

Technical Evaluation Committee (TEC) Questionnaire
Instructions

- The Technical Evaluation Committee (TEC) Questionnaire shall be used for professional services related to architecture, engineering, or survey projects.
- **The TEC Questionnaire should be completely filled out. Complete and attach ALL sections. Insert “N/A” or “None” if a section does not apply or if there is no information to provide.**
- Questionnaire must be signed by an authorized representative of the Firm. Failure to sign the questionnaire shall result in disqualification of proposer pursuant to J.P. Code of Ordinances Sec. 2-928.
- All subcontractors must be listed in the appropriate section of the Questionnaire. Each subcontractor must provide a complete copy of the TEC Questionnaire, applicable licenses, and any other information required by the advertisement. Failure to provide the subcontractors' complete questionnaire(s), applicable licenses, and any other information required by the advertisement shall result in disqualification of proposer pursuant to J.P. Code of Ordinances Sec. 2-928.
- If additional pages are needed, attach them to the questionnaire and include all applicable information that is required by the questionnaire.

TEC Professional Services Questionnaire

A. Project Name and Advertisement Resolution Number:

SOQ 22-030 - Professional Electrical Engineering Services

B. Firm Name & Address:

Gresham Smith
10000 Perkins Rowe
Suite 280
Baton Rouge, LA 70810

C. Name, title and contact information of Principal, as defined in Section 2-926 of the Jefferson Parish Code of Ordinances, who is a registered, licensed architect, professional engineer, or surveyor in the State of Louisiana:

Herbert "Bert" Moore, II, P.E., PLS, PTOE
State Transportation Leader - Louisiana
bert.moore@greshamsmith.com
225.282.2101

D. Name and contact information of employee who is a registered and licensed architect, professional engineer, or surveyor in the State of Louisiana in the applicable discipline. A subcontractor may be substituted here only if the advertised Project requires more than one discipline.

Christina Florez
Senior TSM&O Engineer
christina.florez@greshamsmith.com
225.757.5849

E. Please provide the number of employees whose primary function corresponds with each category:

<u>1</u> Administrative	<u> </u> Estimators	<u> </u> Specification Writers
<u> </u> Architects (Licensed)	<u> </u> Geologists	<u>3</u> Structural Engineers
<u> </u> Chemical Engineers	<u> </u> Geotechnical Engineers	<u>1</u> Graduate Engineers
<u>6</u> Civil Engineers	<u> </u> Interior Designers	<u>1</u> Project Managers
<u>3</u> Construction Inspectors	<u> </u> Landscape Architects	<u> </u> Clerical
<u> </u> Ecologists	<u> </u> Land Surveyor	<u> </u> Grant/Funding Specialist
<u>2</u> Electrical Engineers	<u> </u> Mechanical Engineers	<u> </u> Sanitary Engineers
<u>3</u> Engineer Intern	<u> </u> Environmental Engineers	
<u> </u> Professional Land Surveyors		<u>20</u> TOTAL

F. Is this submittal by a JOINT-VENTURE? Please check: YES NO

If marked "No" skip to Section I. If marked "yes" complete Sections G-H.

TEC Professional Services Questionnaire

G. If submittal is by JOINT-VENTURE, list the firms participating and outline specific areas of responsibility (including administrative, technical, and financial) for each firm. Please attach additional pages if necessary.

1.

2.

H. Has this JOINT-VENTURE previously worked together? Please check:
 YES NO

I. List all subcontractors anticipated for this Project. Please note that all subcontractors must submit a fully completed copy of this questionnaire, applicable licenses, and any other information required by the advertisement. See Jefferson Parish Code of Ordinances, Sec. 2-928(a)(3). Please attach additional pages if necessary.

Name & Address:	Specialty:	Worked with Firm Before (Yes or No):
1. N/A		
2.		
3.		

J. Please specify the total number of support personnel that may assist in the completion of this Project:

20

TEC Professional Services Questionnaire

K. List the professional in charge, key persons, specialists, and individual consultants anticipated for this Project and provide their relevant information below. If necessary, please attach additional documentation (i.e. resume) that demonstrates the employment history and experience of the Firm's key persons that may assist in the completion of this Project. Please attach additional pages if necessary.

PROFESSIONAL IN CHARGE OF PROJECT:

Name & Title:

Herbert "Bert" Moore, II, P.E., PLS, PTOE
State Transportation Leader - Louisiana

Project Assignment:

Professional In Charge Of Project / Project Executive

Name of Firm with which associated:

Gresham Smith

Years' experience with this Firm:

8

Education: Degree(s)/Year/Specialization:

Bachelor of Science / 1999 / Civil Engineering Minor in Land Surveying

Active registration: Year first registered/discipline:

PE.0031065 / LA / 2004 / Civil Engineer PTOE 2728 / 2009
PLS 5043 / LA / 2010

Other experience and qualifications relevant to the proposed Project:

Bert is a professional engineer with 24 years of experience designing and managing projects in the fields of traffic and transportation engineering. Prior to joining Gresham Smith, Bert spent six years serving as the District Traffic Operations Engineer (DTOE) for the Louisiana Department of Transportation and Development (LADOTD) where he was responsible for the daily maintenance and operation of signs, striping and traffic equipment for 2,000 miles of roadway and over 600 traffic signals in the Department's Baton Rouge region. Bert also has experience designing for non-vehicular traffic such as bicyclists and pedestrians and making accommodations within ROW and at intersections. Bert has his Professional Traffic Operations Engineer (PTOE) certification and has completed both the ATSSA Traffic Control Training and all 3 modules of LADOTD's Traffic Engineering Process and Report Training.

See attached resume.

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Christina Florez, P.E. Senior TSM&O Engineer
Project Assignment:
Project Manager/ITS Lead
Name of Firm with which associated:
Gresham Smith
Years' experience with this Firm:
6
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 2001 / Electrical Engineering
Active registration: Year first registered/discipline:
PE.0038799 / LA / 2014 / Electrical and Computer Engineer PE 65603 / FL / 2007 / Electrical and Computer
Other experience and qualifications relevant to the proposed Project:
<p>Christina has been a senior project manager/engineer on complex ITS projects over the past 22 years. She has been the lead engineer, supervising and mentoring staff, as well as the overall project management of a wide variety projects. Some of her project experiences include: design-build projects, providing support to DOT clients, adaptive traffic signal control (ATSC) plans, integrated corridor management (ICM) planning studies, ITS design and construction support, field inspection and testing, variable speed limit (VSL) system, transportation systems management and operations, systems engineering analyses, incident management system (IMS), and reversible-lane plan development. Christina is one of the leaders of the TSM&O Initiative for Gresham Smith which includes technical areas of ITS, Traffic Signal Systems, Data Management and Analytics, Connected and Autonomous Vehicles, Traffic Incident Management, and Transportation Operations and Strategies. Christina has completed the ATSSA Traffic Control Training and all 3 modules of LADOTD's Traffic Engineering Process and Report Training.</p> <p>See attached resume.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Tait Karlson, P.E., PTOE Senior Transportation Engineer
Project Assignment:
Traffic Engineering/ITS Engineer
Name of Firm with which associated:
Gresham Smith
Years' experience with this Firm:
13
Education: Degree(s)/Year/Specialization:
Master of Engineering / 2003 / Transportation Engineering Bachelor of Science / 2001 / Civil Engineering
Active registration: Year first registered/discipline:
PE.0040438 / LA / 2016 / Civil Engineer; PE19387 / KS / 2007 / Expired* PTOE 3091 / 2011 *Gresham Smith does not perform engineering work in Kansas
Other experience and qualifications relevant to the proposed Project:
<p>Tait has over 19 years of experience performing transportation engineering tasks for many municipalities and DOTs. He has experience in developing traffic studies and creating traffic signal, Adaptive Traffic Signal Control (ATSC), and ITS design plans. Tait has developed the purpose and need studies for interchanges, traffic impact studies for developments, and analyses for freeway systems to determine alternative solutions. He has integrated the use of traffic modeling software to analyze design alternatives, as well as to develop three-dimensional videos for public involvement purposes. Tait's design experience also includes creating roadway, pavement marking, signing, traffic control, lighting, traffic signal, and ITS plans as well as developing specifications and cost estimates for these plans. Tait has his Professional Traffic Operations Engineer (PTOE) certification and has completed all 3 modules of LADOTD's Traffic Engineering Process and Report Training.</p> <p>See attached resume.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Doug Smith Jr., P.E., IMSA II Engineer
Project Assignment:
ITS Engineer
Name of Firm with which associated:
Gresham Smith
Years' experience with this Firm:
5
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 2000 / Industrial Engineering, Louisiana State University
Active registration: Year first registered/discipline:
PE.0043689 / LA / 2019 / Electrical
Other experience and qualifications relevant to the proposed Project:
<p>Doug is a Professional Electrical Engineer in Louisiana. He brings 20 years of multidiscipline design experience with an electronics design focus and extensive experience in lighting analysis and design. He has managed the design and deployment of research projects at Louisiana State University consisting of complex sensor arrays and custom data acquisition systems. He also designed, constructed, and maintained electronic equipment used in teaching, research activities, and consumer electronics. Doug's diverse background in electrical design, communications and programming enhances the team with hands-on practical knowledge which is applied to all design and construction tasks.</p> <p>See attached resume.</p>

TEC Professional Services Questionnaire

KEY PERSON, SPECIALIST, OR INDIVIDUAL CONSULTANT:
Name & Title:
Julian Bordelon, E.I. TSM&O Specialist
Project Assignment:
ITS Specialist
Name of Firm with which associated:
Gresham Smith
Years' experience with this Firm:
12
Education: Degree(s)/Year/Specialization:
Bachelor of Science / 2018 / Electrical Engineering, Louisiana State University
Active registration: Year first registered/discipline:
EI.0034032 / LA / 2019 / Engineer Intern
Other experience and qualifications relevant to the proposed Project:
<p>As a TSM&O Specialist, Julian's experience includes ITS design, Adaptive Traffic Control System design, electrical analysis, lighting design and analysis, and fiber optic mapping. His direct experience with network infrastructures, database management, and electrical analysis has been proven useful as a technical resource. Julian recently passed his PE exam.</p> <p>See attached resume.</p>

TEC Professional Services Questionnaire

L. Work by Firm or Joint-Venture members which best illustrates current qualifications relevant to this Project. Please include any and all work performed for Jefferson Parish. Please attach additional pages if necessary.		
PROJECT NO. 1		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Jefferson Parish, Train Detection System (TDS) Jefferson and Orleans Parishes, LA Angela Desoto, PE 504.736.6511 adesoto@jeffparish.net	Prime Consultant responsible for entire contract. Gresham Smith was selected to implement the Train Detection System (TDS) to solve a long-standing problem of providing advance notice to drivers that a train was approaching or blocking the grade crossing at Metairie Road. Gresham Smith is tasked with coordination for device procurement and installation, implementation of the TDS application, testing, routine maintenance and data management. The implementation of the TDS application includes server configuration and software customization.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
80% Completed: 12/2022 (Estimated)	\$164,000	\$164,000

PROJECT NO. 2		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
LCG, Johnston Street Lighting, Lafayette, LA Warren Abadie, P.E. 1515 East University Avenue Lafayette, LA 70502 337.291.8548	Gresham Smith was selected by Lafayette Consolidated Government to develop design plans for street lighting for the 2.3 miles section of Johnston Street (US 167) through Lafayette Parish. LADOTD has a J-Turn project that is currently removing the street lighting within the median of Johnston Street. Gresham Smith performed the photometric analysis for Johnston Street and developed preliminary and final design plans for street lighting, voltage drop calculations, and construction cost estimates. The contractor's bid of this project was \$2.4 million which was within 10% of the estimate of probably construction costs that was developed as part of the design for this project.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
Design 100% Completed: 2/2022 (Actual) Post design services: Ongoing	\$200,000	\$200,000

TEC Professional Services Questionnaire

PROJECT NO. 3		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility	
East Baton Rouge Parish, Bluebonnet Boulevard Sidewalks (Mall Drive 1 to Bluebonnet Centre Blvd.), East Baton Rouge, LA Thomas A. Stephens, P.E. 225.389.3186 tstephens@brla.gov	Gresham Smith was selected to perform a pedestrian operations study of the intersection of Bluebonnet Boulevard at Bluebonnet Centre/Blue Cross and to develop design plans to add pedestrian lighting and pedestrian signals to the existing traffic signals on Bluebonnet Boulevard for the intersections of Mall Drive 1 / Constantine Boulevard, I-10 EB Ramps, I-10 WB Ramps and Bluebonnet Centre Boulevard in Baton Rouge, Louisiana. The goal of this project is to bring this existing intersection up to current ADA requirements for pedestrians and provide connectivity for pedestrians through these intersections and provide connectivity to the BREC path along Ward's Creek and to the sidewalks along Bluebonnet on either end of the project limits. This includes providing pedestrian lighting for the entire length of the project and providing full design for the section under the I-10 overpass.	
Completion Date (Actual or estimated)	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
33% Completed: 3/31/2023 (Estimated)	\$48,000	\$48,000

PROJECT NO. 4		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
East Baton Rouge Parish, Jefferson Hwy at Bluebonnet, City-Parish Project No. 20-CP-HC-0046, East Baton Rouge, LA Thomas A. Stephens, P.E. 225.389.3186 tstephens@brla.gov	Gresham Smith was selected as part of a team to perform the traffic design report and street lighting analysis and design for the portions Jefferson Highway and Bluebonnet Boulevard adjacent to the intersection of Jefferson Highway and Bluebonnet Boulevard study in Baton Rouge, Louisiana. The goal of the traffic design report is to collect data at the study intersection, perform capacity analyses of existing and future traffic volumes and develop alternatives for improved capacity. The lighting analysis will be performed to provide a design to relocate existing lighting to accommodate proposed roadway improvements at the intersection.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
96% Completed: 12/2022 (Estimated)	\$33,800	\$33,800

TEC Professional Services Questionnaire

PROJECT NO. 5		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
City of Baton Rouge and Parish of East Baton Rouge Department of Transportation, MovEBR-Plank Road Corridor Enhancement Segment 2, Baton Rouge, LA Thomas A. Stephens, P.E. 225.389.3186 tstephens@brla.gov	The purpose of this project is to improve the safety and mobility of both the vehicular and non-vehicular traffic through the Plank Road corridor from Dawson Drive to Harding Blvd. The roadway configuration may be revised to accommodate existing and projected volumes and the traffic signals along the corridor will be upgraded to current technologies that can accommodate connected vehicle technology and transit priority operations. This project is a small portion of a larger corridor improvement project along Plank Road. Plank Road (LA 67) is a major arterial highway which provides a critical connection from the norther portion of East Baton Rouge Parish and the cities of Zachary, Central and Baker to the Baton Rouge Airport, the main Capitol Area Transit System (CATS) terminal, the Greyhound Bus Station and downtown Baton Rouge. A design study was performed to identify the design year traffic volumes to determine the appropriate lane configuration. Pedestrian and bicycle facilities will be designed along the corridor to fit within the existing Right-Of-Way (ROW) and to connect to the adjacent pedestrian facilities and neighborhoods. Where possible, bus pullout will be provided to prevent busses stopping at bus stops from blocking travel lanes on Plank Road. The existing traffic signals will be upgraded to current standards with additional SMART Corridor technologies, capable of remote communications, Automated Traffic Signal Performance Measures (ATSPMs), connected vehicle technology and transit priority for rapid transit operations. Crosswalks will be designed for all of the signalized intersections to ensure safe crossings for pedestrians.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
100% Completed: 02/2022 (Actual)	\$156,000	\$156,000

PROJECT NO. 6		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
Sherwood Forest Blvd MUP, C-P Project No. 20-EN-HC-0027, Baton Rouge, LA Thomas A. Stephens, P.E. 225.389.3186 tstephens@brla.gov	Prime Consultant responsible for designing a Multi-Use Path along the west side of South Sherwood Forest Boulevard from South Harrells Ferry Road to Old Hammond Highway. Gresham Smith was selected to provide the safety and timing study for the traffic signals through this project, to review the feasibility of the improvements required to the traffic signals. Gresham Smith was also tasked with the design to upgrade these traffic signals to accommodate the MUP and the crosswalks required. This included the intersections of South Sherwood Forest at S. Harrells Ferry, I-12 EB Ramps, I-12 WB Ramps, N. Harrells Ferry and Old Hammond Highway. This project will improve the operation and safety for both vehicular and non-vehicular users by bringing these existing intersections up to current ADA requirements. The signal improvements will include the installation of handicap ramps, crosswalks, pedestrian signal heads and audible pedestrian pushbuttons. Gresham Smith has also tasked been tasked with the study and design of pedestrian lighting along Sherwood Forest between these intersections. This included pedestrian lighting for the portion of the path under the I-12 overpass.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
43% Completed: 10/2022 (Estimated)	\$150,000	\$150,000

TEC Professional Services Questionnaire

PROJECT NO. 7		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
MDOT, 2020 RWD, WA #1, Meridian Lighting and ITS, Meridian, MS David Seal State Roadway Design Engineer MDOT 601.359.7001 david.seal@mdot.ms.gov	The Project is a design build project and includes the installation and operation of Intelligent Transportation System (ITS) applications and devices with connections to major roadways in the Lauderdale County area and Interstate lighting along I-59 from SR 11 to the Mississippi/Alabama State Line. Gresham Smith will provide Light Pole inspection, Phase A Lighting and ITS plans, Systems Engineering Analysis Report, Design/Build document setup, and D/B Construction Administration support. Gresham Smith has performed the structural inspection of the existing street light poles and is currently developing plans to replace deficient poles and for installation of new poles in areas where lighting is not present. Gresham Smith is performing the lighting analysis and will provide 3 lighting fixture options using the AiG32 software. Once the options have been narrowed down, an analysis of the fixtures will be done for the entire corridor to determine foot candle levels that can be attained and how closely they will meet the AASHTO lighting requirements. Plans will be developed using aerials that provide the preliminary conduit, power service points, fixture and electrical details. Preliminary voltage drop calculations will be developed to help ascertain the expected power service point needs. Additionally, the project will connect traffic signals to the Traffic Management Center, add Closed-Circuit Television (CCTV) cameras, Dynamic Message Signs (DMS) and vehicle detection devices.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
100% Completed: 2/2021 (Actual)	\$243,000	\$243,000

PROJECT NO. 8		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
MDOT, State Route 601 – Canal Road Lighting Design, Gulfport, MS Richard Pittman State Roadway Design Engineer MDOT 601.359.7001 rpittman@mdot.ms.gov	Gresham Smith is providing Phase A design services to develop lighting and ITS design plans for the proposed interchange at SR 601 (Canal Road) and I-10 in Harrison County. The project limits are from the I-10 interchange at County Farm Road (west limit) to the I-10 interchange at US 49 (east limit) in Gulfport and from the proposed intersection of SR 601 at 28th Street (south limit) to the I-10 interchange at SR 601 (north limit) including the full extent of the proposed interchange ramps. The design services include developing field inspection plans, identifying potential power service locations, placement of device locations, site visit documentation, and making recommendations for existing equipment updates/upgrades.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
100% Completed: 12/2020 (Actual)	\$42,750	\$42,750

TEC Professional Services Questionnaire

PROJECT NO. 9		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
LADOTD, ITS Design and Implementation Services, WO #4: I-10 Twin Spans Lucy Kimbeng, P.E., PTOE 225.379.1143 lucy.kimbeng@la.gov	Gresham Smith developed design plans along with specifications and cost estimates for eight Pan-Tilt-Zoom (PTZ) camera locations, a new Dynamic Message Sign (DMS) and power and communications equipment along an eight-mile segment of I-10 in a crucial evacuation route between New Orleans and Slidell Louisiana. This project included the design for the removal of existing cameras and DMS poles that were installed 10 years ago when the bridge was constructed. This project also utilized the existing conduit originally installed within the structure of bridge. Detailed structural analyses were performed to ensure that the new poles camera and DMS poles could be installed on the existing foundations within the bridge structure. It also included a new front access LED DMS enclosure, which required the design of a butterfly cantilever structure to support the LED DMS, the first of each to be installed along the interstate system in Louisiana. Additionally, Gresham Smith incorporated connections from the existing bridge health monitoring equipment to the ITS network and TMCs. Gresham Smith also provided project management and reporting services for the duration of the project. This project stands as a great example of retrofitting new ITS technology along existing infrastructure to create a fully comprehensive ITS system on the Twin Span bridges.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
100% Completed: 11/2018 (Actual)	\$209,000	\$209,000

PROJECT NO. 10		
Project Name, Location and Owner's contact information:	Nature of Firm's Responsibility:	
LADOTD, LCG Adaptive Traffic Signal Andre Fillastre, P.E. 225.242.4646 / andre.fillastre@la.gov	Gresham Smith was selected to upgrade all of the traffic signals in Lafayette, Louisiana and install Adaptive Traffic Signal Control (ATSC) along eight major corridors. This project includes performing traffic signal inventories for all 190 traffic signals that are maintained by LCG. Once the inventories were performed, design plans were developed for traffic signal controller upgrades for all of the traffic signals to be upgraded from Trafficware 980 TS2 traffic signal controllers to Trafficware 980 ATC traffic signal controllers and the installation of a new emergency vehicle preemption system from Applied Information. Of the 190 traffic signal locations, 78 intersections will have Synchro Green Adaptive Traffic Signal Control implemented into the project. Gresham Smith designed plans to upgrade the existing vehicle detection systems at these adaptive intersections to meet the needs of the new adaptive system. A before travel time study will be performed prior to construction to compare post installation results. Gresham Smith is assisting with the implementation and integration of the adaptive system and the emergency vehicle preemption system. Gresham Smith has successfully completed the installation of other adaptive traffic signal systems in numerous states. Upon completion of this project, this will be the largest adaptive traffic signal system in Louisiana.	
Completion Date (Actual or estimated):	Estimated Cost:	
	Entire Project:	Work for which Firm was Responsible:
95% Completed: 7/2022 (Estimated)	\$813,000	\$813,000

TEC Professional Services Questionnaire

M. List all prior and/or on-going litigation between Firm and Jefferson Parish. Please attach additional pages if necessary.

Parties:		Status/Result of Case:
Plaintiff:	Defendant:	
1. None	None	None
2.		
3.		
4.		

N. Use this space to provide any additional information or description of resources supporting Firm's qualifications for the proposed project.

Our staff of experienced professionals includes hand-selected experts who offer national perspectives on innovative and sustainable strategies for many Transportation disciplines, including, roadway lighting, utility design, utility relocation, power designs, roadway, traffic signal designs, and intelligent transportation systems (ITS).

At Gresham Smith, our team of professional engineers, planners and integration experts understand the intricacies of publicly-funded transportation projects and deliver quality planning, design, operations and construction management services for federal, state and local projects. Understanding the relationships between all of these phases and operational roles enables us to produce cost-effective solutions that meet our client's specific requirements. Our versatility, grounded in our proven combination of creativity, resources and technical expertise, allows us to deliver a broad diversity of services and projects. We deliver an unparalleled diversity and depth of resources rivaling those of much larger national firms, but we retain the dedicated, personalized service and responsiveness of a smaller, local firm. Our core philosophy for the past 53 years remains the same: Focus on the Success of our Clients.

O. To the best of my knowledge, the foregoing is an accurate statement of facts.

Signature: Herbert Moore II **Print Name:** Herbert "Bert" Moore, P.E., PLS, PTOE
Title: State Transportation Leader - Louisiana **Date:** July 15, 2022



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

State Transportation Leader - Louisiana

Bert is a professional engineer with over 20 years of experience designing and managing projects in the fields of traffic and transportation engineering. His experience includes traffic operations, traffic control, timing and design, safety studies, the implementation of access management principles, and temporary traffic control through work zones. He also has experience with incident management, evacuation for natural disasters, and traffic signal preemption in regards to railroad and emergency. In his time at Gresham Smith, Bert is proudest of boosting the Baton Rouge office from two to 15 team members, one service line to multiple, and acquiring contracts with clients like LADOTD.

Years of Experience

24

Education

Bachelor of Science, Civil Engineering, Louisiana State University

Registrations

Professional Engineer: LA, AL, GA, KY, SC, TN, TX

Memberships/Affiliations

Institute of Transportation Engineers

Society of Professional Surveyors

Accreditations/Certifications

Professional Traffic Operations Engineer

Relevant Projects

LCG Johnston Street Lighting, Lafayette, LA | *Project Executive*

Gresham Smith was selected by Lafayette Consolidated Government to develop design plans for street lighting for the 2.3 miles section of Johnston Street (US 167) through Vermillion and Lafayette Parishes. LADOTD has a J-Turn project that is currently removing the street lighting within the median of Johnston Street. Bert led coordination with multiple stakeholders.

LADOTD, LCG Adaptive Traffic Signal System, Lafayette, LA | *Project Executive*

Gresham Smith was selected to develop an Adaptive Traffic Signal network for the Lafayette Consolidated

Government, which involved upgrading 190 traffic signal controllers. In addition, 78 traffic signals will be upgraded to become adaptive traffic signals. This will be the largest adaptive traffic signal system installed within the state of Louisiana. This project includes field inspection of 190 traffic signals, design plans for 78 adaptive signals, implementation of a new EVP system, integration support, and before and after travel studies. Bert was responsible for quality assurance and verifying the technical adequacy of the plans.

LADOTD, I-210 at LA 1138-2 (Nelson Road) Interchange Modification Re-Evaluation Study, Lake Charles, LA | *Project Executive*

Gresham Smith was selected to develop a calibrated Vissim model to model existing conditions and the future proposed diverging diamond interchange at I-210 at Nelson Road in order to evaluate the proposed interchange design. Gresham Smith was responsible for the data collection, conducting field investigations, travel time runs, conducting a Road Safety Assessment (RSA), reviewing crash reports, developing Vissim models for existing conditions, determining a regional growth rate, developing and modeling a future Build and No Build conditions, and developing a project report. Traffic count data was collected used to create Vissim models of the study area. These models were calibrated to accurately represent existing traffic patterns along the corridor.

LADOTD, LA 37: Sullivan Road to Liberty Road, Baton Rouge, LA | *Project Executive*

Gresham Smith collected and reviewed over 580 crash reports over a span of three years from the state highway crash database and collected ADT data on 21 segments of LA 37 and intersecting streets, peak hour turning movement counts at 12 significant intersections and 15-minute counts along 38 driveways and insignificant side streets. Crash reports were reviewed and evaluated using the LADOTD safety triage and the safety tool box. Traffic analysis will be performed using mainly HCS and Synchro and other software tools as needed. Gresham Smith reviewed historic traffic volumes counts and TransCAD models and performed an extensive count analyses to develop regional growth rates for the study area. Bert was the supervising professional who was responsible for the overall study.



Christina Florez, P.E.

Senior TSM&O Engineer

Christina has been a senior project manager/engineer on complex ITS projects for over 18 years. Christina is on the TSM&O Leadership Team for Gresham Smith's which includes technical areas of ITS, Traffic Signal Systems, Data Management and Analytics, Connected and Autonomous Vehicles, Traffic Incident Management, and Transportation Operations and Strategies. Christina is motivated to use technology to benefit the motoring public. Her hope is that more efficient commutes improve quality of life.

Years of Experience

21

Education

Bachelor of Science, Electrical Engineering, Florida International University

Registrations

Professional Engineer: LA, AL, FL, GA, KY, MS, TN

Memberships/Affiliations

Transportation Research Board
Womens Transportation Seminar
Louisiana Engineering Society

Relevant Projects

LCG Johnston Street Lighting, Lafayette, LA | *Project Manager*

Gresham Smith was selected by Lafayette Consolidated Government to develop design plans for street lighting for the 2.3 miles section of Johnston Street (US 167) through Vermillion and Lafayette Parishes. LADOTD has a J-Turn project that is currently removing the street lighting within the median of Johnston Street. Christina managed this project and performed the on team QA/QC.

Tennessee Department of Transportation (TDOT), I-40 SmartWay Extension - Cumberland Plateau, Cookeville, TN | *QA/QC/Technical Advisor*

Gresham Smith is currently designing the Cumberland Plateau Extension project as part of the TDOT ITS SmartWay Extension. The project will provide new ITS coverage along I-40 from Cookeville east to SR 299. The project will encompass approximately 50 miles of

ITS fiber and devices, which includes new fiber optic backhaul, network hubs, RDS, DMS, RWIS, CCTV cameras, CB interrupter/CB Wizard technology and relocation of existing HAR station. The project also includes the design of the electrical distribution system. Christina is responsible for being a technical advisor and for performing QA/QC.

Florida Department of Transportation (FDOT), District 6, Palmetto Expressway from East of NW 57th Avenue to East of NW 42nd Avenue, Miami, FL | *Project Manager / ITS Engineer of Record*

As the ITS designer, Gresham Smith is responsible for designing the ITS infrastructure, including mainline DMS system, arterial DMS system, CCTV camera system, microwave vehicle detectors (MVDS) systems, ramp signaling system (RSS), power systems and fiber optic communication system. The project included the development of standardized specifications and equipment details. Christina was the engineer of records and responsible for the entire ITS design, including the power distribution system.

Jefferson Hwy at Bluebonnet, City-Parish Project No. 20-CP-HC-0046, Baton Rouge, LA | *Project Manager*

Gresham Smith was selected as part of a team to perform the traffic design report and lighting design portions of the Jefferson Highway at Bluebonnet Boulevard study in Baton Rouge, Louisiana. The goal of the traffic design report is to collect data at the study intersection, perform capacity analyses of existing and future traffic volumes and develop alternatives for improved capacity. The lighting analysis will be performed to provide a design to relocate existing lighting to accommodate proposed roadway improvements at the intersection. Christina is managing this project and is performing the on-team QA/QC.

LADOTD - District 61 & 62 Signal Communication Upgrade, Phase 1 CEI, Baton Rouge, LA | *Project Manager*

Gresham Smith is providing construction engineering inspection services, including on-site daily/nightly inspection and technical construction inspection for the signal communications upgrade phase 1 project.



Doug Smith Jr., P.E., IMSA II

Engineer

Doug has a wealth of multidisciplinary engineering experience with an electrical engineering focus. He has a proven ability to work in challenging environments as well as interfacing with staff in various trades. He has managed the design and deployment of research projects at Louisiana State University with a focus on electronic development. He also designed, constructed, and maintained electronic equipment used in teaching and research activities.

Years of Experience

20

Education

Bachelor of Science, Industrial Engineering, Louisiana State University

Registrations

Professional Engineer: LA

Accreditations/Certifications

Fiber Optics Design, Installation and Maintenance

Relevant Projects

LCG Johnston Street Lighting, Lafayette, LA | *Lead Lighting Engineer*

Gresham Smith was selected by the Lafayette Consolidated Government to develop design plans for street lighting for the 2.3 miles section of Johnston Street (US 167) through Vermillion and Lafayette Parishes. LADOTD has a J-Turn project that is currently removing the street lighting within the median of Johnston Street. Doug performed the photometric analysis for Johnston Street and developed preliminary and final design plans for street lighting, voltage drop calculations, and construction cost estimates.

FDOT, I-95 (Moncrief Creek) to SR 111 Lighting Plans, Jacksonville, FL | *Electrical System Specialist*

Doug performed the electrical system analysis for a street lighting upgrade in Duval County, Florida. The reconfigured design removed, replaced, and added luminaries to the existing system. Doug performed engineering calculations on the new design to ensure compliance with NEC and FDOT specifications.

Jefferson Hwy at Bluebonnet, City-Parish Project No. 20-CP-HC-0046, Baton Rouge, LA | *Electrical System Specialist*

Gresham Smith was selected as part of a team to perform the traffic design report and lighting design portions of the Jefferson Highway at Bluebonnet Boulevard study in Baton Rouge, Louisiana. The goal of the traffic design report is to collect data at the study intersection, perform capacity analyses of existing and future traffic volumes and develop alternatives for improved capacity. The lighting analysis will be performed to provide a design to relocate existing lighting to accommodate proposed roadway improvements at the intersection. Doug is performing the photometric analysis, lighting plans development and calculations.

TDOT, I-40 SmartWay Expansion – Cumberland Plateau, Cookeville, TN | *Electrical Systems Specialist*

Gresham Smith designed the Cumberland Plateau Extension project as part of the TDOT ITS SmartWay Extension. The project provided new ITS coverage along I-40 from Cookeville east to SR 299. The project encompassed approximately 50 miles of ITS fiber and devices, which included new fiber optic backhaul, network hubs, RDS, DMS, RWIS, CCTV cameras, CB interrupter/CB Wizard technology and relocation of existing HAR station. The project included the design of the electrical distribution system. Doug assisted with the power distribution design, assisted in developing standard details, reviewed communications network design and assisted in preliminary construction cost estimates.

Kentucky Transportation Cabinet, River Road Multimodal Improvements From 3rd Street to 7th Street, Lexington, KY | *Electrical Systems Specialist*

Doug designed the lighting system for the proposed expanded pedestrian pathway as well as an architectural flood lighting system to illuminate the underdeck I-65 which runs above River Road. He has performed photometric analysis for the pathway lighting, designed the power and control systems, and produced lighting layout and detail plans for the project.



Julian Bordelon, EI

TSM&O Specialist

As a TSM&O Specialist, Julian's experience includes ITS design, Adaptive Traffic Control System design, electrical analysis, and fiber optic mapping. His direct experience with network infrastructures, database management, and electrical analysis has been proven useful as a technical resource. Julian recently passed his PE exam.

Years of Experience

6

Education

Bachelor of Science, Electrical Engineering, Louisiana State University

Accreditations/Certifications

Engineer In Training Certification

Relevant Projects

LCG Johnston Street Lighting, Lafayette, LA | *Electrical Engineer Intern*

Gresham Smith was selected by Lafayette Consolidated Government to develop design plans for street lighting for the 2.3 miles section of Johnston Street (US 167) through Vermillion and Lafayette Parishes. LADOTD has a J-Turn project that is currently removing the street lighting within the median of Johnston Street. Julian assisted with the photometric analysis and the plan development.

LADOTD, LCG, Adaptive Traffic signal Design and Implementation, Lafayette Parish, LA | *ITS Systems Specialist*

This project includes performing traffic signal inventories for all 190 traffic signals that are maintained by LCG. Once the inventories were performed, design plans were developed for traffic signal controller upgrades for all of the traffic signals to be upgraded from Trafficware 980 TS2 traffic signal controllers to Trafficware 980 ATC traffic signal controllers and the installation of a new emergency vehicle preemption system from Applied Information. Julian is responsible for field verification of traffic signal inventory (TSI) of LCG system, design plans for adaptive signal control intersections, and integration when the system is completed.

FDOT D6 - SR 826/Palmetto Expressway from E of NW 57th Ave to E of NW 42nd Ave, Tampa, FL | *Electrical Systems Specialist*

As a subconsultant to Gannett Fleming, Gresham Smith is the ITS Engineer of Record for the Palmetto Expressway Segment 4 design project. The design includes CCTV cameras, DMS, arterial DMS, MVDS, radar detection and ramp signaling, lightning protection, fiber optic communications network and power distribution system with stand-by generators.

TDOT - Cumberland Plateau ITS Extension, Cookeville, TN | *Intern Engineer*

Julian is assisting with the electrical design and voltage drop calculations and back checking of plans. Gresham Smith is currently designing the TDOT ITS SmartWay I-40 Extension - Cumberland Plateau Project which will provide new ITS coverage along I-40 from Cookeville east to SR 299 (Exit 338). This 50-mile project includes new fiber optic backhaul, network hubs, radar detection sensors (RDS), dynamic message signs (DMS), road weather information sensors (RWIS) and closed circuit television (CCTV) cameras.

TDOT - Nashville ITS I-40 - WO#7, Nashville, TN | *Intern Engineer*

Electrical Systems Specialist. Gresham Smith is currently designing the Cumberland Plateau Extension project as part of the TDOT ITS SmartWay Extension. The project will provide new ITS coverage along I-40 from Cookeville east to SR 299. The project will encompass approximately 50 miles of ITS fiber and devices, which includes new fiber optic backhaul, network hubs, RDS, DMS, RWIS, CCTV cameras, CB interrupter/CB Wizard technology and relocation of existing HAR station. The project also includes the design of the electrical distribution system. Julian is assisting with the electrical design and voltage drop calculations and back checking of plans.

MovEBR-Nicholson Drive Segment 2, Baton Rouge, LA | *Electrical Systems Specialist*

The project will extend to tie-in to the current Nicholson Segment 1 (Brightside Drive to Gourrier Avenue) project between Brightside Drive and Gourrier Avenue. This project is part of the MOVEBR Program, designated as a New Capacity Improvement Project.



Tait K. Karlson, P.E., PTOE

Senior Transportation Engineer

Tait brings a wealth of transportation engineering experience to any project he touches. With well over a decade in the industry, he understands the impact a well-designed roadway system can have on a community. Tait has worked on the design of many ITS projects, taking them from concept through construction and even analyzing the data retrieved from the devices. His knowledge base includes traffic studies, purpose and need studies for interchanges, and analyses for freeway systems to determine alternative solutions, such as ramp metering. He is also well versed in creating roadway, pavement marking, signing, traffic control, lighting, and signal plans.

Years of Experience

18

Education

Master of Engineering, Transportation Engineering, University of Florida
Bachelor of Science, Civil Engineering, University of Florida

Registrations

Professional Engineer: LA, KY, MS, TN, TX

Memberships/Affiliations

Institute of Transportation Engineers
Mississippi Engineering Society

Accreditations/Certifications

CPR/AED Certification

Relevant Projects

MDOT, 2020 RWD, WA #1, Meridian Lighting and ITS, Meridian, MS | *Project Manager and QA/QC*

This work assignment (WA) is under an existing MDOT RWD master contract. Gresham Smith is providing services including Light Pole inspection, Phase A Lighting and ITS plans, Systems Engineering Analysis Report, Design/Build document setup, and D/B Construction Administration support. Tait is the Project Manager and is providing oversight of lighting design and is also in charge of monitoring contact performance with respect to scope, schedule and budget.

MDOT, SR 601 between US 90 at the Port of Gulfport and I-10 at Canal Road, Lighting and ITS Improvements, Gulfport, MS | *Project Manager and QA/QC*

Gresham Smith is providing Phase A design services to develop lighting and ITS plans for the proposed interchange at SR 601 (Canal Road) and I-10 in Harrison County. The project limits are from the I-10 interchange at County Farm Road (west limit) to the I-10 interchange at US 49 (east limit) and from the proposed SR 601 (south limit) to the I-10 interchange at SR 601 (north limit) including the full extent of the proposed interchange ramps. The design services include developing field inspection plans, identifying potential power service locations, placement of device locations, site visit documentation, and making recommendations for existing equipment updates/upgrades. The lighting portion of the design includes identifying desired lighting levels; performing preliminary photometric analysis; developing conceptual design; preparing lighting plan sheets; and preparing lighting detail sheets. Tait is the Project Manager and is providing oversight of lighting design and is also in charge of monitoring contact performance with respect to scope, schedule and budget.

SR 302 (Goodman Road), Safety Improvements near the I-55 Interchange, DeSoto County, MS | *Technical Advisor and QA/QC*

MDOT initially contracted with Gresham Smith to perform a feasibility study for potential improvements to SR 302 (Goodman Road) from Interstate Boulevard in Horn Lake to Southcrest Parkway in Southaven. Improvements included signalization, lighting, channelizing islands, and other geometric design or traffic control treatments to improve safety, traffic flow, and access control on SR 302 between the I-55 interchange ramps and the adjacent signalized intersections to the west (Interstate Boulevard) and east (Southcrest Parkway). Tait provided technical assistance and was responsible for QA/QC.