, and design of ITS and Lidar Wrong Way Driver Detection system. The proposed system monitors roadway off ramp and triggers flashing beacons when a wrong way driver gets detected. If the wrong way drive continues, the system triggers alert to the El Paso Police Department 911 call center, TransVista Traffic Management Center and has the capability to activate a DMS with a caution message about a wrong way driver with or without TransVista operator confirmation. This project required extensive coordination with multiple agencies and had a very tight scheduled.
04/20-02/21	**Wrong Way Driver Detector I-10, Fabens, TX.** Project Manager. Project consisted on deploying two Wrong Way Driver Detection systems at the exit ramp of I-10 at FM 1110. The system consisted of a thermo cameras that detect presence and direction of vehicles entering the off-ramp in the wrong way. At the event of wrong way driver detection, the system trigger flashing beacons installed at Wrong Way sign locations to get wrong way driver's attention. The system takes a snapshot of the vehicle and send an email to TransVista TMC operators about the event. This system was integrated to TransVista using cellular modem. This project also included signing and striping improvements as recommended in the El Paso District Wrong Way Countermeasure guidelines.
02/20-07/20	**Permanent Queue Detection System, I-10, Sierra Blanca, TX.** Project Manager. Project included five miles of fiber optic infrastructure, five CCTV cameras, 11 Radar Vehicle detectors, three Dynamic Message Signs and Central Processing Unit installed at the approach of Customs and Border Protection checkpoint. The ITS design consisted on integrating vehicle detection system to a Central Processing Unit. This Unit processes vehicle speed and volumes and automatically displays warning message alerting the traveling public of congestion ahead on the roadway. Proposed CCTV cameras are for traffic surveillance only. Video feed was shared with the Customs and Border Protection checkpoint and integrated into the TransVista TMC. System was integrated using cellular modem. Data load calculation were performed and ITS was broken into multiple systems to ensure Quality of Service
04/14-09/15	**City of El Paso Traffic Management Center Relocation, El Paso, TX.** Project Manager and Lead ITS Design Engineer. When the City of El Paso approved the construction of a new AAA baseball stadium for the El Paso Chihuahuas, the selected site needed to be cleared immediately of existing structures, namely City Hall, which housed the TMC. For the City to continue to monitor and control traffic flow on the City's freeways and surface streets, a new TMC had to be designed, along with the relocation of all City fiber optic systems coming into and out of the City's IT Network Center, also located in City Hall. Selection of the site initiated a rapid design and deployment project to establish an interim TMC in just under two weeks—an almost impossible task, but one that earned the project recognition at the 2014 ITS (Intelligent Transportation Society of America) Texas Chapter's annual conference. System downtime was unacceptable, requiring unique, multi-entity approved solutions to be achieved efficiently. Project included complex ITS design and integration and development concept of operations for the new TMC. (prior to AECOM)

Firm	AECOM		
Carlos Duran, PE, PTOE *(MPR 4)* Traffic Studies, ITS Design		Years of Relevant Experience with this Employer	4
		Years of Relevant Experience with Other Employer(s)	14
Degree(s) / Years / Specialization	MS /2010 / Traffic Engineering BS/2007/Civil Engineering		
Active Registration Number / State / Expiration Date	PE/125531/TX/12/31/2023 | PE/23558/NM/12/31/2024 PTOE/ 4108 / 04/30/2026		
Year Registered	2016	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**MPR 4. Role: Traffic Studies, ITS Design.** *Carlos will support the ITS/TSMO Implementation Team in designing ITS projects in alignment with the TSMO Strategic Plan and Concepts of Operations. He prepares Plans and Specifications for a variety of ITS devices including CCTV cameras, dynamic messages signs, vehicle detectors, wrong way driving systems, road weather information systems, traffic signal system, smart work zones, as well as fiber and wireless communications*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
10/21 - 09/22	**San Antonio Wrong Way Detection System along I-10, I-37, and Highway 410, TxDOT San Antonio, District.** Design, coordinate and implement of LED flashing wrong way detection system. The system included the implementation of radar sensors and confirmation cameras using the latest technology to detect wrong way drivers entering the major freeway ramps in San Antonio. The systems were designed as a stand-alone solar power system, at 31 locations, capable of sending an alert message to the San Antonio TxDOT and other Traffic Management Centers in the area. The project required coordination with the Federal Aviation Administration FAA to authorize the implementation of wrong-way equipment. Additional local coordination was needed with the transit authority VIA and school district to coordinate alternative routes during the project construction, which will require temporary ramp closure in their local operation routes in the San Antonio metro area.
02/22 - 11/22	**San Antonio Wrong Road-Side Units Wireless Communication, TxDOT Statewide.** Design, and coordinate on the development of construction documents and estimates to install Road-Side Units (RSU) for the application of Connected and Automated Vehicle (CAV) technology. The systems were designed as a stand-along system at 108 locations statewide (11 locations in the San Antonio District). The RSU is a wireless communications device within a "connected vehicle" that will collect and send roadway information from the vehicles in which the 'on-board unit" at the vehicle, pedestrian, other transportation with this technology will transfers information to/from the roadside equipment (controller) and back to the Traffic Management Center. The project required extensive coordination with institutions in all major metro areas in Texas.

11/20 - 09/21	**City of San Antonio- Broadway St and Avenue B - Roadway Design-Build, San Antonio, Tx, TxDOT San Antonio District.** AECOM developed a completed set of construction documents for two major corridors inside the tourist and historical destination inside downtown San Antonio. The two corridors, Broadway St and Avenue B, which included 24 blocks in downtown, required a complete traffic signal design, roadway, pedestrian, cyclist, and landscape reconstruction. The Broadway St corridor had 11 new traffic signals, signing, pavement markings, street curb extensions, and accessible parking spot design. Avenue B corridor included the mill and overlay of the corridor, ADA ramp and sidewalk improvements, landscape design, NACTO two-way cyclist lanes corridor, side parking, signing, pavement marking, and traffic signal improvement to accommodate the cyclist lanes, pedestrians, and regular vehicular traffic.
03/21 - 04/23	**City of Austin, Slaughter Lane Corridor Improvements, Austin, TX.** Provided the complete PS&E of the traffic engineering design for the roadway improvements, including a share-use path and inclusive bike lane corridor. The project included signal updates and improvements at 24 intersections along the 4 miles of complete roadway improvements. The project included complete traffic signal improvements utilizing existing and/or new poles and mast arms. All ramp, sidewalk and pedestrian elements were upgraded to comply to ADA requirements. Extensive coordination was required with all utility companies to complete a design meeting all minimum utility requirements clearances simultaneously to fit the city's existing ROW limits.
11/19 - 10/20	**I-35 at Williams Drive, Austin, TX, TxDOT Austin District.** Design of 3.4 miles roadway corridor of traffic elements which included Road Weather Information Systems, Radar Vehicle Devices, CCTV, DMS, Wrong Way Detection. Development of communication diagram for both wireless & fiber optic cable connections. Design and quantify the use of Smart Work Zone (Queue Detection/incident detection/speed monitoring). Currently overseen the Construction Phase which includes the review and approval of RFIs, Shop Drawing Reviews for the construction of the project.
06/13 - 12/13	**City of El Paso – Traffic Management Center Relocation, El Paso, District.** Design engineer for all communication systems associated with the traffic management center relocation. The project included the development plan sheets and cost estimates to relocate the existing traffic management center from City Hall to the new location with zero downtime. The new Traffic Management Center design consisted of the integration of 26 CCTV cameras, 13 DMS, 250 VIVDS, over 600 Traffic Signals, fiber optic cable, upgrade of existing SONET and Ethernet nodes, and integration into the TransVista TMC. Work included development of fiber expansion plan, ITS network analysis and design of system/network improvements. (prior to AECOM)
01/17 - 10/17	**City of El Paso Streetcar Phase I and Phase II, El Paso, TX.** Design the alternative traffic engineering analysis and complete PS&E of the traffic engineering components of the streetcar project. The project included signal modifications at 33 intersections along the 5 mile streetcar route and the design of three complete intersections: Arizona & Stanton, Stanton & Rio Grande, and Baltimore & Stanton. The project included striping and signage along the route and at 44 signalized intersections. (prior to AECOM)
11/19 - 06/20	**State Loop 375 (Americas Ave) Reconstruction, TxDOT El Paso District.** Develop and design Smart Work Zones (SWZ) which detected vehicles queueing along frontage roads and obstructing exit ramp along the LP 375. Once vehicles were detected a series of portable DMS displayed a predefined message to inform drivers of queue and advice to lower the speed. The SWZ were intended to be use during the traffic control during project construction.
06/14 - 02/17	**Border Highway Loop 375 ITS, Tolling, and Traffic Signal Design, El Paso, TX.** Prepared PS&E for new $476 million, nine-mile, four-lane design-build toll road project. Design the ITS fiber optic cable infrastructure and integration of the traffic management system installed on Loop 375 and connect to the TransVista Traffic Management System, design the tolling system underground infrastructure, traffic signal design, signing and striping design for this complex, fast-track project. (prior to AECOM)

Firm	AECOM		
Bonnie Dial, PE, PTOE *(MPR 4)* Traffic Design		Years of Relevant Experience with this Employer	17
		Years of Relevant Experience with Other Employer(s)	0

Degree(s) / Years / Specialization	BS/2006/Civil Engineering		
Active Registration Number / State / Expiration Date	PE/108550/TX/03.31.24 PTOE/3577/11/30/2025		
Year Registered	2011	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**MPR 4. Role. Traffic Design.** *Bonnie will support the traffic engineering team in traffic design. She prepares plans and specifications for traffic signals, signing, pavement markings, lighting as well as safety, capacity, and operational improvements.*		

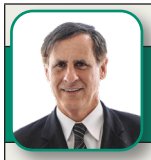
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
07/18-Ongoing	**Slaughter Lane Improvements, City of Austin, Austin, TX.** Traffic Task Lead. Providing management and traffic design lead services for about 10 miles with sidewalks, SUP, bike lanes, and roadway capacity. Designed and constructed in phases to facilitate early construction. Bonnie supervised the preparation of the Traffic Projections Report and Safety Analysis. Bonnie managed signal design and signing/pavement marking design for over 20 traffic signals within multiple PS&E and IDIQ submittals. Coordinated with staff, other agencies, and utilities for a cohesive design.
11/20-1/21	**Staff Augmentation, City of Austin, TX.** Project Manager. Led multiple traffic engineering projects. Bonnie supervised the design of safety improvements with federal HSIP funding including two traffic signals, traffic control plan, pedestrian ramp improvements, and signing/striping. Converted the PHB for Congress at Alpine to a full signal, and designed new signal at Congress at Ramble. In addition, managed the fast-paced Cameron/Dessau street lighting PS&E project to improve safety lighting along roadway. Coordinated with City staff, Austin Energy, TXDOT, and other consultants. Developed 48 Cameron/Dessau street light design sheets specifications, and cost estimates and Howard/Slaughter street light schematic with cost estimate from 0-100% in 3 months.
08/20-Ongoing	**US 59 Reconstruction, TXDOT Laredo District, Laredo, TX.** Traffic Task Lead. Provided services for 90% design of 6.5 miles of ITS, temporary and permanent signals for two intersections (University Blvd. and Del Mar Blvd.), and signing and pavement markings. The ITS system consists of DMS, CCTV, and wrong way detection systems on select exit ramps. Designed mast arms, pedestal poles, APS push buttons, installation of Synchro Green (radar detection), and CCTV to view under bridge. Designed signing and marking plans for freeway, frontage road, and transition between arterial and freeway segment. Designed ITS schematic and coordinated among multiple prime consultants and with traffic control for consistency.
9/21-9/22	**West Road at Fedex Drive Traffic Signal Design, Fedex, Houston, TX.** Traffic Design Lead. Provided services for the design of a traffic signal to Harris County standards and specifications. The project included coordination with Fedex, Harris County for approval of the traffic signal design, and CenterPoint to establish a new electrical service. The design included a traffic signal warrant study, flashing left turn arrow warrant, and intersection sight distance analysis. Also providing review and approval of construction item submittals.

11/19-01/20	**Planning Level Traffic Impact Analysis, Confidential Client, Lake Charles, LA.** Project Manager. Responsible for the oversight of a planning level traffic impact analysis for traffic during construction of a new industrial facility. Using generalized criteria for similar types of roadways, the existing and expected arterial Level of Service (LOS) was analyzed and possible roadway network improvements were identified to determine the overall viability of the project.
01/19-03/21	**SH 146 at N Alexander Drive Traffic Signal Design, TXDOT (Houston District), Baytown, TX.** Traffic Signal Design. Prepared a traffic signal warrant study for the intersection of SH 146 at Alexander Drive that determined once the mainlane overpass is built, a traffic signal is no longer needed. Then, performed an all-way stop warrant and traffic signal design to convert the traffic signal to flashing all-way stop conditions until further study after construction. The controller needed to be relocated due to the location of the bridge columns, and the existing mast arms will remain to reduce construction cost.
03/19-12/19	**FM 1488 at Forest West and FM 1488 at Sweetgum Lane Traffic Signal Design, TXDOT (Houston District) Montgomery County, TX.** Project Manager. Responsible for the design two traffic signals along FM 1488 due to the growing drivers in the area. The design included mast arms, pedestrian crossings to align with the planned access management project. Included driveway relocation to align driveway with intersection, utility relocation to avoid mast arm location, designed conduits and pedestrian ramps to avoid existing cross drainage diagonal across intersection.
03/19-12/19	**FM 1488 Access Management Study, TXDOT, Montgomery County, TX.** Project Manager. Responsible for guiding short-, medium-, and long-term improvement solutions to enhance safety and mobility along the 14 mile corridor with 19 signalized intersections. Analyzed intersection LOS, crash history, and deficiencies as part of the existing conditions report. Conducted steering committee, stakeholder, and public meetings as part of the valuable public involvement process. Recommended access management solutions including raised medians with hooded left turn lanes, continuous green T intersection, bicycle connectivity through intersections, pedestrian crossings, and traffic signal improvements. Prepared construction cost estimates and Transportation Improvements Program (TIP) applications to request funding.
03/19-10/19	**Industrial Traffic Study, Confidential Client, Gregory, TX.** Project Manager. Responsible for the analysis of a large industrial facility with the primary goal to recommend roadway improvements for circulation of existing operations and future operations. Understanding project needs, collecting traffic count data, determining local growth rates, analyzing intersections in Synchro, analyzing freeways in Vissim, and preparing construction cost estimates. Close coordination was required with client and TXDOT to incorporate several planned improvements.
07/19-05/20	**IH 45 Reconstruction, TXDOT, Harris County, TX.** Traffic Task Lead. Responsible for design of signing, signals, pavement markings, high mast illumination, and ITS along IH 45 from south of the Texas City Terminal Railroad to north of the Galveston Causeway surrounding SH 6 intersection. Performed quality control for signing, pavement markings, and ITS. Led team to complete work on time, within budget, and to high quality emphasizing public safety.
01/18-12/18	**SH 3 Access Management Study, TXDOT, Harris County, TX.** Traffic Engineer. Responsible for short-, medium-, and long-term improvements to enhance safety and mobility along the 14-mile corridor with 24 signalized intersections. Prepared preliminary roadway improvements to add raised medians with hooded left turn lanes based on Synchro traffic analysis results, to add sidewalks for multimodal connectivity, and recommend traffic signal improvements. Presented recommendations to the steering committee and prepared visually effective public meeting materials. Currently tasked to design 3 traffic signal designs from these recommendations.

Firm	AECOM		
Daniel Helms, PE, PTOE, RSP$_{2I}$ *(MPR 5)* Traffic Engineering Lead		Years of Relevant Experience with this Employer	3
		Years of Relevant Experience with Other Employer(s)	19
Degree(s) / Years / Specialization	BS / 1998 / Civil Engineering ME / 2003 / Civil Engineering		
Active Registration Number / State / Expiration Date	PE.0042486 / LA / 09/30/2022 | PTOE #2870 / 04/14/2022 | RSP$_{2I}$ #11 / 12/09/2022 | ATSSA Traffic Control Technician –LA State Specific (2018) | ATSSA Traffic Control Supervisor –LA State Specific (2018) | LADOTD Traffic Process and Report Parts 1, 2 and 3 (2018)		
Year Registered	2018	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**MPR 5. Traffic Engineering Lead.** *Daniel will lead traffic engineering design and analysis services under this contract. Daniel is a professional engineer, professional traffic operations engineer, and road safety professional with an infrastructure emphasis. He has worked as a project manager for a diverse suite of projects, including traffic analysis and forecasting, safety planning studies, feasibility analysis, and roadway design. He will use his wealth of experience from his time as traffic safety engineering manager and major planning projects to lead the traffic engineering efforts for the contract.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
07/21 – Ongoing	**Road to Zero Performance Dashboard, Texas Department of Transportation (TxDOT), Texas.** Highway Safety Technical Lead. Highway Safety Technical Lead for the assessment of Texas' Road to Zero Safety Initiative – looking to eliminate fatal and serious injury crashes from their roadways. The project looks to evaluate the efficacy of the program – at the statewide, district and county level, individual projects, countermeasures, and evaluate Crash Modification Factors (CMFs), using a naïve before-after evaluation. Daniel works with staff developing the dashboard to integrate safety performance metrics. He takes the work developed through the dashboard efforts and collaborates with TxDOT Staff to discuss the data analysis and findings.
09/20 – Ongoing	**Feasibility Study and Report / TEPR, College Drive, City of Baton Rouge / Parish of East Baton Rouge, Baton Rouge, LA.** Traffic Task Lead. Daniel is responsible for working with various subconsultants on the development and documentation of various traffic operations and safety analyses and provides quality checks to work prior to submittal. This project requires adherence to LADOTD's Traffic Engineering Process and Report.
02/19 – 01/20	**District 8 Systemic Safety Project, Pedestrians, Ohio Department of Transportation (ODOT).** Senior Transportation Engineer. Daniel was responsible for review of data of crash, roadway inventory and socio-economic data, coordinating with and providing guidance for project staff, and working with Project Manager in development of systemic safety analysis and framework for addressing pedestrian crashes using the 4 Safety E's. Data analysis determined focus facilities and areas where pedestrian crashes were over-represented. This process allowed project team to not only develop engineering treatments, but also for education and enforcement strategies.
02/18 – 01/20	**East Baton Rouge Parish Ped–Bike Master Plan, LADOTD, Baton Rouge, LA.** Project Manager. Consultant project manager, overseeing the day–to–day development of the East Baton Rouge Parish Ped–Bike Master Plan, in partnership with an out–of–state subconsultant. The project included the analysis of crash and infrastructure data, coordination and collaboration with a large and varied group of passionate stakeholders, including participants from all 4 safety E's.

02/20 – Ongoing	**MOVEBR Jones Creek Road Extension, Segments 1A and 1B, City-Parish of East Baton Rouge, LA.** Traffic Task Lead. Daniel is responsible for the development of the traffic analysis, looking at different alternatives, including signalized intersections, roundabouts, and alternative intersections. This project also includes following LADOTD's Traffic Engineering Process and Report, coordinating analysis work with the City-Parish and LADOTD. He also leads the development of Appendix C – Existing Safety Analysis, which utilizes the Crash1 and Crash3 databases, to conduct spot specific and segment crash analysis, using the CATScan tool. For new intersections of the project, signal warrant analysis will be included in the alternative selection process. Any intersections where signalization is the preferred alternative, Daniel will develop the signal timings for the intersection, along with any coordination with adjacent traffic signals.
06/07 – 12/17	**Traffic Safety Engineering Manager, Mississippi DOT (MDOT).** Day-to-day manager of the traffic safety engineering program. He performed site review, crash data analysis, benefit-to-cost analysis, countermeasure development and selection, design contract scope development and contract review, and design project management, including design and plan review. He managed several traffic signal projects, which included the crash data analysis, countermeasure selection, design, benefit-to-cost analysis, and traffic signal analysis, including signal timings, warrant analysis, capacity analysis, etc. These projects include: Implement FYA, update signal timings (2014 – 2019): US 51 and SR 463 in Madison and Ridgeland; SR 12 in Starkville; SR 145 in Tupelo; US 49 in Hattiesburg; US 90 in Waveland/Bay St. Louis (engineering was completed prior to departure); US 90 in Pascagoula (crash analysis, countermeasure selection, benefit-to-cost and some engineering completed prior to departure). Signalized intersection safety projects included (2007 – 2017): SR 25 in Rankin County (safety and capacity analysis); US 61 at Delta View Road (signal and warrant analysis); US 45 at Ripley Road (safety, signal and warrant analysis); US 98 at Rocky Creek Road, Beaver Dam Road (safety, signal, and warrant analysis); US 61 at Oak Ridge Road (safety, signal, and warrant analysis); US 45 at Hamilton Road (safety, signal, and warrant analysis); SR 15/SR 67 at Lickskillet Road (safety, signal, and warrant analysis); US 84 at Auburn Road (safety, signal, and warrant analysis); SR 18 at Midway Road (safety, signal, and warrant analysis). Other intersection safety projects included (2007 – 2017): US 49 / US 61 at Eagles Nest Road intersection improvement (safety and warrant analysis); SR 67 at Traditions Parkway intersection improvement (safety and warrant analysis); US 84 at SR 35 intersection improvement (safety and warrant analysis); SR 27 at Lee Avenue (safety and warrant analysis); US 84 at SR 184 intersection improvement (safety, signal, and warrant analysis). Developed systemic and low-cost safety improvement projects, including paper plan sets/proposals. Projects included: • Rural Safety Innovation Program: Crash analysis, field reconnaissance; $2M Grant to install centerline rumble strips. • Cable Barrier installation: Crash analysis, field reconnaissance for median cable barrier on controlled access roadways. • District 1 Intersection Improvement Project: Crash analysis; screening criteria; Systemic treatments – upsized signing, pavement markings, transverse rumble strips, reflectorized signposts. Treatments based on screening of each intersection. • SR 613 Systemic Curve Improvement Project: Crash analysis; screening criteria; Systemic treatments – upsized signing, pavement markings, flashing chevrons, high friction surface treatments (HFST). Treatments based on screening of each curve. • Widen shoulders to provide rumble strips: US 61 (Washington County), MS 12 (Washington and Humphreys County) • SR 2 (Alcorn County): Crash analysis; Clear zone re-establishment; Curve signing; Pavement markings



Firm	AECOM		
Bob Edelstein, PhD, PE, PTOE *(MPR 5)* TSMO Strategic-Business Plan / TSMO Training Program		Years of Relevant Experience with this Employer	44
		Years of Relevant Experience with Other Employer(s)	5
Degree(s) / Years / Specialization	PhD / 1974-78 / Transportation Planning and Engineering MS / 1972-73 / Transportation Planning BS / 1968-72 / Civil Engineering		
Active Registration Number / State / Expiration Date	PE #23959 / Louisiana / 09/30/2023 PTOE #1205/ National / 2024		
Year Registered	1990	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**MPR 5. Role: TSMO Strategic Business Plan Lead; TSMO Training Program.** *Bob will be responsible for development of the TSMO Strategic Plan and Training Program. He serves as AECOM's ITS Practice Leader having developed the LADOTD ITS Strategic Plan in 2010 as well as TSMO Strategic Plans and TSMO Training Programs for Texas DOT and Florida DOT. He has also served as Technical Advisor for the New Hampshire DOT and Maryland DOT TSMO Strategic Plans.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
02/10 – 06/10	**Louisiana DOTD, ITS Strategic-Business Plan, LA.** Project Director/Author of an ITS Strategic Business Plan that addressed each facet of the program, including ITS deployment; TMC operations; ITS maintenance; ITS systems; Roadway Safety Incident Program; traffic incident management; traveler information; traffic engineering; partnering; and public outreach.
02/06 - Ongoing	**FDOT District Four, TSMO Strategic-Business Plan, Project Manager / Author, Fort Lauderdale, FL.** Project Manager/Author for a TSMO Strategic-Business Plan for FDOT District 4 (Southeast Florida). The contents of this report include the following: (1) Strategic Plan – Development of a vision reflecting the desired status of the TSMO program in the next five years. This vision addressed each facet of the program including: ITS deployment, ITS operations, ITS maintenance, Road Rangers, traffic incident management, ITS systems, partnering, traveler information, public outreach and new initiatives. (2) Business Plan – The Business Plan provided recommendations for each of the above categories on a year-by-year basis. (3) Report Card – Performance measures were developed in order to track the progress and effectiveness of the ITS program on an annual basis. Updated the ITS Strategic-Business Plans for the 2010-2015, 2015-2020, and 2018-2023 time frames. Currently, developing and delivering a comprehensive TSMO training program of 25 modules including a TSMO overview, systems engineering, performance measures, capability maturity model, TSMO strategies (i.e., ATM, Managed Lanes, Emerging Technologies), TSMO Design, Construction, and Data Management; and TSMO O&M.
05/19 - Ongoing	**Texas DOT, TSMO GEC, Project Manager, TX.** Project Manager providing technical support at the statewide level as well as five of the 25 districts throughout Texas. Scope of services includes leadership engagement, conducting capability maturity model workshops, development of TSMO strategies for implementation, review of specifications, benefit-cost analyses, update of ITS Master Plans and system architectures, development of operational performance measures, as well as presentations and preparation of TSMO Program Plans. As part of the project, he prepared a comprehensive TSMO Training program inclusive of 30 modules. In addition, he prepared technical reports on a variety of TSMO topics including: TSMO Funding, Technology Solutions, Performance Measures, TSMO Evaluation Tool, Data Platform, Interoperability, Information Management, TSMO Benefit-Cost Analysis, Traffic Incident Management, TSMO Innovation Framework, AI/Machine Learning Applications to TSMO, Gamification Applications to TSMO, Lonestar™ Enhancements, and others.

06/18 – 02/20	**Ohio DOT, Automated Vehicles (AV) / Connected Vehicles (CV) System Engineering, Statewide, OH.** Technical Advisor in supporting the AV/CV Feasibility & Exploration Report and supporting development of the ConOps, system requirements, Integrated Data Exchange software requirements, and defining pilot projects throughout the state. Final concepts are being advanced based on needs, risk, readiness, deployment feasibility and expected benefits as well as their applicability to urban, suburban or rural locations. The ConOps provides a high-level description of how AV/CV applications can be implemented in a coordinated manner to deliver needed transportation services. This includes the identification of stakeholder roles and responsibilities for AV/CV applications, including the data they share to deliver those services. Building on the Ohio AV/CV Statewide ITS Architecture, this ConOps describes the state of existing transportation systems in Ohio, presents the justification for changes to those systems in support of AV/CV, outlines a proposed system concept for identified AV/CV functions – including an ODOT Integrated Data Exchange that will enable this functionality, details operational scenarios to demonstrate the influence of AV/CV in the delivery of transportation services, and describes anticipated impacts and performance measures for the proposed system concept.
07/18 – 02/19	**Colorado DOT, ROADX, Statewide, CO.** ITS Engineer having provided technical support in developing a Technology Strategic Plan that will leverage the resources and capability of their Mobility Operations Division (i.e., Traffic & Safety Engineering, ITS, Real-Time Operations). The plan provides the framework to transform mobility by using data and emerging technology to create an efficient, safe, and reliable transportation system.
9/17 – 2/18	**New Hampshire DOT, ITS On Call Services, Statewide, NH.** Technical Advisor supporting the development of a TSMO Strategic Plan to provide guidance on the deployments and integrations of the TSMO Bureau over the next five fiscal years (2020-2024). This Strategic Plan is an update to the previous Strategic Plan developed by AECOM for fiscal years 2015 - 2019. The time frame reflects a reasonable horizon that considers major advances in emerging technologies that may alter installation methods, costs, or delivery systems in the future.
5/18 – 12/18	**Maryland Department of Transportation, On Call ITS Services, Statewide, MD.** Technical Advisor for the preparation of the 5-Year Program (2020-2024) to define a number of corridors as candidates for initial TSMO deployment projects. One-page project summary sheets were developed for each TSMO project including information on project location; operational issues and needs within the corridor of parallel and arterial roadways; project type (institutional, process, deployment); cost estimates (deployment, operations, and maintenance); and project schedule.
07/14 – 03/16	**Ohio DOT, Statewide Active Traffic Management Study, OH.** Project Director for a statewide study evaluating the application of Active Traffic Management strategies to address growing congestion within their major regional networks (i.e., Cincinnati, Columbus, Cleveland, Akron, Dayton, Toledo). The following strategies were considered: Dynamic Ramp Metering, Hard Shoulder Running – Buses and Mixed traffic, HOV Lanes, Truck Only Lanes, Contra Flow Lanes, Managed Lanes, Dynamic Merge Control, Dynamic Lane Assignment, Variable Speed Limit/Speed Harmonization, Queue Warning. He prepared the Concept of Operations.

Firm	AECOM		
Greg Reilly, PE *(MPR 6)* ITS Design		Years of Relevant Experience with this Employer	1
		Years of Relevant Experience with Other Employer(s)	17
Degree(s) / Years / Specialization	BS / 2004 / Electrical Engineering		
Active Registration Number / State / Expiration Date	PE.0047409 / LA / 03/31/2025 | Additional PE Licenses in IL, IN, NE, KS, FL, GA, MO		
Year Registered	2022	Discipline	Electrical Engineering
Contract Role(s) / Brief Description of Responsibilities	**MPR 6. Role: ITS Design.** *Greg will support the ITS/TSMO Implementation Team in designing ITS projects in alignment with the TSMO Strategic Plan and Concepts of Operations. He prepares Plans and Specifications for a wide range of ITS devices including CCTV cameras, dynamic messages signs, vehicle detectors, ramp management, smart work zones, wrong way detection, lighting, power, fiber and wireless communications.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
10/22 - Ongoing	**I-80 from I-55 to Briggs Street Reconstruction (DCM and Design), Illinois Department of Transportation, Joliet, IL (QA/QC).** DCM ITS and lighting QA/QC lead responsible for specifications, details, and designs for ITS infrastructure and devices along the 16-mile corridor and roadway lighting systems. DCM role also included coordination with other corridor designers to ensure consistency in ITS and roadway lighting designs. Design role included final lighting design from Houbolt Road to west of Center Street. Developed specifications, details, and design plans for all electrical work, including coordination with involved disciplines through construction. DCM role also included coordinating specifications for a smart work zone monitoring and notification system to manage traffic and reduce incident response times. Portable PCMS, microwave vehicle detection, data feeds, and CCTV cameras will be used to communicate traffic conditions with the public and monitor traffic.
10/22 - Ongoing	**I-190 Reconstruction (DCM and WB Design) – Lighting and Toll Plaza, Illinois Department of Transportation, Chicago, IL (Electrical & Lighting Design Lead).** DCM electrical and lighting lead responsible for specifications, details, and designs for roadway lighting systems, toll plaza electrical/communications systems, , and ITS systems at the toll plaza. DCM role also included coordination with other corridor designers to ensure consistency in roadway lighting designs. Developed specifications, details, and design plans for all lighting and toll plaza electrical/communication work, including coordination with involved disciplines through construction.
03/20 - 09/22	**General Engineering Consultant (GEC), Illinois Tollway, Lisle, IL (TSMO Manager).** TSMO manager responsible for ITS, roadway lighting, fiber optics, and business systems-related work. Responsible for managing a team of individuals that perform many tasks related to those disciplines such as create and maintain design standards, design reviews, training, ITS and business systems inspections, reporting, asset management, system-wide planning, budgeting, construction walk-throughs, fiber assignments, warranty surety inspection, and special projects. Also responsible for cutting edge initiatives for LED lighting replacements, utility rebate applications for LED replacements, wireless lighting management systems, wrong-way driver detection/prevention and connected & automated vehicle strategic planning, electric vehicle (EV) chargers at fleet maintenance yards and rest areas, along with researching available EV charging infrastructure rebate opportunities. (Prior to AECOM)

06/17 - 06/20	**Elgin O'Hare Western Access, Illinois Tollway, Franklin Park, IL.** Lead ITS engineer responsible for I-294 ITS design from North Ave to Wolf Rd, County Line Road Ramp Tolling, Weigh-In-Motion, and other appurtenant ITS elements. He was also responsible for establishing the ITS communication between the EOWA corridor and the I-294 corridor which come together at the I-490 interchange. He also provided ITS design for an advanced fiber optic relocation contract prior to mainline roadway reconstruction, which included a 26 conduit duct bank for fiber and ITS power and multiple single mode fiber optic cables ranging from 12 strand to 864 strand. Assisted in designing a new interchange that tied the Elgin O'Hare Expressway (I-490) into the Tri-State Expressway (I-294). The $450 million project included the construction of two new flyover bridges and the reconstruction of three existing bridges that carry I-294 over streets and Union Pacific Railroad. There were also four miles of retaining wall on the project with heights near 45 feet. (Prior to AECOM)
06/12 - 06/16	**I-90 Jane Addams, Design & Corridor Management, Illinois Tollway, Cook/Kane County, IL.** ITS planning and design lead who led several elements of the project including research and fiber communications and planning for Active Traffic Management. This portion of the project design included HD camera upgrades, DMS Type I replacements and new DMS Type II, non-intrusive speed detection including RTMS and Wavetronix, Ramp Queue, and Wrong Way ramp detection, weather stations, Smart LED lighting systems and new redundant ITS system. The design of this project included seven miles of widening and reconstruction of the I-90 Tollway. Work tasks included mainline and interchange design, toll plazas, lighting, ITS, utility re-locations, and bridge replacements. (Prior to AECOM)
06/12 - 06/20	**I-74 over the Mississippi River Design, Iowa Department of Transportation, Bettendorf, IA / Moline, IL.** Provided lighting and ITS QA/QC for the design team, as well as lighting design for preparation of contract plans, estimates, and specifications. He also provided QC for the ITS and fiber optic design packages for the corridor. The project scope included designing roadway and aesthetic lighting and coordination with the ITS, traffic signal, and structural designs for the roadway reconstruction of I-74 from Bettendorf, Iowa to Moline, Illinois. The proposed lighting, ITS, and traffic signals were part of a complete roadway and bridge reconstruction over the Mississippi River in this area. The ITS design included lane control/utilization structures, dynamic message signs, CCTV cameras, and traffic detectors. The existing suspension bridge will be replaced with a tied-arch bridge, which includes color-changing LED aesthetic lighting. The design of the lighting system includes 45' and 50' roadway poles with specially designed 14' davit arms with 10' radii and LED luminaries. Decorative "C" shaped light poles with LED luminaires were also included in the design for the arch bridge and multi-use path. Swivel mount LED navigation lighting was also designed per U.S. Coast Guard standards. (Prior to AECOM)
06/18 - 06/20	**Tri-State Reconstruction from St Charles Road to North Avenue, Illinois Tollway, Berkeley, IL.** Lead ITS engineer responsible for managing the ITS design, as well as preparation of contract plans, estimates, and specifications. This roadway reconstruction project included a 26 conduit duct bank for fiber and ITS power, ATM lane control sign gantry structures, ITS device infrastructure, a prefabricated ITS building, and electric/gas services. Work includes overall roadway design, updated roadway lighting; extensive utility coordination; ITS infrastructure and design for future Active Traffic Management System (ATMS). (Prior to AECOM).
06/17 - 06/19	**Fargo University Drive - 18th Avenue to I-94, North Dakota Department of Transportation, Fargo, ND.** Project manager responsible for managing the lighting, traffic signal, and ITS design, as well as preparation of contract plans, estimates, and specifications. This project included the design of roadway lighting, pedestrian tunnel lighting, ITS, and traffic signals for the reconstruction of University Drive in Fargo, North Dakota. The proposed ITS system included CCTV cameras at intersections for traffic surveillance and fiber optic interconnect network connections. Permanent and temporary traffic signals were also designed for three intersections. (Prior to AECOM)

Firm	AECOM		
Dan Nelson, AICP *(MPR 7)* Concept of Operations		Years of Relevant Experience with this Employer	17
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization	MA / 2006 / Urban and Regional Planning / University of Iowa BA / 2004 / Economics and American Studies / St. Olaf College		
Active Registration Number / State / Expiration Date	American Institute of Certified Planners #024115 / MN / 12/31/2023		
Year Registered	2010	Discipline	Transportation
Contract Role(s) / Brief Description of Responsibilities	**MPR 7. Role: Concept of Operations.** *Dan will support the systems engineering team, specifically in developing Concepts of Operations for TSMO projects. He prepared the "Systems Engineering" chapter of the TxDOT ITS Design Manual and developed ITS system architectures and/or Concept of Operations for projects in Michigan, Texas, Florida, Ohio, Kentucky, and Minnesota.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
01/23 – ongoing	**ITS Systems Engineering / Design, Panther Station Transit Terminal, FL.** Leading the development of a Concept of Operations to describe how ITS technologies can be installed to allow for transit vehicle queue jumps near a proposed Panther Station transit terminal facility in Miami, FL. Facilitated a virtual stakeholder meeting to discuss existing agency systems and presented alternative system technologies to support future queue jump operations.
11/22 – ongoing	**ITS Systems Engineering / Design, Ann Arbor, MI.** Leading the development of a Concept of Operations to describe how a Transit Signal Priority (TSP) system can leverage existing fiber optic cable infrastructure in Ann Arbor, MI. Facilitated a virtual stakeholder meeting to present draft sections of the Concept of Operations and gather feedback on project goals and objectives. Will oversee procurement of ITS systems and provide oversight of system testing and installation in 2023 and 2024.
01/20 – 07/21	**ITS Systems Engineering / Design, TxDOT El Paso District.** Updated the regional ITS architecture for the El Paso MPO that covers six counties in the TxDOT El Paso District, as well neighboring regions in New Mexico, to account for new ITS projects in the region. Coordinated and facilitated stakeholder involvement through virtual meetings in identifying regional needs and plans for future ITS deployments. Developed a website to display the updated regional ITS architecture for the El Paso MPO.
01/20 - 12/21	**TxDOT Statewide and District TSMO Program Plans, Texas Department of Transportation, Texas (Technical Lead).** Provided oversight and development of two separate TSMO Program Plans for neighboring rural districts (Amarillo and Childress) of the Texas Department of Transportation (TxDOT) from 2020 to 2021. This included facilitating discussion at stakeholder workshops and conducting surveys with stakeholder agencies prior to recommending action steps to advance the district's overall performance with respect to transportation operations. Work zone management tactical plans were recommended to optimize traveler and worker safety and to expand work zone awareness and coordination. Dan supported an update to the TxDOT Statewide TSMO Strategic Plan through recommendations to incorporate the Systems Engineering process into ITS project planning and use of Performance Measures for evaluations.

06/20 - 05/21	**ITS Systems Engineering / Design, NASA Kennedy Space Center.** Led the development of a Concept of Operations to describe how CCTV cameras, Dynamic Message Signs, and other ITS devices will be installed to enhance safety and efficiency of the transportation network at the NASA Kennedy Space Center (KSC) multi-user spaceport. Facilitated a virtual stakeholder meeting to discuss agency needs with respect to transportation in the area and completed an Alternatives Analysis prior to working Space Florida and the Florida DOT District 5 in developing the Concept of Operations.
02/21 - 03/22	**ITS Systems Engineering / Design, Toledo and Youngstown, OH.** Supported the updates of two regional level ITS Architectures in the Toledo and Youngstown metro regions to account for existing and future ITS technologies in each region. Coordinated and facilitated stakeholder involvement in identifying regional needs and plans for future ITS deployments.
01/15 - 07/15 and 1/20 - 07/20	**ITS Systems Engineering / Design, Lexington Area MPO.** Updated the regional ITS architecture for the Lexington Area MPO that covers Fayette and Jessamine Counties, Kentucky in 2015 and again in 2020 to account for new ITS projects in the region. Coordinated and facilitated stakeholder involvement in identifying regional needs and plans for future ITS deployments. Assisted with development of an ITS implementation plan that Identified ITS project implementation sequences and strategies.
12/18 - 05/20	**ITS Systems Engineering / Design, Ohio Area Coordinating Agency (NOACA).** Developed regional ITS architecture previously developed for the Northeast Ohio Area Coordinating Agency (NOACA) MPO region that reflects the existing and planned ITS technologies in the 5-county region surrounding Cleveland, OH. Developed surveys to gather information on regional ITS elements and facilitated discussions at stakeholder workshops with multiple public-sector agencies on the existing and planned regional ITS elements. Updated the previous Turbo database to account for updates to the ITS projects, inventory, stakeholders, service packages, and interconnections between agencies in the region. Developed a project website to receive public feedback on the ITS Architecture and maintain records of all project meetings and deliverables.
03/09 - 12/09 and 02/14 - 12/14 and 02/18 - 12/18	**ITS Systems Engineering / Design, Minnesota Department of Transportation (MnDOT).** Assisted MnDOT in updating its Statewide ITS Architecture on three separate occasions in 2009, 2014, and in 2018. Supported MnDOT with a transition of their ITS Architecture from Turbo to the recently updated RAD-IT software. In 2018, participated in multiple stakeholder workshops to gather information on existing and planned ITS elements throughout the state. In 2014, developed a series of objectives and performance measures that conform to the FHWA- recommended S.M.A.R.T. (Specific, Measurable, Agreed, Realistic, and Time-bound) characteristics. Developed an ITS Architecture Maintenance Plan to guide MnDOT as new ITS projects are proposed.
12/15 – 06/16	**ITS Systems Engineering / Design , Ohio-Kentucky-Indiana MPO.** Updated the Regional ITS Architecture previously developed for the Ohio-Kentucky-Indiana (OKI) MPO region that reflects the existing and planned ITS technologies in that region surrounding Cincinnati, OH. Reviewed the existing Turbo ITS Architecture database developed by and updated it for OKI and updated the ITS inventory, service packages, and interconnections between all regional ITS elements. Developed a new project website for the OKI region and also updated the Final Report, which included a plan to maintain the OKI Regional ITS Architecture that details the roles and responsibilities of agency stakeholders in maintaining, updating, and using the architecture.

Firm	Intelligent Transportation Systems		
Jonathan Fox, PE, PTOE, PMP *(MPR 7, 8)*		Years of Relevant Experience with this Employer	8
ITS/TSMO Implementation Lead; ITS Master Plan Update		Years of Relevant Experience with Other Employer(s)	13
Degree(s) / Years / Specialization	BSCE/2003/Civil Engineering, Louisiana State University		
Active Registration Number / State / Expiration Date	PE/33277/LA/09.30.23 PTOE/2329/11.07.25 PMP/1812148/04.27.24		
Year Registered	2007 (PE and PTOE)	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**MPR 7, 8. Role: ITS/TSMO Implementation Lead; ITS Master Plan Update.** *Jonathan is a principal at Intelligent Transportation Systems LLC (ITS LLC). His background includes traffic studies and assessments, traffic signal design, and ITS systems engineering. Jonathan's ITS-related experience includes system diagnostics and troubleshooting, system testing, management and operations, and systems maintenance . Jonathan's varied experiences in design, ITS, traffic engineering, and program management make him an asset to the team managing the TSMO program development and implementation.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
08/15-07/19	**SASOL Lake Charles Chemical Project-Adaptive Traffic Signal Systems, Westlake, LA.** 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.
06/18-07/19	**US 90 Adaptive Corridor, Westlake, LA.** Project Manager and Overall Design Lead. Jonathan has 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 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	**DOTD ITS Maintenance, 44-2500, 44-7102, 44-16811, Statewide, LA.** Served as 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. Jonathan's knowledge of the ITS from planning through operations has made him a highly valuable asset to the ITS Maintenance team especially his knowledge of the ITS as it was designed and operated.

2007-2010	**I-12 Ramp Metering Design & Implementation, East Baton Rouge Parish, LA.** 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.
10/12-12/14	**Baton Rouge ITS Phase 3, Baton Rouge, LA.** Project Manager and Design Lead. 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 deployments 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 16 additional closed circuit television video cameras, 5 dynamic message sign sites, 1 HUB site, 30 Bluetooth detection sites, 1 travel time message sign (first in the state), and 8 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, LA.** 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.
04/16-07/18	**Alabama Department of Transportation, ALDOT, ITS Specifications, Statewide AL.** ITS Design and Deployment. ALDOT desired an upgrade of their special provisions into a standard specification in order to bring consistency throughout the state on ITS equipment. Jonathan's vast experience in design of ITS deployment projects as well as firsthand knowledge of what works from being part of ITS maintenance, made him the ideal project manager. The specifications developed included material and construction for a plethora of items: 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 miscellaneous 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.

Firm	Intelligent Transportation Systems		
Erik Smith, PE *(MPR 8)* ITS Master Plan Update		Years of Relevant Experience with this Employer	<1
		Years of Relevant Experience with Other Employer(s)	27
Degree(s) / Years / Specialization	Bachelor of Science / 1995 / Civil Engineering, Louisiana State University		
Active Registration Number / State / Expiration Date	P.E.0029085 / LA / Exp. 9/30/24		
Year Registered	2000 (PE)	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**MPR 8. Role: ITS Master Plan Update.** *Erik has over 27 years of engineering experience, particularly in the specialty area of Intelligent Transportation Systems (ITS) Maintenance. Prior to joining ITS LLC, Erik had a prosperous career at LADOTD where he managed the ITS Maintenance Section for many years. His extensive knowledge of intelligent transportation systems, traffic management center operations, incident management, and the inner workings of the Louisiana Department of Transportation and Development will be integral to the team for the TMSO program. The relationships he built during his time at LADOTD will enhance the team's ability to communicate effectively as the TSMO program develops and is deployed. Erik will be able to help identify potential challenges and develop solutions in advance to keep the project moving forward. In addition to his experience, Erik also achieved the following certifications related to TSMO.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
06/12 – 03/16	**LADOTD ITS Maintenance Statewide (44-2500, H.007026) | Project Manager.** Erik served as the Project Manager for LADOTD for the retainer contract. His roles included project management, quality control checks, and site reviews. Reviewed and approved the project management plan, equipment maintenance plan, and traffic control plans.
07/16 - 03/19	**LADOTD ITS Management, Operations, and Maintenance Statewide (44-7102, H.011537) | Project Manager.** Served as the project manager for LADOTD for the retainer contract. Roles included project management, quality control checks, and site reviews. Reviewed and approved the project management plan, ITS equipment maintenance plan, traffic control plans, and performance indicators.
01/20 - 01/23	**LADOTD ITS Management, Operations, and Maintenance Engineering and Inspection (ME&I) Statewide (44-16811, H.013868) | Project Manager.** Served as the project manager for LADOTD for the retainer contract. Roles included project management, quality control checks, and site reviews. Reviewed and approved the project management plan, project communication plan, ITS equipment maintenance plan, traffic control plans, and performance indicators. Erik's knowledge of the ITS from planning, maintenance, operations, troubleshooting, and communications has made him a highly valuable asset to the ITS maintenance team especially his knowledge of the ITS as it was designed and constructed.

01/06 - 01/23	**LADOTD ITS Maintenance Program (Louisiana, Statewide) | Program Manager.** Erik developed and managed the LADOTD ITS Maintenance Program. In this role he performed extensive research of ITS Maintenance policies and best practices throughout the US. He led a staff of 25 LADOTD employees to perform ITS maintenance activities statewide on traffic cameras, dynamic message signs, vehicle detectors, queue detection, and emergency crossover gates for traffic incident management. Additionally, he led the maintenance activities statewide on interstate ramp meters for traffic demand management. Erik served as the state's subject matter expert on ITS maintenance throughout this time.
01/06 - 01/23	**LADOTD Telecommunications Program (Louisiana, Statewide) | Program Manager.** Erik managed the LADOTD Telecommunications Program. In this role, he performed extensive research of telecommunications policies, products, services, and best practices throughout the US. He led a staff of 25 LADOTD employees to perform telecommunications selection, procurement, installation, and maintenance activities statewide on telephones, radios, fiber optic cable, Ethernet cable, Ethernet routers, Sonet Regens, microwave radio towers, tower buildings, and many other telecommunication devices. Erik planned, deployed, and managed the voice and internet circuits for LADOTD's traffic management centers used for traffic incident management, road weather management, special event management, and traveler information. He planned, deployed, and managed the internet circuits for LADOTD's traffic management centers used for interstate ramp meters for traffic demand management. Erik served as the chair of LADOTD's Infrastructure sub-committee of the Connected and Autonomous Vehicle (CAV) Committee and the state's subject matter expert on communications products, services, and technology throughout this time.
06/08 – 09/09	**LADOTD New Orleans Regional Traffic Management Center (Orleans Parish, La) | Project Manager.** Erik served as the project manager for LADOTD for the communications, inside and outside plant wiring, video display, and video distribution portions of the TMC construction project. His work on the communications circuits and video display system facilitated the traffic incident management performed by the TMC staff.
01/06 – 07/06	**LADOTD Statewide Traffic Management Center (East Baton Rouge Parish, La) | Project Manager.** Erik served as the project manager for LADOTD for the communications, inside and outside plant wiring, video display, and video distribution portions of the TMC construction project. His work on the communications circuits and video display system facilitated the traffic incident management performed by the TMC staff.
07/00 – 01/06	**LADOTD Interstate Pavement Preservation Program (Louisiana, Statewide) | Design Engineer.** Erik served as the Design Engineer in the LADOTD Interstate Pavement Preservation Program. In this role he performed extensive research of Concrete Pavement Preservation policies, techniques, and best practices throughout the US. He designed and drafted LADOTD's Concrete Pavement Restoration details, shoulder underdrain details, and shoulder rumble strip details. He reviewed 50+ interstate pavement preservation plans prepared by LADOTD district design staff and checked the quantities and design computations. Concrete projects included jointed concrete pavement, jointed concrete patching, continuously reinforced concrete pavement, continuously reinforced concrete patching, bonded concrete overlay, and unbonded concrete overlay. Asphalt projects included mill & overlay, saw and seal, crack and seat, break and seat, and rubblization. Erik prepared and reviewed construction cost estimates, conducted life cycle cost studies, and performed traffic queue studies. He conducted Plan-In-Hand inspections and prepared PIH reports. He provided letting status updates and recommended changes in project delivery dates. He served as the state's subject matter expert on Concrete Pavement Restoration, shoulder underdrains, and shoulder rumble strips throughout this time.

Firm	Intelligent Transportation Systems		
Clarke Chauvin, PE, PTOE, PMP *(MPR 8)* Traffic Signalization		Years of Relevant Experience with this Employer	6
		Years of Relevant Experience with Other Employer(s)	3.5
Degree(s) / Years / Specialization	Bachelor of Science / 2013 / Civil Engineering, Louisiana State University		
Active Registration Number / State / Expiration Date	P.E.0041770 / LA / Exp. 9/30/23 | PTOE 4337 / Exp. 11/20/2023 | PMP 1812148 / Exp. 11/31/2023		
Year Registered	2016 (PE) / 2017 (PTOE)	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**MPR 8. Role: Traffic Signalization.** *Clarke has nearly ten years of engineering experience, most of which has focused on complex signal design and intelligent transportation system (ITS) design and maintenance. Clarke currently oversees ITS LLC's work on the ITS Maintenance IDIQ contracts with the Louisiana Department of Transportation and Development (LADOTD). His experience includes system diagnostics and troubleshooting, system testing, management and operations, and systems maintenance. Clarke's varied experiences in design, ITS, and traffic signal design make him an important member of the TSMO program development and implementation.*		

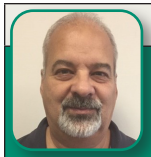
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
02/16 - present	**DOTD ITS Maintenance (44-7102 44-16811), Statewide Louisiana | Pre-Professional, Engineer.** Clarke has served as a pre-professional and now as engineer for the existing ITS Maintenance Retainer. He has performed routine maintenance on emergency crossover gates, travel time message system, CCTV camera sites, RVD sites, ramp meter sites as well as DMS sites. His skills include device troubleshooting, communication and network troubleshooting, parts replacement, site cleaning, insect extermination, traffic control setup, as well as coordinating with law enforcement, TMC operations staff, and DOTD. In addition to setting up monitoring for recent hub site generators, Clarke determined a solution for monitoring all existing generator sites.
07/22 – Present	**LADOTD Task Order - Connected & Autonomous Vehicles (C/AV) Team and Working Group Support, Louisiana Statewide.** Clarke is serving as ITS LLC's project manager for the firm's portion of this work. The goal of this task order is to bring various practitioners together to begin developing projects, programs, infrastructure, statutes, and other mechanisms necessary to prepare the State of Louisiana for the integration of connected and autonomous vehicles on the state's highways and roadways.
08/15 – 07/19	**Lake Charles Chemical Project – Adaptive Traffic Signal Systems (Westlake) | Signal/ITS Design Engineer.** In support of the $8.9 billon ethane cracker chemical plant expansion, Clarke provided signal design support for multiple intersections. His efforts included developing preliminary signal permit plans, developing timing models, conducting field investigations, providing quantities, constructability reviews, and signal construction inspection. Additionally, Clarke provided support for the first Adaptive corridor installed in the state of Louisiana. Along Sampson St., an adaptive corridor was implemented and is currently operational. Clarke was involved in the Synchro modeling, TSI documentation, and producing as-built drawings for the system.

02/18 – 07/19	**System B (LA 108) Adaptive Traffic Signal Corridor (Westlake) | Project Manager.** Clarke was the project manager for the implementation of the System B adaptive traffic signal corridor. In addition to allocating IP addresses, configuring devices (both for network communication and signal operation), and managing construction and coordination, Clarke worked to bring an isolated traffic signal into the adaptive system through cellular communication. Clarke worked with DOTD to use a private cellular network to remotely connect to the signal equipment. He configured the cellular modem to allow port forwarding of the devices required for the adaptive system and oversaw the installation and configuration for all of the equipment for these signals. The communication system is currently active and the signals have been integrated into DOTD's adaptive system. Clarke is currently responsible for ongoing maintenance and performance monitoring and has set up network management software to collect performance data and notify ITS LLC and DOTD with issues.
06/18 – 07/19	**US 90 Adaptive Corridor (Westlake) | Signal/ITS Design Engineer.** Clarke performed network design and construction project management for the US 90 adaptive traffic signal corridor in Westlake, LA. In addition to performing the initial field wireless testing to determine appropriate frequency, power, mounting heights, etc., Clarke designed and allocated IP addresses for the various equipment at these intersections. He programmed controllers, switches, radar detection, and wireless Ethernet radios. The communication system is currently active and the signals have been integrated into DOTD's adaptive system. Clarke is currently responsible for ongoing maintenance and performance monitoring/testing and has set up network management software to collect performance data and notify ITS LLC and DOTD with issues.
03/19 – 04/20	**H.012661 D07 FYA – US 171 Adaptive Traffic Signal Corridor (Sulphur) | Project Manager.** Clarke served as Project Manager in addition to performing network design, integration, and performance monitoring for the Adaptive traffic signal corridor installed in Sulphur, LA. From initial field wireless testing to device configuration and installation to network and traffic performance monitoring, Clarke was involved in creating a quality project with proven reliability and proven performance. Phasing construction to set up communications prior to the Adaptive turn on in November 2019 allowed ITS LLC to create a baseline for traffic operations to compare against active Adaptive system operation. ITS LLC also utilized NMS software to evaluate the network communications for speed, uptime, and reliability. Performance monitoring for the project is ongoing.
04/19 – 05/20	**LA 1256 (Ruth St) Adaptive Traffic Signal Corridor (Westlake) | Signal/ITS Design Engineer.** To create an adaptive traffic signal corridor along LA 1256, Clarke designed the communications network which would be responsible for handling all of the live traffic data for the corridor. For the adaptive corridor to function optimally, constant communication is required between the traffic signal and adaptive server at DOTD D07's TMC. Clarke allocated IP addresses for the devices and equipment at each signal along the corridor. He evaluated the path required for VLAN through an existing DOTD fiber optic ring for communication between the project site and DOTD D07 TMC. He performed wireless testing to evaluate whether 2Ghz or 5Ghz band frequencies would provide better performance along the corridor. He determined proper configuration for each network switch and wireless radio along the corridor. Clarke serves as Project Manager in addition to performing network design.

Firm	G.E.C. Inc.		
James "Jimmy" Wheeler *(MPR 9)* ITS CEI		Years of Relevant Experience with this Employer	16
		Years of Relevant Experience with Other Employer(s)	13
Degree(s) / Years / Specialization	N/A		
Active Registration Number / State / Expiration Date	N/A		
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities	**MPR 9 Role: ITS CEI.** *Jimmy has three decades of experience iand a wealth of electrical and ITS construction and implementation knowledge. He is the lead inspector for GEC on electrical, ITS, and associated construction projects and has experience with construction installation and operation including equipment maintenance, heavy equipment operation, installation of dynamic message signs and CCTV cameras with structures in both Louisiana and Texas, installation of bridge mounted conduit and junction boxes and underground conduit and pullboxes, installation of high mast lighting and roadway illumination, installation of electrical service points, installation of guard rail, installation of communication hub buildings, installation of fiber optic cable and splicing, traffic signal build out and commissioning, and setup and execution of lane closures. Jimmy has served as lead inspector on all ITS projects at GEC since 2006.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
05/08 – 10/13	**737-99-0799, BATON ROUGE TO NEW ORLEANS, ITS – TRAFFIC INCIDENT MANAGEMENT (TIM) PHASE I, ROUTE I-10-BONNET CARRÉ FLOODWAY, DESIGN BUILD PROJECT: Statewide, LA.** Lead Inspector: Jimmy was responsible for electrical inspection and reporting for this project. The project included Design and installation of ITS devices including ground and structure mounted Dynamic Message Signs (DMS), ground and structure mounted Closed Circuit Television Cameras (CCTV), structure mounted Traffic Detectors, underground and structure mounted conduit, power distribution, and wireless and fiber optic communications. Jimmy performed Quality Control inspection for the Design Build team.
06/10 – 08/11	**737-99-0604, BATON ROUGE TO LAFAYETTE, ITS – TRAFFIC INCIDENT MANAGEMENT (TIM) PHASE 2, ROUTES I-10, I-49, US 90, AND US 190, DESIGN BUILD PROJECT: Statewide, LA.** Lead Inspector: Jimmy was responsible for electrical inspection and reporting for this project. CE&I services for the installation of twenty four (24) CCTV, four (4) DMS detection, and wireless & fiber optic communications.
06/11 – 05/14	**H.006761, LADOTD RETAINER #4400000688, TRAFFIC INCIDENT MANAGEMENT (TIM) PHASE 3: Statewide, LA.** Lead Inspector: Jimmy was responsible for electrical inspection and reporting for this project. CE&I for the construction and integration of twelve (12) new DMS sites, forty (40) CCTV sites (new and existing), two (2) new hub sites, eleven (11) RVD sites (new and existing) and thirty (30) miles of new fiber optic network backbone elements.

10/14-01/17	**RETAINER NO 44-0688, H.006831 / BATON ROUGE ITS DEPLOYMENT PHASE 3: Statewide, LA.** Lead Inspector: JImmy was responsible for electrical inspection and reporting for this project. CE&I for five (5) new DMS sites, ten (10) new CCTV sites, one (1) new hub site, thirty (30) Bluetooth Vehicle Detectors (combined with new and existing sites) and five (5) miles of new fiber optic build-out, conduit, and associated pullboxes.
07/19-Present	**H.011670, I-10/LOYOLA INTERCHANGE IMPROVEMENTS: Jefferson Parish, LA.** Electrical Inspector: GEC, selected as the Owner Verification firm, is providing all necessary engineering & related services for Design-Build Construction Support Services for the administration of the Design-Build contract on behalf of LADOTD, along with managing the implementation of the Project's Construction Quality Assurance Program (CQAP). Jimmy performs electrical inspection services along with complete inspection of sound barrier walls, footings, columns, panels and painting. He performed complete re-builds of traffic signals on north and south Loyola including Louisiana's first DDI Intersection. He also provides inspection of all Electrical and traffic signals mounted to new ramps to airport terminal, including aesthetic lighting on ramps. He provides inspection of all bridge concrete painting.
05/15-Present	**H.009479.6 / WEST LAROSE VERTICAL LIFT SPAN BRIDGE REHABILITATION: Larose, LA.** Electrical Inspector: Jimmy provided electrical inspection for the project which included a new fender system construction, removal of the existing paint system and repainting, structural repairs and bolt replacement, and rehabilitation of the electrical and mechanical systems.
01/11-12/15	**LAKE PONTCHARTRAIN CAUSEWAY BASCULE CONTROL SYSTEM REPLACEMENT, GNOEC: St Tammany and Jefferson Parishes, LA.** Electrical Inspector: GEC designed a replacement control system to allow operator control of the bascule bridge system at the North Channel of the Lake Pontchartrain Causeway. Jimmy located and tested circuits inside existing cabinets for proper voltage and tested conductors. He performed daily inspection of control systems and replaced existing controls as needed. He provided inspection and installation of CCTV equipment above and under the Bascule and installed AC units for cabinets.
2019-Present	**RETAINER NO 44-4729; TO H.003003 / I-10: LA 328 TO I-49 JUCT: Lafayette and St Martin Parish, LA.** Lead Electrical Inspector: Presently JImmy is Lead Electrical Inspector for this project which includes full-depth replacement of the pavement within the existing lanes, widening the westbound and eastbound pavement surface, and installing concrete median protection. The project replaces the La 328 overpass and widens the overpasses and structures on Bayou Teche, Vermillion River, Louisiana Avc, Francis Coulee and La 176 (Moss St). Pavement striping, raised markers, and rumble strips would also be installed. He is coordinating all work at both weigh station with their WIM sites and provided inspection of all roadway lighting along with assisting with sub grade work and asphalt. He worked closely with the project engineer on closing documents and is a certified LADOTD concrete tester.



Firm	AECOM		
Augustin "Gus" Suteu, PE *(MPR 9)* ITS CEI		Years of Relevant Experience with this Employer	33
		Years of Relevant Experience with Other Employer(s)	6
Degree(s) / Years / Specialization	BS / 1984 / Electrical Engineering, Lawrence Technological University		
Active Registration Number / State / Expiration Date	PE #60766 / FL / 02/28/2023		
Year Registered	2004	Discipline	Electrical
Contract Role(s) / Brief Description of Responsibilities	**MPR 9. Role: ITS CEI.** *Gus will support the ITS/TSMO Implementation Team in ITS CEI. He has provided CEI services on ITS projects for the past 30 years. These projects include freeway management systems (e.g., CCTV, DMS, detectors, communications), traffic signal systems, bus rapid transit systems, fiber communication systems, and transit security systems.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
02/22 – Ongoing	**Miami Dade County Advanced Traffic Management System and Bus Rapid Transit, Miami Dade, FL.** Providing CEI services on a $160M ATMS project, Task Group 2 which entails the installation of vehicle video detection and cabinet equipment at 1,500 intersections. Providing project administration services on a $368M 20-mile Bus Rapid Transit project representing Miami Dade County Traffic Signal and Signs Department.
06/20 – 02/22	**Lead Inspector, Project Administrator, St Lucie County Advanced Traffic Management System, Phase 1, St Lucie County, FL.** 2022 FTBA BIC AWARD. Provided CEI services on this $6.4M ATMS project. Project consists of the installation of conduit infrastructure, fiber optic backbone cable, fiber optic drop cable installed into 45 existing traffic cabinets, upgrade NEMA TS1 traffic cabinets, traffic cabinet UPS units, Managed Field Ethernet Switches, Bluetooth, CCTV cameras, fiber pull boxes, splice vaults with splice enclosures, fiber splices, patch panels, multi-conductor cable, low voltage surge protection, firewalls and a Layer 3 switch. Responsible for overseeing all construction activities, review and tracking of all items installed in the field, directional bore logs, utility damages, deficiency list, RFIs, equipment model/serial numbers, warranties, weekly progress reports, and in house as-builts. Review of contractors as-builts, ITSFM documentation and RTVM. Participation in the fiber optic cable pre-install and post install OTDR testing, Stand-alone Tests, Subsystem Tests, System Tests, Operational Test, and integration of devices into D4 FDOT SunGuide, St. Lucie County and City of Ft. Pierce.
03/18 – 6/20	**Lead Inspector, Project Administrator, Computer Signal System Update Phase II (LAP), Lee County, FL.** Provided CEI services on this $8.5M federally funded ATMS project. Project consisted of integrating 110 intersections into Lee County's existing Traffic Management System. Installation of conduit infrastructure, SM fiber optic backbone cable, SM fiber drops into traffic cabinets, fiber splices, patch panels, fiber pull boxes, splice vaults with splice enclosures, incident management cameras, Econolite traffic cabinet/controller replacements on new Quazite bases, traffic cabinet UPS units, MFES, CCTV cameras mounted to traffic signal mast arms, Microwave Vehicle Detectors, bluetooth, electrical service, high and low voltage surge protection, multi-conductor cable, lightning protection, and pedestrian improvements. Responsible for overseeing all construction activities, review and tracking of directional bore logs, utility damages, lane closure requests, RFIs, RFMs, change orders, work orders, deficiency list, equipment model/serial numbers, warranties, and in house as-builts. Review of shop drawing submittals, test procedures, electrical services installed per NEC and local codes, lightning protection system installed per UL 96A, OTDR traces, contractors as-builts, ITSFM documentation and RTVM. Participation in the fiber optic pre-install and post install OTDR testing, Stand-alone Tests, Subsystem Tests, System Tests, and integration into Lee County Traffic Management System.

04/16 – 9/17	**Lead Inspector, Senior ITS Engineer, Section 5 826/836 Interchange CEI, FDOT District 6, Miami-Dade County, FL.** Participation in the Stand-alone Tests and Subsystem Tests for 18 Arterial Dynamic Message Signs (ADMS), 18 Dynamic Message Signs (DMS), 36 confirmation cameras and 40 Microwave Vehicle Detectors (MVDS) along the SR-826 and SR-836 corridor. Responsible for documenting a detailed deficiency list of all ITS devices. The project included reconstruction of both the SR 826/ Flagler Street and SR 836/NW 72nd Avenue interchanges. Estimated construction cost is $568M.
07/13 – 04/16	**Lead Inspector, Project Administrator, Design-Build Project for System-Wide Implementation of Dynamic Message Signs CEI, Miami-Dade Expressway Authority (MDX), Miami, FL.** Project Administrator for the deployment of Dynamic Message Signs (DMS) with CCTV confirmation cameras, Arterial Dynamic Message Signs (ADMS), electrical services, high and low voltage surge protection, lightning protection, and fiber optic cable backbone throughout the MDX roadway network. Responsible for overseeing all construction activities, review and providing comments for shop drawing submittals and test procedures. Field verified new electrical service installations complies with the NEC and local codes, and lightning protection was installed per UL 96A. Tracking of directional bore logs, utility damages, lane closure requests, RFIs, RFMs, deficiency list, equipment model/serial numbers, warranties, and in house as-builts.
04/12 - 05/13	**Lead Inspector, Senior ITS Engineer, ITS CEI for US-1 ITS Design-Build Deployment, Senior ITS Engineer, FL Senior ITS inspector for the CEI of the ITS deployment along US-1, I-395 and SR 826.** The US-1 design-build project included the installation of fiber optic communications, closed-circuit television cameras, microwave vehicle detectors, dynamic message signs, and communication hub buildings along 17 miles of US-1. Responsible for confirming power requirements, lightning protection, field operations, testing and integration efforts.
05/11 - 12.11	**Electrical Designer, LYNX Security System Closed-Circuit Television Expansion, Central Florida Regional Transportation Authority, Orlando, FL.** Electrical designer for a CCTV security system expansion project for the downtown Orlando LYNX LYMMO bus system. Design included placement of CCTV cameras at existing covered bus stops, placement of CCTV cameras on the existing bus stop shelters to view the LYNX LYMMO bus lanes, placement of wireless access points along the bus route to allow the LYNX control center to view live video feed from within the LYNX buses, placement of CCTV cameras within the city of Orlando parking garage, production of the technical specification package and cost analysis. All CCTV video feeds were transmitted back to the LYNX central office thru a fiber optic infrastructure.
04/11 – 08/11	**Electrical Designer, Transportation System Management and Operation, General Consultant Services, FDOT District Four, Broward County, FL.** This project included the evaluation and OTDR testing of the Broward County Traffic Engineering Division existing fiber optic cable infrastructure in support of FDOT's Central Broward Corridor Advanced Transportation Management System (ATMS) project. Responsible for assisting BCTED staff in the testing of the fiber optic cables, reviewing the optical time domain reflectometer (OTDR) traces, identifying deficiencies, troubleshooting the identified deficiencies, and retesting the identified deficiencies to bring all the fiber optic cable identified for the ATMS project within FDOT specifications. Project results included OTDR test reports and a summary spreadsheet which contains all final OTDR test results.
09/08 - 03/10	**Lead Inspector, Project Administrator, I-95 Northern Counties ITS CEI, Martin, FDOT District Four, St.** Lucie and Indian River Counties, FL. Provided ITS CEI services for the deployment ITS system that included installation of SM Fiber Optic Cable backbone, 10 Gigabit Ethernet Backbone Network (connected to FTE for redundancy), Gigabit Ethernet Access Network. Hub shelters, electrical services, 3 CCTV Cameras with lowering devices mounted on 60-foot concrete spun poles, Dynamic Message Signs , Microwave Vehicle Detection System, Road Weather Information Systems, Wireless Voice over IP (VoIP) Network. Tracking and review of plow logs, utility damages, lane closure requests, RFIs, RFM's, change orders, work orders, deficiency list, equipment model/serial numbers, warranties, and in house as-builts. Review of contractors as-builts, OTDR traces, and RTVM. Participation in fiber optic cable pre-install and post install OTDR testing, DMS sign pre-installation tests, Stand-alone Tests, Subsystem Tests, System Tests, and integration into FDOT D4 RTMC at Commercial Blvd.

Staff Experience
Additional Staff - Alphabetical

Firm	AECOM		
Paul Avery Emerging Technologies		Years of Relevant Experience with this Employer	4
		Years of Relevant Experience with Other Employer(s)	21
Degree(s) / Years / Specialization	MS / 2004 / Mechanical Engineering BS / 1998 / Mechanical Engineering		
Active Registration Number / State / Expiration Date	NA		
Year Registered	NA	Discipline	NA
Contract Role(s) / Brief Description of Responsibilities	**Role: Emerging Technologies Lead.** *Paul will provide his expertise in emerging technologies including connected vehicle (CV) and automated vehicles (AV). He developed AECOM's AV Readi tool which he used in evaluating the CV/AV readiness of several highway corridors in multiple states. He has five patents related to CV/AV and has prepared TSMO/CV Strategic Plans.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
02/20 - 08/20	**Texas Department of Transportation – TSMO, Austin, TX.** Connected Roadway Classification System (CRCS) proof-of-concept analysis for IH-30 between Dallas and Fort. Worth, TX. This project developed a novel method and tool for performing CRCS analyses, enabling an objective evaluation for AV/CV readiness of a roadway or roadway network.
02/20 - 08/20	**Texas Department of Transportation – TSMO, Austin, TX.** Integration of the TxDOT statewide Cooperative Automated Transportation (CAT) Strategic Plan and its 35 individual strategies into the statewide TSMO Strategic Plan.
01/14 - 12/16	**Project Manager | Wrong Way Driver Detection Using Connected Vehicle Technology | SwRI (TTI/TxDOT), San Antonio, TX.** Served as project manager for this project, which developed a wrong way driver detection (WWDD) system that utilized connected vehicle technologies. This project was performed for the Texas A&M Transportation Institute (TTI), and was funded by TxDOT. A Concept of Operations was developed describing how CV technology could be utilized to detect WWDs and quickly alert other CVs in the area, as well as the relevant traffic management center. A technology demonstration was then developed and performed on the TTI RELLIS campus. Served as the technology architect for the software solution to connected vehicle WWD detection. (prior to AECOM)
02/22 - 03/23	**Maryland Department of Transportation – AV Freight Vehicle Feasibility.** Deputy project manager and AV technical lead assessing the feasibility of AV freight vehicle deployment throughout 900 miles of MD roadways.
11/22 - 12/23	**NDA AV Freight Client – AV Freight Vehicle Route Alternatives Analysis.** Project manager and AV technical lead assessing 23 alternative routes for an AV freight vehicle.
06/21 - 06/23	**Ohio Department of Transportation – Automated Vehicle Pooled Fund Study Strategic Roadmap for Accelerated Adoption of Automated Vehicles.** Deputy project manager and subject matter expert on vehicle automation. Leading the development of a State of the Practice (SOP) report on the state of the AV industry across multiple market sectors, and the role of IOOs in accelerating the adoption of AV technology.

06/21 - 06/23	**Achieving Efficiencies within ODOT with the Event Streaming Platform (ODOT), OH (Co-PI).** Co-PI for the development of Event Streaming Platform (ESP) use cases, statements of work and an implementation roadmap. The ESP has a diverse set of stakeholders with an interest in using an integrated, data-rich environment for the automation of work tasks as well as data visualization and analytics.
11/20 - 04/21	**RUC West – Subject Matter Expert Support, Austin, TX.** Project Manager and an SME in vehicle automation and emerging technologies. Prepared a white paper and presentation on the application of distributed ledger technologies (DLT) to road use charging (RUC) and tolling.
01/21 - 06/21	**Pennsylvania Department of Transportation – Automated Bus Platooning Study, Austin, TX.** Serving as the Deputy Project Manager as well as a subject matter expert for bus automation and platooning technologies. This study will inform PennDOT on the viability of inter-city automated bus platooning deployment. Integrating Python scripts with GIS tools for data analytics and visualizations for automated bus platooning in Pennsylvania.
06/18 - 02/19	**Ohio Department of Transportation, Connected Vehicle Systems Engineering Analysis (CV-SEA), OH.** Provided location and performance analysis for connected vehicle roadside devices along a corridor that experiences significant lake-effect winter driving hazards.
02/06 - 12/10	**Technical Lead | Mobile Robotics Technology Initiative (MARTI) | SwRI, San Antonio, TX.** This project was the largest internally-funded project in Southwest Research Institute's history, and was staffed by a small group of hand-selected Institute staff based on their individual expertise. Mr. Avery developed novel software algorithms using C++ for a full-sized fully-automated vehicle, in the areas of perception, behavior architecture, and cooperative maneuvers. The systems were demonstrated in 2008 at the ITS World Congress in New York City, and subsequent refinements of the system were demonstrated on additional vehicle types from 2009 to 2012, for both commercial and Government clients. (prior to AECOM)
10/18 - 09/19	**Texas Department of Transportation - Austin District, I-35 Mobility Capital Express GEC Services, Austin, TX.** Provided technical analysis and program management support in the deployment of a comprehensive dashboard for use in historical data analysis, and predictive scenario planning, for work zone lane closure traffic impacts. Developed a system architecture to represent data pipelines among stakeholders, and critical points of data warehousing, processing, and display.
11/18 - Ongoing	**AECOM Automated Bus Consortium, Austin, TX.** Providing subject matter expertise on automated vehicle technologies and architectures, including sensors, computing hardware and software, route and path planning considerations, functional safety requirements, and vehicle behavior architectures.
06/19 - 10/19	**Deputy Project Manager, Cooperative Automated Transportation (CAT) Plan Development.** Serving as the deputy project manager and technical lead on a project for the Texas Department of Transportation to develop CAT strategic and program plans. This project will help guide TxDOT in the implementation of programs, projects, and processes for integrating emerging technologies like connected and automated vehicles into the transportation system.
10/18 - 09/19	**Texas Department of Transportation - I-35 Corridor Analysis, Austin, TX.** Team lead to develop data analytics dashboard using various transportation district, and statewide data sources, with the purpose of providing up to date project status and funding needs to TxDOT leadership. Integrated 3rd-party custom analytics tools with in-house software components.

Firm	AECOM		
Chris Chaffee, PE, PTOE TSMO Project Implementation		Years of Relevant Experience with this Employer	9
		Years of Relevant Experience with Other Employer(s)	3
Degree(s) / Years / Specialization	MS/2011/ Advanced Infrastructure Systems, Carnegie Mellon University BS/2010/Engineering and Public Policy, Carnegie Mellon University BS/2010/Civil and Environmental Engineering, Carnegie Mellon University		
Active Registration Number / State / Expiration Date	PE.51507 / MA / 06/30/2024 | PE.16606 / ME / 12/31/2023 | PE.12653 / RI / 06/30/2023 | PE.14998 / NH/10/31/2023 | PTOE 4186		
Year Registered	2014	Discipline	Civil
Contract Role(s) / Brief Description of Responsibilities	**Role. TSMO Project Implementation.** *Chris will support the ITS/TSMO Implementation Team in designing TSMO projects. His experience covers all phases of transportation technology projects from planning and systems development through operations and maintenance. He prepared the NHDOT TSMO Strategic Plan, then designed many of the projects recommended.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
01/18 - Ongoing	**MassDOT ITS Programs, ITS On-Call Contract, Boston, MA.** Project Manager for ITS task-order assignments including: **ATMS Software (2020 – Present).** Owner's representative, prepared the concept of operations and system requirements for the statewide ATMS software including highway and tunnel systems. Prepared a Request for Information (RFI) to obtain industry feedback and evaluated vendor feedback. Developing a Request for Proposals (RFP) for ATMS software based on stakeholder discussions, RFI responses, and industry best practices. **ITS Design and Construction (2018 – Present).** Designed over 40 sites including CCTV cameras, variable message signs (VMS), road weather information systems (RWIS), traffic counting station (TCS), and Bluetooth readers. Designs included special provision, engineer's estimate, construction drawings, systems engineering documents, sample test plans, and environmental documents. Performing construction services including site visits, furnishing advise, submittal reviews, RFI responses, and attending construction meetings. **GoTime System Support (2019 – Present).** Acting as owners representative, supported vendor procurement by reviewing the RFP and evaluating proposals including the ability to meet system requirements. Overseeing the statewide Bluetooth travel time "GoTime" System Operator, reviewing all software design, testing, and implementation deliverables. Conducting site visits to troubleshoot problems at various sites, preparing construction documents for their repairs, and overseeing the contractor making the repairs.
01/20 - 12/20	**Southwestern Pennsylvania Commission, ITS4US Grant, Pittsburgh, PA.** Subject matter expert responsible for emerging transit technologies contributing to the USDOT ITS4US Grant for the Southwestern Pennsylvania Commission. The grant required technical analysis and a proposed concept following the complete trip framework: utilizing effective technologies and data-backed operations to aid underserved populations. The grant application included an enhanced bus network, key mobility hubs, and trip planning upgrades throughout the Monongahela Valley.

01/16 - Ongoing	**NHDOT TSMO Bureau, ITS On-Call Contract, Concord, NH.** Project Manager for ITS task-order assignments including: **Traffic Signal Connectivity (2018 – 2020).** Created a Concept of Operations for Traffic Signal Connectivity, determining a proposed system for linking traffic signals with the Transportation Management Center (TMC) and interface with maintenance operations. The concept would allow for remote control and troubleshooting of traffic signals, drastically reducing time spent on operations and maintenance efforts. **Strategic Plan (2018 - 2019).** Updated the 5-year ITS Strategic Plan (2020 – 2024) including project development, work plans, and cost estimating. Created a new section for Emerging Technologies. **Corridor Master Plans (2018 – 2020).** Developed the ITS Master Deployment Plans for the I-89 and Route 101 corridors. Work included analyzing traffic data and site conditions to inform the planned device types, site locations, and communication diagrams. Results included cost estimates and site prioritization.
06/21 - Ongoing	**NHDOT | MaineDOT | Maine Turnpike Authority, I-95 Part Time Shoulder User System Design-Build, Portsmouth, NH – York, ME.** Project Manager and Engineer of Record for this innovative solution that will allow vehicles to travel on the shoulder lane during peak travel periods. The system involves CCTV cameras, lane use signal and blank-out sign assemblies, a flashing beacon warning system, microwave and fiber communications, software systems integration, and more. Leading a design team including environmental, civil, structural, traffic, communication, and ITS disciplines to develop the construction documents. Working closely with the prime contractor on constructability issues and effective client engagement.
06/18 - Ongoing	**MassDOT, Chelsea Street Bridge Notification System, Chelsea & East Boston, MA.** Project Manager working closely with the Secretary's office to develop improvements to the Chelsea Street Bridge, a vertical lift bridge causing significant congestion to roadway users. Conducted a series of stakeholder workshops with municipalities, oil terminals, local Pilots, the MBTA, Massport, Department of Energy, Coast Guard, and others. Wrote and submitted a regulation change proposal to the Coast Guard requesting a reduced lift height. Proposal included detailed bridge lift data analysis. Implementing and evaluating a pilot program for advanced notification where predicted lift times are communicated to roadway users via Twitter and portable variable message signs. Prepared construction documents for a permanent notification system including variable message signs, notification lights, and an application programming interface (API). Currently performing construction services.
06/22 - Ongoing	**NHDOT, Electric Vehicle Charging Plan.** Project Manager responsible for developing New Hampshire's Electric Vehicle (EV) Charging Plan for the Joint Office of Energy and Transportation. Developed surveys, coordinated with stakeholders, planned locations for future EV charging station sites and upgrades to existing sites, and fulfilled all requirements of the National Electric Vehicle Infrastructure (NEVI) guidance. The plan is tied to $17M of federal funding earmarked for NH. The plan was accepted by the Joint Office of Energy and Transportation in September 2022.
06/11 - 11/17	**Illinois State Toll Highway Authority, General Engineering Consulting - Technical Services, Various Locations, Illinois.** Designed the Illinois Tollway intelligent transportation system asset database consisting of 11 tables for each device type, site information, and inspection information. Created an inspection form using VBA to accurately and efficiently populate the database in the field and link each site and device with its corresponding photographs. Built a photo-viewer tool to quickly look up photographs by roadway, site, or device type directly from the database. Generated summary statistical information and graphics that automatically update with new database records. The Tollway was pleased with the results and has requested two additional databases to record in-depth uninterrupted power supply inspection and closed-circuit television incidents.

Firm	AECOM		
Derek Chisholm AICP, ENV SP, LEED GA Active Transportation		Years of Relevant Experience with this Employer	8
		Years of Relevant Experience with Other Employer(s)	23
Degree(s) / Years / Specialization	MPA / 1997 / Public Affairs BS / 1994 / Organizational Management		
Active Registration Number / State / Expiration Date	American Institute of Certified Planners (AICP) 018309/12/31/2023 | Leadership in Energy and Environmental Design, Green Associate; (LEED GA) | Envision Sustainable Professional (ENV SP) | LADOTD Traffic Process and Report Parts 1, 2 and 3 (2021)		
Year Registered	n/a	Discipline	n/a
Contract Role(s) / Brief Description of Responsibilities	**Role: Active Transportation.** *Derek is a senior-level project manager and planner with experience in multi-modal transportation projects, bike and pedestrian design, parking and curb use, autonomous vehicles, and more.. Derek is a contributing author for the ASCE book Engineering for Sustainable Communities, and Bicycle Urbanism. Derek is AECOM's North America's Complete Streets Practice Lead.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
03/19 - 10/21	**Lakeshore Drive Road Diet and Cycle Track, New Orleans, LA.** Derek led a team to study pedestrian safety along this prominent Lakeshore roadway in New Orleans. The plan and recommendations were wholeheartedly adopted, and the project is now constructed and include raised speed-table pedestrian crossings with pedestrian refuges, and a protected, two-way cycle track.
04/08 - 07/12	**Seattle Waterfront Promenade and Overlook Walk – Seattle, WA.** Following on his NEPA work removing the Alaska Way Viaduct from the Seattle waterfront, Derek assisted with the completion of a world-class promenade along the waterfront
05/17 - 08/19	**FHWA Synthesis Report on Automated Vehicles and NEPA, Nationwide.** Derek was the project manager for this national study of the manner in which automated vehicles are being incoorpate in NEPA analysis. The team interviewed various subject matter experts and dozens of DOT leaders who were working on AV deployment projects and NEPA studies.
Ongoing	**Micromobility and Ebike Policy.** Derek has taught workshops and assisted numerous local and regional agencies, and State Departments of Transportation in developing policy related to the use of electric bikes in various roadway, bike, and pedestrian facilities.
09/20–Ongoing	**Feasibility Study and Report / TEPR, College Drive, City of Baton Rouge / Parish of East Baton Rouge, Baton Rouge, LA.** CSS Task Lead for the Design Study for the completion of roadway improvement on College Drive and its vicinity between Perkins Road and Bawell Street inclusive of the interchange with I–10. Derek is assisting with GI, and Complete Streets.
09/15–04/17	**Multimodal Transportation and Traffic & Safety Analysis, and Transportation Plan (NODTA), City of New Orleans Department of Public Works, New Orleans, LA.** Lead Planner for multimodal transportation analysis and plan for the New Orleans Downtown and historic French Quarter neighborhood. Dozens on bicycle, pedestrian and vehicular alternatives were developed and evaluated and selected improvements were programmed, based on the integrated modal-access analysis, including pedestrian LOS modeling around transit stops

11/17–04/19	**S.P. No. H.001779.2, Jimmie Davis Bridge Supplemental EA, LADOTD, Bossier and Caddo Parishes, LA.** Derek has served as a Senior Advisor on this project, providing quality control review and assisting on complex issues related to bicycling connectivity, Section 4(f) and the final FHWA comments on the preliminary, draft Supplemental Environmental Assessment.
10/16–Ongoing	**S.P. No. H.004273.5, I–49 Lafayette Connector Project, LADOTD, Lafayette, LA.** Derek serves as the bridge between the public and stakeholder involvement of the CSS process and the environmental team. Derek set up the comment management system and is facilitating the current CSS and the Section 106 consultations.
03/16-05/18	**US Air Force, Barksdale Air Force Base, IMR & Environmental Assessment, Bossier City, LA.** Environmental Assessment. To improve traffic congestion, safety/national security, Derek assisted with the Environmental Assessment of this improvement, and am MOU and strategy for expeditious completion of the IMR process. The US Air Force is designing and constructing the portion for which AECOM prepared an EA.
03/14-09/16	**Lafourche Airport Connector Road EA, Port Fourchon, LA.** EA Design. Lafourche Parish and the Port partnered to provide this important new connection between the Port's upland and coastal facilities. The DOTD had not provided funding for the EA but was collaborating with the Parish and Port on this effort. Derek lead the development of the draft preliminary EA, design, and the public and agency coordination tasks for this project. AECOM developed a TIGER Grant application as well.
05/10-08/23	**ODOT Clackamas River-Springwater Road Bridge.** Clackamas, OR. Public Engagement. This project developed and evaluated alternative river crossings in the core of Carver, Oregon. Derek led the public involvement discussions and aspects of the alternatives analysis. He also led the NEPA process. Issues included direct impacts to many businesses, a low-income manufactured home park, and historic resources.
03/06–02/13	**Columbia River Crossing, Portland, OR.** This project included a major bridge over a navigable waterway with multi–modal improvements between Portland Oregon and Vancouver Washington, including the extension of the Portland Light Rail Transit system. As the Consultant Environmental Team Manager, Derek worked with the design teams and others to prepare environmental documentation, plan amendments, and numerous impact analyses.
03/14–09/16	**Lakeshore Drive Safety Study and Reconfiguration, New Orleans, LA.** The Orleans Levee District was concerned about pedestrian safety along the popular tourist and neighborhood corridor. Derek managed the safety study and developed the roadway reconfiguration concept. The new design reduces the four-lane road to two lanes with center turn pockets. Pedestrian refugees, raised speed-table crossings and RRFBs have been constructed.

Firm	Intelligent Transportation Systems		
Christoper Dodt Agency Coordination		Years of Relevant Experience with this Employer	<1
		Years of Relevant Experience with Other Employer(s)	20
Degree(s) / Years / Specialization	N/A		
Active Registration Number / State / Expiration Date	N/A		
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities	**Role: Agency Coordination.** *Chris has over ten years of experience with Transportation Management Systems and Operations (TSMO) components, namely with the management and operations of Traffic Management Centers (TMCs). Over those ten years of working in TMC Operations, Chris was responsible for the full day-to-day operations of the centers including coordination with municipalities, law enforcement, EMS, fire, and various LADOTD sections and districts. Chris has achieved a variety of specialty certifications related to TSMO as shown in Section 20. Chris' extensive experience in with LADOTD TMC operations and ITS Maintenance Engineering will give him a keen advantage as part of the TSMO contract team.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
01/23 - present	**DOTD ITS Maintenance (44-7102.** 44-16811), Statewide Louisiana | Project Manager. 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, RVD sites, ramp meter sites as well as DMS sites. His skills include device troubleshooting, communication and network troubleshooting, parts replacement, site cleaning, insect extermination, traffic control setup, as well as coordinating with law enforcement, TMC operations staff, and DOTD. Chris manages the firm's ME&I technicians including scheduling, training, and QA/QC of work.
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 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 conduct 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.
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. He investigated felony and misdemeanor criminal offenses, performed traffic control services, and investigated automobile crashes. In the course of his duties, he obtained statements, conducted surveillance, searched for and collected evidence, wrote detailed investigative and arrest reports, issued summonses, made arrests, and executed search and arrest warrants. Chris conducted DWI enforcement patrols and performed a variety of specialized duties during hurricanes and other disasters or emergencies. He served as the Armorer and Field Training Officer (FTO) for Squad of 18 officers. As a Correctional Peace Officer, Chris operated various criminal history databases and video surveillance equipment setups, provide 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 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. 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.

Firm	Vectura Consulting Services, LLC		
Sheelagh Brin Ferlito, PE, PTOE Active Transportation		Years of Relevant Experience with this Employer	7
		Years of Relevant Experience with Other Employer(s)	27
Degree(s) / Years / Specialization	BS / 1988 / Civil Engineering		
Active Registration Number / State / Expiration Date	PE.0025383 / LA 9/30/2023		
Year Registered	1993	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**Role: Active Transportation.** *Brin's three decades of experience with Louisiana active transportation, combined with her traffic signal analysis and design expertise, will benefit work under this contract that involves bicycle and pedestrian aspects.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
07/21 - current	**H.007160 - EBR Computerized Traffic Signal, Phase VB, Baton Rouge, LA.** Brin is the task leaders for Vectura for the Construction Engineering and Inspection of 24 traffic signals. Brin oversaw the review of signal mast arm shop drawings to assist the City-Parish of Baton Rouge in accepting the manufactured poles. Brin and Reece, with the DOTD, City-Parish and the Contractor conducted field visits to confirm pole foundation locations.
07/19 – current	**MOVEBR New Capacity Projects Program Management, Baton Rouge, LA.** Brin is the lead traffic engineer for entire the New Capacity Projects program management team. All traffic engineering scope of services, traffic / speed data collection, traffic design studies, safety studies, and traffic signal design plans are reviewed by Brin. She is in constant communication with the Traffic Engineering staff of DOTD and EBR Traffic Engineering Department. She understands the current requirements for all aspects of traffic engineering projects.
07/19 – current	**H.004791 DOTD Belle Chasse Bridge & Tunnel Replacement PPP Belle Chasse, LA.** Brin is the project manager for the temporary and permanent traffic signal plans for the intersections of LA 23 at Burmaster St and at Engineers Rd. She based her traffic signal plans on design year volumes that were developed using growth rates from the New Orleans Regional Planning Commission Travel Demand Model. This project is the first ever Public-Private-Partnership performed by DOTD.
09/20 – 12/21	**H.010960.5 LA 30 Roundabouts at Tanger I-10 Ascension Parish, LA.** Brin is the project manager for the design of temporary traffic signal plans that will be implemented during the roundabout construction along LA 30 in Gonzales, LA. The project involves replacing three existing signalized intersections with multilane roundabouts along LA 30 at I-10 Interchange ramps and at the Tanger Boulevard. Vectura also developed signal timing plans for each phase of the construction to maintain progression along LA 30.
07/18 – 04/19	**LA 1 Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Design West Baton Rouge Parish, Addis, LA.** Brin developed a Pedestrian Crosswalk Study and Traffic Signal Construction Plans for the intersection of LA 1 at LA 990 in Addis, LA. The study was based on DOTD Traffic Engineering Manual Crosswalk Guidelines followed by traffic signal design plans based on DOTD requirements. The study included traffic and pedestrian traffic data collection, a speed study, crash analyses, intersection analyses and progression analyses. The signal plans included pedestrian signal equipment, signal timing parameter calculations, crosswalk striping, signs, DOTD pay items, estimated quantities, and construction cost. Brin also assisted with the Parish with the DOTD Permit Request for Intersection Control Devices on a State Right of Way.

09/17-04/18	**US 11 at US 190 Bus (Fremaux Ave) Pedestrian Crosswalk Study and Traffic / Pedestrian Signal Equipment Design, Slidell, LA.** Brin developed a formal traffic study for a proposed crosswalk with pedestrian traffic signal equipment and pedestrian clearance timings based on DOTD requirements. Brin assisted with vehicle and pedestrian data collection, spot speed study, analyzed 3-year intersection crash data and developed signal timing for pedestrians to cross the street. From the design study, a set of Traffic Signal Modification Plans were developed to implement the recommended alternative.
08/15-05/17	**Enhancing Guidance for Evacuation Time Estimate Studies (Nuclear Regulatory Commission, Rockville, MD.** Brin conducted an applied research study of U.S. Nuclear Regulatory Commission guidance for developing evacuation time estimate studies and produced a technical basis for revision of NUREG/CR-7002 "Criteria for Development of Evacuation Time Estimate Studies" in support of the 2020 update of ETEs. Specifically, Brin was the lead VISSIM modeler for the "large" population models, which consisted of a 20-mile radius model. The VISSIM model input included traffic volumes distributed over 8 hours, highway and intersection lane geometry using links and connectors, conflict areas, traffic signal and stop control and speed. Brin also developed Dynamic Traffic Assignment code to simulate that fastest route out of the evacuated zone.
04/14 – 12/14	**H.002301 Signal Design for N Sherwood Forest Drive Widening Project, Baton Rouge, LA.** As the project engineer, Brin was in responsible charge for data collection and design for three signalized intersections as part of a road widening project as per EBR DPW and DOTD requirements. Ms. Ferlito developed the traffic signal equipment, signal timing and communication construction plans, special provision specifications, quantities, and cost estimate. She also performed tasks to develop the striping plans and sequence of construction plans which included temporary signal equipment placement due to lane shifts during construction.
07/12-03/14	**EBR 03-TS-CI-0026 CE&I for EBR Traffic Signal Systems Jefferson Highway Construction, Baton Rouge, LA.** Brin was the Project Resident Engineer on behalf of EBR for performing CE&I services for the construction of 11 traffic signals. She maintained records of the contractor's daily operations, coordinated significant events that affected construction progress including utility issues, reviewed shop drawings, conducted monthly progress meetings, recorded daily installed quantities, developed change orders and monthly contractor pay estimates. She also coordinated with DOTD ITS division for fiber splicing into interstate I-12 fiber backbone and ATM / EOC building. She processed all monthly tasks in EBR formats as well as well as all items on the EBR project closeout checklist.
07/08-09/09	**SPN 013-05-0043 CE&I for EBR Traffic Signal Systems Phase IV Construction, Baton Rouge, LA.** Brin was the Project Resident Engineer for DOTD and EBR to perform CE&I services for the construction of 21 traffic signals. She developed the project Sample Plan, maintained records of the contractor's daily operations, coordinated significant events that affected construction progress including utility issues, reviewed shop drawings, conducted monthly progress meetings, recorded daily installed quantities, coordinated concrete sampling for DOTD Materials Lab, developed change orders and monthly contractor pay estimates. She also coordinated with DOTD ITS division for fiber splicing into Airline Highway fiber backbone and ATM / EOC building. She processed all monthly tasks electronically in DOTD Site Manager and in EBR required formats as well as all items on the DOTD Project Closeout Checklist including the 2059 Report.
09/13 – 04/14	**SP 700-99-0477 Jefferson Hwy Signal Design, Baton Rouge, LA.** Brin designed traffic signal plans for 11 intersections along Jefferson Highway between College Drive and the I-12 On Ramp in Baton Rouge. Design included traffic data collection, traffic signal layout, fiber interconnect layout, fiber splicing diagrams, pedestrian crosswalk layout, and sign layout. Design also included traffic signal synchronization signal timing and pedestrian signal timing. She prepared estimated quantities, preliminary and final signal construction plans and specifications.

Firm	G.E.C. Inc.		
Reagan "Sean" Johnson ITS CEI		Years of Relevant Experience with this Employer	14
		Years of Relevant Experience with Other Employer(s)	10
Degree(s) / Years / Specialization	AA / 1987 / Computer Science		
Active Registration Number / State / Expiration Date	N/A		
Year Registered	N/A	Discipline	N/A
Contract Role(s) / Brief Description of Responsibilities	**Role: ITS CEI.** *Sean has 30+ years of experience in computing with skills in UNIX, Linux, and Windows 9xx/ NT/2K/XP/server. In addition, he possesses experience with a wide variety of information systems ranging from routing and switching, optical network design, Ethernet network design and management, CCTV video network design and configuration, and point-to-point and point-to-multipoint WAN connectivity. He is well versed in fiber optic cable outside and inside plant design and handling practices. This includes OTDR analysis, optical budget calculation, cable specification, termination, and selective splicing methods. Sean has expansive background in design, implementation, integration, and construction inspection.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
01/11-12/15	**LAKE PONTCHARTRAIN CAUSEWAY BASCULE CONTROL SYSTEM REPLACEMENT, GNOEC: St Tammany and Jefferson Parishes, LA.** Electrical Inspector: GEC designed a replacement control system to allow operator control of the bascule bridge system at the North Channel of the Lake Pontchartrain Causeway. Sean performed inspection of the installation of new electrical components, PLC, operators control console and roadway lighting systems as well as the testing of these systems to assure that they met the requirements and specifications.
08/17-04/18	**RETAINER NO 44-1634 – RETAINER CONTRACT FOR INTELLIGENT TRANSPORTATION SYSTEMS (ITS) STATEWIDE: SP NO H.011503 – I-10 TWIN SPANS ITS: Orleans and St Tammany Parishes, LA.** Electrical Inspector: The project consisted of construction and integration of one (1) new DMS site, four (4) new CCTV sites, bridge mounted CCTV platforms, and integration into existing fiber optic backbone including new and existing conduit and associated pullboxes.
10/15-08/16	**RETAINER NO 44-5410 – PAINTING INSPECTION AND ENVIRONMENTAL MONITORING STATEWIDE: SP NO H.000792 – DISTRICT 08 BRIDGES (FIVE LOCATIONS): Avoyelles, Rapides, Sabine, and Vernon Parishes, LA.** On-Site Environmental Monitor: Sean collected pre-project soil samples; conducted air quality monitoring for TSP-Lead during construction; conducted visual assessments of contractor air emissions; observed contractor sample collection; ensured compliance with specifications during hazardous waste and waste water collection, storage, disposal/discharge; inspected contractor compliance with worker training and safety requirements; documented waste shipments and water discharges; filed daily reports; collected post-project soil samples.

09/15-11/16	**RETAINER NO 44-5410 – PAINTING INSPECTION AND ENVIRONMENTAL MONITORING STATEWIDE: SP NO H.003244 – DISTRICT 04 BRIDGES (I-20 BRIDGE AT SPRING STREET): Bossier, Caddo, DeSoto, and Webster Parishes, LA.** On-Site Environmental Monitor. Sean collected pre-project soil samples; conducted air quality monitoring for TSP-Lead during construction; conducted visual assessments of contractor air emissions; observed contractor sample collection; ensured compliance with specifications during hazardous waste and waste water collection, storage, disposal/discharge; inspected contractor compliance with worker training and safety requirements; documented waste shipments and water discharges; filed daily reports; collected post- project soil samples.
04/14-02/16	**RETAINER NO 44-3420 – CONSTRUCTION ENGINEERING AND PAINTING INSPECTION AND ENVIRONMENTAL MONITORING STATEWIDE: SP NO H.009480 – I-20 OUACHITA RIVER BRIDGE: Ouachita Parish, LA.** On-Site Environmental Monitor: Sean collected pre-project soil samples; conducted air quality monitoring for TSP-Lead during construction; conducted visual assessments of contractor air emissions; observed contractor sample collection; ensured compliance with specifications during hazardous waste and waste water collection, storage, disposal/discharge; inspected contractor compliance with worker training and safety requirements; documented waste shipments and water discharges; filed daily reports; collected post-project soil samples.
06/14-03/16	**RETAINER NO 44-1765 – CONSTRUCTION ENGINEERING AND PAINTING INSPECTION AND ENVIRONMENTAL MONITORING STATEWIDE: SP NO H009487 – LA 1 ATCHAFALAYA RIVER BRIDGE (SIMMESPORT): Avoyelles Parish, LA.** On-Site Environmental Monitor: Sean collected pre-project soil samples; conducted air quality monitoring for TSP-Lead during construction; conducted visual assessments of contractor air emissions; observed contractor sample collection; ensured compliance with specifications during hazardous waste and waste water collection, storage, disposal/discharge; inspected contractor compliance with worker training and safety requirements; documented waste shipments and water discharges; filed daily reports; collected post-project soil samples.
01/14-11/15	**RETAINER NO 44-3420 – CONSTRUCTION ENGINEERING AND PAINTING INSPECTION AND ENVIRONMENTAL MONITORING STATEWIDE: SP NO H.009104 – LA 70 MISSISSIPPI RIVER BRIDGE PHASE 2 (MAIN SPAN): St James Parish, LA.** On-Site Environmental Monitor: Sean collected pre-project soil samples; conducted air quality monitoring for TSP-Lead during construction; conducted visual assessments of contractor air emissions; observed contractor sample collection; ensured compliance with specifications during hazardous waste and waste water collection, storage, disposal/discharge; inspected contractor compliance with worker training and safety requirements; documented waste shipments and water discharges; filed daily reports; collected post-project soil samples.
09/10-12/13	**H.006761 / ITS-TRAFFIC INCIDENT MANAGEMENT (TIM-PHASE 3), ROUTES I-10, I-110, I-12, AND US 61, DESIGN BUILD PROJECT: Baton Rouge, LA.** ITS Technician – Sean responsibility included CE&I for the construction and integration of 12 new DMS sites, 40 CCTV sites (new and existing), 2 new hub sites, 11 RVD sites (new and existing), and fiber optic network backbone elements.
06/10-08/11	**737-99-0604 / BATON ROUGE TO LAFAYETTE, ITS – TRAFFIC INCIDENT MANAGEMENT (TIM) PHASE 2, ROUTES I-10, I-49, US 90, AND US 190, DESIGN BUILD PROJECT: Baton Rouge, LA.** ITS Technician – Sean was responsible for CE&I and plan/ submittal review services.
05/08-06/14	**737-99-0799 / BATON ROUGE TO NEW ORLEANS, ITS – TRAFFIC INCIDENT MANAGEMENT (TIM) PHASE I, ROUE I-10 – BONNET CARRE FLOODWAY, DESIGN BUILD PROJECT: Baton Rouge, LA.** ITS Technician - Sean was responsible for CE&I and plan/submittal review services.
07/16-Present	**H.012381 / FIBER OPTIC MAPPING AND MANAGEMENT: LA.** Inspector: Sean performed testing and cataloging of the installed DOTD fiber optics systems. Locations include Hammond, Covington, Slidell, Shreveport, Houma, and Baton Rouge.

Firm	AECOM		
Brian Keeler System Requirements		Years of Relevant Experience with this Employer	24
		Years of Relevant Experience with Other Employer(s)	20
Degree(s) / Years / Specialization	BS / 1979 / Quantitative Business Analysis		
Active Registration Number / State / Expiration Date	NA		
Year Registered	NA	Discipline	NA
Contract Role(s) / Brief Description of Responsibilities	**Role: System Requirements.** *Brian will be responsible for developing system requirements for TSMO programs and projects. He is AECOM's ITS Systems Integration Manager responsible for the planning, design, specification, development, integration, and deployment of ATMS and TSMO operations tools.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
06/20 - Ongoing	**Massachusetts DOT ITS and Tunnel Assets.** Systems Engineering lead for a contract to reimagine and define a new combined transportation control center to manage the Department's ITS and tunnel assets. This involved designing a loosely coupled data architecture, supporting data ingestion and storage, data distribution, alerting and alarming, incident management, asset management, tunnel life/safety devices and controls, reporting data subscription management services as well as administrative services. Participated and supported the teams responsible for in the needs analysis and concept of operations as well as the preparation and analysis of responses of an RFI package to invite comments, information and ideas from industry
02/18 - 08/22	**Ohio DOT, Drive Ohio.** Deputy project manager for Systems Engineering Analysis for Autonomous/Connected Vehicle (SEA-AV/CV) projects in conformance with 23 CFR 940 and Section 1300 of the Traffic Engineering Manual. Included with this effort will be a review, and recommendations of necessary updates, to the existing statewide and MPO Regional ITS Architectures to ensure consistency with the developed SEA-AV/CV document. The goal of this effort is to create the statewide framework to guide current and future AV/CV deployments. Brian was the task lead for the System and Software requirements portions of the contract as well as supporting the needs gathering, concept of operations and preliminary and detailed design activities
05/18 - Ongoing	**Texas Department of Transportation (TxDOT) DIIMS Contract.** Program Manager for the AECOM Portion of the Recompeted DIIMS contract to provide software systems support, software maintenance, software enhancement TMC Operations, System Engineering, Process and organizational reengineering to the Texas Central Office Traffic Branch. The task order based contract is utilized by TxDOT as a staff augmentation contract to provide support to districts Texas wide using the software. As one of the many task orders under this contract AECOM has designed, developed and deployed a data archival system as well as a reporting system to assist the traffic engineers in exploring long term trends in the transportation network. The program's success has allowed TxDOT to migrate the various users in the state to a single platform allowing the state to focus on a single product to support their traffic management needs.

02/16 - 05/17	**Ohio DOT Concept of Operations.** Deputy Project Manager for a contract with the DOT to perform a Concept of Operations, review of existing operations and analysis of the systems supporting the staff. The project involves a design of the supporting infrastructure and systems modifications to support the enhanced operational environment, as well as a design and specification for the ATMS solution.
04/16 - 05/18	**OHL Mexico City Toll Road.** Deputy Project Manager for a contract with the toll road concessionaire OHL supporting a project to enhance of the operational effectiveness of the roadway in central Mexico City. The project includes the evaluation and specification of concepts and designs for the use of alternative pricing strategies including congestion and dynamically based pricing schemes to enhance both revenue for the concessionaire and the effectiveness of the roadway as well as increasing utilization during non-peak hours
04/12 - Ongoing	**New Jersey Turnpike Authority ATMS System.** AECOM Project Manager for a subcontract to IBM to provide an ATMS system to the Authority to manage both the Turnpike and the Garden State Parkway. The project involves requirements development and documentation, systems design, system development, systems testing, system deployment, training and documentation. The system is designed to assist the operations staff in managing the traffic on the two roadways utilizing a large collection of message signs, HAR radio transmitters and external data delivery methods. AECOM is responsible for the device management components of the overall system.
05/10 - 06/09	**Caltrans, Los Angeles, CA, Dynamic Pricing Subsystem and Sensor Device Interface.** AECOM Project Manager for a subcontract to ACS to provide a dynamic pricing subsystem and sensor device interface subsystem. The project involves requirements development and documentation, systems design, system development, systems testing, system deployment, training and documentation. The two subsystems are interfaced with the ACS Toll Management systems to provide the dynamic pricing used to manage the flow on the I-10 and I-110 managed lanes project
05/05 - 09/09	**Houston Transtar Traffic Management Center ITS Control Systems.** Project Manager providing system planning and design, ITS control systems analysis, design, implementation as well as software systems engineering control design and integration services for the Houston TranStar Transportation Management Center. DMJM Harris has been working with Houston TranStar and its partners (i.e., TxDOT, the City of Houston, Harris County and Metro) for the past seven years providing design, software products and integration, and consultation support. The Regional Incident Management System (RIMS) has been the major deliverable effort. The RIMS software consists of a suite of web-enabled software for ITS and Emergency Management operations. These applications provide governmental agencies and stakeholders with a truly distributed operational capability. Through a web browser and wireless web connections, operators located in the field have the same capabilities as those operators in the TMC. The software provides the same Graphical User Interfaces (GUIs) to both local and remote operators, allowing them the ability to enter data pertaining to a particular incident, maintenance issue, road closure, etc. The GUIs also allow the operators to document incident updates, thus providing a chronological history of the entire incident life cycle.
01/08 - 12/11	**Chicago Transportation Management Center Systems Integration.** Project manager and systems integration lead for the design of a new TMC. Provided technical support for development of functional and physical requirements; system architecture, concept design; institutional operations and maintenance plan; etc

Firm	Vectura Consulting Services, LLC		
Laurence Lucius Lambert, II, PE, PTOE, PTP Agency Coordination		Years of Relevant Experience with this Employer	7
		Years of Relevant Experience with Other Employer(s)	18
Degree(s) / Years / Specialization	B.S./1997/Civil Engr. M.S./2006/Civil Engr. (Transportation focus) M.B.A./2010		
Active Registration Number / State / Expiration Date	PE.0029901 / LA / 3/31/2024		
Year Registered	2002	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**Role: Agency Coordination.** *Lawrence brings two decades of experience in traffic control design, signal analysis and design, TMPs, and peer reviews. His breadth of work with LADOTD uniquely qualifies him to assist with agency coordination on this contract.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
10/21—03/22	**H.013256.5 I-10 ITS Scott to Lake Charles (Lead Traffic Engineer).** Laurence was the lead traffic engineer for a Level 2 Traffic Management Plan (TMP) for the construction of ITS equipment along I-10. The plan included a safety strategy that included a CAT Scan, LOS determination utilizing Citrix data, lane closure recommendations based on a queue analysis and public information strategies.
09/18 – 02/19	**H.013261.1 I-110 ITS Deployment Systems Engineering Analysis (Project Manager).** As a sub-consultant, Laurence was the task leader for the Constraints & Alternatives Analysis as well as the Projects & Procurement Strategy portion of the project. The goal of the project was to deploy Close Circuit Television (CCTV) cameras and one Dynamic Message Sign (DMS) along the I-110 corridor from US 190 to US 61. To communicate with the field devices from the Traffic Management Centers (TMCs), installing fiber optics along the I-110 corridor was recommended. The fiber optics also allow communication to the traffic signals at the interchange ramps along I-110 to the TMC.
08/15-05/17	**Enhancing Guidance for Evacuation Time Estimate Studies (Nuclear Regulatory Commission, Rockville, MD.** Laurence conducted an applied research study of U.S. Nuclear Regulatory Commission guidance for developing evacuation time estimate studies and produced a technical basis for revision of NUREG/CR-7002 "Criteria for Development of Evacuation Time Estimate Studies" in support of the 2020 update of ETEs. Specifically, Laurence was the lead VISSIM modeler for the "medium" and "small" population models, which consisted of a 20-mile radius model. The VISSIM model input included traffic volumes distributed over 8 hours, highway and intersection lane geometry using links and connectors, conflict areas, traffic signal and stop control and speed. Laurence also developed Dynamic Traffic Assignment code to simulate that fastest route out of the evacuated zone.
06/12-12/12	**Ramp Metering Study of I-10 Segment, East Baton Rouge and Ascension Parishes, Louisiana (Project Manager).** Laurence conducted a feasibility study to deploy ramp meters along the Interstate 10 (I-10) Corridor in Baton Rouge between Dalrymple Drive and LA 73. The study consisted of analyzing 17 on-ramps under differing design conditions, which include the following: 2010 Existing, 2012 Without Ramp Meter, 2012 Ramp Meter, and 2012 Ramp Meter with Recommendations. 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.

07/11 – 07/15	**H.4400001465 Retainer Contract for ITS Traffic Incident Management (TIM) Program Transportation Management Centers (TMCs) 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.
03/10 – 06/10	**Bonnet Carre Spillway Speed Study, New Orleans, Louisiana (Project Manager).** The DOTD asked Laurence to analyze 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. We 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.
08/09 – 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.
07/08 – 07/11	**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.
01/07 – 08/07	**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 Micro-simulation 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.
03/06 – 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.
03/06 – 09/06	**SPN 700-99-0304 TMC Design for the DOTD Annex Building (Project Manager).** Laurence was the project manager to provide design work to supplement the statewide traffic management center within the DOTD ITS Division Office. Design included the development of plans, specifications, and cost estimates for three video walls, communications equipment, equipment control consoles, and equipment hardware and software related to connection to existing fiber optic cable truck line. A technical memorandum was developed for equipment approval. Deliverables included the following: Technical Memorandum, Preliminary, Advance Check Prints, and Final cost estimates, technical specifications, and plans.

Firm	AECOM		
Ming-Shiun Lee, PhD, PE Systems Engineering		Years of Relevant Experience with this Employer	23
		Years of Relevant Experience with Other Employer(s)	4
Degree(s) / Years / Specialization	PhD / 1998 / Civil Engineering (Transportation) MS / 1996 / International Project Management MS / 1992 / Transportation BS / 1987 / Civil Engineering		
Active Registration Number / State / Expiration Date	PE.43396 / MN / 06/30/2024		
Year Registered	2004	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**Role: Systems Engineering Lead. M***ing will be responsible for all activities related to Systems Engineering. He has led 60+ TSMO planning, systems engineering, and ITS architecture projects in 20+ states. His expertise in systems engineering supports standardization and interoperability. He also has CV experience in planning, testing, and implementation.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
12/19 - 12/22	**TSMO Program Plan and ITS Master Plan for Amarillo and Lubbock Districts, Technical Project Manager.** Under the statewide master contract, develop a TSMO Program Plan and an ITS Master Implementation Plan for the TxDOT Amarillo and Lubbock Districts. Tasks include: district leadership engagement, stakeholder outreach and engagement, existing condition assessment, needs identification, capability maturity assessment, state of practice review, TSMO strategy and action recommendation, ITS implementation projects and strategies, and support of TSMO strategy roll-outs. The TSMO Program Plan and the ITS Master Implementation Plan for the Amarillo District were completed in March 2021. The TSMO Program Plans and the ITS Master Implementation Plan for the Lubbock District were completed in April 2022
01/20 - 03/21	**El Paso Regional ITS Architecture Update, Technical Project Manager.** Performed a comprehensive update to the regional ITS architecture for the 6-county area of the TxDOT El Paso District and the El Paso MPO planning area that expands into a portion of two counties in New Mexico. Perform stakeholder outreach, education and coordination. Applied the Architecture Reference for Cooperative and Intelligent Transportation (ARC-IT) Version 8.3 to update the regional ITS architecture. Recommend ITS projects and develop implementation strategies to assist with moving ITS forward in the region, as well as facilitate information and resource sharing amongst stakeholders within the region, with the neighboring state and with Mexico.
08/16 - 05/19	**Minnesota Statewide ITS Architecture Updates, Project Manager.** Updated the Minnesota ITS Architecture using the Architecture Reference for Cooperative and Intelligent Transportation (ARC-IT) Version 8.2. Refined Minnesota ITS Development Objectives and performance measures to monitor the status and measure the effectiveness of ITS deployment in Minnesota. Developed an ITS Implementation Plan to guide future ITS investments in Minnesota.
03/19 - 05/20	**Minnesota ITS Implementation for CAV Readiness, Project Manager.** The goal of this project was to enhance the MnDOT ITS Implementation Process. The ITS Implementation Process provides guidance and assistance to MnDOT Districts statewide scoping and project development processes to fulfill the implementation requirements of 23 CFR 940 for all ITS projects or projects with an ITS component. Project tasks included: updating the Highway Project Development Process (HPDP) – ITS Systems Engineering Requirement; enhancing the ITS Implementation Process and supporting materials; updating the existing systems engineering documents; creating ITS checklists for additional ITS applications; and providing ongoing maintenance and enhancements to the ITS Implementation Process and support materials.

12/18 - 05/20	**St Charles County Gateway Green Light ITS/CAV Feasibility Study.** Technical Lead. Developed an update to the initial Gateway Green Light (GGL) ITS feasibility study to reflect current stakeholder needs including new ITS, system and communications enhancements, CAV and other emerging technology applications. Effort included stakeholder outreach, workshop facilitation, current systems inventory, needs identification, ITS and emerging technology assessments, applications development and development of multi-year, multi-phase deployment plan for future expansion and enhancements of the GGL program.
10/12 - 12/13	**Fargo-Moorhead ITS Deployment Strategies, Fargo, ND, Task Lead.** Identified and recommended strategies for ITS deployment in the Fargo-Moorhead Metropolitan Area. Assisted in the development of a Regional Concept for Transportation Operations for the area and led the development of deployment strategies for traffic operations center, traveler information program, and transit ITS deployment.
01/10 - 10/10	**Commuter Corridor ITS Study, Iowa, Project Manager.** Assisted Iowa DOT in a planning study to determine top commuter corridors for ITS deployment considerations and develop an ITS plan that provides recommendations on ITS technology, locations, estimated costs, and deployment considerations.
10/02- 03/20	**TMC Pooled Fund Study, Project Manager.** Provided program management support to the Transportation Management Center (TMC) Pooled Fund Study for FHWA. Conducted research and developed program plans. Developed project scopes and provided directions to guide project development and research activities. Planned, organized, delivered and facilitated workshops, webinars, meetings and conference calls. Dr. Lee was responsible for the day-to-day operation of the program.
06/19 - 08/22	**Wrong Way Detection and Alerting System, Project Manager.** The purpose of this project is to install and evaluate the operation of a wrong way vehicle detection and alerting system and the effectiveness of the system at reducing wrong way vehicle driving incidents. Major activities include: development of a concept of operation and requirements for the system; development a verification plan and a validation plan; system installation; verification and validation testing; supporting evaluation activities; and development of a final report to document project activities, results and findings.
11/18 - 12/19	**Metro Transit Pedestrian and Cyclist Awareness Notification System Technical Assistance, Project Manager.** AECOM supported Metro Transit in performing a Systems Engineering analysis on a Pedestrian and Cyclist Awareness Notification System (PeCANS). The system technology would provide automated alerts to pedestrians, bicyclists, and/or bus operators in the event of a potential bus-pedestrian/bicycle incident. Project tasks included: identification of and analysis on various technology and application alternatives; stakeholder engagement to discuss desired system capabilities and functionalities with Metro Transit bus operators and management staff; development of a concept of operations to describe how the proposed technology could operate; and development of a systems validation plan to establish validation procedures that outline how Metro Transit and project stakeholders determine whether the deployed system satisfies user needs.
06/09 - 12/10	**Southwest Region ITS Concept of Operations and Design, Southwest Michigan, Task Manager.** Technical Lead responsible for developing a detailed, project-specific concept of operations for the I-94 Corridor. Developed a framework for a Regional Concept of Operations that provided a roadmap for developing more detailed concept of operations for future ITS projects in the Southwest Region. Provided support to design services for the following ITS field devices: 4 dynamic message signs; 17 CCTV cameras; 1 RWIS environmental sensor station; vehicle detectors; and 3 communications tower sites.

Firm	AECOM		
Matt Lee Performance Dashboards		Years of Relevant Experience with this Employer	20
		Years of Relevant Experience with Other Employer(s)	10
Degree(s) / Years / Specialization	BS /1992 / Aviation		
Active Registration Number / State / Expiration Date	NA		
Year Registered	NA	Discipline	NA
Contract Role(s) / Brief Description of Responsibilities	**Role. Performance Dashboards.** *Matt will be responsible for sharing best practices on TSMO performance measures. He oversees the 33 TMC operations, in nine different states, that AECOM manages; develops performance management plans; provides guidance in developing performance dashboards; and leads monthly meetings with our TMC Operations, TIM, and Data Analytics staff to share national best practices.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
01/02 - 12/10	**Georgia DOT – ITS Strategic Business Plan, Atlanta, GA.** Operations Task Lead. The Business Plan served as a roadmap for the continued planning, implementation, operation, and maintenance of the NaviGAtor ITS program throughout the State of Georgia. It documented the projects, resources, arrangements, and program elements needed to implement an improved and expanded NaviGAtor ITS deployment for fiscal years 2006–2010. The Business Plan also provided justification for the development of a statewide ITS Architecture and the deployment of projects that met the NaviGAtor mission, vision, goals, and objectives.
01/12 - 12/14	**State of Georgia – Stakeholder Evaluation of Its Traveler Information, Atlanta, GA.** Facilitator. This project consisted of collecting agency and public feedback to the effectiveness and availability of ITS traveler information. In a relatively aggressive time frame, AECOM TMC management was tasked with collecting feedback from both public agency and general public stakeholder groups, assessing the aforementioned and using the information to tailor future use of the existing traveler information tools and laying the framework for future expansion. Moderator guides and telephone surveys were created and used to interview both stakeholder groups, making sure to include a diverse geographical span of participants and representing various users, be it business and personal. The surveys were conducted in blind focus groups and telephone survey formats, making sure to include a statistically acceptable number of respondents from which to draw conclusions. This data was tabulated in various visual formats to represent the findings and provide the reader quickly decipherable information. The findings resulted in identifying existing deficiencies and plausible solutions, all based on stakeholder feedback.
02/16 - 02/18	**Port Authority of New York and New Jersey (PANYNJ) – George Washington Bridge Systems Operations Center Study Jersey City, NJ.** Systems Analyst. An AECOM technical team was tasked with preparing a strategic plan identifying the resources and costs needed for staff support technology, network systems upgrades, and architectural redesign of the facility. AECOM prepared a series of technical reports and data analytic dashboards defining all necessary upgrades, a return-on-investment analysis, and example scenarios that would rationalize the investment to senior PANYNJ planners.

01/17 - 06/19	**Texas Department of Transportation – Operations Staffing Analysis, Austin, TX.** Study Manager and Primary Engineer. This project involved conducting an activity analysis, operations dashboard, and quantifiable assessment of the six major traffic management centers in Texas and defining a quantifiable rationale for their optimal staffing compliment and operating budget for now and in the future. Sites includes Dallas, Fort Worth, Austin, Houston, El Paso, and San Antonio.
08/10 - 08/17	**Michigan Department of Transportation – West Michigan Transportation Operations Center, Grand Rapids, MI.** Senior Project Advisor. This project involved providing on-site control room staffing for the West Michigan TOC in order to provide freeway incident management and traveler information on a weekday basis. AECOM also developed monthly performance measures, annual TOC reports, operations manuals and performed TOC studies as assigned by the Grand Region.
03/11 - 11/21	**Missouri Department of Transportation – Gateway Guide Transportation Management Center, St Louis, MO.** Project Advisor. Since July 2010 AECOM has been the prime consultant supporting the Missouri Department of Transportation (MoDOT)'s Gateway Guide Transportation Management Center. The Gateway Guide ITS system is an integral part of the St. Louis transportation infrastructure consisting of 260 miles of instrumented interstate, freeways and arterials. The center provides traveller information and customer service support 24 hours a day to the public, while monitoring and managing local interstate traffic on a real-time basis.
06/12 - Ongoing	**Macomb County Department of Roads – Traffic Operations Center, Mount Clemens, MI.** TOC Expert Advisor. AECOM provides control room staffing, IT/ ITS field maintenance and traffic engineering operations support for the Macomb County Department of Roads Communications and Technology Traffic Operations Center (COMTEC). AECOM played an essential role in the start-up of the TOC with the establishment of a staff training and recurring certification program, Standard Operating Procedures, performance measures reports, and routine QA/QC documents. Engineers, operators and technicians manage more than 700 traffic signals throughout the county.

Firm	AECOM		
Matt Letourneau, PE, PTOE System Architecture		Years of Relevant Experience with this Employer	11
		Years of Relevant Experience with Other Employer(s)	12
Degree(s) / Years / Specialization	BS / 1998 /Civil Engineering		
Active Registration Number / State / Expiration Date	PE.062055763/ IL / 11/30/2023 | Additional: IN PE #10809110 (2008); MI PE #6201049766 (2003) OH PE #85598 (2020); TX PE #97836 (2006 – inactive); WI PE #32709-006 (2004); PTOE #1203 (2003)		
Year Registered	2002 (IL)	Discipline	Civil
Contract Role(s) / Brief Description of Responsibilities	**Role. System Architecture.** *Matt will be responsible for updating the ITS Architecture to align with the TSMO Strategic Plan. He has developed, updated, or provided oversight for ITS architectures for numerous state and local agencies, including statewide ITS architectures for Illinois, Wisconsin, Pennsylvania, and Maine. He has also authored several ITS strategic plans at the county, regional, and statewide level.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
06/04 - 06/06 06/14 - 06/19	**Illinois Statewide ITS Strategic Plan and Architecture Technical Assistance, Illinois (statewide) – Illinois Department of Transportation (IDOT) – (Deputy Project Manager).** Deputy Project Manager assisted in leading the effort to assess ITS initiatives throughout the State of Illinois and to compile a Strategic Plan for future developments. This project also involved the creation of a Statewide ITS Architecture for Illinois, as well as technical assistance in the creation of regional ITS architectures throughout the State. The project included extensive public and agency outreach through a project website, newsletters, public workshops, and stakeholder surveys.
07/19 - Ongoing	**Will County ITS Opportunities Plan, Joliet, IL – Will County Division of Transportation – Project Manager.** This study involves the identification of transportation needs from stakeholders in Will County, an evaluation of applicable ITS technologies and strategies, creation of a concept of operations, ITS architecture updates, and the formulation of an ITS implementation plan for the county. Recommendations from this project will serve as the foundation for an ITS program for the Division of Transportation and will include traffic management capabilities to address congestion and freight demand, increase traveler information, and improve safety.
06/06 - 12/07 08/17 - 11/20	**Northeastern Illinois Regional ITS Architecture Update – Chicago Metropolitan Agency for Planning (CMAP) – (Deputy Project Manager).** Deputy Project Manager for the first regular update of the regional ITS architecture covering the CMAP multi-county planning area. Project tasks included a technical review of existing documentation, extensive stakeholder outreach, development of an updated Turbo Architecture® database and associated report, and development of an architecture maintenance and operating plan.
01/18 - 06/20	**Ohio Statewide Automated Vehicle/Connected Vehicle (AV/CV) Systems Engineering Analysis – DriveOhio – Concept of Operations Lead.** Task lead for the development of a comprehensive Concept of Operations for a range of AV/CV applications across Ohio. The Concept of Operations describes the systems and stakeholder responsibilities that will interact to deliver automated and connected vehicle projects across the state. Project tasks include stakeholder outreach; identification and prioritization of user needs; project inventory and conceptual project definition, including services, interfaces, and data flows included in the project architecture; and development of stakeholder roles and responsibilities.

02/15 - Ongoing	**Wisconsin Statewide Traffic Management Center (TMC) (Wisconsin Department of Transportation) – Project Manager.** AECOM project manager for the Statewide Traffic Management Center (TMC) in Milwaukee, WI. Through this contract, AECOM provides 12 full-time operators, supervisors, and TMC manager to continually monitor the entire state highway network, identifying incidents and coordinating their fast and efficient resolution. In addition to traffic incident management, the team is responsible for supporting special events, collecting real-time traffic data, communicating with other State and local officials, dispatching, traveler information, monitoring of ITS field equipment, performance metrics, and supporting other WisDOT programs like oversize/overweight permits. In addition to these regular, tasks, through this contract AECOM has implemented new programs, including updates to the standard operating procedures, operator training, an TMC audit program, and a robust performance measures process for documenting the many benefits provided by the TMC.
06/21 - Ongoing	**I-190 ITS Design (Illinois Department of Transportation), Task Lead.** Leading design of fiber optic communications network, vehicle detection, CCTV camera, dynamic message sign, wrong-way detection, and connected vehicle infrastructure along Interstate 190, which connects regional expressway and tollway routes to O'Hare International Airport.
06/13 - 06/17	**Elgin-O'Hare Western Access (Illinois Tollway) – (Task Lead).** Task Lead for intelligent transportation systems, all-electronic tolling, and traffic signals for the project, which involves the extension of the Elgin O'Hare Expressway from I-290 to the Chicago O'Hare International Airport. The design includes 1.6 miles of new tollway road, two service interchanges at Prospect Avenue and Wood Dale Road, roadway widening and reconstruction at Prospect Avenue, Mittel Blvd. and Wood Dale Road, and new frontage roads. Matt is leading the design of fiber optic and power infrastructure, toll plazas
06/07, 06/10, 06/12 - 06/14 06/18 - Ongoing	**ITS Design Services Upon Request, Northern Illinois – Illinois State Toll Highway Authority (Illinois Tollway) (Project Manager).** As Project Manager, Matt coordinated design and construction management services for the Illinois Tollway on two multi-year work order contracts. Work tasks included research into emerging ITS technologies (e.g., video analytics); development of an Invitation for Bid (IFB) for the procurement and installation of a security monitoring system at the Tollway Central Administration Building; design and construction support services for microwave detection along I-90 from Elgin to Rockford and weigh-in-motion stations along I-94 and I-80; development of a Remote Traffic Microwave Sensor (RTMS) operations and maintenance plan, the creation of an ITS Equipment Labeling specification, an ITS Deployment Guide, and an ITS Commissioning Guide for the Tollway. ($1.7M)
10/19 - Ongoing	**Regional Arterial Traffic Management Center (Illinois Department of Transportation) – (Project Manager).** As project manager, leading a collaborative study to develop a concept for a regional traffic management in northeastern Illinois. This project will provide a roadmap for transportation systems integration involving key regional stakeholders, including municipalities, transit providers, and planning agencies, to ensure that a holistic approach to traffic management is considered across the transportation network.
05/16 - 03/2023	**Jane Byrne/Circle Interchange ITS Design (Illinois Department of Transportation) – Task Lead.** As task lead for ITS, led the design of vehicle detection, CCTV camera, dynamic message sign, and ramp meter sites, as well as extensive conduit/cable infrastructure within and around the Jane Byrne Interchange. As one of the most congested interchanges in the country, this reconstruction project has streamlined traffic flow to and reduce delay for motorists. The network of ITS devices included in the project allows IDOT to monitor travel conditions and aid incident response.
04/12 - 04/19	**Regional Transit Signal Priority (TSP) Implementation Program – Regional Transit Authority (RTA) – (Systems Engineering).** As the Systems Engineering task lead, oversaw development of the Systems Engineering Management Plan and Concept of Operations for the program, which includes program management support; development of interoperable technical requirements, standards and guidelines; and deployment/testing oversight for a $40 million TSP program for the Chicago region.

Firm	Intelligent Transportation Systems		
Kimberly McDaniel, PE, PTOE, PTP Emerging Technologies		Years of Relevant Experience with this Employer	<1
		Years of Relevant Experience with Other Employer(s)	19
Degree(s) / Years / Specialization	Bachelor of Science / 2003 / Civil Engineering, Louisiana Tech University Master of Science / 2005 / Civil Engineering, Wayne State University		
Active Registration Number / State / Expiration Date	P.E.0032973 / LA / Exp. 9/30/23 | PTOE 2072 / Exp. 10/02/2025 | PTP 802 / Exp. 03/14/2025		
Year Registered	2007 (PE); 2007(PTOE); 2022 (PTP)	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**Role: Emerging Technologies.** *Kimberly is 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 consult; 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. All of these required extensive coordination with a variety of internal LADOTD stakeholders, as well as external elected officials, municipalities, private developers, and the general public. Kimberly spent much of that time traveling the state and working with stakeholders in both the development of these policies and programs as well as educating stakeholders on the implementation of such. Her experience integral in these processes make her a key asset to this team for the development and implementation of a TSMO program in Louisiana.*		

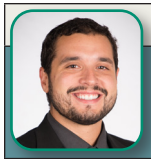
Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
10/08 – 08/14	**LADOTD Access Management 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.

06/12 – 08/14	**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.
2009-2014	**LADOTD Complete Streets Work Group, Louisiana Statewide | Engineer VI: Kimberly served on the Complete Streets Work Group for LADOTD representing the Traffic Engineering Management Section.** The main goal of the task force was to research and evaluate best practices in the area of complete streets and to use that information to develop a Complete Streets Program for the Louisiana Department of Transportation and Development. A final report of the work group was published in July 2010, but Kimberly remained on the work group as policies and other program elements were developed until her departure from LADOTD in September 2014.
07/22 – Present	**LADOTD Task Order - Connected & Autonomous Vehicles (C/AV) Team and Working Group Support, Louisiana Statewide | Policy Development: Kimberly is assisting with the policy development part of the Connected & Autonomous Vehicles Team.** The goal of this task order is to bring various practitioners together to begin developing projects, programs, infrastructure, statutes, and other mechanisms necessary to prepare the State of Louisiana for the integration of connected and autonomous vehicles on the state's highways and roadways.
07/22 – Present	**Contract for Replacement of 16 Bridges District 08, Northern Louisiana | Principal: Kimberly is serving as the Principal for this project.** The project includes the replacement of 16 rural bridges in northeast Louisiana. Kimberly is leading a team to develop Traffic Management Plans to be used to maintain or detour traffic during construction. For some of the bridge replacements, the Traffic Management Plan will employ the use of a temporary traffic signs, and others will utilize a temporary bypass roadway.

Firm	AECOM		
Ramya Rayapureddy, Engineering Aide Traffic Studies		Years of Relevant Experience with this Employer	2
		Years of Relevant Experience with Other Employer(s)	0
Degree(s) / Years / Specialization	MS / 2020 / Civil Engineering B.Tech. / 2015 / Civil Engineering		
Active Registration Number / State / Expiration Date	LADOTD Traffic Process and Report Parts 1 and 2 (2021)		
Year Registered	n/a	Discipline	n/a
Contract Role(s) / Brief Description of Responsibilities	**Role: Traffic Studies.** *Ramya is an entry level traffic engineer with experience on traffic operations and analysis. Her project experience includes safety studies, crash data analysis and crash mapping, traffic signal design and wiring, traffic data collection, traffic impact studies, writing and presenting.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
09/22-10/22	**Cameron LNG Traffic impact Study, Cameron Parish, LA.** Intersection Analysis. Responsible in analyzing 30 intersections including the signalized and stop-controlled intersections for the existing, No Build, Build and Build with mitigation conditions using Synchro 11 software, using HCM 6th edition methodologies. Evaluated the potential traffic impacts associated with the construction of CLNG project.
08/22-10/22	**Port Arthur Liquefaction Project (PALNG), Port Arthur, TX.** Traffic Evaluation. Responsible in evaluating the existing, No Build and Build conditions using synchro 11 for the intersections along SH 87 from the project site to the traffic signal at SH 82. The intersection delay, LOS and 95th percentile queue lengths were analyzed. Optimized the traffic signal timing at the signalized intersections to minimize the impact of project construction traffic on the study intersections.
06/22-08/22	**Loop 1604 at IH-10 IAJR, TX.** Safety Analysis. Responsible in analyzing and documenting the existing safety conditions along the Loop 1604 from Farm to Market (FM) 1303 to FM 1346 in Bexar County, southeast of San Antonio. Analyzed five years of crash data, crash descriptive statistics, and identified problematic locations with more number of crashes. Recommended countermeasures to address the safety issues at these problematic locations.
02/22-02/22	**Slaughter Lane Signal Improvements, City of Austin, TX.** Signal Design. Responsible in reviewing the slaughter lane signal improvement traffic standard plan sets, update of the quantities and redlines in the signal design using the software Microstation.
02/22-03/22	**US 59 Laredo, TXDOT.** ITS Plan. Responsible in reviewing the ITS plan sets, summary of quantities and updating the redlines in the 95% submittal plan sheets. Assisted in printing the PSETS using Axiom tool.
01/22-03/22	**United States Air Force Academy Transportation Master Plan.** Traffic Operations Analysis. Assisted in the traffic operation analysis using the field and street light data in the Vistro software. Responsible for providing report graphics of intersection level of service and average daily traffic for the intersections within the scope of the study.

01/21-Ongoing	**MOVEBR Jones Creek Road Extension, Segments 1A & 1B, City of Parish of East Baton Rouge, LA.** Traffic Signal Design. Responsible in designing the traffic signal using AutoCAD 2020 for the intersection Jones Creek at Tiger Bend Road. Assisted for the development of traffic analysis, collected traffic counts, geometric layout measurements and peak period observations at signalized and unsignalized intersections. Responsible for development of Appendix C – Existing Safety Analysis by reviewing more than 200 crash reports.
11/20-06/21	**City of Dallas-McKinney Avenue/Cole Avenue-Two-way Conversion, Dallas, TX.** Traffic Impact. Responsible for review of the traffic impact studies along the corridor and developed traffic volumes from the base conditions. Collected aged data and developed growth rates at each station.
11/20-03/21	**City of Austin Crash Mapping, Austin, TX.** Crash Investigation. Responsible for crash investigation and crash mapping of 10 intersections based on the impact type by reviewing the crash reports.
02/21–Ongoing	**City of Baton Rouge-Parish of East Baton Rouge, Jones Creek Road Extension 1A, Baton Rouge, LA.** Responsible for collecting traffic counts, geometric layout measurements and peak period observations at signalized and unsignalized intersections within the scope of the study. Coordinated with my team to make sure in getting quality counts while maintaining safety.
12/20–Ongoing	**City of Ketchum Fire Station Traffic Engineering Assistance – Modification 3.** Conducted research and extracted detailed information pertaining to the Emergency Vehicle warning systems, installation equipment and activation options. Coordinated with each of the vendors and requested general information of their systems.
08/18–08/20	**ALDOT for Unsignalized Type Configurations on Rural Divided Highways (Thesis).** Developed AL specific calibration factor for unsignalized intersections on rural divided highways. Calibrated safety performance functions (SPFs) and predicted crash frequency for recently modified intersections. Selection of appropriate crash modification factors (CMFs) for a specific countermeasure deployed at a treatment location.
01/19–04/19	**Atlanta Highway and Interchanges on I–85 at Exit 4 and Exit 6.** Conducted computer simulation of traffic operations using Highway Capacity Software (HCS), CORSIM, VISSIM and Synchro along the arterial to identify and resolve existing problems in traffic flow. Analyzed future conditions for 20 years by assuming traffic volume and built alternatives for future conditions. Developed VISSIM model to analyze existing and future conditions.
01/18–04/19	**Spatial Analysis of Locational Demographics with Intersection Crashes in Alabama, AL.** Performed spatial and statistical analysis of over 100,000 intersection related crashes from Alabama using ArcMap10.6 and excel to identify high crash locations and crash severity. Identified locational demographic factors and suggested measures to reduce crash rates based on regional and driver factors.
09/18–11/18	**College Street and Thach Avenue Intersection, Auburn, AL.** Conducted capacity and level of service (LOS) analysis of a signalized intersection in Auburn during the evening peak period using HCS 7. Suggested improvements in signal phasing which resulted a decrease in an overall delay of 15.5 seconds with a LOS of B for the intersection.
09/18–11/18	**Highway 84 E. Corridor Redevelopment Project Dothan, AL.** Analyzed Pedestrian and bicycle Level of service (LOS) for the existing conditions of the 4–mile corridor in Dothan. Proposed a transportation plan to improve biking, pedestrian safety, connectivity and suggested complete street transformation for Columbia highway.



Firm	Vectura Consulting Services, LLC		
Reece Rodrigue, PE, PTOE, RSP$_1$ Traffic Design		Years of Relevant Experience with this Employer	3
		Years of Relevant Experience with Other Employer(s)	7
Degree(s) / Years / Specialization	BS / 2013 / Civil Engineering		
Active Registration Number / State / Expiration Date	PE. 0042074 / LA / 3/31/2024		
Year Registered	2017	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**Role: Traffic Design.** *Reece brings a decade of experience in traffic control design, traffic signal analysis and design, TMPs, and peer reviews in Louisiana. His experience with LADOTD and local agencies will be valuable in designing traffic signalization under this contract.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
04/21 - current	**MOVEBR Direct Select for Traffic Signal Design, Baton Rouge, LA.** Reece is a project engineer for the design of traffic signal upgrades at 10 intersections. This projected included a traffic design report, preliminary and final plans for traffic signals that included traffic signal layout, fiber interconnect layout, fiber splicing diagrams, pedestrian crosswalk layout, and sign layout. The design also included traffic signal synchronization signal timing and pedestrian signal timing.
07/21 – current	**H.007160 - EBR Computerized Traffic Signal, Phase VB (Baton Rouge).** Reece is part of the team responsible for Construction Engineering and Inspection. Reece has reviewed the signal mast arm shop drawings to assist the City-Parish of Baton Rouge in accepting the manufactured poles. Reece, with the DOTD, City-Parish and the Contractor conducted field visits to confirm pole foundation locations.
01/21 – 05/21	**H.013256 - I-10 ITS Scott to Lake Charles (Lafayette, Acadia, and Jefferson Davis Parishes).** Reece was a member of the subconsultant team who was tasked with reviewing the ITS plans for 15 sites along I-10 where CCTV cameras were being installed. Reece was responsible for measuring anticipated construction quantities and producing a cost estimate for said quantities by using DOTD's Bid Tabulation and Cost Estimating Tool.
09/20 – 12/21	**H.011909.5-4 Roundabout: US 171 at Boone Street (Vernon Parish).** Reece was a project engineer, who participated in the production of the temporary signal design associated with the sequence of construction for the roundabout at US 171 at Boone St. He conducted a thorough analysis of the US 171 corridor's existing allowable movements and identified the movements that would be restricted during the proposed construction process and how it would impact the typical traffic patterns.
09/20 – 12/21	**H.010960.5 LA 30 Roundabouts at Tanger I-10 (Ascension Parish).** Reece was a project engineer, who assisted in the production of the temporary signal design associated with the sequence of construction for the roundabouts on LA 30 in Gonzales, LA. This project consists of eight proposed construction phases. He assisted in calculating the temporary pole heights, determining the placement location for the temporary poles for each phase, measuring and calculating clearance intervals. Reece conducted a thorough analysis of the LA 30 corridor's existing allowable movements and identified the movements that would be restricted during the proposed construction process and how it would impact the typical traffic patterns.

04/20 - current	**H.004791 DOTD Belle Chasse Bridge & Tunnel Replacement Public-Private Partnership Project (Belle Chasse).** Reece is the project engineer who designed the temporary traffic signal for the intersection of LA 23 at Engineers Rd. The design of the temporary signals is set for eight phases of construction per the anticipated sequence of construction. Temporary pole location and heights were recommended for placement for use for all construction phases. Vehicle clearance interval calculations were conducted for each phase in accordance with DOTD and ITE guidance. Reece is responsible for producing the traffic impact analysis portion of the Traffic Management Plan, which were also used in planning for the permanent and temporary signal timing plans. Reece was also produced permanent signal plans for the LA 23 intersections at Engineers Road and at Burmaster Street. He evaluated STOP bar locations, calculated vehicle, and pedestrian clearance intervals, designed the railroad preemption sequence for both at-grade crossings, designed the wiring layout, and developed the interconnect plan. Reece maintains correspondence with the fellow design engineering team for product consistency. In addition, Reece reviewed and approved shop drawings that were submitted by the contractor.
02/20 – 09/21	**College Drive Corridor Enhancement from Perkins Road to I-10 (Baton Rouge, LA).** Reece was the task leader for organizing and formatting the data collection of the College Drive project limits. Tasks included in data collection were 7-day tube counts, intersection turning movement counts, approach tube counts, unmet demand observations, driveway counts, travel time runs, pedestrian / bicycle counts, and weaving counts.
07/19 – 12/19	**Burgess Avenue at Duff Road Traffic Signal Design, Walker, LA.** Reece was responsible for the design of a fully actuated signalized intersection in the city of Walker, LA. The traffic signal was determined to meet signal warrants upon completion of the Foxglove subdivision in Livingston Parish, LA. Plans included road widening, signal face indication schedule, signal sequence chart, sign schedule, detector schedule, controller timing, wiring diagram, and free operation phasing diagram. Reece met with city officials to discuss the feasibility of constructing a traffic signal as opposed to other alternative measures for improving the intersection.
02/16 - 12/16	**H.005733.5 US 190 Superstreet Task Order (St Tammany Parish).** Reece was a team member responsible for the layouts for the US 190 Superstreet signal designs. He created the preliminary plans using CAD software program MicroStation V8i. He aided in the technical design of each intersection. He conducted field inspections to verify locations of existing equipment as well as observing the area for feasible proposed utility locations. He attended project team meetings to discuss the project details as well as the plan-in-hand walk-through.
01/16 – 11/17	**Ochsner Main Campus Traffic Signals (Jefferson Parish).** Reece served as a design engineer for the traffic signal plans for the two Ochsner Main Campus access traffic signals with US 90 (Jefferson Hwy). The goal of the design was to implement updated pedestrian timings as well as optimize progression through the US 90 corridor. He reviewed traffic data and assigned time of day coordination timing parameters for the two intersections so that they may be included in the coordinated system west of the intersections. He used TruTraffic determine the appropriate offset parameters so that vehicles may progress efficiently through the coordinated system. Plans for the two intersections were drafted in the form of DOTD's latest version of the TSI format. He was responsible for estimating construction quantities using DOTD's 2016 Spec Item list.
10/16 – 05/17	**Loyola Interchange Modification Request, Kenner, LA.** Reece was a team member in the production of an Interchange Modification Report (IMR) for the I-10 at Loyola Dr. Interchange. He was an active member in collecting vehicle travel time data and processing the data. He also aided in collecting vehicle queues at the study intersections. He also assisted in the Vissim model calibration.
02/15 – 12/15	**H.011646 Retainer Contract for DOTD District 02 Traffic Signal Inventories - Nola 3.** Reece served as the lead engineer in the production of the traffic study for the District 02 Traffic Signal Inventories. The objective was to effectively correct the progression of traffic through the US 90 (Broad St) corridor. He reviewed vehicle crash data at all intersections in the study scope. He conducted travel time runs. He created a model with existing traffic signal timing information using Synchro 8 Software. He recommended traffic signal pedestrian clearance times and yellow and red clearance times for each intersection. He used MicroStation V8i when designing traffic signal plans in DOTD's TSI format.

Firm	AECOM		
Daryl Taavola, PE, PTOE QA/QC		Years of Relevant Experience with this Employer	25
		Years of Relevant Experience with Other Employer(s)	13
Degree(s) / Years / Specialization	BS / 1986 / Civil and Transportation Engineering		
Active Registration Number / State / Expiration Date	PE IA #19483 / 12/31/2024 | PE MN #26131-06/30/2024 | PE CA#46263 / 12/31/2024 | Traffic Engineer CA #TR1738-06/30/2023 | PTOE #470-1999		
Year Registered	1990 (CA)	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**Role: QA/QC Lead.** *Daryl will be responsible for QA/QC of all deliverables on this IDIQ. He serves as Vice President in charge of AECOM's Regional Technology / ITS Department. He has dedicated his career to ITS in all aspects of research, planning, design, and implementation, thereby providing him the complete life cycle experience to conduct a proper QA/QC review of all types of TSMO projects.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
06/17 – 06/19	**Illinois Statewide ITS Plan Update.** AECOM Quality Manager for development of the Illinois Statewide ITS Plan responsible for review of draft report deliverables including a strategic plan that sets the direction for the state of Illinois ITS program. Efforts included quality reviews and QA/QC documentation to meet client requirements and to allow deliverable of high-quality products.
06/17-06019	**Nebraska DOT Statewide Operations Center/TMC Assessment.** Project Manager for an assessment of the Nebraska DOT's Statewide Operations Center to enhance TMC operations for the state. The assessment first focused on DOT interviews and the review of existing conditions and traffic management procedures conducted by the state. Efforts then included the preparation of new TMC standard operating procedures along with recommendations for TMC staffing, training and performance measures to allow for statewide consistency.
06/10 – ongoing	**MnDOT, Minnesota Guidestar/ITS On-Call Program.** Contract Manager and ITS Director for the Minnesota Guidestar Program while employed at MnDOT including oversight of a $10 – 20 million annual ITS program comprised of a variety of field operational tests, developmental deployment and new innovative ITS strategies. Currently serving as the AECOM Project Manager in support of the MnDOT ITS/CAV On-Call Program and statewide ITS initiatives. Also managing 2 separate AV shuttle pilots including operations on public roads in Minnesota all-weather seasons.
06/89 – 06/95	**City of Pasadena TMC/ITS Program.** Program Manager and operations lead for the TMC in the City of Pasadena, CA. Was in responsible charge of the design, implementation and operation of a state-of-the-art Advanced Traffic Management System (ATMS) including a sophisticated TMC, closed circuit television, dynamic message signs, highway advisory radio, centralized traffic signal system and coordination with Caltrans freeway operations. Responsibilities also included development of Standard Operating Procedures (SOPs),daily TMC staff supervision, incident management, special event management, signal timing development, operations and monitoring of 270 traffic signals.

06/15 – 06/17	**Minneapolis ITS/TMC Enhancements.** Project Manager for the City's effort to upgrade and enhance their arterial Intelligent Traffic Management System and TMC. Efforts included preparation of PS&E procurement packages and State Aid document submittals for traffic signal controller upgrades, CCTV cameras, video detection systems, fiber optic communications and TMC enhancements. Support also included construction oversight services and staff support to the City in managing the project.
06/07 – 06/17	**Minneapolis TMC Upgrade & ITS Enhancements.** Project Manager for the City's effort to upgrade their TMC and deploy an enhanced arterial Intelligent Traffic Management System. Over a 10-year period through various on-call task orders or separate competitive contracts, AECOM supported the City through elements of the ITS system engineering process to enhance their TMC operations including project management, stakeholder outreach, project scoping, concept of operations planning, system requirements, detailed design and PS&E.
06/19 –06/20	**Iowa DOT, I-35 Route Diversion Plan.** Project Manager. Prepared diversion plans along I-35 in the state of Iowa from the Elkhart Exit #96 (north of Des Moines) to the Minnesota border. Project included evaluating diversion route infrastructure, stakeholder outreach and focus group meetings, preparing diversion route strategies, GIS mapping and project management.
01/16 - 12/16	**Minneapolis-Saint Paul Smart City.** Project Manager. Facilitated and supported the Cities of Minneapolis and Saint Paul, Metro Transit, MnDOT and other area stakeholders in developing concepts and funding grant application as part of the USDOT Smart City Challenge including connected/autonomous/electric vehicle applications and other emerging technology. Continued to participate in on-going stakeholder meetings related to the pursuit of Smart City elements.
06/14 – 06/17	**MnDOT Enhanced Speed Compliance for Work Zones.** Project Manager. Project included systems engineering and the deployment and testing of a new mobile system to enhance speed compliance in work zones. The system utilizes combined video and radar to detect speeding vehicles and sends alerts and video to enforcement officers positioned at safe locations downstream of the work zone. The goal is to enhance safety in work zones.
06/18 – 06/20	**Saint Charles County Gateway Green Light ITS/CAV Feasibility Study.** Project Manager. Developed an update to the initial Gateway Green Light (GGL) ITS feasibility study to reflect current stakeholder needs including new ITS, system and communications enhancements, CAV, electrification, and other emerging technology applications. Effort included stakeholder outreach, workshop facilitation, current systems inventory, needs identification, ITS and emerging technology assessments, applications development, and deployment plan for future phases of the GGL program.

Firm	AECOM		
Gregory Trahan, PE, RSP$_1$ Traffic Studies Support		Years of Relevant Experience with this Employer	17
		Years of Relevant Experience with Other Employer(s)	1
Degree(s) / Years / Specialization	BS/2005/Civil Engineering		
Active Registration Number / State / Expiration Date	PE/36041/LA/03.31.2023 RSP$_1$/833/03.14.25 ATSSA Traffic Control Supervisor Refresher–LA State Specific (2019)	LADOTD Traffic Process and Report Parts 1, 2 and 3 (2018)	
Year Registered	2011	Discipline	Civil Engineering
Contract Role(s) / Brief Description of Responsibilities	**Role. Traffic Studies Support.** *Greg will provide traffic studies support to the team, warrant analysis, data collection, and traffic signal inventory services. He will also support the project manager and other design teams as needed.*		

Experience Dates (mm/yy - mm/yy)	Experience and qualifications relevant to the proposed contract; i.e., "designed drainage", "designed girders", "designed intersection", etc. Experience dates should cover the years of experience specified in the applicable MPR(s).
09/17-Ongoing	**LA 23 Over Mid-Barataria Sediment Diversion, Plaquemines Parish, LA.** Project Engineer. Greg was the Project Engineer that assisted in the Design Plans for the new bridge and roadway structure over the new sediment diversion. The project consists of a new concrete precast girder bridge, approximately 2,200 feet in length, and the connecting asphalt roadway. Design Plans included Plan and Profile sheets, Drainage Plan and Profile sheets, Sequence of Construction Plans. Mr. Trahan assisted in the design of road side drainage, intersection layout, guardrail layout, and Sequence of Construction Plans. There will be multiple construction activities being conducted at one time. The Sequence of Construction is a critical element of design in order to manage traffic and maintain roadway operations.
02/07- 06/10	**Siegen Lane Improvements (Highland Rd to 650' south of Perkins Rd), City of Baton Rouge Dept of Public Works, Baton Rouge, LA.** Project Engineer. Greg assisted in the design and plan development of a 1.18-mile segment of Siegen Lane that is planned to be widened to a four-lane boulevard. Greg assisted in the geometric design of the roadway, subsurface drainage, and the development of the sequence of construction. He has also prepared quantities and cost estimates for the project.
06/13-10/14	**Stage 0 Feasibility Study & Report, Williams Boulevard, LADOTD, Jefferson Parish, LA (H.010570.1).** Project Engineer. Greg assisted in the crash analysis and environmental inventory associated with the LA 49 feasibility study. The study considered a 2.5–mile segment of a heavily traveled, heavily developed five-lane urban roadway with moderate pedestrian use, three major intersections and an interchange with Interstate 10.Task included collecting and analyzing data to identify trends and determine overrepresented crash types. Developed collision diagrams. Used Crash Modification Factors to analyze safety countermeasures proposed for each alternative.
08/12-07/14	**Stage 0 Feasibility Study & Report, Johnston Street Study (US 167), LADOTD, Lafayette Parish, LA (H.009998.1).** Project Engineer. Greg was the Project Engineer for the US 167 Study. The US 167 (Johnston Street) Corridor Study is a study that collected and analyzed data to help develop immediate, short–term, and long–term recommendations in accordance with "DOTD's Stage 0: Manual of Standard Practice" for the Johnston St. (US 167) corridor between Coulee Mine Bayou Bridge and Cajundome Avenue. Greg was tasked to identify crash trends, develop collision diagrams, determine the effectiveness of counter measures in alternative concepts, and identify and assemble environmental conditions along the corridor into a GIS database.

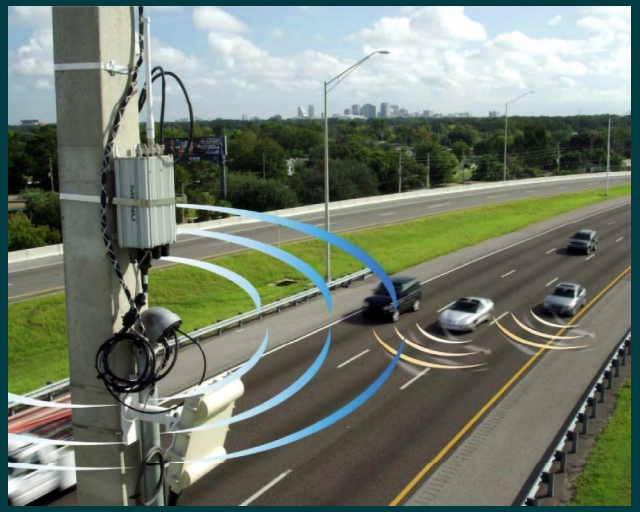
05/10-02/14	**Stage 0 Feasibility Study & Report, I-49 Raceland to the West Bank Expressway (24 Stage 0 Reports), LADOTD, Lafourche, St Charles & Jefferson Parishes, LA (H.005171).** Project Engineer. Greg assisted with developing a program of Stage 0 projects that would provide interim capacity and safety improvements along the US 90 corridor from LA 1 to the current terminus of the elevated portion of the Westbank Expressway. Greg assisted in conducting field work for environmental inventories, reviewed of crash data, various alignment alternative analysis, and completing cost estimates for alternatives.
11/11-01/13	**Stage 0 Feasibility Study & Report, LA 935, LADOTD, Ascension Parish, LA (H.009997.1).** Project Engineer. Greg assisted in performing a Stage 0 Feasibility Study in accordance with the results of a Roadway Safety Assessment (RSA) performed by the AECOM team. The study area is approximately a 4–mile segment of LA 935 from LA 431 to LA 22 in Ascension Parish with a known history of crashes. Greg assisted in developing conceptual alternatives for the realignment of LA 935. Additional tasks included developing typical sections, creating design criteria, and developing cost estimates for various alternatives.
06/13-Ongoing	**MOVEBR Jones Creek Road Extension Segments 1A & 1B, City-Parish of East Baton Rouge, LA.** Project Manager. Greg is managing tasks for Traffic Engineering, Environmental Review, and Green Infrastructure/landscaping for a new roadway project that will extend a suburban arterial from its current terminus at Tiger Bend Road to Airline Highway. Greg is responsible for the development of the traffic analysis, analyzing different alternatives, including signalized intersections, roundabouts, and alternative intersections. Greg also assisted in the design of the Tiger Bend Intersection; this included traffic signals, cross walk layout, and wiring for the new signals.
12/20-Ongoing	**MOVEBR Jones Creek Road Extension, Airline Highway Traffic Study, City-Parish of East Baton Rouge, LA.** Project Manger. Greg is managing the traffic engineering for the corridor study of Airline Highway from Industrialplex Boulevard to the East Baton Rouge Parish line. The traffic engineering report follows the LA DOTD Traffic Engineer Report Process. The traffic study will analysis the existing signals within the study corridor along with a proposed intersection of the Jones Creek Road intersection.
09/20-Ongoing	**Feasibility Study & Report/TEPR, College Drive, City of Baton Rouge/Parish of East Baton Rouge, Baton Rouge, LA.** Project Engineer. Greg is assisting in the Design Study, Traffic Study, and Preliminary Plans for the completion of roadway improvement on College Drive and its vicinity between Perkins Road and Bawell Street inclusive of the interchange with I–10. The Design Study will include development of numerous concepts to enhance operational capacity and efficiency along the corridor while including Complete Streets and green infrastructure improvements. Preliminary alternatives were developed and documented using LADOTD Stage 0 Project and Scope and Environmental Checklists in order to apply for state and federal funding grant applications to expand funding for the project beyond the allocation of the parish MOVEBR bond funds. Completed the Stage 0 checklists.
05/12-12/13	**LA 1 Corridor Study, LADOTD, West Baton Rouge and Iberville Parishes, LA (H.009930.1).** Project Manager. Greg served as the Project Manager for this task order and assisted with the development of alternatives using signal coordination and access management principles to preserve the traffic operations of the corridor. In addition to vehicle mobility AECOM also analyzed and recommend safety and enhancements along the 10.5 mile corridor from N. Line Road to LA 988 (Schnebelen Road).
11/12-11/13	**District 02 Signal Inventory, LADOTD, St Charles, Orleans, St Bernard, Plaquemines, Jefferson, LaFourche, Terrebonne Parishes, LA (H.009426.5).** Project Manager. Greg coordinated the collection of the Existing Traffic Signal inventories with in District 02. This included the collection and review of the existing Traffic Signal Inventory (TSIs) that were provided by the department. Greg was able to deploy a coordinated effort to field verify the existing TSI and provide updates that may have been required. After completion of the field review, AECOM completed updated intersection drawings and required TSI forms to provide the most updated information. These updates TSI were provided to DOTD in both hard copy and electronic format.

Section 17

AECOM provides TSMO Services for Multiple State DOT Programs

- Texas DOT
- Florida DOT
- Maryland DOT
- New Hampshire DOT

Based on AECOM's performance on the 5-year TxDOT TSMO contract, we were ***ranked number one and reselected as prime consultant for another five years*** to implement the TSMO strategies and tactical plans we recommended – the only Louisiana firm that could make that claim.



17. Firm Experience: Identify the team's project experience most relevant to the scope in the advertisement. **The projects should be limited to a total of 20, with no more than 5 projects being represented by the prime consultant and with no more than 3 projects represented by each sub-consultant on the team. If more than 5 projects are identified for the prime consultant, all projects identified after the first 5 will not be evaluated. If more than 3 projects are identified for a single sub-consultant, all projects identified after the first 3 from that sub-consultant will not be evaluated.** Include no more than one page per project. Projects identified shall only include work performed by firms on the team. The projects identified do not necessarily need to have been DOTD projects.

Firm Name	AECOM			Past Performance Evaluation Discipline(s)	ITS/Traffic
Project Name	**TxDOT TSMO Consulting Services**			Firm Responsibility (Prime or Sub?)	Prime
Project Number	58-8IDP5004 PS No. 8705	Owner's Name	Texas Department of Transportation (TxDOT)		
Project Location	Statewide, Texas		Owner's Project Manager	Jianming Ma, PE	
Owner's Address, Phone, Email	6230 E Stassney Lane, Austin, TX, 512.923.6456, jianming.ma@txdot.gov				
Services Commenced by This Firm (mm/yy)	05/19		Total Consultant Contract Cost ($1,000's)	$5,000	
Services Completed by This Firm (mm/yy)	Ongoing		Cost of Consultant Services Provided by This Firm ($1,000's)	$4,000	

AECOM was retained by the TxDOT to provide program management services to update and implement the Statewide TSMO Strategic Plan and other actions to integrate TSMO into core organizational units such as planning, design, construction, maintenance, and traffic operations. Specifically, AECOM has prepared the following documents:

- Statewide TSMO Strategic Plan
- District TSMO Program Plans for El Paso, Lubbock, Amarillo, Odessa, Childress
- TSMO Brochures
- TSMO Policies & Procedures
- TSMO Funding
- Systems Engineering
- Standards & Specifications
- Technology Solutions
- Performance Measures
- TSMO Evaluation Tool
- Data Platform
- Interoperability
- Information Management
- TSMO Benefit-Cost Analysis
- Cooperative Automated Transportation
- Traffic Incident Management
- TSMO Innovation Framework
- Data-Driven Approach to Improve Traffic Safety
- AI/Machine Learning Applications to TSMO
- Gamification Applications to TSMO
- Developing Enhanced Traffic Signal Management Plans
- Lonestar™ Enhancements
- Infrastructure Investment and Jobs Act (TSMO References)
- TSMO Training – 30 modules covering planning, implementation, and O&M

These documents were prepared based on extensive research of FHWA, National Operations Center of Excellence, AASHTO, and other websites; leadership engagement; conducting Capability Maturity Model workshops; and one-on-one interviews with TxDOT Division and District management. In addition, AECOM is supporting TxDOT by updating the TSMO web page including a TSMO video, status updates of the 25 District TSMO Program Plans, frequently asked questions, and other relevant material.

RELEVANCY TO THE IDIQ FOR TSMO:

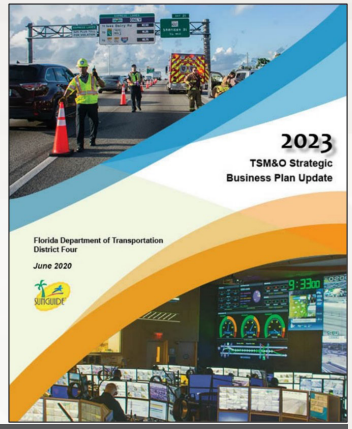
- ✓ Conducting CMM Workshops
- ✓ Development of TSMO Strategic Plan
- ✓ Development of ITS Implementation Plans
- ✓ Development of TSMO Training Program

Firm Members Involved: Bob Edelstein (Project Manager), Victor De la Garza (Deputy Project Manager), Ming-Shiun Lee (TSMO Program Plans), Dan Nelson (TSMO Program Plans, Systems Engineering), Daniel Helms (Data-Driven Approach to Improve Traffic Safety), Matt Lee (TMC Operations Training).Paul Avery (Cooperative Automated Vehicles), John Song (Smart Work Zones)

Firm Name	AECOM			Past Performance Evaluation Discipline(s)*	ITS/Traffic
Project Name	**Florida DOT TSMO Operations Services**			Firm Responsibility (Prime or Sub?)	Prime
Project Number	BE-579 / 436198-2-8201	Owner's Name	Florida Department of Transportation, District Four		
Project Location	Southeast Florida		Owner's Project Manager	Nicole Forest	
Owner's Address, Phone, Email	2300 West Commercial Boulevard, Fort Lauderdale, Florida, 954.847.2631, Nicole.Forest@dot.state.fl.us				
Services Commenced by This Firm (mm/yy)	05/04		Total Consultant Contract Cost ($1,000's)		$100,000
Services Completed by This Firm (mm/yy)	Ongoing		Cost of Consultant Services Provided by This Firm ($1,000's)		$75,000

AECOM was retained by the Florida DOT District 4 to develop a TSMO Strategic Business Plan and use it as the playbook in conducting TSMO operations from the TMCs located in Fort Lauderdale and West Palm Beach. This contract continues AECOM's role in TMC operations at these facilities dating back to 2004. Every five years, AECOM refreshes the plan to reflect changes in technologies, functions, and priorities. In recent years, the TMC operations has transformed from "ITS" to "TSMO" by adding new systems including express lanes, arterial management, and ramp metering.

The TSMO Strategic Plan was prepared by interviewing each of the business units to establish a five-year vision and action items that would be required to make the vision a reality. The components of the plan address TMC operations, ITS deployment, IT/ITS maintenance, safety service patrols, traffic incident management, systems, TSMO planning, partnering, public education & outreach, and new initiatives. Performance measures and targets were developed and used as a tool as part of the annual reports to assess whether each function is on track to achieve the five-year vision.



An important outcome of previous versions of the Strategic Business Plan was using data to track performance in real-time. The video wall was reconfigured to provide a balance in posting performance measures versus CCTV images. Real-time performance measures are posted for incident clearance times, number of ITS devices malfunctioning, number of generators activated to address loss of power, status of reversible flow operations, status of the fiber network in terms of links that were either cut or not operational, signal phasing and timing status along critical corridors, and more. In addition, AECOM provided other TSMO services including:

RELEVANCY TO THE IDIQ FOR TSMO:

- ✓ Development of TSMO Strategic-Business Plan
- ✓ Configuration of video wall in posting real time performance measures
- ✓ Development of Disaster Recovery Plan
- ✓ Operations of Managed Lanes and Ramp Metering

- TMC Visualization – Recommendations to reconfigure the TMC to support the TSMO program in providing more of a balance in conducting proactive traffic / transit management as well as incident management.
- Active Traffic Management Guidelines (ATM) – Guidelines to consider ATM as an alternative in the transportation planning and PD&E process to improve capacity along selected corridors. Specifically, the guidelines share best practices of ATM deployments within Europe and the US; provides a template summarizing typical design concepts, costs and benefits; and identifies implementation considerations.
- Standard Operating Procedures (SOP) – Drafted SOPs, as an amendment to the existing SMART SunGuide TMC SOGs, to address the TSMO program.
- Fiber Optic Testing – Inspection, oversight and recommendations to FDOT and Broward County regarding testing and installation of fiber optic cables.
- Public Involvement Plan – Framework for conveying the mission, vision, goals and objectives of the TSMO program including local issues to be addressed; outreach messages; outreach tools; meetings and presentations.
- Long-Range Transportation Plan (LRTP) – Supported the Broward MPO in developing a TSMO program included in the 2040 Broward MPO LRTP.
- Integrated Corridor Management (ICM) – Drafted the ConOps and prepared the FHWA ICM Deployment Planning Grant Application for the I-95 Corridor.

Firm Members Involved: Bob Edelstein (Project Manager), Matt Lee (Training), Dee McTague (PM/Operations Manager), Aaron Rapp (IT Manager)

Firm Name	AECOM			Past Performance Evaluation Discipline(s)*	ITS/Traffic
Project Name	**New Hampshire DOT Statewide On Call ITS (TSMO)**			Firm Responsibility (Prime or Sub?)	Prime
Project Number	43973	Owner's Name		New Hampshire Department of Transportation	
Project Location	Statewide, New Hampshire		Owner's Project Manager	Charles Blackman	
Owner's Address, Phone, Email	7 Hazen Drive, P.O. Box 483, Concord, New Hampshire 03302, 603.227.0016, Charles.e.blackman@dot.nh.gov				
Services Commenced by This Firm (mm/yy)	09/17	Total Consultant Contract Cost ($1,000's)			$1,000
Services Completed by This Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by This Firm ($1,000's)			$700

AECOM was retained by the New Hampshire DOT, as part of an ITS GEC contract, to develop a **TSMO Strategic Plan** to provide guidance on the deployments and integrations of the TSMO Bureau over the next five fiscal years (2020-2024). This Strategic Plan is an update to the previous Strategic Plan developed by AECOM for fiscal years 2015 - 2019. The time frame reflects a reasonable horizon that considers major advances in emerging technologies that may alter installation methods, costs, or delivery systems in the future. The TSMO Strategic Plan addresses the following:

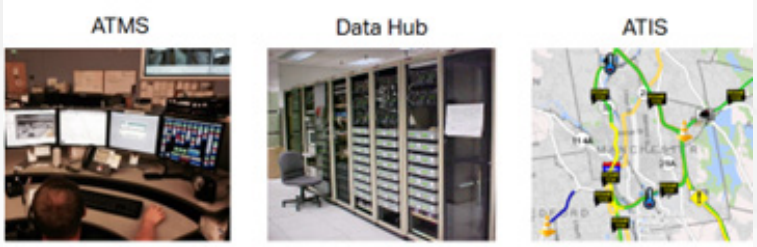
- Background and purpose for ITS systems and their elements.
- General means and methods to focus on during the next 5 years to fulfill the desired vision of the TSMO program.
- Future initiatives for each of the functional areas on a year-by-year basis.
- Project Summary Sheets providing information for each significant component listed in the strategic plan in terms of Project Description, Project Lead/Champion, Schedule, Budgetary Cost Estimate, and Goals.

Specifically, the topics covered in the Strategic Plan include the following:

- TMC Operations
- Maintenance of ITS Assets
- Communications Network
- Advanced Traveler Information Systems (ATIS)
- Traffic Incident Management (TIM)
- Partnering and Public Outreach
- Performance Measures
- Transit/Bridge Recordings
- Emerging Technologies

In summary, the TSMO Strategic Plan provides specific initiatives for projects, processes, and strategies needed to achieve the TSMO Bureau goals. The initiatives outlined in this plan are considered during the development of future contracts and program updates. The progress on individual initiatives is tracked and evaluated on an annual basis to ensure they are being completed in accordance with this plan.

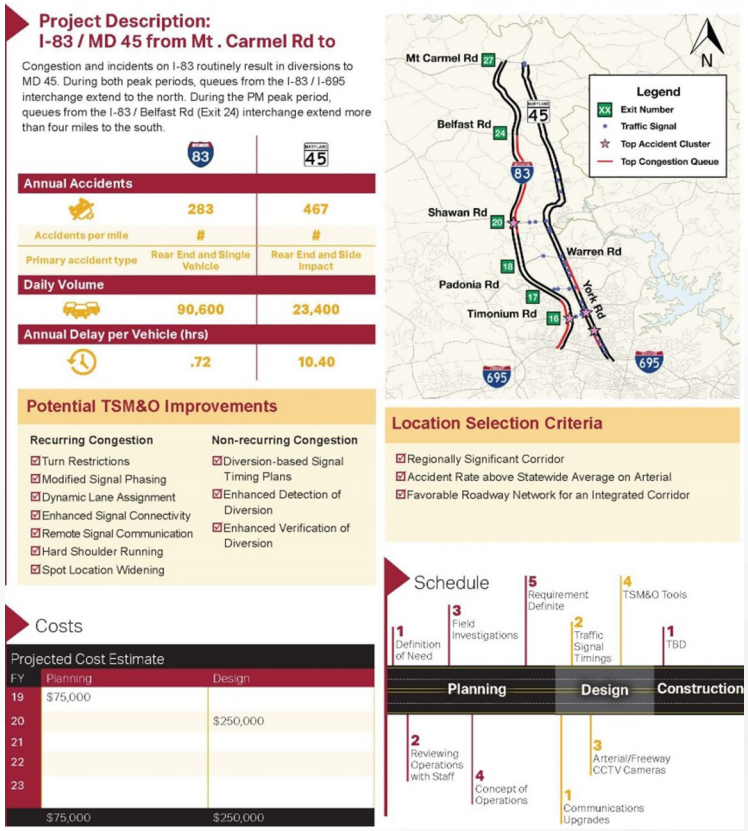
Firm Members Involved:
Chris Chaffee (Project Manager), Bob Edelstein (Technical Advisor)



RELEVANCY TO THE IDIQ FOR TSMO:

- ✓ Development of TSMO Strategic Plan
- ✓ Concepts of Operations
- ✓ ITS Design and Test Plans
- ✓ Developed ITS Asset Management Tool

Firm Name	AECOM			Past Performance Evaluation Discipline(s)*	ITS/Traffic
Project Name	**Maryland DOT On Call ITS Services (TSMO Program)**			Firm Responsibility (Prime or Sub?)	Prime
Project Number	N/A	Owner's Name	Maryland Department of Transportation		
Project Location	Statewide, MD		Owner's Project Manager	Mohammed Raqib, PE, PTOE	
Owner's Address, Phone, Email	7491 Connelley Drive, Hanover, MD 21076, 410.787.5886, mraqib@mdot.maryland.gov				
Services Commenced by This Firm (mm/yy)	08/18	Total Consultant Contract Cost ($1,000's)	$989		
Services Completed by This Firm (mm/yy)	08/21	Cost of Consultant Services Provided by This Firm ($1,000's)	$510		



AECOM was retained by the Maryland Department of Transportation to develop a TSMO Program as part of an On Call ITS contract. The goal was to create a combined freeway and arterial program that is based on roadway operational needs and performance to maximize mobility and reliable travel for people and goods on key corridors within Maryland.

AECOM prepared the 5-Year Program (2020-2024) to define an annual review cycle and realistic operations and maintenance expectations. This also creates stakeholder buy-in for operating and maintaining the program and augments MDOT procedures to accommodate combined freeway and arterial TSMO. Through a series of workshops, AECOM identified a number of corridors as candidates for initial TSMO deployment projects. An algorithm was designed to rank those corridors based on AADT, average speed, PTI, TTI and annual crashes.

One-page project summary sheets were developed for each TSMO project including information on project location; operational issues and needs within the corridor of parallel and arterial roadways; project type (institutional, process, deployment); cost estimates (deployment, operations, and maintenance); and project schedule.

RELEVANCY TO THE IDIQ FOR TSMO:

- ✓ Development of TSMO Strategic Plan
- ✓ One-Page TSMO Project Summary Sheets
- ✓ Freeway-Arterial Integration
- ✓ Developed algorithm to prioritize TSMO corridors

In summary, the document provides both an overall narrative of the program and a collection of project summary sheets which the Maryland Department of Transportation, and their partners can use, in advancing each project and determining priorities.

Firm Members Involved: Bob Edelstein (Technical Advisor), Tim Ryan (Project Manager)

Firm Name	AECOM			Past Performance Evaluation Discipline(s)*	ITS/Traffic
Project Name	**ITS High-Level Design and System Verification, Statewide**			Firm Responsibility (Prime or Sub?)	Prime
Project Number	701-65-1192	Owner's Name		Louisiana Department of Transportation and Development	
Project Location	Statewide, LA		Owner's Project Manager	Carryn Sollie	
Owner's Address, Phone, Email	Annex Bldg. 1212 East Highway Drive, Baton Rouge, LA 70802, 225.202.2426, Carryn.Ferrier@LA.GOV				
Services Commenced by This Firm (mm/yy)	03/09		Total Consultant Contract Cost ($1,000's)		$750
Services Completed by This Firm (mm/yy)	06/16		Cost of Consultant Services Provided by This Firm ($1,000's)		$650

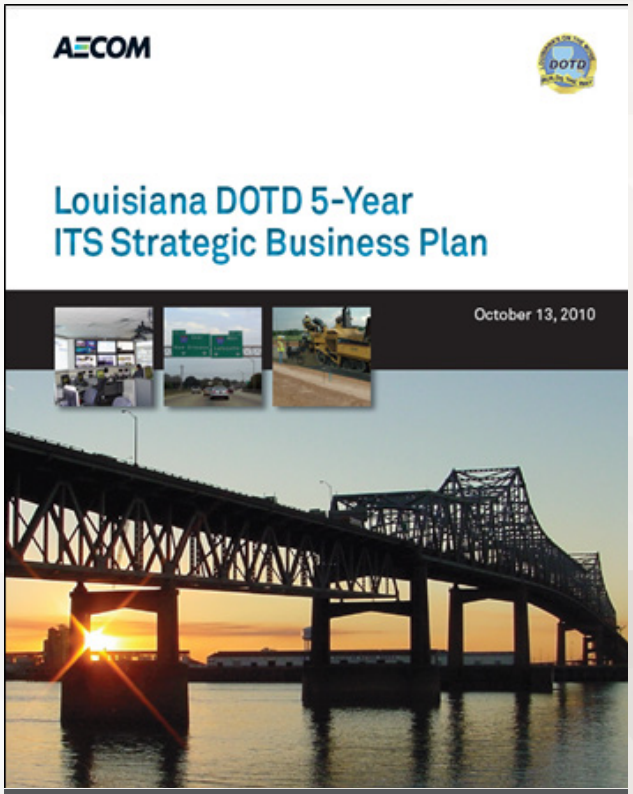
AECOM provided systems engineering and related services for the Statewide and Regional ITS Transportation Management Systems. This was a task-order based contract where AECOM supported DOTD in providing the following services:

Inventory of Assets. AECOM developed a database of ITS field devices including GPS location, physical location, site name; equipment make and model, firmware versions; etc. In addition, AECOM developed a diagram showing how the network devices are connected to the Local Area Networks and Wide Area Networks that drive the ITS systems from a regional and statewide level. Regional diagrams were developed illustrating the topology, communications medium and specific ITS field and equipment for Regional Areas (i.e., Baton Rouge, Shreveport, New Orleans, Lafayette, Lake Charles) and TMCs (i.e., Statewide, Baton Rouge, Shreveport, Houma).

ITS Strategic Business Plan. AECOM prepared an ITS Strategic Business Plan that provided guidance on the direction of the LADOTD ITS program during the time frame 2011 – 2015. The plan addressed each facet of the program, including ITS deployment; TMC operations; ITS maintenance; ITS systems; Roadway Safety Incident Program; traffic incident management; traveler information; traffic engineering; partnering; and public outreach. The business plan provided recommended project initiatives for each of the above categories on a year-by-year basis. Cost estimates were provided for each significant component listed in the business plan in terms of initial costs and annual costs of operations and maintenance. Performance measures were developed to track progress of the ITS program on an annual basis.

ATMS Software. AECOM conducted and documented an inventory of existing ATMS software for potential application for LADOTD. AECOM then prepared a Concept of Operations for the ATMS software that summarized the existing systems and processes; defined the proposed software concept; presented various operational scenarios illustrating how the software would work; defined regional and statewide TMC ITS functions; and presented recommendations for the implementation, operational and support environment. AECOM also defined the functional requirements of the ATMS software and included it in a RFP for the ATMS Integrator. Finally, AECOM provided IV&V services for the software deployment.

Firm Members Involved: Bob Edelstein (ITS Strategic Plan), Brian Keeler (ATMS Software)



RELEVANCY TO THE IDIQ FOR TSMO:

- ✓ Developed ITS Strategic-Business Plan
- ✓ Prepared ConOps for ATMS software
- ✓ Prepared ATMS Functional Requirements
- ✓ Conducted inventory of ITS assets

Firm Name	**Intelligent Transportation Systems LLC**	Past Performance Evaluation Discipline(s)*	ITS
Project Name	**IDIQ Contract for Intelligent Transportation Systems (ITS) Management, Operations, and Maintenance Engineering and Inspection (ME&I)**	Firm Responsibility (Prime or Sub?)	Sub
Project Number	H.013868	Owner's Name	Louisiana Department of Transportation and Development (LADOTD)
Project Location	Statewide Louisiana	Owner's Project Manager	Joshua Harrouch
Owner's Address, Phone, Email	1201 Capitol Access Rd | Baton Rouge, LA 70802 | joshua.harrouch@la.gov		
Services Commenced by This Firm (mm/yy)	04/20	Total Consultant Contract Cost ($1,000's)	$12,000
Services Completed by This Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by This Firm ($1,000's)	Confidential

ITS LLC has been a chosen partner of LADOTD for ITS Maintenance, Engineering, and Inspection since the inception of the first retainer contract awarded in 2012. Since that time, ITS LLC has enjoyed a continuous relationship with LADOTD's ITS Section and has participated on all subsequent retainers since (44-2500 & 44-7102). Since the first contract, ITS LLC's services have been expanded to include more defined roles for project management, operations, engineering, and inspection. ITS LLC is proud of its ongoing commitment to the maintenance of LADOTD's ever-growing ITS infrastructure.

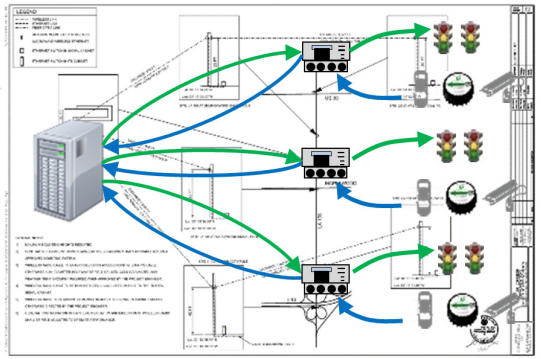
On this contract, ITS LLC is responsible for both ongoing routine maintenance as well as responsive repairs for outages that occur. The ongoing maintenance includes visiting 236 camera sites to provide checking, testing, inspecting, cleaning, and periodic repair and replacement of components as required by the routine ME&I schedule. Technicians ensure that cameras are working properly, that all equipment – including all wiring and connections – is in good working order, that the site is cleaned and free of debris of unwanted insects and vegetation, and that the operations meet LADOTD standards. This results in limited downtime of the equipment and the best level of service for the motoring public. This work includes devices such as traffic cameras, dynamic message signs, vehicle detectors, ramp meters, emergency crossover gates, and queue warning systems.

The responsive ME&I activities are performed to correct any reported failures of ITS equipment. When an outage occurs at one of the 236 sites assigned to ITS LLC, it is reported to the firm. ITS LLC technicians respond to the site within 24 hours to troubleshoot the problem, perform system testing, and make necessary hardware repairs to get that site back up and running as quickly and safely as possible. This sometimes involves coordination with equipment manufacturers' tech support personnel in addition to ITS LLC's in-house technicians

Firm Members Involved: *Clarke Chauvin, PE, PTOE, PMP; Jonathan Fox, PE, PTOE, PMP, Christopher Dodt*

Firm Name	**Intelligent Transportation Systems LLC**		Past Performance Evaluation Discipline(s)*	ITS, Traffic	
Project Name	**Lake Charles - Adaptive Traffic Signal Systems A & B**		Firm Responsibility (Prime or Sub?)	Sub	
Project Number	L2CC-990-11-DW-24	Owner's Name	Sasol		
Project Location	Westlake and Sulphur, LA	Owner's Project Manager	Eric Flemming		
Owner's Address, Phone, Email	2201 Old Spanish Trail | Westlake, LA | eric.flemming@worleyparsons.com				
Services Commenced by This Firm (mm/yy)	08/15	Total Consultant Contract Cost ($1,000's)	Confidential		
Services Completed by This Firm (mm/yy)	07/19	Cost of Consultant Services Provided by This Firm ($1,000's)	Confidential		

ITS LLC worked with the Louisiana Department of Transportation and Development and Trafficware, the system manufacturer, to turn on the first adaptive traffic signal system in the State of Louisiana. The system has eased travel along the corridor, allowing better progression and more efficient operations.



Getting to the point of turning on the system took a lot of project management, planning, coordination, design and integration. ITS LLC performed signal design for six traffic signals on the Sampson St. corridor (System A) and four traffic signals on the LA 108 corridor (System B). The design included upgrading controllers to ATCs, upgrading detection for increased accuracy and traffic data collection, as well as PTZ CCTV camera for remote monitoring (see picture) and seven BlueTOAD units for travel time and speed data collection. In addition to determining the network allocations and communications paths, ITS LLC also designed, configured, and implemented the communications equipment.

A private cellular network connection was originally chosen as an alternative to fiber optic communications. ITS LLC was retained to provide ongoing maintenance support which has included troubleshooting server, network, and detection issues. Since DOTD's ITS Section completed the Lake Charles ITS Phase 2, it allowed ITS LLC to move the cellular communications system over to an unlicensed wireless radio system. ITS LLC conducted wireless assessments, designed, configured and installed 18 radio units between the two systems. This has resulted in fewer adaptive nuisance alarms as well as removed ongoing monthly cellular charges. This project ultimately brought 12 adaptive signals online and established the infrastructure needed to continue to add adaptive systems in the area. Sasol and the design team were recognized for their efforts by receiving the 2018 Louisiana Transportation Conference award for "Use of Innovative Product or Technology."

Firm Members Involved: *Clarke Chauvin, PE, PTOE, PMP; Jonathan Fox, PE, PTOE, PMP*

RELEVANCY TO THE IDIQ FOR TSMO:

- ✓ Traffic Signal Design
- ✓ Coordination with LADOTD District 07 (Lake Charles)
- ✓ Innovative Traffic Management Solutions
- ✓ ATC Controller Upgrades, CCTV for Data Collection and Monitoring
- ✓ BlueToad Units for Travel Time and Speed Data Collection
- ✓ Communications Network Design (Cellular, Unlicensed Wireless Radio)

Firm Name	**Intelligent Transportation Systems LLC**		Past Performance Evaluation Discipline(s)*	ITS, Traffic	
Project Name	**Calcasieu Point Adaptive Traffic Signal Design**		Firm Responsibility (Prime or Sub?)	Sub	
Project Number	N/A	Owner's Name	John Kelly		
Project Location	Lake Charles, LA	Owner's Project Manager	John Kelly		
Owner's Address, Phone, Email	1300 Main Street, Houston, TX 77002 | 713-989-7411 | john.kelly@energytransfer.com				
Services Commenced by This Firm (mm/yy)	09/15	Total Consultant Contract Cost ($1,000's)	Confidential		
Services Completed by This Firm (mm/yy)	10/17	Cost of Consultant Services Provided by This Firm ($1,000's)	Confidential		

The new Lake Charles LNG plant was constructed to provide new liquification facilities as well as non-liquification support facilities to expand LNG processing at existing facilities in Lake Charles, LA. Because of the significant increase in workforce to support these operations, traffic in and around the new plant was expected to also see significant increases. Additionally, during construction, there would be a need for routes to transport oversized load with large and heavy equipment that was constructed offsite and brought in for the facility.

Proposed Adaptive Signal Installation: Country Club Road at Weaver Road.

Traffic Study: ITS LLC was initially tasked with performing an updated traffic study along three major corridors crossing I-210 in Lake Charles, LA, to determine the impacts of the facility development, both during and after construction, and identify areas for improvements. Because at that time the region was undergoing unprecedented industrial growth, and subsequently residential and commercial growth, the traffic study was expansive and changed scope throughout the process as more information was known about future developments in the area. The study mainly focused on three plant construction projects with different levels, phasing, and timelines of construction. The study ultimately led to proposed signal improvements along the three corridors as well as some additional isolated and temporary signals. ITS LLC was also tasked with creating permit plans for almost 30 unique traffic signals including along coordinated corridors, isolated permanent, and isolated temporary signals which were fully actuated.

Adaptive Traffic Signal Design: ITS LLC was later tasked with accommodating some of the planned construction activities. For site prep, one developer intended to bring multiple loads of dirt from one side of the facility to the other, crossing LA 384 (Big Lake Rd.). ITS LLC performed an additional separate traffic impact study for the addition of a signal for the temporary haul road at a state highway crossing. This was a unique situation that required ITS LLC to manipulate intricate defaults of the analysis software to accurately portray the size, startup time, and top speed of these oversized, articulating dump trucks. Factors evaluated in the analysis included safety, quantifying volumes, designing signal timings, and evaluating the long-term duration of these activities as well as the daily schedule of activities. Ultimately, the traffic study provided adequate signal warrant data and resulted in a temporary signal waiver. As a result, ITS LLC produced a TSI plan set for this intersection for permitting.

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Firm Members Involved: *Clarke Chauvin, PE, PTOE, PMP; Jonathan Fox, PE, PTOE, PMP*

RELEVANCY TO THE IDIQ FOR TSMO:

- ✓ All traffic engineering tasks including studies, design, and communication

Firm Name	G.E.C., Inc.			Past Performance Evaluation Discipline(s)*	CE&I / OV
Project Name	**I-10 Widening, LA 328 to I-49**			Firm Responsibility (Prime or Sub?)	Prime
Project Number	H.003003	Owner's Name	LADOT		
Project Location	St. Martin Parish, Louisiana		Owner's Project Manager	Eric Dauphine	
Owner's Address, Phone, Email	428 Hugh Wallis Rd., Lafayette, LA 70508, (337) 262-6100, Eric.dauphine@la.gov				
Services Commenced by This Firm (mm/yy)	02/17		Total Consultant Contract Cost ($1,000's)		$4,216
Services Completed by This Firm (mm/yy)	Present		Cost of Consultant Services Provided by This Firm ($1,000's)		$3,055

This 7.118 mile, $125 million I-10 widening project includes total reconstruction of the existing lanes, widening of 5 structures, and total replacement of one structure in Lafayette and St. Martin Parishes. As the prime firm, GEC is providing all construction inspection services, including the professional engineer and office manager duties. This project includes clearing and grubbing, median barrier, removal of bridges, drainage structures, subgrade layer, class II base course, asphaltic pavement, drill shaft foundations, precast concrete piles, pre-stressed precast concrete girder span bridges, signing of the interstate, lighting, CCTV camera relocations, Weigh-in-Motion (WIM), and related work.

Firm Members Involved: *Brian Buckel, PE, James "Jimmy" Wheeler*

RELEVANCY TO THE IDIQ FOR TSMO:

- ✓ Inspection of lighting, CCTV camera relocations, and Weigh-in-Motion (WIM),

Firm Name	G.E.C., Inc.		Past Performance Evaluation Discipline(s)*	ITS	
Project Name	**Fiber Optic Mapping and Management**		Firm Responsibility (Prime or Sub?)	Prime	
Project Number	4400009327, H.012381	Owner's Name	LADOTD		
Project Location	Statewide, Louisiana	Owner's Project Manager	Lucy Kimbeng, PE		
Owner's Address, Phone, Email	1201 Capital Access Road, Baton Rouge, LA 70804, (225) 379-1315, Lucy.kimbeng@la.gov				
Services Commenced by This Firm (mm/yy)	07/16	Total Consultant Contract Cost ($1,000's)	$920		
Services Completed by This Firm (mm/yy)	12/19	Cost of Consultant Services Provided by This Firm ($1,000's)	$920		

GEC was selected by the LADOTD for a three (3) year, $3M retainer contract in February 2017 to perform Intelligent Transportation System (ITS) services including project management and program assistance, project reporting, traffic and Systems Engineering Analyses (SEA), preparation of engineering plans, specifications, and construction estimates, GIS support services, signal planning and design and signal system timing. GEC also provided technical support during construction including shop drawing and submittal reviews, and other construction related engineering services.

RELEVANCY TO THE IDIQ FOR TSMO:

- ✓ On-site fiber optic testing and inspection
- ✓ Electrical/ITS Inspectors operated and reset non-main circuit breakers

GEC investigated and documented the LADOTD fiber optic system which was installed in Baton Rouge as a task order under this retainer contract. GEC previously performed additional phases of work for the systems in Hammond, Covington, Slidell, Shreveport, and Houma under a separate retainer contract for construction engineering and inspection. For the Baton Rouge phase of work, GEC was responsible for:

- Reviewing as-built plans from the ITS projects in the regions investigated to document points of concern, backbone fiber links, and alterations made to a deployment by a subsequent phase
- Determining the local point(s) of contact for each region addressed by the reference plans
- Coordinating with LADOTD on changes to the personnel/groups included on field work notifications

In addition, GEC performed on-site fiber optic testing and inspection in coordination with local and statewide agencies. GEC Electrical/ITS Inspectors operated and reset non-main circuit breakers at each site tested. GEC also provided collected data for input into databases.

Firm Members Involved: *Reagan Sean Johnson, James "Jimmy" Wheeler*

Firm Name	G.E.C., Inc.			Past Performance Evaluation Discipline(s)*	ITS
Project Name	**I-10 Twin Spans ITS**			Firm Responsibility (Prime or Sub?)	Prime
Project Number	H.011503	Owner's Name	LADOTD		
Project Location	Orleans and St. Tammany Parishes, Louisiana	Owner's Project Manager			
Owner's Address, Phone, Email	1201 Capital Access Road, Baton Rouge, LA 70804				
Services Commenced by This Firm (mm/yy)	07/17	Total Consultant Contract Cost ($1,000's)	$300		
Services Completed by This Firm (mm/yy)	12/17	Cost of Consultant Services Provided by This Firm ($1,000's)	$300		

GEC performed Construction Engineering and Inspection services for the I-10 Twin Spans Intelligent Transportation System (ITS) Deployment project. The project consisted of construction and integration for one (1) new Dynamic Message Sign (DMS) site, four (4) new Closed Caption Television (CCTV) sites, bridge mounted CCTV platforms, and integration into existing fiber optic backbone including new and existing conduit and associated pullboxes.

RELEVANCY TO THE IDIQ FOR TSMO:

- ✓ Dynamic Message Sign (DMS) site
- ✓ Closed Caption Television (CCTV) sites
- ✓ Bridge mounted CCTV platforms
- ✓ Integration into existing fiber optic backbone

Project Deliverables:

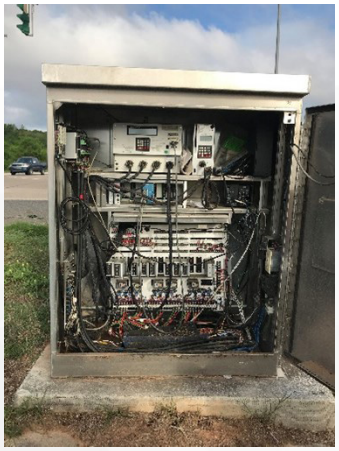
- Part-time technical assistance, meetings (pre-construction and construction progress), and/or field inspections, provided to the Project Engineer and/or field personnel during construction. Assistance includes specialized ITS sites and items as well as non-specialized ITS items such as foundations, structural components, trenching/boring, soils, and pavement.
- Construction assistance – respond to requests for assistance/coordination with LADOTD, review and respond to requests for information from the contractor, review and respond to proposed plan/scope changes from the contractor, preparation and/or review of as-built drawings, and review requests for payment / payment applications.
- Full-time resident construction engineering and inspection (project representative) and on-site daily inspection.
- Daily reporting, field logs and record keeping.
- Project / contract administration and Project Engineer duties.
- Utilization of Site Manager for reporting and administration.
- System acceptance testing – site commissioning testing, system integration testing, and software integration performance testing. Subsequent preparation of a report of findings detailing issues discovered during testing phases.
- Preparation of final project file.

Firm Members Involved: *Reagan Sean Johnson, James "Jimmy" Wheeler*

Firm Name	Vectura Consulting Services, LLC			Past Performance Evaluation Discipline(s)*	Traffic
Project Name	**Shreveport Immediate ITS Phase 2b**			Firm Responsibility (Prime or Sub?)	Sub
Project Number	H.006474.1	Owner's Name	LADOTD		
Project Location	Shreveport, LA		Owner's Project Manager	Lucy Kimbeng	
Owner's Address, Phone, Email	1201 Capitol Access Road, Baton Rouge, LA 70802 (225) 379-2528 lucy.kimbeng@la.gov				
Services Commenced by This Firm (mm/yy)	03/18		Total Consultant Contract Cost ($1,000's)		Unknown
Services Completed by This Firm (mm/yy)	06/18		Cost of Consultant Services Provided by This Firm ($1,000's)		$18

As a sub-consultant, Vectura was the task leader for Procurement and Alternative Analysis Configuration portions of the Systems Engineering Analysis (SEA) that complied with Code of Federal Regulations (CFR), Title 23, 940.11). The Alternatives Analysis Configuration consisted of analyzing three possible project configurations. The pros and cons of the needed equipment and communication options were documented. This task consisted of a field visit with DOTD staff to verify fiber optic lines, junction boxes and traffic signal controller types.

The Procurement task consisted of investigating the methods of procurement for the deployment project where the procurement options the pros and cons for each method were documented.



RELEVANCY TO THE IDIQ FOR TSMO:
- ✓ Systems engineering analysis
- ✓ Traffic signal control

Firm Members Involved: *Brin Ferlito, Laurence Lambert and Bridget Robicheaux (100% performed in Louisiana)*

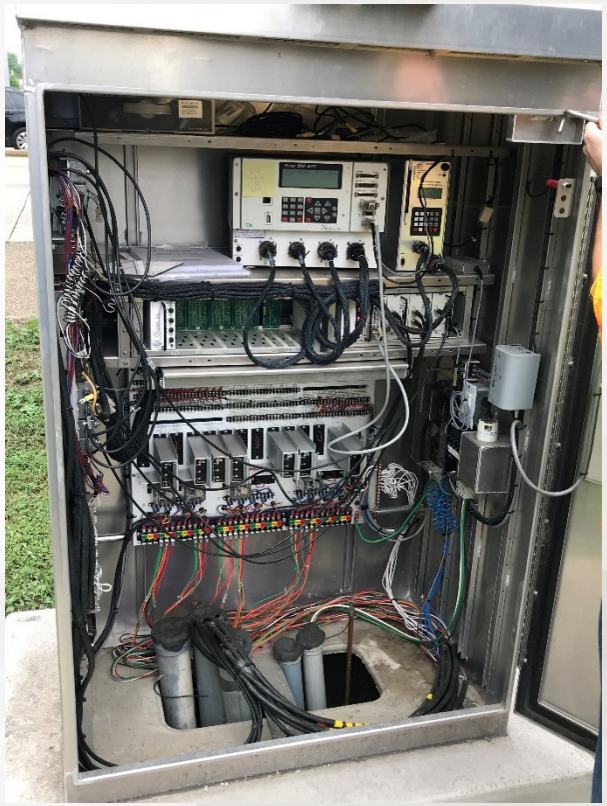
Firm Name	Vectura Consulting Services, LLC			Past Performance Evaluation Discipline(s)*	Traffic
Project Name	**I-110 ITS Deployment SEA**			Firm Responsibility (Prime or Sub?)	Sub
Project Number	H.013261.1-1	Owner's Name	LADOTD		
Project Location	Baton Rouge, LA		Owner's Project Manager	Alaa Shams	
Owner's Address, Phone, Email	1201 Capitol Access Road, Baton Rouge, LA 70802 (225) 379-1497 alaa.shams@la.gov				
Services Commenced by This Firm (mm/yy)	09/18	Total Consultant Contract Cost ($1,000's)		Unknown	
Services Completed by This Firm (mm/yy)	12/18	Cost of Consultant Services Provided by This Firm ($1,000's)		$16	

Vectura provided an Alternatives Analysis Configuration and Procurement Analysis as part of a System Engineering Analysis (SEA) for I-110 CCTV Cameras and DMS deployment to comply with Code of Federal Regulations (CFR), Title 23, 940.11.

The alternative analysis consisted of a field visit along the I-110 corridor to examine CCTV and DMS locations. As part of the field visit, drones were flown at the proposed heights of the CCTV's and DMS's to determine if any sight line issues were present. Also included in the site visit was the evaluation of connecting three pump stations and traffic signals to the proposed fiber optic line. Three possible project configurations were developed for this task along with pros and cons of the needed equipment and communication options.

Vectura also investigated the methods of procurement for the deployment project. Procurement options were documented with the identification of the pros and cons for each method.

Firm Members Involved: *Brin Ferlito, Laurence Lambert and Bridget Robicheaux (100% performed in Louisiana)*



RELEVANCY TO THE IDIQ FOR TSMO:

- ✓ Alternatives analysis
- ✓ ITS configuratoin
- ✓ Traffic signals

Firm Name	Vectura Consulting Services, LLC			Past Performance Evaluation Discipline(s)*	CE&I
Project Name	**EBR Computerized Traffic Signal, PH VB**			Firm Responsibility (Prime or Sub?)	Sub
Project Number	H.007160	Owner's Name	LADOTD		
Project Location	East Baton Rouge, LA		Owner's Project Manager	Desmond Sam, PE	
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)	01/21	Total Consultant Contract Cost ($1,000's)		$604	
Services Completed by This Firm (mm/yy)	Ongoing	Cost of Consultant Services Provided by This Firm ($1,000's)		$93	

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

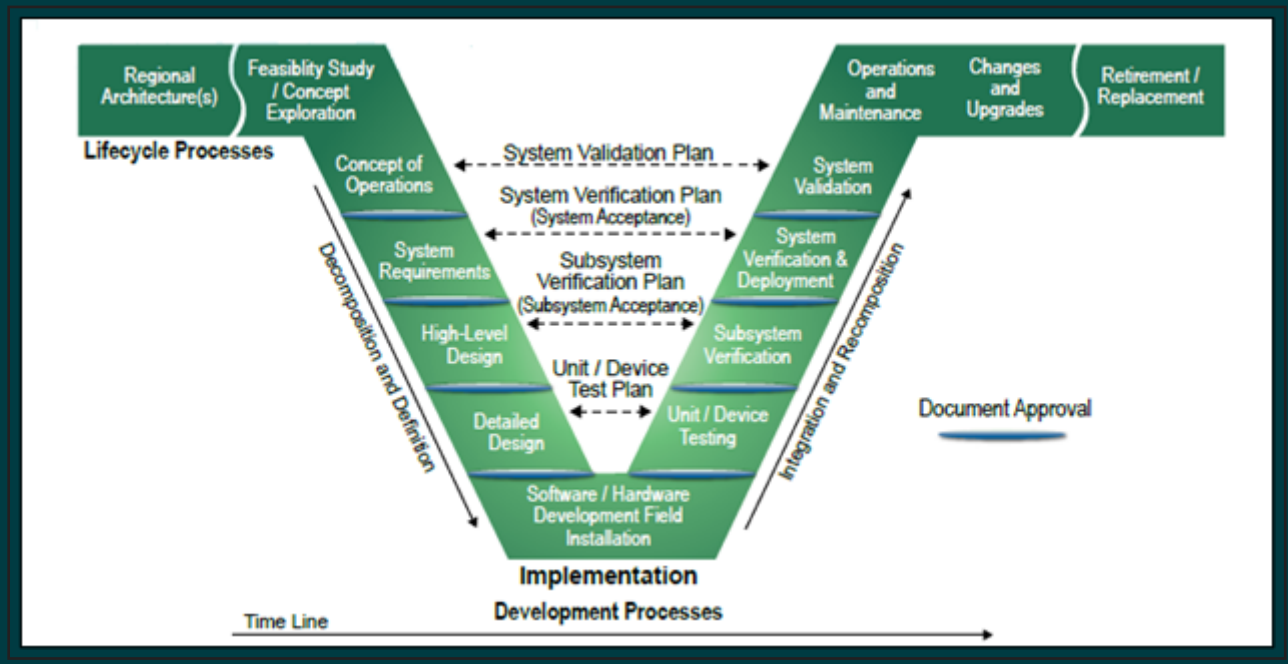
Firm Members Involved: *Brin Ferlito, Laurence Lambert, and Reece Rodrigue (100% performed in Louisiana)*

RELEVANCY TO THE IDIQ FOR TSMO:
- ✓ Traffic signal equipment
- ✓ Field inspections

Section 18

TxDOT ITS Design Manuals

AECOM recently prepared the *Systems Engineering* chapter, and supported writing other chapters, of the *TxDOT ITS Design Manual*.



AECOM has extensive TSMO experience throughout the world, allowing our staff to share best practices and lessons learned to begin mainstreaming TSMO strategies to optimize safety, mobility, security, and reliability of the LADOTD statewide transportation system.

PROJECT UNDERSTANDING

AECOM understands the importance in developing the Statewide TSMO Strategic Plan as an initial step in implementing the program in a consistent and effective manner. Upon completion and adoption of the Strategic Plan by the DOTD, subsequent TOs will focus on implementing priority projects in the plan. The Strategic Plan will serve as a working document triggering alerts to take action rather than just a report sitting on the shelf. This will require close integration between Traffic Engineering and ITS Work Groups. We also recognize the importance in mainstreaming TSMO during all phases of the project development life cycle including Planning, Design, Construction, Operations and Maintenance. AECOM has developed checklists for other clients to achieve this need.

AECOM also recognizes the need for software enhancements to be compatible with the DOTD's ATMS. AECOM has developed such tools for our other clients in providing near-real time performance dashboards, operations quality control, ICM operations tools, etc. For example, "ICMSTAT" is an AECOM web-based software tool designed to provide automated real-time performance management analysis of the roadway network, ITS devices, and operations, via integration with the ATMS software and external data partners. .

AECOM proposes to apply our life cycle TSMO experience currently operating in 33 TMCs in nine different states, to share bast practices with the DOTD as part of monthly meetings and annual workshops. While emerging technologies will be considered like C-ITS to support TSMO strategies, we realize that they should be needs-based.

PROJECT MANAGEMENT AND PROGRAM ASSISTANCE

At the inception of each task order, PM Victor De la Garza will prepare a Project Management Plan (PMP) that establishes the team organization, communication protocols, QC procedures, schedule, risk register with mitigation strategies, document control procedures, invoicing process, DOTD manuals/ checklists, and change management procedures. This plan, shared with the DOTD PM, will serve as a project execution guidebook, enhance efficiency, and document project decisions. Victor or his delegate will update the PMP immediately in the event of changes to the scope, budget, schedule, or project team. These updates will cascade to all affected PMP components, including risk, and a revised PMP will be distributed to the team. Victor will lead the development of a PMP for each TO to establish expectations and provide for integrated delivery from execution to final closeout. AECOM's Quality Management System (QMS) is ISO 9001:2015-compliant and includes protocols, checklists, forms, and data validation processes.

COORDINATION MEETINGS & PROJECT REPORTING

Upon contract execution, Victor and key task leads (TLs) will hold a kickoff meeting with DOTD to gather requirements and expectations. Victor will develop a PMP that incorporates contractual priorities and establishes the team composition, organizational chart, roles and responsibilities, master schedule, QA/QC Plan, Safety Plan, internal and external communication protocols, a Public Involvement Plan (PIP) if applicable, documentation protocols, and procedures for risk and change management. Key elements of his management style are summarized in the table below.

Project Management Approach
Project Team
Conducting weekly TL meetings and biweekly DOTD meetings for each TO, developing solutions and coordinating across disciplines using tools such as MS Teams and SharePoint to collaborate and communicate effectively without silos.
LADOTD
Documenting each meeting with a sign-in sheet, agenda, notes, and document tracker including action items responsibilities and deadlines, all shared with DOTD. We will use a secure project SharePoint site with a consistent filing structure/naming convention to readily access relevant electronic content, correspondence, work products, technical data, and deliverables.
Stakeholders
Establishing a Project Advisory Committee (PAC) to include and engage both internal and external key stakeholders across the state. We will coordinate with DOTD Districts to gather their input, needs, and suggestions.

STRATEGIC PLAN DEVELOPMENT

AECOM applies a workshop driven approach in developing TSMO Strategic Plans. This approach was used by AECOM during the development of the LADOTD ITS Strategic Plan in 2010 and will be customized to address the needs of TSMO based on the CMM analysis.

Workshop No. 1: Kickoff Meeting

AECOM will initiate the process of developing the Strategic Plan by conducting a kickoff meeting with the DOTD Project Management team. The objective of this meeting is for AECOM to better understand the current and future goals of DOTD's TSMO Program. Prior to the workshop, AECOM will review relevant documents provided by DOTD to better understand how they fit in within the broader context of the DOTD organization. AECOM will facilitate the workshop in addressing strengths, weaknesses, opportunities, and threats through a SWOT analysis. **Outcome:** *Baseline the existing DOTD TSMO Program.*

Workshop No. 2: Capability Maturity Model (CMM) Assessment

AECOM will conduct CMM assessments with the goal of engaging input from DOTD Central Office, District staff, as well as project stakeholders. CMM assessments will focus on the six dimensions (i.e., business processes, systems and technology, data and performance measures, culture, organization & workforce, collaboration) as well as selected Capability Maturity Frameworks (i.e., traffic management, traffic incident management, traffic signal management, road weather management, work zone management, planned special events). It is anticipated that CMM workshops will utilize a combination of in-person and virtual participation applying the MentiMeter tool to enter and summarize CMM scoring in real-time. Further, we will take detailed notes for the discussions of strengths and weaknesses to support the numerical scores. The output of the CMM assessment will be used as the starting point in developing specific actions as part of the TSMO Strategic Plan. AECOM has applied this approach for several TSMO programs, most recently on March 30, 2023 for the TxDOT TSMO Program in collaboration with FHWA. **Outcome:** *CMM scoring and identification of specific areas to focus on in the TSMO Strategic Plan.*

Workshop No. 3: Business Planning

The Business Plan provides recommendations to address the needs as identified in the previous workshops using the SWOT and CMM analysis tools. The business plan will provide recommendations to implement specific action items on a year-by-year basis. These action items pertain to a variety of needs including, but not limited to, ITS devices to fill in the gaps; modified job descriptions; the need to provide new skill sets; high-level needs of the ATMS, workstation and video wall configuration; suggested enhancements to the ATMS software and other operational software tools; and improvements to training programs. **Outcome:** *Business Plan documenting TSMO resource needs on an annual basis with estimates for initial and recurring costs.*

Workshop No. 4: Performance Measures

AECOM will identify "outcome" performance metrics to measure the success for continuous improvement of the TSMO Program.

Performance measures will be consistent with the goals of the program. These measures will be included in the Strategic Plan then reviewed on an annual basis as part of the Annual Report. In addition, recommendations will be made regarding real-time (or predictive) performance measures to improve situational awareness of the health status of the transportation system, particularly if there are significant anomalies with pre-defined targets. **Outcome:** *Performance measures to conduct an assessment on an annual basis, and near real-time metrics in becoming more proactive to improve traffic safety and mobility.*

Workshop No. 5: Presentation

AECOM will prepare the Draft Strategic Plan for review by the DOTD prior to conducting Workshop No. 5. AECOM will present the findings of the plan in accordance with the following outline.

1. Executive Summary
2. Baseline TSMO Program
3. Vision (2030) and 10-Year Outlook (2035)
4. Business Plan Recommendations (2025-2030)
5. Cost Estimates (i.e., Capital, O&M)
6. Next Gen TSMO and Emerging Technologies (e.g., ATM, ICM, CV, AV, AI)
7. Summary and Next Steps

ENGAGEMENT, OUTREACH, AND STAKEHOLDER TRAINING

AECOM will engage, outreach, and train stakeholders in implementing the Statewide TSMO Strategic Plan. Specifically, we will prepare brochures, presentations, FAQs, and a TSMO video to describe the TSMO program. In addition, we will develop a DOTD TSMO web site to serve as a repository of deliverables produced as part of the TSMO program. AECOM also has the capability to create a virtual room to store all the above collateral materials in providing a robust venue to support effective communication with project stakeholders.

AECOM will also develop a training program for DOTD existing employees, new hires, and partnering stakeholders. This will provide the training needed to adapt and continuously improve their skill sets. This is essential in optimizing the application of TSMO strategies to improve efficiency in addressing current and future transportation safety and mobility needs, and the needs of succession planning.

TSMO POLICY DEVELOPMENT AND UPDATES

AECOM will conduct a review of existing DOTD policies, update existing policies when necessary, and assist with the development of new policies. AECOM will recommend policies to include TSMO strategies during each phase of the project development life cycle. Specifically, we will focus on policies that:

- Include TSMO in the early planning and design phases to consider emerging technologies and innovative TSMO strategies.
- Consider TSMO strategies during the construction phase to encourage travelers to seek alternate routes, reduce congestion, and enhance the safety of construction crews and motorists approaching the work zone.
- Develop a TSMO champion working group that can help TSMO initiatives gain momentum throughout the state.

AECOM will develop checklists to support these policies aligning with each step of the systems engineering process.

TSMO STRATEGY AND SOLUTION PROJECTS

AECOM will develop and prepare plans for TSMO solutions including, but not limited to, the following. **For each TSMO strategy, a proof illustrates a relevant AECOM project.**

- **Work Zone Management.** Develop Smart Work Zone ITS Standard Sheets, Specifications, and Design Guidelines. ✓ **Proof:** Texas DOT, SWZ Design Guidelines and Specifications
- **Traffic Incident Management.** Prepare incident management manuals, provide TIM training, support TIM teams, conduct TIM CMM Assessments, and explore TIM innovations. ✓ **Proof:** South Carolina DOT, TIM Services
- **Special Event Management.** Provide management support for a wide range of special events including major sporting events, parades, festivals, etc.✓ **Proof:** Florida DOT, Super Bowl, Formula One Race, and Kennedy Space Center Launches
- **Road Weather Management.** Develop roadway weather information systems by understanding the latest trends in operational data requirements and how devices like weather information systems could assist in satisfying requirements, especially flooding. ✓ **Proof:** Texas DOT, Regional Incident Management System (web-based tool used during hurricane evacuations and incidents)
- **Transit Management.** Provide services ranging from Transit Signal Priority (or Preemption), integrated fare collection systems, security systems, to automated buses with first/last mile connections. ✓ **Proof:** Central Ohio Transit Agency, ITS Strategic Plan
- **Freight Management.** Develop solutions ranging from freight signal priority, weigh-in-motion, customized freight traveler information systems, queue management systems, drayage optimization systems, to connected freight corridors. ✓ **Proof:** Texas DOT, Connected Freight RSUs (Design)

- **Traffic Signal Coordination.** Provide services including analysis, design, signal timing, software development and implementation, to real-time operations.
  ✓ **Proof:** Georgia DOT, Statewide Signal Operations
- **Traveler Information.** Support future enhancements and upgrades of the 511 system. ✓ **Proof:** AECOM supported LADOTD in updating the ConOps and system requirements; conducted a 511 SWOT analysis; prepared the RFI document, vendor responses, and vendor presentation summary; and researched alternative 511 ATIS procurement methods.
- **Ramp Management.** Conduct feasibility studies for proposed freeway segments; provide design and CEI services; develop SOPs and performance dashboards. ✓ **Proof:** Florida DOT, I-95 Ramp Metering Feasibility Study, CEI, Operations
- **Active Transportation and Demand Management.** Assess systems including part-time shoulder use, lane control signals, variable speed limits, ramp metering, dynamic lane assignments, reversible lanes, travel time signing, dynamic rerouting, integrated corridor management, managed lanes and queue warning systems.
  ✓ **Proof:** Ohio DOT, Statewide ATM Master Plan
- **Integrated Corridor Management.** Assess where ICM strategies can provide a high BCR focusing initially on freeway-arterial integration, then expanding to decision support systems and transit applications, if applicable. ✓ **Proof:** FHWA, ICM Evaluation
- **Improved Bike and Pedestrian Crossings.** Provide guidelines and develop projects that focus on bike and pedestrian safety as well connectivity as part of regional networks that link to transit systems.
  ✓ **Proof:** LADOTD, East Baton Rouge Parish Ped-Bike Master Plan
- **Connected Automated Vehicle Deployment.** Conduct CAV readiness analyses, using AECOM's AV Readi tool, to prepare corridors for needed infrastructure and systems to accommodate CAVs in the future.
  ✓ **Proof:** Texas DOT, IH-30 CAV Readiness

FUNDING AND BENEFIT-COST ANALYSIS

AECOM recognizes that Benefit-Cost Analysis (BCA) plays an important role in the TSMO decision-making process to help planners, engineers, and operations managers determine whether or not and when a TSMO strategy or project should be implemented; which among competing strategies, alternatives and projects should be funded given a limited budget; and whether or not the TSMO strategy or project was cost effective after being implemented.

A BCA can provide valuable input to the many different phases of the project development process. During the planning phase, it can be applied to basic cost and performance data to screen potential alternatives, assisting in the development of program budgets and areas of program emphasis. During the operations phase, the BCA may be used to drive continuous improvement in addressing TSMO goals (e.g., incident clearance, safety, mobility, reliability) as well as support TSMO funding requests by demonstrating benefits to the participating agencies (e.g., operational integration and efficiency) and the public (e.g., reduced delays, crash reduction).

While "quantitative" tools are available to conduct BCAs for TSMO projects (e.g., FHWA TOPS-BC), they do not appear to be applicable for many TSMO strategies at the Strategic Plan level. As TSMO strategies typically included in the Strategic Plan may be aligned with the six dimensions of the CMM analysis framework (e.g., business processes), "qualitative" BCA tools are also needed. AECOM developed a BCA methodology that addresses both "qualitative" and "quantitative" benefits and costs as part of the TxDOT TSMO contract.

GRANT APPLICATION WRITING AND SUPPORT

AECOM will investigate the applicability of Federal Grants using AECOM's "Fund Navigator" tool to identify information about grant Notices of Funding Opportunity (NOFOs) that have been released. AECOM's approach in conducting research and preparing grant applications is to collaborate with the DOTD to develop a complete package.

A successful grant strategy requires a nimble approach that makes the most of each discretionary funding opportunity capitalizing on predictable and unexpected opportunities alike. AECOM's grant experience is focused on transportation and infrastructure. Our services include grant researching services (including periodic summaries) mapping future expected opportunities aligned with DOTD's project priorities, interpretation of grant requirements, and assembly of the requisite information for submission; drafting the grant application narrative and required forms and assembling the supplemental materials; completing BCAs; and Grant Application Review, including editing and verifying compliance with applicable application guidelines. **AECOM has supported clients in securing over $1.3 billion in discretionary funding over the past ten years, including two recent SMART grants.**

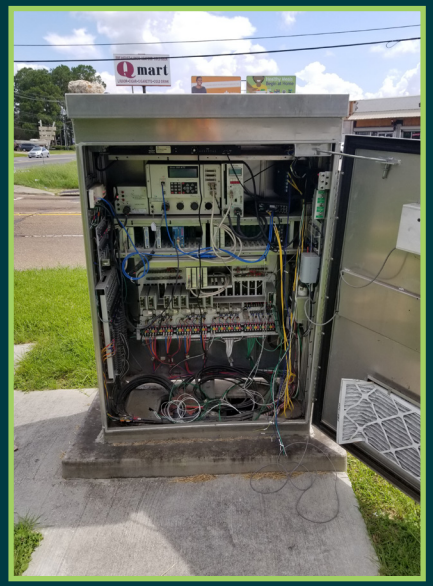
REPORT DELIVERABLES

AECOM will submit report deliverables in electronic format and/or hard copy format for meetings, workshops, and research materials, feasibility studies, reports, and all other applicable work. **In developing the TSMO Strategic Plan we suggest attaching one-page summary sheets for each project highlighting information on project location; operational issues and needs within the corridor; project type (institutional, process, deployment); cost estimates (deployment, operations, and maintenance); and project schedule.**

Section 19

Intelligent Transportation Systems LLC (ITS) Certifications

ITS employs 18 personnel including both engineering staff and field technicians. The firm currently employs four Professional Engineers (PE), licensed in Civil Engineering in Louisiana, four of whom are also certified Professional Traffic Operations Engineers (PTOE). Additionally, two of those engineers are credentialed as a Professional Transportation Planner (PTP) and a Road Safety Professional (RSP_1). The company's field technicians include two IMSA Level II Technicians and one IMSA Signal Inspector. These specialized certifications are required by the Louisiana Department of Transportation and Development (LADOTD) for any personnel who service the state's traffic signal equipment.



19. Workload:

Firm(s)	Past Performance Evaluation Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
AECOM	Road, Bridge	4400004662; H.004367.5	Earhart Expressway to US 61	$215,483
	Traffic	4400004662; H.004367.5	Earhart Traffic Evaluation	$27,990
	Bridge	4400021593; H.009859.5	Bridge Load Rating	$2,226,557
	4400004128; H.004273.5		I-49 Connector (Sub)	
	-Planning	"	Tasks 1, 5, 6, 12	$634,115
	-Traffic	"	Task 2	$34,207
	-Road	"	Task 4	$14,923
	-Bridge	"	Task 8	$68,855
	-Environmental	"	Task 10	$739,109

Firm(s)	Past Performance Evaluation Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
ITS Intelligent Transportation Systems®	ITS	4400024424 ; H.013256.6	I-10 ITS Scott to Lake Charles - Construction	$13,679
	ITS	4400017922; H.014515	511 & ATMS SEA	$4,315
	ITS	4400020058; H.013710.6	I-10: US61 to LaPlace Deployment	$26,808
	ITS	Contract No. N/A; H.011152	I-12- US 190 to LA 59	$49,382
	ITS	Contract No. N/A; H.007160	EBR Computerized Signal Phase VB	$19,995
	ITS	4400020058; H.001234.6	LA1 Port Allen Canal BR Replacement	$14,291
	ITS	4400016811; H.013868.6(A)	ITS Routine Maintenance Engineering and Inspection (ME&I)	$83,853
	ITS	4400016811; H.013868.6 (B)	ITS Responsive/Emergency ME&I Statewide	$75,196
	ITS	4400016811; H.013868.5	ITS Maintenance Program Management & Ops.	$17,029
	ITS	4400016364; H.011504	Alexandria Phase 2	$83,043
	ITS	Contract No. N/A; H.012676	I-10 Ramps at LA 3019 Interstate Improvements	$4,970
	ITS	44400020058; H.002424.6	LA 70: Sunshine Bridge – LA 22	$19,734
	ITS	44400020058; H.003047	Pecue Lane/I10 Interchange Phase III	$25,364
	Traffic	4400024461; H.012685	LA 385 – Ryan St Intersection Improvements	$180,000
	Traffic	4400021887; H.012047, H.012542, H.12543, H.12544, H.12562	Replacement of Fifteen Bridges	$79,573

Firm(s)	Past Performance Evaluation Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
GEC	Road	4400004128, H.004273.5	I-49 Connector (Lafayette Regional Airport to I-10/I-49/US 167 Interchange) (Sub to Stantec)	$70,810
	Road	H.013897	I-10 & I-12 College Drive Flyover Ramp Design-Build Project (Sub to Boh Bros.)	$89,160
	Bridge	4400004128, H.004273.5	I-49 Connector (Lafayette Regional Airport to I-10/I-49/US 167 Interchange) (Sub to Stantec)	$29,573
	Bridge	4400018646, H.004100	I-10 Baton Rouge Widening CMAR Segment 1 (Bridge & Sound Walls) (Sub to Huval)	$135,000
	Bridge	NA; H.013897	I-10 & I-12 College Drive Flyover Ramp Design-Build Project (Sub to Boh Bros.)	$174,800
	Bridge	4400004900, H.004540.5	Leeville to Golden Meadow, Route LA 1 Relocated, Const. Engineering Services (Sub to HNTB)	$219,878
	Bridge	4400025040, H.015342	Infrastructure Investment and Jobs Acts (IIJA), Off-System Bridge Program, District 61 Less EBR	$3,639
	Bridge	4400005267, H.003074.5	Williams Blvd – Veterans Blvd., Route I-10, Jefferson Parish, LA	$148,795
	Environmental	4400004128, H.004273.5	I-49 Connector (Lafayette Regional Airport to I-10/I-49/US 167 Interchange) (Sub to Stantec)	69,052
	Environmental	4400026569, H.011358.1	US 190 (Vine Street) RAISE Grant Application	47,380
	ITS	4400004128, H.004273.5	I-49 Connector (Lafayette Regional Airport to I-10/I-49/US 167 Interchange) (Sub to Stantec)	$19,447
	ITS	4400018646, H.004100	I-10 Baton Rouge Widening CMAR Segment 1 (Sub to Huval)	$86,000
	CE&I/OV	4400023074, H.010724.6	IDIQ for CE&I Services and Staff Augmentation, District 61 - Pecan Island Road Over the Chenal, Pointe Coupee Parish	$0
	CE&I/OV	4400023074, H.012465.6	IDIQ for CE&I Services and Staff Augmentation, District 61 - Flashing Yellow Arrow Part 3	$418,859
	CE&I/OV	4400023074, H.010960.6	IDIQ for CE&I Services and Staff Augmentation, District 61 - LA 30 Roundabouts at Tanger Mall and I-10	$675,975
	CE&I/OV	4400023074, H.015022.6	IDIQ for CE&I Services and Staff Augmentation, District 61 - LA 976: LA 81 - US 190	$36,053
	CE&I/OV	4400023074, H.014694.6	IDIQ for CE&I Services and Staff Augmentation, District 61 - LA 426: LA 73 - Sherwood Forest	$215,876
	CE&I/OV	4400023074, H.014930.6	IDIQ for CE&I Services and Staff Augmentation, District 61 - Rumble Strips: District 61 - Area C	$63,701
	CE&I/OV	4400019950, H.002735.6	IDIQ for CE&I, Statewide, with Majority of Work in District 03 - Bayou Vermillion Bridge	$31,498
	CE&I/OV	4400019950, H.003003.6	IDIQ for CE&I, Statewide, with Majority of Work in District 03 - I-10: I-49 - LA 328	$149,343

Firm(s)	Past Performance Evaluation Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
GEC	CE&I/OV	4400019950, H.002151.6	IDIQ for CE&I, Statewide, with Majority of Work in District 03 - Bayou Parc Perdue and Creek Bridges	$0
	CE&I/OV	4400019950, H.002868.6	IDIQ for CE&I, Statewide, with Majority of Work in District 03 - I-49 S: Amb Caffery / US 90 Interchange	$877,543
	CE&I/OV	4400019950, H.013265.6	IDIQ for CE&I, Statewide, with Majority of Work in District 03 - US 90: LA 14 to LA 83	$578,781
	CE&I/OV	4400014315, H.003370.6	IDIQ for Painting Inspection & Environ. Monitoring with CE&I, Statewide - I-220/I-20 Interchange IMP & BAFB Access	$0
	CE&I/OV	4400014315, H.010000.6	IDIQ for Painting Inspection & Environ. Monitoring with CE&I, Statewide - US 171: Calcasieu River Bridge Repairs	$71,877
	CE&I/OV	4400017006, H.011670.6	I-10/Loyola Interchange Improvements, Jefferson Parish	$0
	CE&I/OV	4400023897, H.011965.6	LA 47: IWGO Bridge Rehabilitation (HBI) (CE&I) (sub to GPI)	$189,116
	Other (Electrical)	4400004128, H.004273.5	I-49 Connector (Lafayette Regional Airport to I-10/I-49/US 167 Interchange) (Sub to Stantec)	$301,419
	Other (Electrical)	4400018646, H.004100	I-10 Baton Rouge Widening CMAR Segment 1 (Sub to Huval)	$350,000
	Other (Electrical)	NA; H.013897	I-10 & I-12 College Drive Flyover Ramp Design-Build Project (Sub to Boh Bros.)	$45,000
	Other (Electrical)	4400005267, H.003074.5	Williams Blvd – Veterans Blvd., Route I-10, Jefferson Parish, LA	$54,012
	Other (Electrical)	4400011354, H.013442.6	IDIQ Contract for Electrical Statewide - I-10: Crowder Boulevard Interstate Lighting	$43,208
	Other (Electrical)	4400011354, H.013617.6	IDIQ Contract for Electrical Statewide - I-10: I-610E Interchange Lighting. Task Order No. 1	$164,164
	Other (Electrical)	4400011354, H.014552.5	IDIQ Contract for Electrical Statewide - I-49: LA 31 Interchange Lighting (Opelousas), Task Order No. 2	$273,910
	Other (Electrical)	4400011354, H.014556.5	IDIQ Contract for Electrical Statewide - I-49: US 190 Interchange Lighting (Opelousas), Task Order No. 3	$309,952
	Other (Electrical)	4400011354, H.014557.5	IDIQ Contract for Electrical Statewide - I-49: Judson Walsh Drive Interchange Lighting (Opelousas), Task Order No. 4	$320,591
	Other (Electrical)	4400011354, H.014553.5	IDIQ Contract for Electrical Statewide - I-49: LA 3233 Interchange Lighting (Opelousas), Task Order No. 5	$376,863
	Other (Electrical)	4400010428, H.004774.5 & H.00730 0.6	Kansas Lane - Garrett Rd Connector and I-20 Improvements, Ouachita Parish (Sub to Lazenby & Associates, Inc.)	$9,070

Firm(s)	Past Performance Evaluation Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
GEC	Other (Electrical)	4400005660, H.012874.6	Retainer Contract for Electrical Services - I-55: LA 22 Interstate Lighting (Sub to Buchart-Horn)	$20,153
	Other (DOTD Support Services)	4400017329; NA	Retainer Contracts for Innovative Procurement and Alternative Delivery Support Services (Sub to HNTB Corporation) (No Task Orders Issued) (NOTE: No work expected for GEC under this Contract.)	$0
	Other (Program Management)	4400016958; NA	Road Transfer Program Management, Statewide (NOTE: The Average Annual billing is approximately $290,000/year. We are in year 3 of 6. This billing represents 1 person stationed at DOTD. Thus, unlikely to bill this entire remaining balance. (Program Management ONLY – NO Planning, Road or Bridge Design work).	$1,499,121
	Other (Program Management)	4400004128, H.004273.5	I-49 Connector (Lafayette Regional Airport to I-10/I-49/US 167 Interchange) (Sub to Stantec)	$197,293
	Other (Program Management)	4400018646, H.004100	I-10 Baton Rouge Widening CMAR Segment 1 (Sub to Huval)	$110,483

Firm(s)	Past Performance Evaluation Discipline(s) *	Contract Number and State Project Number	Project Name	Remaining Unpaid Balance**
VECTURA CONSULTING SERVICES, LLC	Traffic	4400017293; H.010616	I-20: LA 544 Overpass Replacement	$120,664
	Traffic	H.005168.2	New Orleans Rail Gateway Jefferson Highway EA	$15,067
	Traffic	H.005168.2	New Orleans Rail Gateway Avondale EA	$124,383
	CE&I	4400020018; H.007160	EBR Computerized Traffic Signal, Ph VB	$47,412
	Traffic	4400016942; H.004791	Belle Chasse Bridge & Tunnel Replacement PPP	$14,740
	Traffic	4400021519 H.012030.5	KCS RR Overpasses HBI	$28,026
	ITS	4400016364; H.011504.5	Alexandria ITS Phase 2	$14,305

(Add rows as needed) DO NOT SUM

* The past performance evaluation disciplines to be used are: Road, Bridge, Traffic, CE&I/OV, Geotech, Survey, Environmental, Data Collection, Planning, Right-of-Way, CPM, ITS, Appraiser and Other. If a firm has more than one past performance evaluation discipline for any single project, the firm can use multiple rows to express the remaining unpaid balance per evaluation discipline.

** Round to the nearest dollar. Do not round to the nearest thousands. If there are no active contracts with a remaining unpaid balance, place N/A in the Remaining Unpaid Balance column. LEAVING THE "REMAINING UNPAID BALANCE" COLUMN BLANK IS NOT ACCEPTABLE.

Sections 20-23

Georgia Department of Transportation Signal Operations

For GDOT's SigOps program, AECOM provides ongoing active management and preventive maintenance for 3,000 traffic signals. We also provide SigOps field communications management statewide, which includes monitoring and troubleshooting of the communications infrastructure supporting a total of over 7,000 traffic signals.

20. Certifications/Licenses (Alphabetical):

If the advertisement requires submission of licenses and/or certificates, include them here. Otherwise, leave this section blank.

Clarke Chauvin, PE

LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 11/7/2022 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Clarke Phillip Chauvin
14433 Courtshire Avenue
Baton Rouge, Louisiana 70817

Cut Here

LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Clarke Phillip Chauvin

License/Certificate Type - Number	Expiration Date
PE.0041770	09/30/2023

Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer
All information provided by LAPELS on this web page, and on its other web pages and internet sites, is made available to provide immediate access for the convenience of interested persons. While LAPELS believes the information to be reliable, human or mechanical error remains a possibility, as does delay in the posting or updating of information. Therefore, LAPELS makes no guarantee as to the accuracy, completeness, timeliness, currency, or correct sequencing of the information. Neither LAPELS, nor any of the sources of the information, shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information. Other specific cautionary notices may be included on other web pages maintained by LAPELS.

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Project Management Institute

THIS IS TO CERTIFY THAT

Clarke Chauvin

HAS BEEN FORMALLY EVALUATED FOR DEMONSTRATED EXPERIENCE, KNOWLEDGE AND PERFORMANCE IN ACHIEVING AN ORGANIZATIONAL OBJECTIVE THROUGH DEFINING AND OVERSEEING PROJECTS AND RESOURCES AND IS HEREBY BESTOWED THE GLOBAL CREDENTIAL

Project Management Professional (PMP)®

IN TESTIMONY WHEREOF, WE HAVE SUBSCRIBED OUR SIGNATURES UNDER THE SEAL OF THE INSTITUTE

Tony Appleby
Chair, Board of Directors

Sunil Prashara
President and Chief Executive Officer

PMP® Number: 2858208
PMP® Original Grant Date: 12 November 2020
PMP® Expiration Date: 11 November 2023

Project Management Institute.

Transportation Professional Certification Board, Inc.

certifies that

Clarke Phillip Chauvin

has met all of the requirements established by the Certification Board to use the title of

Professional Traffic Operations Engineer

unless withdrawn by the Certification Board and subject to the provisions for renewal. Certificate number 4337 issued in Washington, DC, USA

11/20/17

Michael K. Park
Chair

PTOE
PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

Jeffrey F. Paniati
Executive Director

Clarke Chauvin, PE

ATSSA
SAFER ROADS SAVE LIVES

3/10/22

430066
Mr. Clarke Chauvin
20405 Highland Rd
Baton Rouge, LA 70817-7348
US

Dear Mr. Chauvin,

The American Traffic Safety Services Association (ATSSA) appreciates your participation in our Traffic Control Supervisor Refresher-LA State Specific course held on 1/25/2022. Your certificate of attendance is enclosed.

You received a passing grade of 98.00% on the final examination. Congratulations on your successful completion of this course.

Please call us at 877-642-4637 if you have any questions.

Sincerely,

Training and Business
Development Department

~ Educated Employees Do Save Lives ~

ATSSA provides training and certification but neither constitutes employment by ATSSA.

American Traffic Safety Services Association
15 Riverside Parkway, Suite 100 • Fredericksburg, VA 22406-1077
Office: 540-368-1701 • Toll-Free: 800-272-8772 • Fax: 540-368-1717
ATSSA.com

Certificate of Completion

presented to

Clarke Chauvin

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 16, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDH's) Awarded: 2

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Clarke Chauvin

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: July 23, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDH's) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Clarke Chauvin

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 15, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDH's) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

The American Traffic Safety Services Association

Hereby recognizes that

Clarke Chauvin

has attended

Traffic Control Technician-LA State Specific

Training Course

10/14/2014
Date

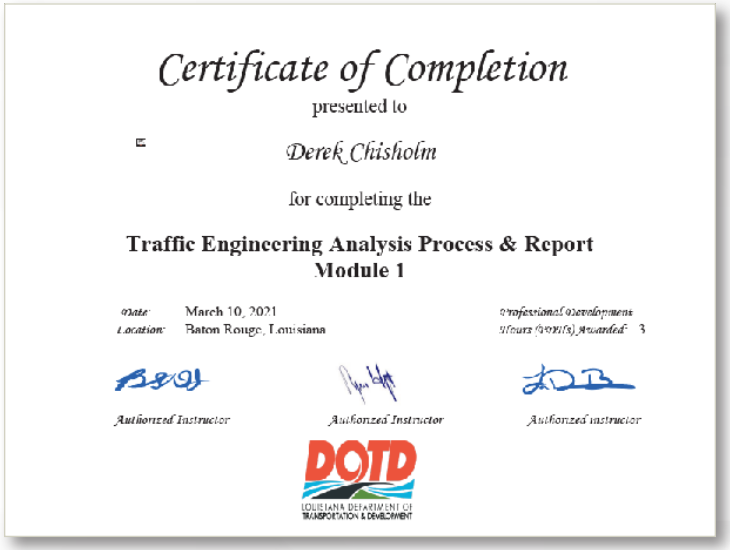
Baton Rouge, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

Derek Chisholm AICP, ENV SP, LEED GA



Certificate of Completion

presented to

Derek Chisholm

for completing the

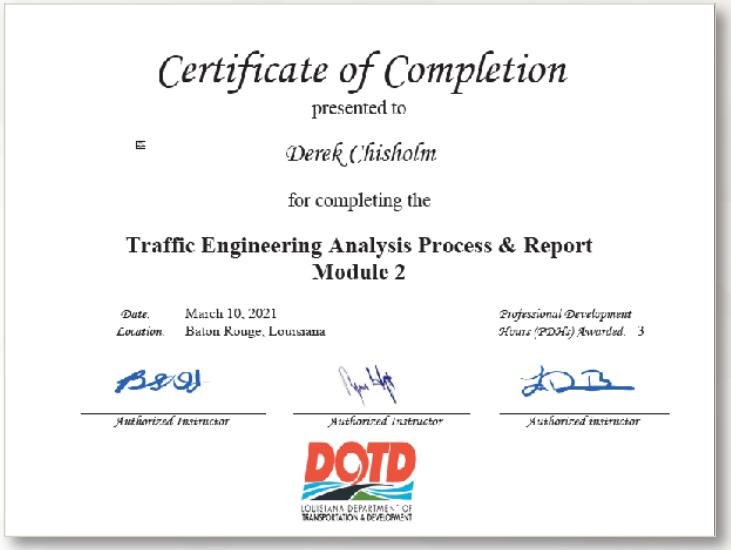
Traffic Engineering Analysis Process & Report
Module 1

Date: March 10, 2021
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Derek Chisholm

for completing the

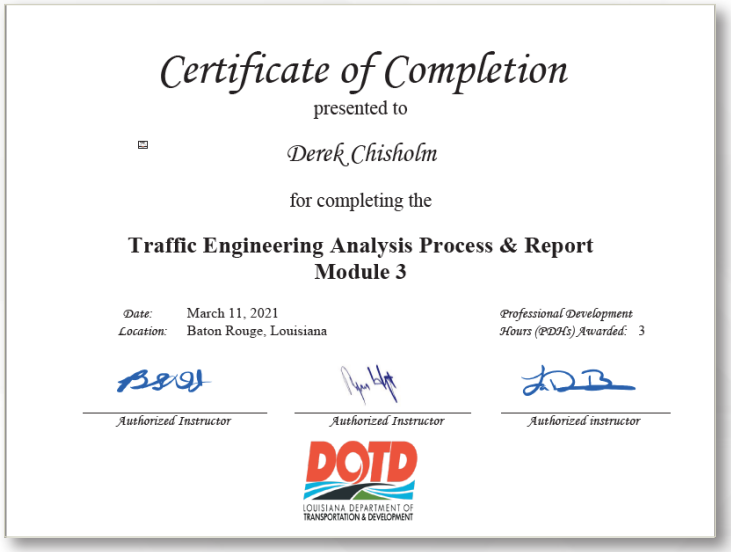
Traffic Engineering Analysis Process & Report
Module 2

Date: March 10, 2021
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Derek Chisholm

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: March 11, 2021
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Helms, Daniel

From: De la Garza, Victor
Sent: Monday, November 7, 2022 5:15 PM
To: Helms, Daniel
Subject: FW: Registration Confirmation for Traffic Engineering Process & Report (Pre-Booking - Dates to be Announced)

From: LTRC Registration Website <no_reply@lsu.edu>
Sent: Monday, November 7, 2022 4:14 PM
To: De la Garza, Victor <victor.delagarza@aecom.com>
Subject: Registration Confirmation for Traffic Engineering Process & Report (Pre-Booking - Dates to be Announced)

This Message Is From an External Sender

This message came from outside your organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Report Suspicious

Louisiana Transportation Research Center

Thank you for submitting your student registration. This confirmation is for Pre-Booking only. you will receive a new confirmation once you are enrolled in an active course.

Course: Traffic Engineering Process & Report (Pre-Booking - Dates to be Announced)
First Name: Victor
Last Name: De La Garza
Company: AECOM
Title: Associate Vice President
Phone: 915-701-8796

If you need assistance with managing your submission, please contact Layne Brown at layne.brown@la.gov.

Visit Website | (225) 767-9183

Congratulations!
Bonnie Dial

You have completed

Traffic Engineering Analysis Process & Report Class
Modules 1, 2 &3

Date: February 1-2, 2023
Location: Baton Rouge, Louisiana

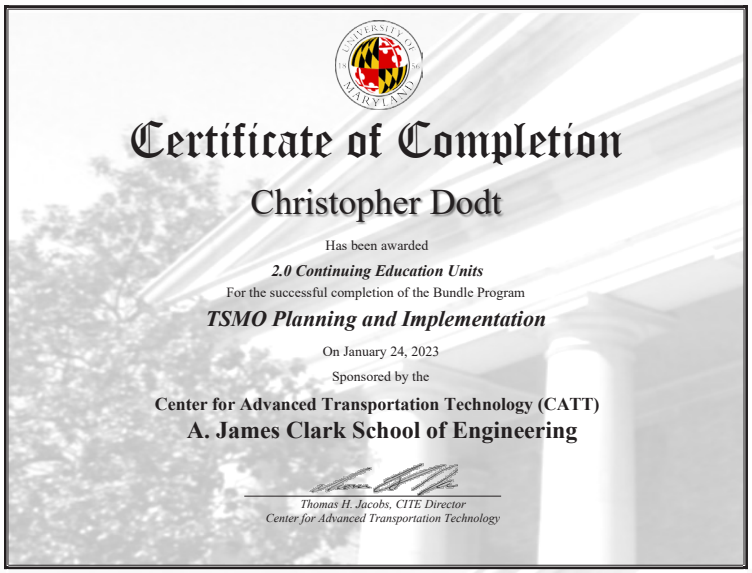
Professional Development Hours (PDHs) Awarded: 8.50

Authorized Instructor

Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Christopher Dodt



Certificate of Completion

Christopher Dodt

Has been awarded

2.0 Continuing Education Units

For the successful completion of the Bundle Program

TSMO Planning and Implementation

On January 24, 2023

Sponsored by the

Center for Advanced Transportation Technology (CATT)

A. James Clark School of Engineering

Thomas H. Jacobs, CITE Director
Center for Advanced Transportation Technology

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Christopher Dodt

has attended

Traffic Control Technician-LA State Specific

Training Course

2/7/2023 to 2/7/2027
Training Valid Through

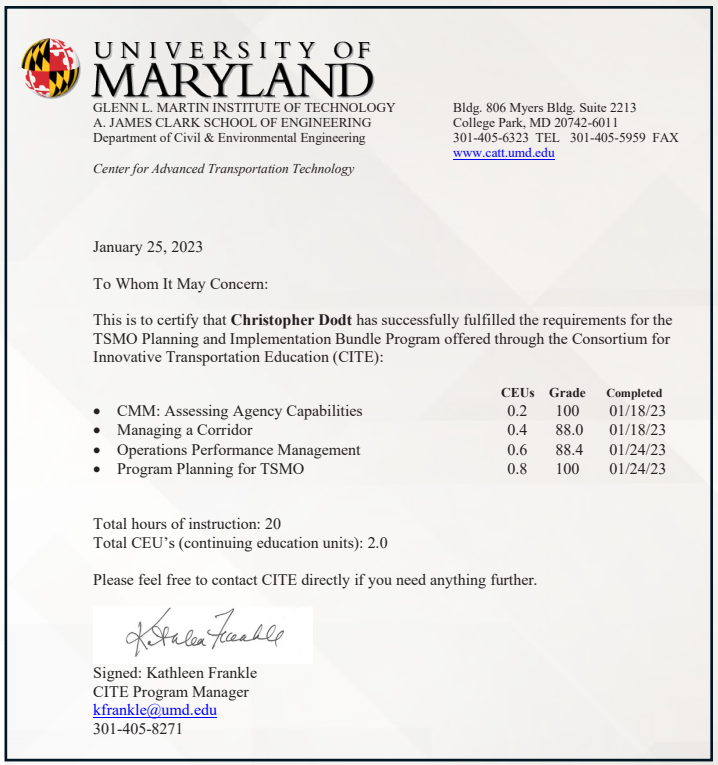
Vice President of Education and Technical Services

Baton Rouge, LA
Location

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.

ATSSA American Traffic Safety Services Association ATSSA.com



UNIVERSITY OF MARYLAND

GLENN L. MARTIN INSTITUTE OF TECHNOLOGY
A. JAMES CLARK SCHOOL OF ENGINEERING
Department of Civil & Environmental Engineering

Bldg. 806 Myers Bldg. Suite 2213
College Park, MD 20742-6011
301-405-6323 TEL 301-405-5959 FAX
www.catt.umd.edu

Center for Advanced Transportation Technology

January 25, 2023

To Whom It May Concern:

This is to certify that **Christopher Dodt** has successfully fulfilled the requirements for the TSMO Planning and Implementation Bundle Program offered through the Consortium for Innovative Transportation Education (CITE):

	CEUs	Grade	Completed
• CMM: Assessing Agency Capabilities	0.2	100	01/18/23
• Managing a Corridor	0.4	88.0	01/18/23
• Operations Performance Management	0.6	88.4	01/24/23
• Program Planning for TSMO	0.8	100	01/24/23

Total hours of instruction: 20
Total CEU's (continuing education units): 2.0

Please feel free to contact CITE directly if you need anything further.

Signed: Kathleen Frankle
CITE Program Manager
kfrankle@umd.edu
301-405-8271

Carlos Duran, PE, PTOE

Certificate of Completion

presented to

Carlos Duran

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: March 29, 2022
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized Instructor

Certificate of Completion

presented to

Carlos Duran

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: March 29, 2022
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized Instructor

Certificate of Completion

presented to

Carlos Duran

for completing the

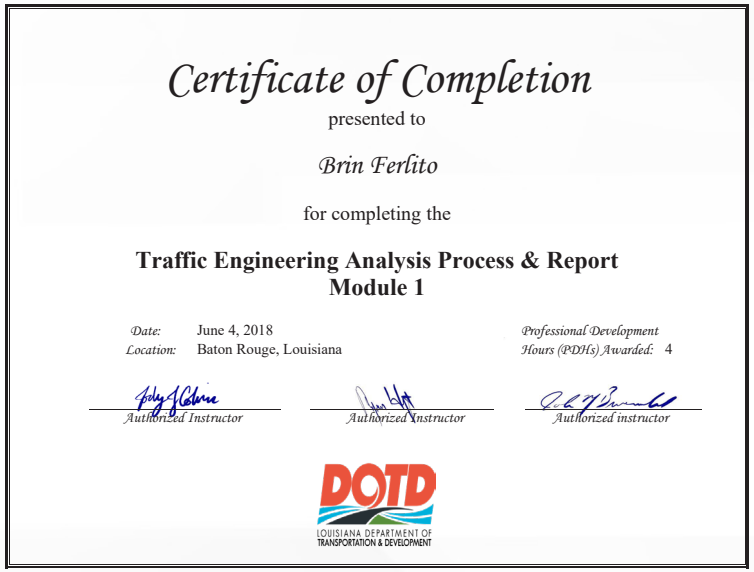
Traffic Engineering Analysis Process & Report
Module 3

Date: March 30, 2022
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized Instructor

Sheelagh Brin Ferlito, PE, PTOE



Certificate of Completion

presented to

Brin Ferlito

for completing the

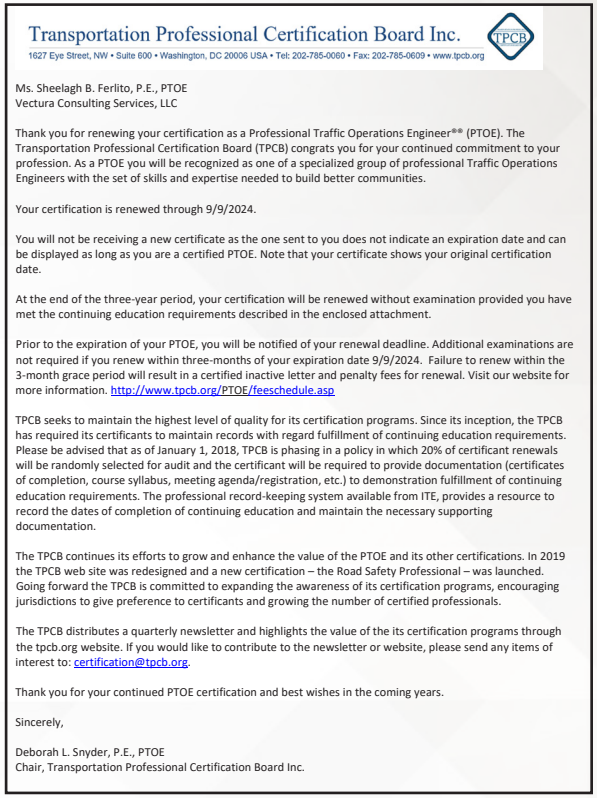
Traffic Engineering Analysis Process & Report
Module 1

Date: June 4, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 4

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Transportation Professional Certification Board Inc.
1627 Eye Street, NW • Suite 600 • Washington, DC 20006 USA • Tel: 202-785-0060 • Fax: 202-785-0609 • www.tpcb.org

Ms. Sheelagh B. Ferlito, P.E., PTOE
Vectura Consulting Services, LLC

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 9/9/2024.

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 9/9/2024. 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.tpcb.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 ITE, provides a resource to record the dates of completion of continuing education and maintain the necessary supporting documentation.

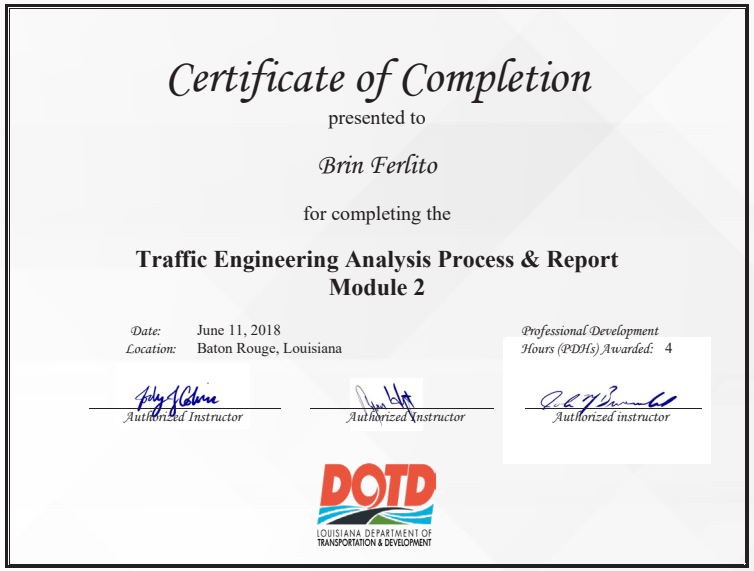
The TPCB continues its efforts to grow and enhance the value of the PTOE and its other certifications. In 2019 the TPCB web site was redesigned and a new certification – the Road Safety Professional – was launched. Going forward the TPCB is committed to expanding the awareness of its certification programs, 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@tpcb.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.



Certificate of Completion

presented to

Brin Ferlito

for completing the

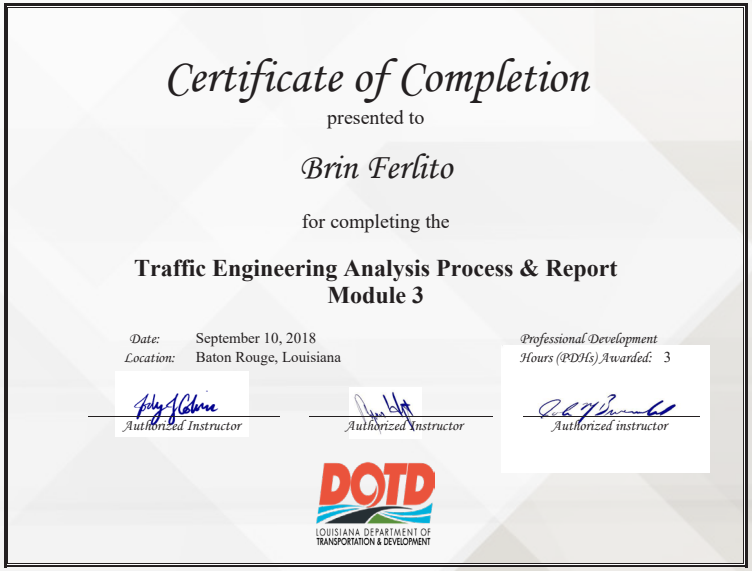
Traffic Engineering Analysis Process & Report
Module 2

Date: June 11, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 4

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Brin Ferlito

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: September 10, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Brin Ferlito

has attended

Traffic Control Supervisor Refresher-LA State Specific

Training Course

4/29/2022 to 4/29/2026
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.

This certificate provides proof of training, not certification.

ATSSA American Traffic Safety Services Association ATSSA.com

Certificate of Training

this certifies that

Sheelagh Ferlito

has successfully completed the training program requirements for

National Flagger Certification Training Course

Awarded on this **9th** *day of* **May 2023**

This certificate is valid for 30 days from the date awarded.

Jonathan Fox, PE, PTOE, PMP

Project Management Institute

THIS IS TO CERTIFY THAT

Jonathan N. Fox

HAS BEEN FORMALLY EVALUATED FOR DEMONSTRATED EXPERIENCE, KNOWLEDGE AND PERFORMANCE IN ACHIEVING AN ORGANIZATIONAL OBJECTIVE THROUGH DEFINING AND OVERSEEING PROJECTS AND RESOURCES AND IS HEREBY BESTOWED THE GLOBAL CREDENTIAL

Project Management Professional (PMP)®

IN TESTIMONY WHEREOF, WE HAVE SUBSCRIBED OUR SIGNATURES UNDER THE SEAL OF THE INSTITUTE

Tony Appleby
Chair, Board of Directors

Sunil Prashara
President and Chief Executive Officer

PMP® Number: 1812148
PMP® Original Grant Date: 28 April 2015
PMP® Expiration Date: 27 April 2024

Project Management Institute.

LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 11/7/2022 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Jonathan Nicolas Fox
20405 Highland Road
Baton Rouge, Louisiana 70817

LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Cut Here

Mr. Jonathan Nicolas Fox

License/Certificate Type - Number: PE.0033277
Expiration Date: 09/30/2023
Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer
All information provided by LAPELS on this web page, and on its other web pages and internet sites, is made available to provide immediate access for the convenience of interested persons. While LAPELS believes the information to be reliable, human or mechanical error remains a possibility, as does delay in the posting or updating of information. Therefore, LAPELS makes no guarantee as to the accuracy, completeness, timeliness, currency, or correct sequencing of the information. Neither LAPELS, nor any of the sources of the information, shall be responsible for any errors or omissions, or for the use or results obtained from the use of this information. Other specific cautionary notices may be included on other web pages maintained by LAPELS.

9643 Brookline Avenue, Suite 121 • Baton Rouge, Louisiana 70809-1433 • (225) 925-6291 • Fax (225) 925-6292 • www.lapels.com

Transportation Professional Certification Board Inc.

certifies that

Jonathan Nicolas Fox

has met all of the requirements established by the Certification Board to use the title of

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

unless withdrawn by the Certification Board and subject to the provisions for renewal. Certificate number 2329 issued in Washington, D.C., U.S.A.

November 7, 2007

Steven D. Hofener
Chair

PTOE PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

Executive Director

The American Traffic Safety Services Association

Hereby recognizes that

Jonathan Fox

has attended

Traffic Control Technician-LA State Specific

Training Course

08/07/2014
Date

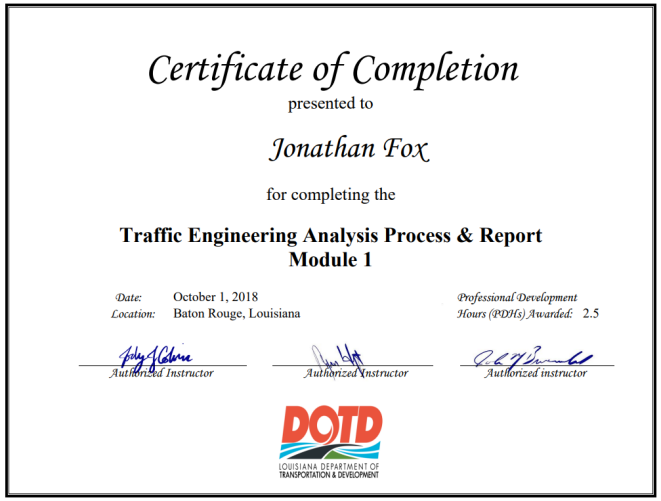
Baton Rouge, LA
Location

ATSSA
SAFER ROADS SAVE LIVES

Donna M. Clark
Training & Products Dept. Director

Ryan A. Wentz
President, CEO

Jonathan Fox, PE, PTOE, PMP



Certificate of Completion

presented to

Jonathan Fox

for completing the

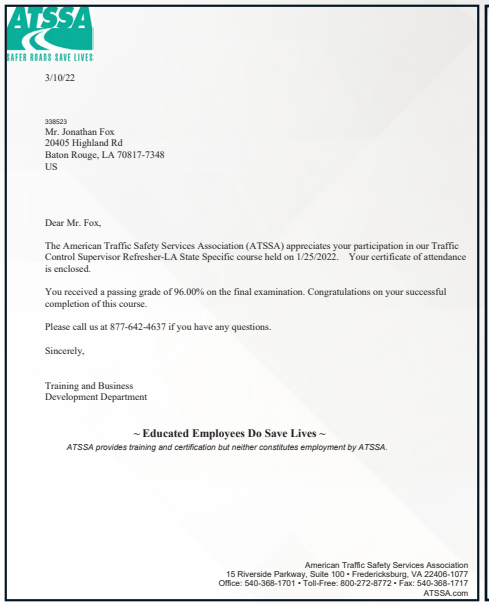
Traffic Engineering Analysis Process & Report
Module 1

Date: October 1, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2.5

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



ATSSA SAFER ROADS SAVE LIVES

3/10/22

338523
Mr. Jonathan Fox
20405 Highland Rd
Baton Rouge, LA 70817-7348
US

Dear Mr. Fox,

The American Traffic Safety Services Association (ATSSA) appreciates your participation in our Traffic Control Supervisor Refresher-LA State Specific course held on 1/25/2022. Your certificate of attendance is enclosed.

You received a passing grade of 96.00% on the final examination. Congratulations on your successful completion of this course.

Please call us at 877-642-4637 if you have any questions.

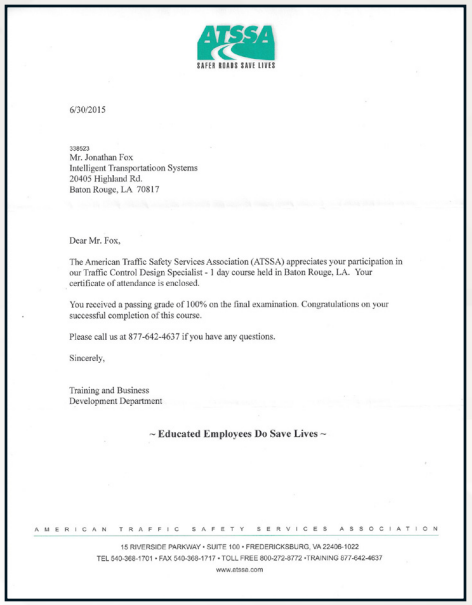
Sincerely,

Training and Business
Development Department

~ Educated Employees Do Save Lives ~

ATSSA provides training and certification but neither constitutes employment by ATSSA.

American Traffic Safety Services Association
15 Riverside Parkway, Suite 100 • Fredericksburg, VA 22406-1077
Office: 540-368-1701 • Toll-Free: 800-272-8772 • Fax: 540-368-1717
ATSSA.com



ATSSA SAFER ROADS SAVE LIVES

6/30/2015

338523
Mr. Jonathan Fox
Intelligent Transportaticon Systems
20405 Highland Rd.
Baton Rouge, LA 70817

Dear Mr. Fox,

The American Traffic Safety Services Association (ATSSA) appreciates your participation in our Traffic Control Design Specialist - 1 day course held in Baton Rouge, LA. Your certificate of attendance is enclosed.

You received a passing grade of 100% on the final examination. Congratulations on your successful completion of this course.

Please call us at 877-642-4637 if you have any questions.

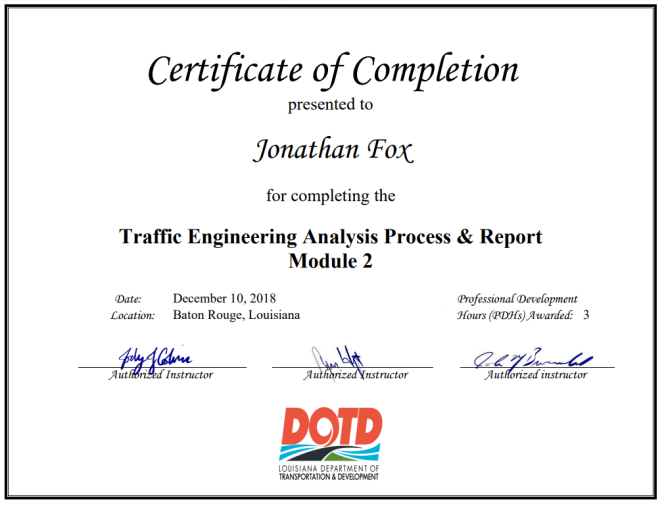
Sincerely,

Training and Business
Development Department

~ Educated Employees Do Save Lives ~

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

15 RIVERSIDE PARKWAY • SUITE 100 • FREDERICKSBURG, VA 22406-1022
TEL 540-368-1701 • FAX 540-368-1717 • TOLL FREE 800-272-8772 •TRAINING 877-642-4637
www.atssa.com



Certificate of Completion

presented to

Jonathan Fox

for completing the

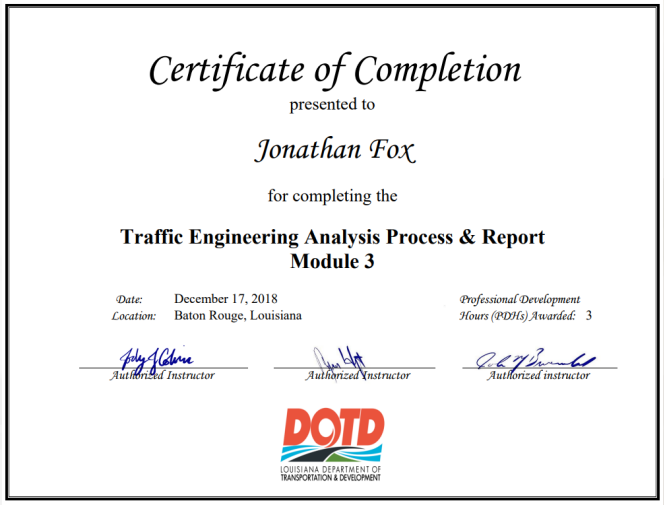
Traffic Engineering Analysis Process & Report
Module 2

Date: December 10, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Jonathan Fox

for completing the

Traffic Engineering Analysis Process & Report
Module 3

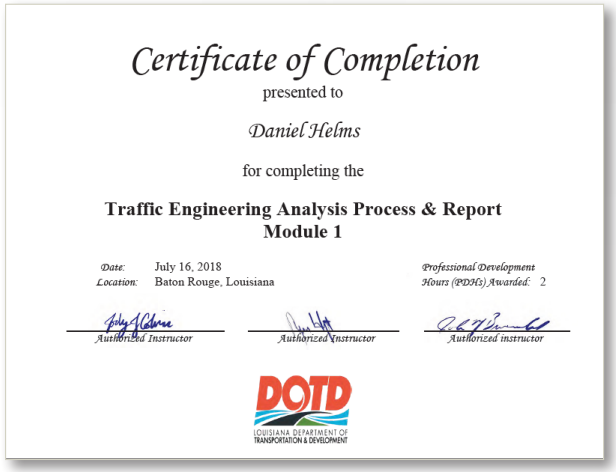
Date: December 17, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Daniel Helms, PE, PTOE, RSP$_{2I}$



Certificate of Completion

presented to

Daniel Helms

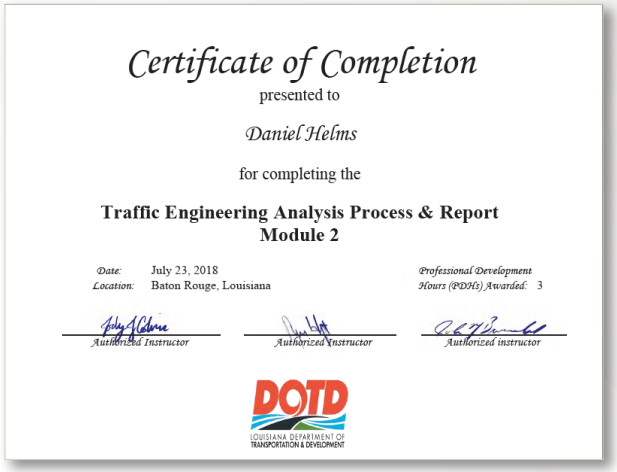
for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 16, 2018
Location: Baton Rouge, Louisiana
Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor | Authorized Instructor | Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Daniel Helms

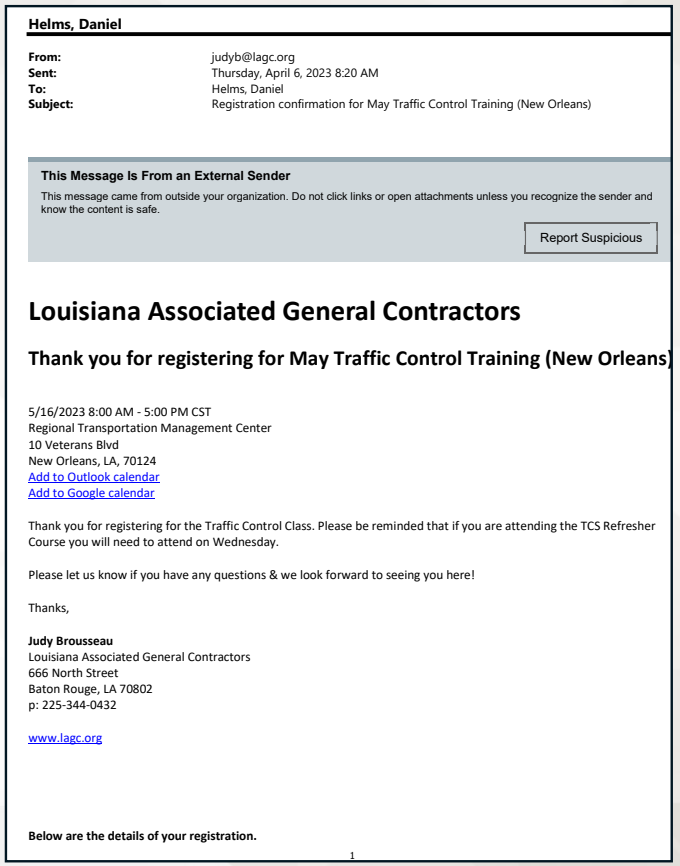
for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: July 23, 2018
Location: Baton Rouge, Louisiana
Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Helms, Daniel

From: judyb@lagc.org
Sent: Thursday, April 6, 2023 8:20 AM
To: Helms, Daniel
Subject: Registration confirmation for May Traffic Control Training (New Orleans)

This Message Is From an External Sender
This message came from outside your organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Report Suspicious

Louisiana Associated General Contractors

Thank you for registering for May Traffic Control Training (New Orleans)

5/16/2023 8:00 AM - 5:00 PM CST
Regional Transportation Management Center
10 Veterans Blvd
New Orleans, LA, 70124
Add to Outlook calendar
Add to Google calendar

Thank you for registering for the Traffic Control Class. Please be reminded that if you are attending the TCS Refresher Course you will need to attend on Wednesday.

Please let us know if you have any questions & we look forward to seeing you here!

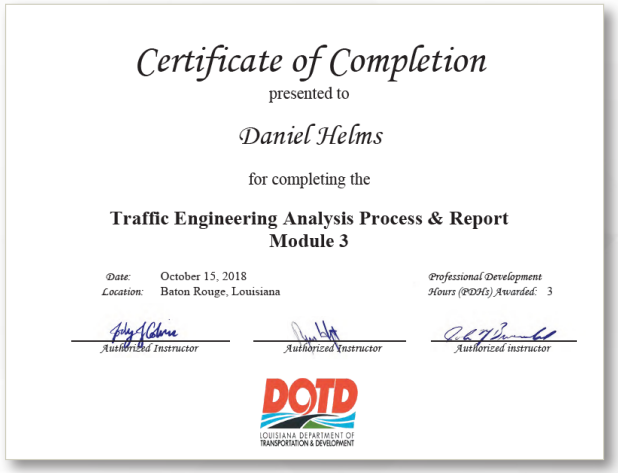
Thanks,

Judy Brousseau
Louisiana Associated General Contractors
666 North Street
Baton Rouge, LA 70802
p: 225-344-0432

www.lagc.org

Below are the details of your registration.

1



Certificate of Completion

presented to

Daniel Helms

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 15, 2018
Location: Baton Rouge, Louisiana
Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized Instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Transportation Professional Certification Board Inc.

certifies that

Daniel Brooks Helms

has met all of the requirements established by the Certification Board to use the title of

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

unless withdrawn by the Certification Board and subject to the provisions for renewal. Certificate number 2810 issued in Washington, D.C. U.S.A. April 14, 2010

Steven D. Hofener, Chair | PTOE PROFESSIONAL TRAFFIC OPERATIONS ENGINEER | Executive Director

Reagan "Sean" Johnson

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION

This is to affirm that

Sean Johnson

has satisfied the requirements to be designated as a

CERTIFIED FLAGGER

Expiration Date 4-6-27 State Issued in LA

Instructor Signature

Verification available by calling 1-877-642-4637 or at http://www.flagger.com

LOUISIANA ASSOCIATED GENERAL CONTRACTORS, INC.
666 North Street – Baton Rouge, LA 70802
Phone: 225/344-0432 * Fax: 225/344-0458
www.lagc.org

April 7, 2023

To Whom It May Concern,

This is to verify that the below listed employee of G.E.C. has successfully completed LADOTD required ATSSA Traffic Control Training.

ATSSA Traffic Control Supervisor Refresher Training – April 7, 2023: Sean Johnson

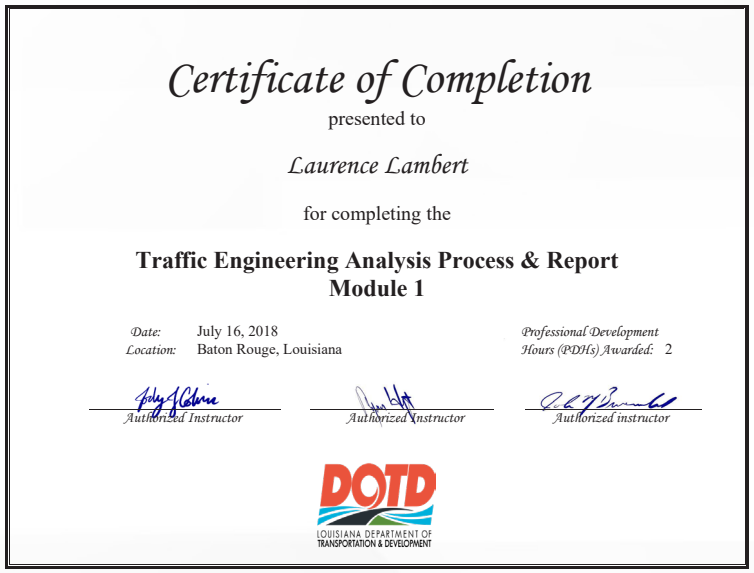
This letter will serve as temporary proof of training until above listed employees receive their official certificates from American Traffic Safety Services Association (ATSSA).

If there are any questions regarding this issue, please contact Mr. Brett Morgan of LADOTD at Headquarters in Baton Rouge, LA (225-379-1584) or Judy Brousseau at the above captioned address.

Best Regards,

Ken Naquin, LAGC Chief Executive Officer

Laurence Lambert, PE, PTOE



Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 16, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Training

this certifies that

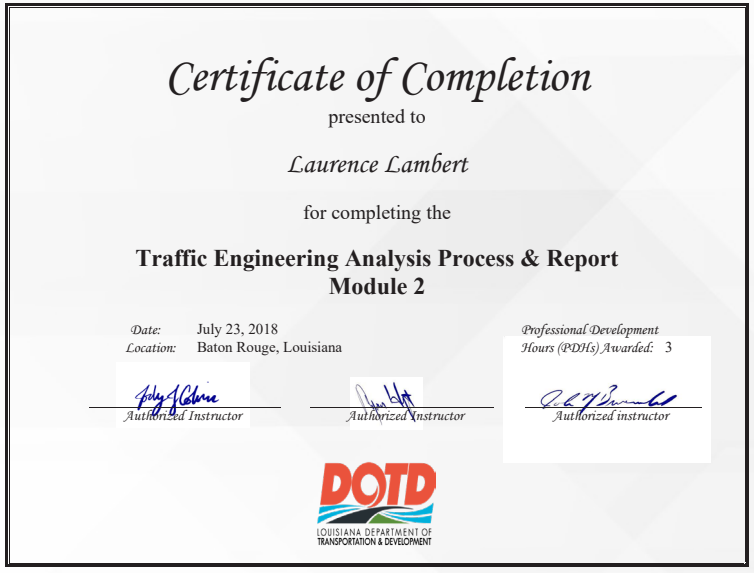
Laurence Lambert

has successfully completed the training program requirements for

National Flagger Certification Training Course

Awarded on this **9th** *day of* **May 2023**

This certificate is valid for 30 days from the date awarded.



Certificate of Completion

presented to

Laurence Lambert

for completing the

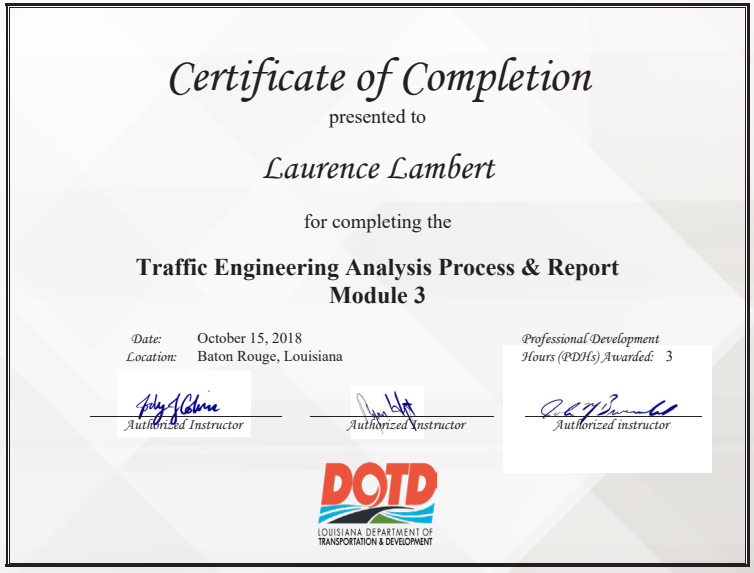
Traffic Engineering Analysis Process & Report
Module 2

Date: July 23, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Laurence Lambert

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 15, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Laurence Lambert, PE, PTOE

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.tpcb.org/PTOE/feeschedule.asp

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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@tpcb.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.

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Laurence Lambert
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

4/29/2022 to 4/29/2026
Training Valid Through

Director of Training

Baton Rouge, LA
Location

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.
This certificate provides proof of training, not certification.

ATSSA American Traffic Safety Services Association ATSSA.com

Kimberly McDaniel

Transportation Professional Certification Board Inc.

certifies that

Kimberly D. McDaniel

has met all of the requirements established by the Certification Board to use the title of

PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 2072 issued in Washington, D.C. U.S.A.
October 2, 2007

Steven D. Hofener
Chair

PTOE
PROFESSIONAL TRAFFIC OPERATIONS ENGINEER

Executive Director

LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 11/7/2022 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mrs. Kimberly Dawn McDaniel
10132 Springvalley Avenue
Baton Rouge, Louisiana 70810

Cut Here

LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mrs. Kimberly Dawn McDaniel

License/Certificate Type - Number: PE.0032973
Expiration Date: 09/30/2023
Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer
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Transportation Professional Certification Board, Inc.

certifies that

Kimberly McDaniel

has met all of the requirements established by the Certification Board to use the title of

Professional Transportation Planner

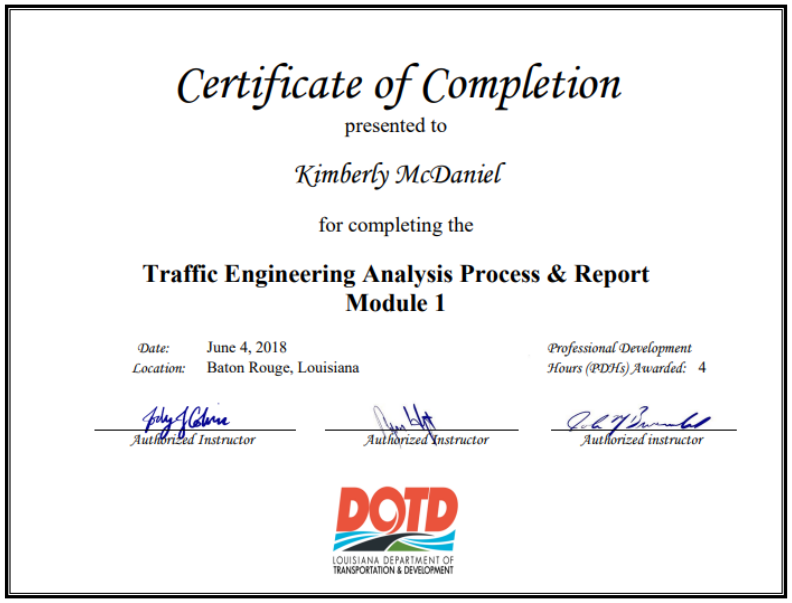
unless withdrawn by the Certification Board and subject to the provisions for renewal.
Certificate number 802 issued in Washington, DC, USA
3/14/2022

Deborah Snyder
Chair

PTP
PROFESSIONAL TRANSPORTATION PLANNER

Jeffrey F. Paniati
Executive Director

Kimberly McDaniel



Certificate of Completion

presented to

Kimberly McDaniel

for completing the

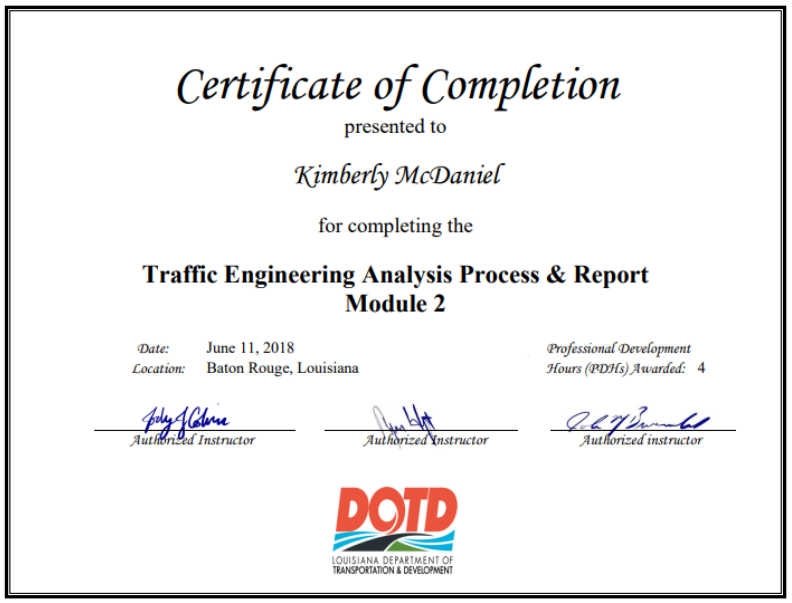
Traffic Engineering Analysis Process & Report
Module 1

Date: June 4, 2018
Location: Baton Rouge, Louisiana

Professional Development
Hours (PDHs) Awarded: 4

Authorized Instructor | Authorized Instructor | Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Kimberly McDaniel

for completing the

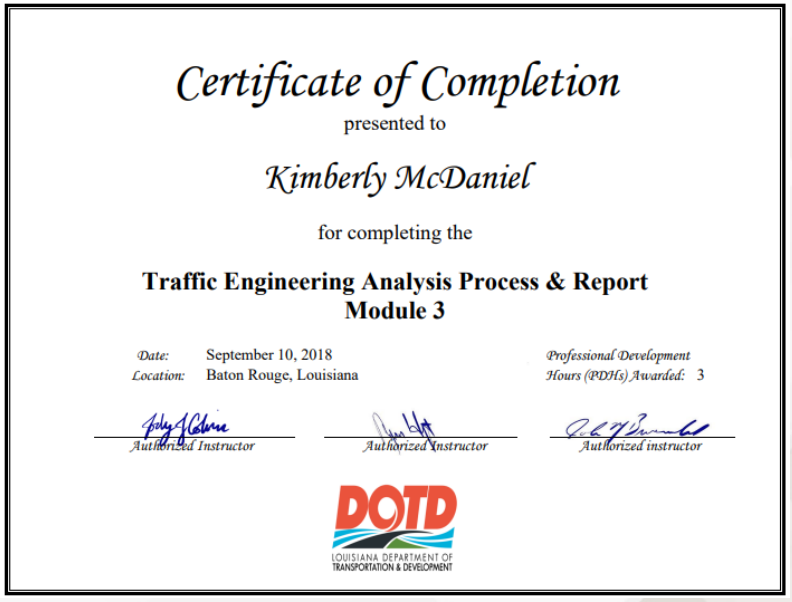
Traffic Engineering Analysis Process & Report
Module 2

Date: June 11, 2018
Location: Baton Rouge, Louisiana

Professional Development
Hours (PDHs) Awarded: 4

Authorized Instructor | Authorized Instructor | Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Kimberly McDaniel

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: September 10, 2018
Location: Baton Rouge, Louisiana

Professional Development
Hours (PDHs) Awarded: 3

Authorized Instructor | Authorized Instructor | Authorized instructor

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Jonathan McDowell

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: September 5, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Jonathan McDowell

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: September 17, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Jonathan McDowell

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 15, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Note: Mr. McDowell is scheduled to take the TCS Refresher on 5/17/23.

The American Traffic Safety Services Association

Hereby recognizes that

Jonathan G McDowell

has attended

Traffic Control Supervisor Refresher-LA State Specific Training Course

5/24/2019 to 5/24/2019
Date

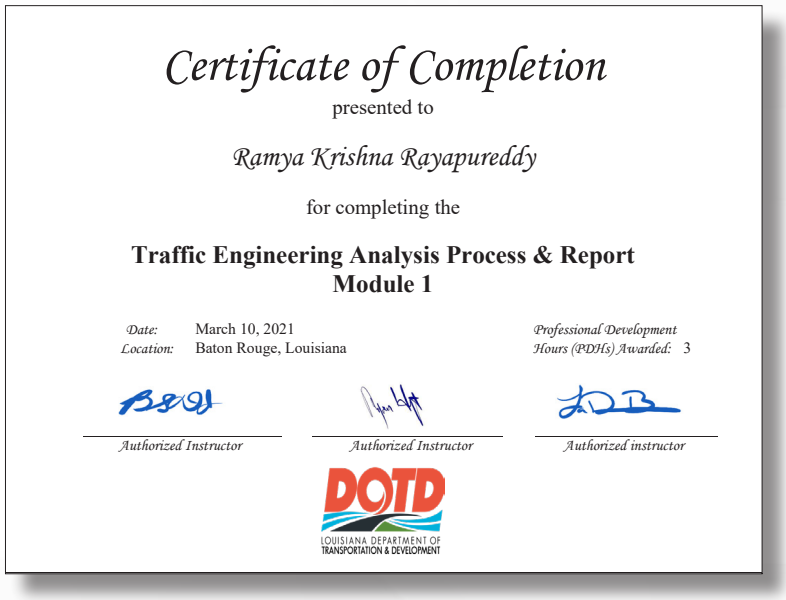
Baton Rouge, LA
Location

ATSSA SAFER ROADS SAVE LIVES

Training & Products Dept. Director

President, CEO

Ramya Rayapureddy



Certificate of Completion

presented to

Ramya Krishna Rayapureddy

for completing the

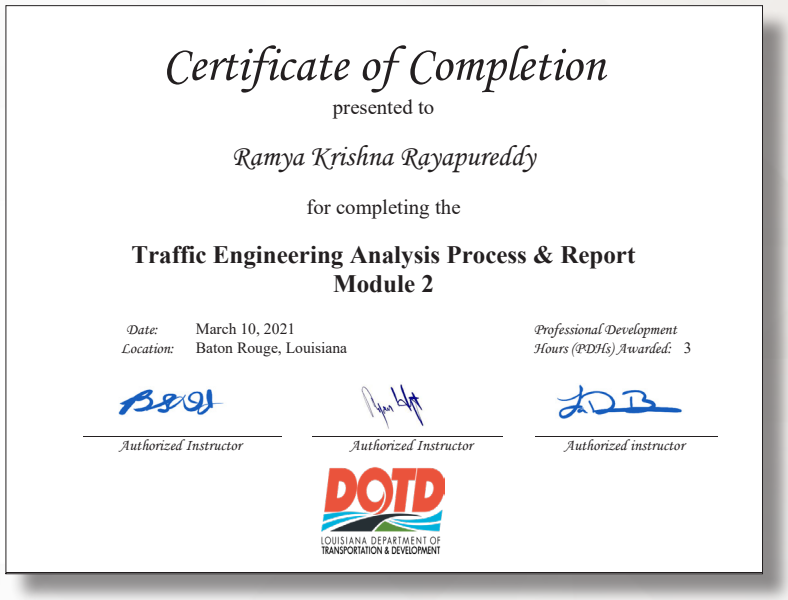
Traffic Engineering Analysis Process & Report
Module 1

Date: March 10, 2021
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT



Certificate of Completion

presented to

Ramya Krishna Rayapureddy

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: March 10, 2021
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Ramya Krishna Rayapureddy

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: March 30, 2022
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

Reece Rodrigue, PE, PTOE, RSP$_1$

Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: November 5, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: November 26, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3.5

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Reece Rodrigue

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: December 3, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Transportation Professional Certificatic

1627 Eye Street, NW • Suite 600 • Washington, DC 20006 USA • Tel: 202-785-0060 • f

Mr. Reece J. Rodrigue, P.E., PTOE
Vectura Consulting Services, LLC

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 7/17/2025.

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 7/17/2025. 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.tpcb.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

1

Reece Rodrigue, PE, PTOE, RSP[1]

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Reece Rodrigue
has attended
Traffic Control Supervisor-LA State Specific
Training Course

9/4/2019 to 9/5/2019
Date

Baton Rouge, LA
Location

Vice President of Member Services

President, CEO

ATSSA American Traffic Safety Services Association ATSSA.com

Certificate of Training

this certifies that

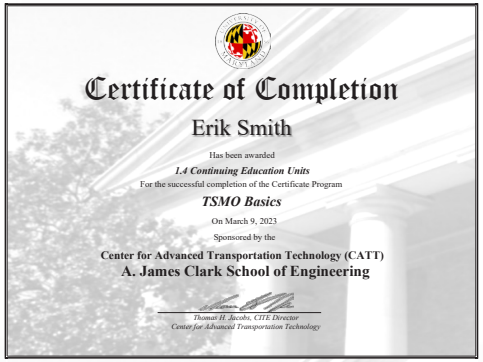
Reece Rodrigue

has successfully completed the training program requirements for

ATSSA Online Flagger Certification Training Course

Awarded on this **24th** *day of* **September 2020**

Erik Smith, PE



Certificate of Completion

Erik Smith

Has been awarded

1.4 Continuing Education Units

For the successful completion of the Certificate Program

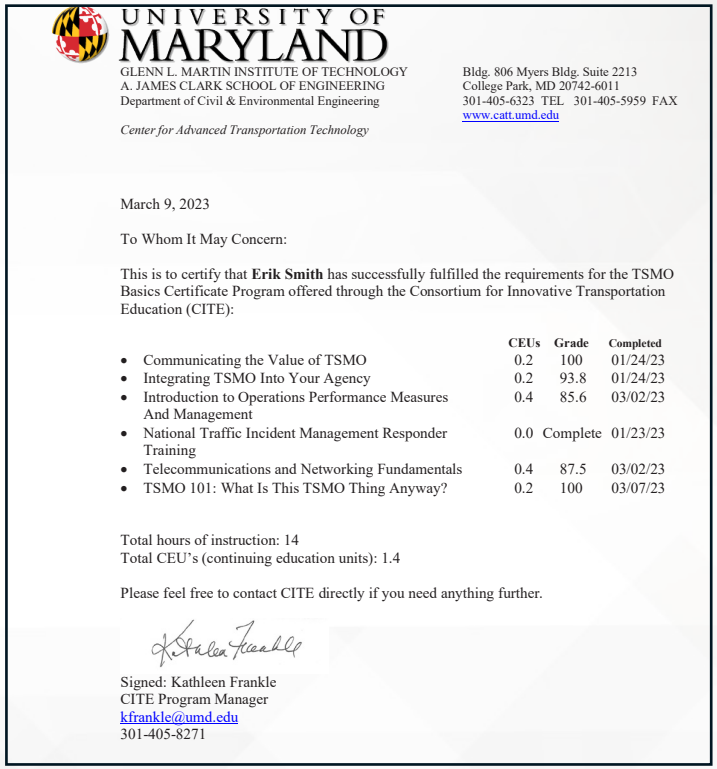
TSMO Basics

On March 9, 2023

Sponsored by the

Center for Advanced Transportation Technology (CATT)
A. James Clark School of Engineering

Thomas H. Jacobs, CITE Director
Center for Advanced Transportation Technology



UNIVERSITY OF MARYLAND

GLENN L. MARTIN INSTITUTE OF TECHNOLOGY
A. JAMES CLARK SCHOOL OF ENGINEERING
Department of Civil & Environmental Engineering

Center for Advanced Transportation Technology

Bldg. 806 Myers Bldg. Suite 2213
College Park, MD 20742-6011
301-405-6323 TEL 301-405-5959 FAX
www.catt.umd.edu

March 9, 2023

To Whom It May Concern:

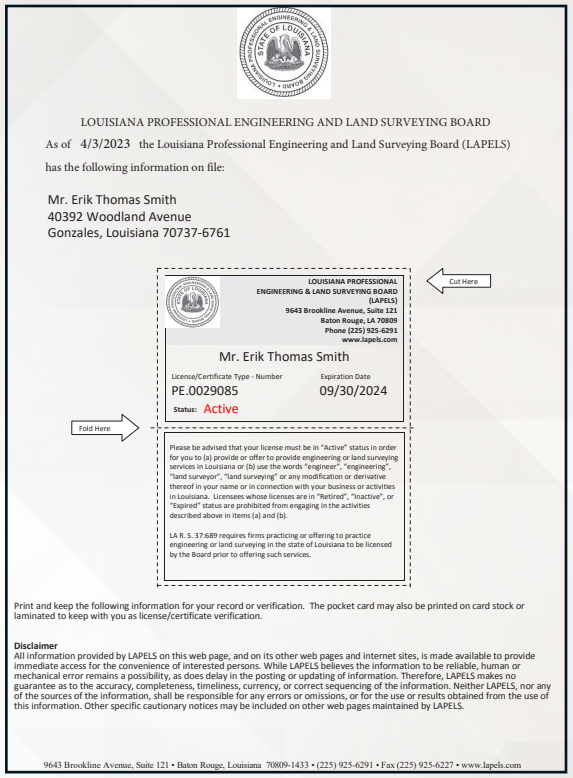
This is to certify that **Erik Smith** has successfully fulfilled the requirements for the TSMO Basics Certificate Program offered through the Consortium for Innovative Transportation Education (CITE):

	CEUs	Grade	Completed
• Communicating the Value of TSMO	0.2	100	01/24/23
• Integrating TSMO Into Your Agency	0.2	93.8	01/24/23
• Introduction to Operations Performance Measures And Management	0.4	85.6	03/02/23
• National Traffic Incident Management Responder Training	0.0	Complete	01/23/23
• Telecommunications and Networking Fundamentals	0.4	87.5	03/02/23
• TSMO 101: What Is This TSMO Thing Anyway?	0.2	100	03/07/23

Total hours of instruction: 14
Total CEU's (continuing education units): 1.4

Please feel free to contact CITE directly if you need anything further.

Signed: Kathleen Frankle
CITE Program Manager
kfrankle@umd.edu
301-405-8271



LOUISIANA PROFESSIONAL ENGINEERING AND LAND SURVEYING BOARD

As of 4/3/2023 the Louisiana Professional Engineering and Land Surveying Board (LAPELS) has the following information on file:

Mr. Erik Thomas Smith
40392 Woodland Avenue
Gonzales, Louisiana 70737-6761

Cut Here

LOUISIANA PROFESSIONAL ENGINEERING & LAND SURVEYING BOARD (LAPELS)
9643 Brookline Avenue, Suite 121
Baton Rouge, LA 70809
Phone (225) 925-6291
www.lapels.com

Mr. Erik Thomas Smith

License/Certificate Type - Number: PE.0029085
Expiration Date: 09/30/2024
Status: Active

Fold Here

Please be advised that your license must be in "Active" status in order for you to (a) provide or offer to provide engineering or land surveying services in Louisiana or (b) use the words "engineer", "engineering", "land surveyor", "land surveying" or any modification or derivative thereof in your name or in connection with your business or activities in Louisiana. Licensees whose licenses are in "Retired", "Inactive", or "Expired" status are prohibited from engaging in the activities described above in items (a) and (b).

LA R. S. 37:689 requires firms practicing or offering to practice engineering or land surveying in the state of Louisiana to be licensed by the Board prior to offering such services.

Print and keep the following information for your record or verification. The pocket card may also be printed on card stock or laminated to keep with you as license/certificate verification.

Disclaimer
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CERTIFICATE of ACHIEVEMENT

This is to certify that

Erik Smith

has completed the course

TSMO 101 - What Is This TSMO Thing Anyway?

Kathleen Frankle
CITE Program Manager

UNIVERSITY OF MARYLAND

Center for Advanced Transportation Technology
Bldg. 806 Myers Bldg. Suite 2213 College Park, MD 20742-6011
301-405-6323 TEL | 301-405-5959 FAX | www.catt.umd.edu WEB

GLENN L. MARTIN INSTITUTE OF TECHNOLOGY
A. JAMES CLARK SCHOOL OF ENGINEERING
Department of Civil & Environmental Engineering

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

Erik Smith
has attended
Traffic Control Technician-LA State Specific
Training Course

2/7/2023 to 2/7/2027
Training Valid Through

Baton Rouge, LA
Location

Vice President of Education and Technical Services

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.

ATSSA American Traffic Safety Services Association ATSSA.com

Erik Smith, PE

STATE OF LOUISIANA
DEPARTMENT OF STATE CIVIL SERVICE
LOUISIANA BOARD OF ETHICS
P. O. BOX 4368
BATON ROUGE, LA 70821
(225) 219-5600
FAX: (225) 381-7271
1-800-842-6630
www.ethics.la.gov

November 7, 2022

Erik Smith
40392 Woodland Ave
Gonzales, Louisiana 70737

RE: Docket No. 2022-582
Advisory Opinion

Dear Mr. Smith:

The Louisiana Board of Ethics ("Board"), at its November 4, 2022 meeting, considered your request for an advisory opinion as to whether the post-employments provisions of the Code of Governmental Ethics ("Code") would prohibit you from providing engineering services to the Department of Transportation and Development ("DOTD"), through a consultant who has existing contracts or may attempt to obtain future contracts, for both design and maintenance services with Section 56.

Facts Provided

You have been employed with the DOTD for 27 years. You currently serve as Maintenance and Communications Engineer Manager, Engineer 7, in the Intelligent Transportation Services ("ITS") (Section 56) within DOTD's Engineering and Operations Department. You have been employed in ITS-Section 56 since 2006. Your appointing authority is the ITS-Section 56 Director, Joshua Harroun, an Engineer 8. You anticipate retiring at the end of October 2022.

In your current position, your job duties include:

1. Supervising and overseeing all Systems Engineering (SE), field device maintenance, and data voice, and video support for the statewide ITS program. This includes planning, engineering, and direct contractual resources to deploy and manage the Departments ITS infrastructure.
2. Supervising, overseeing, and performing Systems Engineer troubleshooting, installation, and inspection services for ITS maintenance projects statewide. This includes facilitating SE management activities through direct supervision of professional consultant/contractors on all ITS deployed projects.
3. Developing and maintaining DOTD standard plans and specifications for ITS.

AN EQUAL OPPORTUNITY EMPLOYER

You ask whether you are prohibited, for two years from your retirement from DOTD, from providing engineering services to DOTD, through a consultant who has existing contracts or may attempt to obtain future contracts, for both design and maintenance services with ITS-Section 56.

You are currently considering an offer from Intelligent Transportation Systems LLC ("ITS LLC"). You also have been in discussions with other firms who do similar work, such as Arcadis.

ITS is a niche subset of the transportation field. Additionally, most ITS-related work in Louisiana utilizes federal dollars and is managed by DOTD. As such, any firm who does work in this specific field would likely have DOTD Contracts. Regarding ITS LLC specifically, the firm is a sub-consultant on multiple contracts with DOTD managed through ITS-Section 56. ITS LLC does not currently have a prime contract with DOTD. Additionally, ITS LLC has contracts with several public port authorities throughout the state.

It is your understanding that you will be precluded from working on any contracts with ITS-Section 56 for a two-year period post-employment as an employee of a consulting firm. ITS LLC intends for your work, during this period, to focus on clients, contracts, and projects not associated with ITS-Section 56. Some of your work may include public clients such as the port authorities.

The contracts held by this consulting firm and others are managed by DOTD employees Lucy Kimbeng (ITS Design and Construction Group), Rosalinda Deville (ITS Integration Group), or Scott Rundell (ITS Tolling Group). These are contracts for which you do not have managerial authority.

Law

La. R.S. 42:1121A(1) provides no former agency head or elected official shall, for a period of two years following the termination of his public service as the head of such agency or as an elected public official serving in such agency, assist another person, for compensation, in a transaction, or in an appearance in connection with a transaction, involving that former agency or render any service on a contractual basis to or for such agency.

La. R.S. 42:1121B(1) provides that no former public employee shall, for a period of two years following the termination of his public employment, assist another person, for compensation, in a transaction, or in an appearance in connection with a transaction in which such former public employee participated at any time during his public employment and involving the governmental entity by which he was formerly employed, or for a period of two years following termination of his public employment, render any service which such former public employee had rendered to the agency during the term of his public employment on a contractual basis, regardless of the parties to the contract, to, for, or on behalf of the agency with which he was formerly employed.

La. R.S. 42:1102(3) defines one meaning of "agency head" to be an administrative officer of an agency who exercises supervision over the agency.

La. R.S. 42:1102(2)(a) defines "agency" as a department, office, division, agency, commission, board, committee, or other organizational unit of a governmental entity.

Analysis

Pursuant to La. R.S. 42:1121A(1), you would be prohibited for two years from your termination from assisting a consulting company, for compensation, in a transaction, or in an appearance in connection with a transaction, involving the Maintenance and Communications Section of ITS-Section 56 of DOTD or render any service on a contractual basis to or for the Maintenance and Communications Section of ITS-Section 56 of DOTD. The Code defines an agency head in La. R.S. 42:1102(3) to be an administrative officer who exercises supervision. Therefore, under the facts presented, you would be considered an agency head of the Maintenance and Communications Section.

Also applicable are the general post-employment prohibitions in the Code provided in La. R.S. 42:1121B(1). Pursuant to La. R.S. 42:1121B(1) you are prohibited from participating in, or assisting another person in, a transaction in which you participated in during your time employed by the State of Louisiana. Additionally, La. R.S. 42:1121B(1) prohibits you from rendering any services, on a contractual basis, to the Maintenance and Communications Section of ITS-Section 56 that are the same services you rendered to Maintenance and Communications Section of ITS-Section 56 during the term of your employment.

Conclusion

The Board concluded, and instructed me to inform you, that the Code would not prohibit you, for a period two years following your retirement, from providing the engineering services as described above to other sections within ITS-Section 56 of DOTD through a consultant that has or intends to do business in the future with DOTD because you will not be contracting with your former agency Maintenance and Communications Section nor will you be working on any project you participated in as a public servant.

This advisory opinion is based solely on the facts as set forth herein. Changes to the facts as presented may result in a different application of the provisions of the Code of Governmental Ethics. The Board issues no opinion as to past conduct and or to laws other than the Code of Governmental Ethics, the Campaign Finance Disclosure Act, the Lobbyist Disclosure Acts, and the conflict of interest provisions contained in the Louisiana Gaming Control Law.

If you have any questions, please contact me at (800) 842-6630 or (225) 219-5600.

Sincerely,
Louisiana Board of Ethics

Suzanne Q. Mooney
For the Board

Augustin “Gus” Suteu, PE

This Certifies that
AUGUSTIN SUTEU

Has Completed a Florida Department of Transportation Approved Temporary Traffic Control (TTC) Advanced (Refresher) Course.

Date Expires: 03/26/2025 **Certificate #** 71859
Instructor: Messler R. Gilchrist **FDOT Provider #** 140

Metro Florida Safety Council
Phone: 954-603-1900
Tri-County
Dade,Broward,Palm Beach,
metrofloridasafetycouncil.com
mlyons@metrofloridasafetycouncil.com

Gregory Trahan, PE

Certificate of Completion

presented to

Gregory Trahan

for completing the

Traffic Engineering Analysis Process & Report
Module 1

Date: July 16, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 2

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Gregory Trahan

for completing the

Traffic Engineering Analysis Process & Report
Module 2

Date: July 23, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Certificate of Completion

presented to

Gregory Trahan

for completing the

Traffic Engineering Analysis Process & Report
Module 3

Date: October 29, 2018
Location: Baton Rouge, Louisiana

Professional Development Hours (PDHs) Awarded: 3

Authorized Instructor *Authorized Instructor* *Authorized Instructor*

DOTD LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

Note: Mr. Trahan is scheduled to take the TCS Refresher on 5/17/23.

James “Jimmy” Wheeler

ATSSA TRAINED

PROOF OF TRAINING

THIS CERTIFICATE HEREBY RECOGNIZES THAT

James C Wheeler
has attended
Traffic Control Supervisor Refresher-LA State Specific
Training Course

1/29/2021 to 1/29/2021
Date

Vice President of Education and Technical Services

Baton Rouge, LA
Location

President, CEO

ATSSA provides training and certification but neither constitutes employment by ATSSA.

ATSSA American Traffic Safety Services Association ATSSA.com

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.

(This page intentionally left blank, as instructed per the RFP)

22. Sub-consultant information:

If one or more sub-consultants will be used, provide the name, address, point of contact and phone number for each. Otherwise, leave this section blank.

Firm Name (Name must match as registered with Louisiana's Secretary of State)	Address	Point of Contact and Email Address	Phone Number
Intelligent Transportation Systems LLC	20405 Highland Road Baton Rouge, LA 70817	Kimberly McDaniel, P.E., PTOE, PTP kimberly@itsanswers.com	225.751.9300
G.E.C., Inc.	8282 Goodwood Blvd. Baton Rouge, LA 70806	Brian Buckel, PE bbuckel@gecinc.com	225.612.4260
Vectura Consulting Services, LLC	4467 Bluebonnet Blvd., Suite A Baton Rouge, LA 70809-9639	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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About AECOM

AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project life cycle – from advisory, planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivaled technical and digital expertise, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a *Fortune 500 firm* and its Professional Services business had revenue of $13.1 billion in fiscal year 2022. See how we are delivering sustainable legacies for generations to come at aecom.com and @AECOM.

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