ADVERTISEMENT FOR ENGINEERING AND RELATED SERVICES NOVEMBER 13, 2023

CONTRACT NOS. 4400028301 AND 4400028302 STATE PROJECT NO. H.972500.1 FEDERAL AID PROJECT NO. H972500 TRAFFIC DATA COLLECTION AND MONITORING SERVICES STATEWIDE

NO DBE GOAL

Under the authority granted by Title 48 of Louisiana Revised Statutes, the Louisiana Department of Transportation and Development (DOTD) hereby issues this advertisement for consulting firms to provide engineering and related services. Consultants who are a Louisiana or foreign LLC or corporation should be appropriately registered with the Louisiana Secretary of State, as contemplated by Title 12 of the Louisiana Revised Statutes, and with the Louisiana Professional Engineering and Land Surveying (LAPELS) Board under its rules for firms. If a consultant is not in good standing in accordance with those provisions, it may be subject to consequences contemplated in Title 12 and/or the LAPELS rules. All requirements of LAPELS must be met at the time the proposal is submitted. Prime consultants must be registered with the Louisiana Secretary of State and the Federal Government, using SAM.gov, prior to contract execution.

One (1) proposal will be selected for each contract solicited per this advertisement. Only one (1) DOTD Form 24-102 proposal is required for this advertisement, and it represents the prime consultant's qualifications and those of any and all sub-consultants proposed to be used for the referenced contract(s). All identifying contract number(s) should be listed in Section 2 of the DOTD Form 24-102. **USE THE DOTD FORM 24-102, DATED JANUARY 1, 2023, PROVIDED WITH THE ADVERTISEMENT.**

Sub-consultants will not be considered in this selection.

Any questions concerning this advertisement must be sent in writing to <u>DOTDConsultantAds80@la.gov</u> no less than 48 hours (excluding weekends and holidays) prior to the proposal deadline.

SCOPE OF SERVICES

The general tasks to be performed by the consultant for this contract are described more specifically in Attachment A, which is incorporated herein by reference.

The consultant shall perform the work in accordance with the requirements of this advertisement and the resulting contract. Deliverables shall be in such format as required in Attachment A. The work performed by the consultant shall be performed in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession currently practicing under similar circumstances.

MINIMUM PERSONNEL REQUIREMENTS (MPRs)

The requirements set forth in Attachment B must be met at the time the proposal is submitted.

EVALUATION CRITERIA

The criteria to be used by DOTD in evaluating responses for the selection of a consultant to perform these services are listed below:

- 1. firm experience on similar projects, weighting factor of three (3);
- 2. staff experience on similar projects, weighting factor of four (4);
- 3. firm size as related to the project magnitude, weighting factor of three (3);
- 4. past performance on similar DOTD projects, weighting factor of six (6)*;
- 5. current work load with DOTD, weighting factor of five (5);
- 6. approach and methodology, weighting factor of nine (9).

*The consultant is to identify in the table below those evaluation disciplines consistent with the approach and methodology proposed in Section 18 of the DOTD Form 24-102.

THE FOLLOWING TABLE MUST BE COMPLETED AND INCLUDED IN SECTION 12 OF THE DOTD FORM 24-102 PROPOSAL.

Sub-consultants are not allowed to be used for this proposal. Fill in the table by identifying		
only those evaluation disciplines consistent with the approach and methodology proposed in		
Section 18 of the DOTD Form 24-102*, and the percentage of work in each past performance		
evaluation discipline to be performed. The percentage estimated for each evaluation discipline		
is for evaluation purposes only and will not control the actual performance or payment of the		
work. (Add rows as needed)		
Past Performance Evaluation Discipline(s)	% of Overall Contract	

% of Overall Contract

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

Proposals will be evaluated as set forth in the "Evaluation Criteria" section of this advertisement. The evaluation will be by means of a point-based rating system. Each of the above criteria will receive a rating on a scale of one (1) through five (5). The rating will then be multiplied by the corresponding weighting factor. The rating in each category will then be added to arrive at the proposal's final rating.

DOTD's Project Evaluation Team (PET) will be responsible for performing the above described evaluation, and will present a shortlist of the four (4) (if four are qualified), highest rated consultants to the Secretary of DOTD. The Secretary will make the final selection.

COMPLIANCE WITH SUPPLEMENTAL ETHICS REQUIREMENTS

DOTD has established supplemental ethics requirements applicable to consultants and PET members. These requirements are found in the "Supplemental Ethics Requirements" article of the sample contract linked to this advertisement, which are incorporated herein by reference. Any firm that is found to have violated these requirements may not be considered for this selection.

By submission of a proposal to perform services pursuant to this advertisement, the consultant agrees to comply with DOTD's Supplemental Ethics Requirements.

RULES OF CONTACT UPON ADVERTISEMENT

DOTD is the single source of information regarding the contract selection. Any official correspondence will be in writing, and any official information regarding the contract will be disseminated by DOTD's designated representative via the DOTD website. The following rules of contact will apply during the contract selection process, commencing on the advertisement posting date and ceasing at the time of final contract selection. Contact includes face-to-face communication, the use of a telephone, facsimile, electronic mail (email), or formal or informal written communications with DOTD. Any contact determined to be improper, at the sole discretion of DOTD, may result in the rejection of the proposal (i.e., DOTD Form 24-102).

Consultants and consultant organizations shall correspond with DOTD regarding this advertisement only through the email address designated herein; <u>DOTDConsultantAds80@la.gov</u> and during DOTD sponsored one-on-one meetings.

No consultant, or any other party on behalf of a consultant, shall contact any DOTD employee, other than as specified herein. This prohibition includes, but is not limited to, the contacting of: department, office, or section heads, project managers, members of the evaluation teams, and any official who may participate in the decision to award the contract resulting from this advertisement.

DOTD will not be responsible for any information or exchange that occurs outside the official process specified above.

By submission of a proposal to perform services pursuant to this advertisement, the consultant agrees to the communication protocol herein.

PROJECT TIME

The overall time for the completion of the scope of services is estimated to be 5 years.

COMPENSATION

The compensation payable to the consultant for all services rendered in connection with each contract is estimated at **\$2,000,000**. This estimate will be used for grading purposes only. Actual compensation will be determined by DOTD based on work hours negotiated between DOTD and

the selected consultant. Within fifteen (15) calendar days of notification of selection, a kick-off meeting will be held with the selected consultant and appropriate DOTD personnel. The selected consultant will be required to submit a work hour proposal within thirty (30) calendar days following the notification of selection. All negotiations must be completed within the timeframe set forth in the Consultant Contract Services Manual.

Payment will be made based on cost per unit of work.

DIRECT EXPENSES

To the extent that the consultant is allowed to claim reimbursement for direct expenses, all direct expense items that are not paid for in the firm's indirect cost rate, and are, needed and will be consumed during the life of the contract must be identified by the consultant during contract development. The acquisition or rental of standard equipment or resources to be used in the provision of services rendered for this contract will not be considered for payment under direct expenses (e.g., vehicles for construction engineering and inspection (CE&I) inspectors).

The consultant should own most of the equipment required to provide the work and services. The cost of this equipment should be included in the consultant's indirect cost rate. Equipment may be considered "specialized" if it cannot be considered standard equipment for that particular consultant's normal operating business needs. If a consultant believes special equipment is needed for the contract, the consultant must inquire through the Question and Answer process, as provided herein, whether the identified item will be considered specialized equipment for the individual contract.

All travel related expenses will be compensated under direct expenses, and will be in accordance with the most current Louisiana Office of State Travel regulations as promulgated in the Louisiana Administrative Code under the caption "PPM No. 49", with the exception that compensation for vehicle usage will be based on actual miles traveled directly and exclusively related to project needs. Vehicle rental rates will require prior approval from the PM.

CYBERSECURITY TRAINING

In accordance with La. R.S. 42:1267(B)(3) and the State of Louisiana's Information Security Policy, if the Consultant, any of its employees, agents, or sub-consultants will have access to State government information technology assets, the Consultant's employees, agents, or sub-consultants with such access must complete cybersecurity training annually, and the Consultant must present evidence of such compliance annually and upon request. The Consultant may use the cybersecurity training course offered by the Louisiana Department of State Civil Service without additional cost or may use any alternate course approved in writing by the Office of Technology Services.

For purposes of this Section, "access to State government information technology assets," means the possession of credentials, equipment, or authorization to access the internal workings of State information technology systems or networks. Examples would include but not be limited to Stateissued laptops, VPN credentials to credentials to access the State network, badging to access the State's telecommunications closets or systems, or permissions to maintain or modify IT systems

used by the State. Final determination of scope inclusions or exclusions relative to access to State government information technology assets will be made by the Office of Technology Services.

QUALITY ASSURANCE/QUALITY CONTROL

DOTD requires the selected consultant and all sub-consultants to develop a Quality Assurance/Quality Control (QA/QC) program in order to provide a mechanism by which all deliverables will be subject to a systematic and consistent review. The selected consultant shall address in its plan the review of all sub-consultant work and deliverables. **Only the selected consultant must submit their QA/QC plan to the DOTD PM within 10 business days of the award notification to the consultant (do not include QA/QC plan in the DOTD Form 24-102).** Consultants must ensure quality and adhere to established DOTD policies, procedures, standards and guidelines in the preparation and review of all deliverables. DOTD may provide limited input and technical assistance to the consultant. Any deliverables to be transmitted by the consultant shall be transmitted with a DOTD Quality Assurance/Quality Control Checklist, and a certification that the deliverables meet DOTD's quality standards.

If Attachment A includes specific QA/QC requirements that contradict those set forth above, the requirements in Attachment A control.

TRAFFIC ENGINEERING PROCESS AND REPORT TRAINING REQUIREMENTS

As part of DOTD's on-going commitment to high quality traffic engineering reports, a traffic engineering training course must be taken by traffic engineering PEs and EIs in order to be eligible to work on DOTD projects. When traffic is included as a discipline on which past performance is evaluated, for consultants performing traffic engineering services (i.e., traffic analysis throughout all DOTD project stages and/or QC of traffic analysis), appropriate personnel must successfully complete the three (3) modules of the Traffic Engineering Process and Report Course offered by Louisiana Transportation Research Center (LTRC). This Course must be completed no later than the time the proposal is submitted or show proof of registration for the Course from the LTRC's Registration site. **Copies of training certificates or proof of registration are to be included in Section 20 of the proposal.**" It will be the prime consultant's responsibility to ensure their staff and sub-consultants complete the training. Copies of training records may be obtained from the LTRC website <u>https://registration.ltrc.lsu.edu/login</u>.

WORK ZONE TRAINING REQUIREMENTS

As part of DOTD's on-going commitment to work zone safety, required work zone training courses must now be taken every four (4) years in order for personnel to remain eligible to work on DOTD projects. For consultants performing preconstruction services (*e.g.*, design, survey, subsurface utility, geotechnical, traffic, bridge inspection, environmental services), appropriate personnel must successfully complete these courses. In general, the person in responsible charge of traffic control plans shall be required to have Traffic Control Supervisor training. For preconstruction field services performed within the clear zone, at least one (1) member of the field crew shall have Traffic Control Supervisor or Traffic Control Technician training. The consultant should identify all personnel listed in the staffing plan (Section 14) for the contract who have completed the appropriate work zone training courses. All preconstruction work zone training

requirements shall be met **prior to contract execution**. It will be the prime consultant's responsibility to ensure their staff and sub-consultants have the appropriate work zone training.

In addition to the above requirements, if the Scope of Services set forth in Attachment A includes Construction Engineering and Inspection (CE&I), the following training requirements shall be met **at the time the proposal is submitted**:

Field Engineers:	Traffic Control Technician Traffic Control Supervisor Flagger
Field Engineer Interns:	Traffic Control Technician Traffic Control Supervisor Flagger
Field Senior Technicians,	
Survey Party Chiefs, and	
SUE Worksite Traffic Supervisors*:	Traffic Control Technician Traffic Control Supervisor Flagger
Other Field Personnel*:	Traffic Control Technician Flagger

* excluding Asphalt Plant Inspector, Paint Managers, and Paint Inspectors

Approved courses are offered by ATSSA and AGC. Substitutes for these courses must be approved by the DOTD Work Zone Task Force. For more information, please contact DOTD HQ Construction at 225-379-1584. Specific training course requirements are:

Flagger:	Successful completion every four (4) years of a work	
	zone flagger course approved by the Department. The	
	"DOTD Maintenance Basic Flagging Procedures	
	Workshop" is not an acceptable substitute for the	
	ATSSA and AGC flagging courses.	

- Traffic Control Technician (TCT): Successful completion every four (4) years of a work zone traffic control technician course approved by the Department. After initial successful completion, it is not necessary to retake this course every four (4) years if Traffic Control Supervisor training is completed every four (4) years.
- Traffic Control Supervisor (TCS): Successful completion of a work zone traffic control supervisor course approved by the Department. Following an initial completion, traffic control supervisors must either complete a one (1)-day TCS refresher course or retake the original two (2)-day TCS course every four (4) years.

ATSSA contact information: (877) 642-4637

ALL WORK ZONE TRAINING CERTIFICATIONS MUST BE ACTIVE

REFERENCES

All services and documents will meet the standard requirements as to format and content of DOTD and will be prepared in accordance with the latest applicable editions, supplements, and revisions of the following:

- 1. AASHTO Standards The American Association of State Highway Transportation Officials https://www.transportation.org/
- 2. AASHTO A Policy on Geometric Design of Highways and Streets https://bookstore.transportation.org/collection_detail.aspx?ID=110
- 3. ASTM Standards <u>https://www.astm.org/BOOKSTORE/BOS/index.html</u>
- 4. CyberSecurity Training https://forms.gle/deZGAo5hUMWeSG4P6
- 5. DOTD Bridge Design and Evaluation Manual (BDEM) http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Pages/BD EM.aspx
- 6. DOTD Complete Streets <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Highway_Safety/Complet</u> <u>e_Streets/Pages/default.aspx</u>
- 7. DOTD Construction Contract Administration Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Pages/Engineering_Docs.</u> <u>aspx</u>
- DOTD Consultant Contract Services Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/CCS/Manuals/CCS%20M</u> <u>anual%20rev%20Dec%202020.pdf</u>
- 9. DOTD Hydraulics Manual http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Public_Works/Hydraulics/ Documents/Hydraulics%20Manual.pdf
- 10. DOTD Location and Survey Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals</u> <u>%20and%20Forms/Location_and_Survey_Manual.pdf</u>
- 11. DOTD Addendum "A" to the Location & Survey Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/LocationSurvey/Manuals</u> <u>%20and%20Forms/Location%20and%20Survey%20Manual%20-%20Addendum%20A.pdf</u>
- 12. DOTD Louisiana Standard Specifications for Roads and Bridges http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Standard_Specifications/P ages/Standard%20Specifications.aspx
- 13. DOTD Materials Sampling Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Men</u> <u>u_MSM.aspx</u>

- 14. DOTD Minimum Design Guidelines http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Memoranda /Minimum%20Design%20Guidelines.pdf
- 15. DOTD Off-System Highway Bridge Program Guidelines http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Bridge_Design/Manuals/ Other%20Manuals%20-%20Guidelines/2019%20Federal%20Aid%20Off-System%20High way%20Bridge%20Program%20Guidelines.pdf
- 16. DOTD Roadway Design Procedures and Details Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Road_Design/Pages/Road</u> <u>-Design-Manual.aspx</u>
- 17. DOTD Stage 1 Planning/Environmental Manual of Standard Practice <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Environmental/Pages/Stag</u> <u>e_1.aspx</u>
- 18. DOTD Testing Procedures Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Materials_Lab/Pages/Men</u> <u>u_TPM.aspx</u>
- 19. DOTD Traffic Engineering Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Misc</u> <u>%20Documents/Traffic%20Engineering%20Manual.pdf</u>
- 20. DOTD Traffic Engineering Process and Report <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Man</u> <u>ualsPublications/Pages/TEPR.aspx</u>
- 21. DOTD Traffic Signal Manual <u>http://wwwsp.dotd.la.gov/Inside_LaDOTD/Divisions/Engineering/Traffic_Engineering/Traffic%20Signal%20Manual%20V3%20-%207.1.20.pdf</u>
- 22. e-CFR Electronic Code of Federal Regulations (all applicable) <u>https://ecfr.io/</u>
- 23. FHWA Bridge Inspector's Reference Manual (BIRM) website: <u>https://www.fhwa.dot.gov/bridge/nbis.cfm</u> manual: <u>https://www.fhwa.dot.gov/bridge/nbis/pubs/nhi12049.pdf</u>
- 24. FHWA Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) <u>http://mutcd.fhwa.dot.gov/</u>
- 25. National Electrical Safety Code (NESC) https://standards.ieee.org/products-services/nesc/index.html
- 26. NFPA 70 National Electrical Code (NEC) <u>https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/list-of-codes-and-standards/detail?code=70</u>
- 27. NEPA National Environmental Policy Act <u>https://www.epa.gov/nepa</u>

CONTRACT EXECUTION REQUIREMENTS

The selected consultant will be required to execute the contract within ten (10) days after receipt of the contract.

A sample of the contract provisions can be found at the following link: <u>http://wwwsp.dotd.la.gov</u>/<u>Inside_LaDOTD/Divisions/Engineering/CCS/Pages/Advertisements.aspx</u>.

REVISIONS TO THE ADVERTISEMENT

DOTD reserves the right to revise any part of the advertisement by issuing addenda to the advertisement at any time. Issuance of this advertisement in no way constitutes a commitment by DOTD to award a contract. DOTD reserves the right to accept or reject, in whole or part, all DOTD Form 24-102s submitted, and/or cancel this consultant services procurement if it is determined to be in DOTD's best interest. All materials submitted in response to this advertisement become the property of DOTD, and selection or rejection of a proposal does not affect this right. DOTD also reserves the right, at its sole discretion, to waive administrative informalities contained in the advertisement.

CLARIFICATIONS

DOTD reserves the right to request clarification of ambiguities or apparent inconsistencies found within any proposal, if it is determined to be in DOTD's best interest.

PROPOSAL REQUIREMENTS

The consultant's proposal for this advertisement must be submitted by email to DOTDConsultantAds80@la.gov. USE THE DOTD FORM 24-102, DATED JANUARY 1, 2023, PROVIDED WITH THE ADVERTISEMENT. Hard copies of the consultant's proposal are not required. All proposals must be in accordance with the requirements of this advertisement, and the Consultant Contract Services Manual. Unless otherwise stated in this advertisement, copies of licenses and certificates are not required to be submitted with the proposal.

If more than one (1) contract is to be selected based on this advertisement, no prime consultant is allowed to be a sub-consultant on any other consultant's 24-102. If a prime consultant is submitted as a sub-consultant on another consultant's 24-102, its proposal as a prime consultant may be deemed non-responsive.

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.

DOTD employees may not submit a proposal, nor be included as part of a consultant's proposal.

Contract and/or part-time employees are allowed. Such employees should be shown in Section 14 of the DOTD Form 24-102 with an asterisk denoting their employment status.

The DOTD Form 24-102 **PDF file shall be labeled** "CONTRACT NOS. 4400028301 AND 4400028302, Consultant's name", and must be received no later than 3:00 p.m. Central Time by <u>DOTDConsultantAds80@la.gov</u> via email on Tuesday, December 12, 2023. The PDF file must be attached in the email or as a hyperlink in the email or as an email through third-party file transfer websites such as Dropbox or WeTransfer.

Please note that delivery failure may occur on email files exceeding 30MB uncompressed. In addition, all emails are scanned for cybersecurity threats prior to delivery to <u>DOTDConsultantAds80@la.gov</u>; therefore, allow sufficient time for this process to take place when submitting your proposal.

ATTACHMENT A – SCOPE OF SERVICES

The project time is typical.

Consultant shall conduct specific traffic monitoring sessions to monitor traffic volume and classification on the Louisiana State Interstate, National Highway System (NHS), State Highway System (SHS), and local roads as well as Interstate ramps across the state of Louisiana. Consultant shall conduct specified traffic monitoring sessions for use throughout the Louisiana DOTD for preconstruction engineering, forecasting future traffic volumes, as well as, other transportation planning purposes.

Consultant will be required to provide all of the services including paying attention to specific guidelines as follows:

General Notes:

- Traffic counts shall not be conducted during holidays, annual festivals, Mardi Gras, or other abnormal traffic/inclement weather conditions. School zone traffic factors into the count data; therefore, the counts shall take place when school is in session, unless otherwise instructed to by the Project Manager. It is the responsibility of Consultant to check local school schedules and holidays. Payment will not be approved if counts are taken during holidays or when schools are out unless with the expressed and/or written permission by the Project Manager.
- 2) Volume and Vehicle Classification counts shall be performed on the same week or at the same time if possible. Permission may be granted by the project manager to perform these counts not within the same week.
- 3) Each session performed will be paid for a predetermined, non-negotiated rate per session. Overhead costs and direct costs incurred by Consultant are also included in this rate. No additional payments will be made in addition to the per session rate(s); all invoicing shall only include actual session(s) performed during the billing cycle.
- 4) Required Monthly Invoice: submit invoice with supporting documents for processing every month.
- 5) Required to provide a weekly activity schedule showing where traffic monitoring sessions will be performed for that week. This could be planned ahead of time and may be revised to accommodate certain unforeseen circumstances or emergencies, but the DOTD Project Manager must be informed of any changes.

Compatible File Formats and Method of File-Transmission

Consultant must utilize a raw traffic data file format that is compatible with MS2 operated by the DOTD and certified as a current version of traffic data management software. DOTD may require Consultant to use any acceptable or approved upload procedure to transmit the raw traffic data files to DOTD. The data file format certification process and the upload procedure is provided by current software vendor hosting DOTD traffic data to Consultant free of charge.

Types of services and traffic data Consultant will be required to collect statewide may include:

- Blanket traffic volume monitoring
- Routine traffic volume/class monitoring at Interstate exit ramps
- Additional services (on as needed basis) including:
 - Site-specific traffic monitoring Urban and Rural
 - Site-specific traffic monitoring-Statewide
 - 7-day, 24-hour Counts (Non-Interstate)
 - 7-day, 24-hour Counts (4 or 6 lanes Interstate)
 - 24-hour Traffic Counts at Intersections
 - 48-hour Traffic Counts at Intersections
 - Turning Movement Counts (Peak Hour Counts)
 - Turning Movement Counts (Non-Peak Hour Counts)
 - o 15-Minute Counts with Demand Volumes included (Peak Hour Counts)

Statewide blanket volume monitoring sessions:

Conduct specified routine volume monitoring sessions: These monitoring sessions are short, 48hour sessions that shall be performed for the whole parish and at specific sites designated by DOTD and completed within the calendar year assigned. This work will be assigned for the whole parish with location maps and monitoring site information provided. The data provided shall include the nominal traffic volume, and the latitude and longitude coordinates of the site obtained by global positioning system (GPS) technology and recorded during the monitoring session at each site designated and identified by a station number. The nominal traffic volume shall be based on the number of axles recorded assuming 2 axles per vehicle. Sites located on divided highways and other locations agreed to in advance will require two installations, one for each direction of traffic, and they will be paid for per installation. For each of these sites, the monitoring sessions will be simultaneous and the nominal traffic volume data will be reported by direction (North/South or East/West). The data shall be uploaded regularly as the work is completed, such that, in general, the monitoring sessions reported in a submittal are no more than approximately one month old.

Statewide Routine volume/class monitoring at Interstate Exit Ramps:

Conduct site-specific traffic monitoring sessions: These site-specific traffic monitoring sessions shall be conducted Monday through Friday, excluding holidays or during other abnormal traffic conditions. They shall include individual short session, 48-hour, traffic monitoring sessions at specific locations designated by DOTD that will typically include the traffic volume and the vehicle classification for each interstate exit ramp. The individual short session traffic monitoring sessions will be paid for per location. All of the data provided per site shall be collected simultaneously in 15-minute intervals. It will include the nominal traffic volume performed in each direction of traffic and based on the number of each vehicle type for each of the 13 Standard FHWA Vehicle Classifications. This data shall be submitted in an approved text file and in format for vehicle volume/class data according the Federal Highway Administration FHWA) Traffic Monitoring Guide (TMG) through the DOTD-approved upload procedure.

ADDITIONAL SERVICES (IF REQUIRED)

The scope of services, compensation, and contract time for future engineering and related services (if required) will be established by a supplemental agreement for the following:

Site-specific traffic monitoring sessions—urban and rural:

Session type:	Number/year:
a) 2-lane, 2-way classification or volume	10
b) Multi-lane, 2-way classification of volume	20
c) 2-lane intersection turning movements	30
d) Multi-lane intersection turning movements	6
e) Freeway interchange turning movements	2

Site-specific traffic monitoring sessions -Statewide:

- 1) 7-Day, 24-Hour Volume Counts (Non-Interstate) (\$/approach)
- 2) 7-Day, 24-Hour Classification Counts (Non-Interstate) (\$/approach)
- 3) 7-Day, 24-Hour Volume Counts (Interstate) (4lanes) (\$/location)
- 4) 7-Day, 24-Hour Classification Counts (Interstate) (4lanes) (\$/location)
- 5) 7-Day, 24-Hour Volume Counts (Interstate) (6lanes) (\$/location)
- 6) 7-Day, 24-Hour Classification Counts (Interstate) (6lanes) (\$/location)
- 7) 24-Hour Volume Counts (\$/approach)
- 8) 24-Hour Classification Counts (\$/approach)
- 9) 48-Hour Volume Counts (\$/approach)
- 10) 48-Hour Classification Counts (\$/approach)
- 11) Turning Movement Counts (Peak Hours) (1 Technician) (\$/intersection)
- 12) Turning Movement Counts (Peak Hours) (2 Technicians) (\$/intersection)
- 13) Turning Movement Counts (Non-Peak Hours) (1 Technician) (\$/intersection)
- 14) Turning Movement Counts (Non-Peak Hours) (2 Technicians) (\$/intersection)
- 15) 15-Minute Counts (Peak Hours) (\$/location)

7-day, 24-hour Counts (Non-Interstate) (\$/approach)

- 1) A 7-day, 24-hour traffic volume count session shall be conducted on all approaches to the intersection, collected in 15-minute intervals and submitted in an approved electronic format.
- 2) A 7-day, 24-hour vehicle classification monitoring session shall be conducted in both directions on the highest volume approach to the intersection, collected in 15-minute intervals and submitted in an approved electronic format. Classification counts shall include the percent of each vehicle type as defined by FHWA Traffic Monitoring Guide (TMG), which includes 13 classification categories.

7-day, 24-hour Counts (Interstate) (4 or 6 lanes) (\$/location)

- 1) A 7-day, 24-hour traffic volume count session shall be conducted at the specified location, collected in 15-minute intervals and submitted in an approved electronic format.
- 2) A 7-day, 24-hour vehicle classification monitoring session shall be collected in 15-minute intervals and submitted in an approved electronic format. Classification counts shall include the percent of each vehicle type as defined by FHWA Traffic Monitoring Guide which includes 13 classification categories.

24-Hour Traffic Counts at Intersections (\$/approach)

- 1) A 24-hour traffic volume count session shall be conducted on all approaches to the intersection, collected in 15-minute intervals and submitted in an approved electronic format.
- 2) A 24-hour vehicle classification monitoring session shall be conducted in both directions on the highest volume approach to the intersection, collected in 15-minute intervals and submitted in an approved electronic format. Classification counts shall include the percent of each vehicle type as defined by FHWA Traffic Monitoring Guide, which includes 13 classification categories.

48-Hour Traffic Counts (\$/approach)

- 1) A 48-hour traffic volume count session shall be conducted on all approaches to the intersection, collected in 15-minute intervals and submitted in an approved electronic format.
- 2) A 48-hour vehicle classification monitoring session shall be conducted in both directions on the highest volume approach to the intersection, collected in 15-minute intervals and submitted in an approved electronic format. Classification counts shall include the percent of each vehicle type as defined by FHWA Traffic Monitoring Guide.

Turning Movement Counts (Peak Hour Counts) (1 or 2 Technicians) (\$/intersection)

- 1) Turning movement count sessions up to 8 hours shall cover the morning, the midday, and the evening peak hours such that each session includes a 45-minute period minimum either side of the anticipated peak hour. The peak hours are determined by the DOTD and are provided to Consultant. All turning movement counts for an intersection shall take place on the same day.
- 2) The peak am, peak pm, and peak lunch turning movement count sessions shall be conducted during the work week on Tuesday, Wednesday and/or Thursday.
- 3) During each 15-minute period of the turning movement, count the queue shall be estimated in feet. (The queue is a line of vehicles, bicycles, or persons waiting to be served by a phase in which the flow rate from the front of the queue determines the average speed within the queue. Slow moving vehicles or people joining the rear of the queue are usually considered part of the queue. The internal queue dynamics can involve starts and stops. A faster-moving line of vehicles is often referred to as a moving queue or a platoon).
- 4) The data shall be collected in 15-minute intervals.
- 5) The turning movement count data shall include pedestrians.

- 6) The turning movement count data shall separate passenger vehicles, school buses and commercial vehicles. Turning Movement Counts shall include percent of vehicle type as defined by FHWA Traffic Monitoring Guide.
- 7) An electronic copy of all of the count data shall be submitted to the DOTD Project Manager in Excel format.
- 8) The manual count diagrams showing all vehicle movements entering the intersection and their direction in 15-minute intervals. The traffic shall be separated into passenger vehicles, school buses, pedestrians, and commercial vehicles.
- 9) The summary of the manual counts for all vehicle movements in 15-minute intervals which include the peak hour factor and a diagram of the sum of the peak hour traffic along with the turning movements and the queue lengths (ft).

Turning Movement Counts (Non-Peak Hour Counts) (1 or 2 Technicians) (\$/2-hour session)

- 1) Depending upon the 7-day, 24-hour counts, other days and/or times may need to be counted and these turning movement counts could be taken on any day other than Tuesday, Wednesday, and Thursday for up to 2 hours.
- 2) All turning movement counts for an intersection must be done on the same day.
- 3) During each 15-minute period of the turning movement, count the queue shall be estimated in feet. (The queue is a line of vehicles, bicycles, or persons waiting to be served by a phase in which the flow rate from the front of the queue determines the average speed within the queue. Slow moving vehicles or people joining the rear of the queue are usually considered part of the queue. The internal queue dynamics can involve starts and stops. A faster-moving line of vehicles is often referred to as a moving queue or a platoon).
- 4) Data shall be collected in 15-minute intervals.
- 5) Turning movement count data shall include pedestrians.
- 6) Turning movement count data shall separate passenger vehicles, school buses and commercial vehicles. Turning Movement Counts shall include percentage of vehicle type as defined by FHWA.
- 7) Manual count diagrams showing all vehicle movements entering the intersection and their direction in 15-minute intervals. The traffic shall be separated into passenger vehicles, school buses, pedestrians, and commercial vehicles.
- 8) The summary of the manual counts for all vehicle movements in 15-minute intervals which include the peak hour factor and a diagram of the sum of the traffic along with the turning movements and the queue lengths (ft).
- 9) The summary of the manual counts for all vehicle movements in 15-minute intervals which include the peak hour factor and a diagram of the sum of the peak hour traffic along with the turning movements and the queue lengths (ft).

15-Minute Counts with Demand Volumes included (peak Hour Counts) (\$/location)

- 1) 15-minute counts with demand volumes may be requested during morning, midday, and evening peak hours at intersections, median opens, and driveways.
- 2) The terminology "with demand volumes included" requires Consultant to use procedures described in The Manual of Transportation Engineering Studies, 2nd Edition to determine arrival volumes. Arrival volumes shall be recorded when the demand exceeds the capacity and queues develop. Queues will develop when the intersection/driveway/median opening

becomes saturated. Arrival volumes can be approximated by relating the departure count to the number of vehicles in the queue.

SERVICES TO BE PERFORMED/ITEMS TO BE PROVIDED BY DOTD

• Provide maps per parish with station numbers and latitudes/longitudes coordinates showing locations to be monitored as needed by the consultant.

ELECTRONIC DELIVERABLES

Consultant agrees to provide the following deliverables within the time frames specified herein:

<u>Data Submission</u> – Monthly electronic upload of collected traffic data onto the DOTD Traffic Data Management System (TDMS) in a timely/routine fashion.

<u>Data Quality Assurance</u> – A reasonably good quality data that has passed an established quality assurance measures.

OTHER DELIVERABLES

<u>Monthly Invoice</u> – Timely invoice (including supporting documents) for payment processing.

<u>Type of Sensors</u> - Detailed description including the name and manufacturer of the traffic monitoring equipment to be used.

SPECIFIC SOFTWARE AND/OR EQUIPMENT DESIRED

• Equipment such as traffic monitoring sensors to be used is the decision of Consultant but Consultant must provide to DOTD a detailed description including the name and the manufacturer of the traffic monitoring equipment.

QUALITY ASSURANCE/QUALITY CONTROL

DOTD requires Consultant to develop or have developed a Quality Assurance /Quality Control program to reasonably assure the collecting and reporting of accurate and quality traffic data. Consultant must also reasonably assure good quality data and minimally adhere to the TMG standards and guidelines required for collecting and reporting traffic monitoring data.

ATTACHMENT B – MINIMUM PERSONNEL REQUIREMENTS (MPRs)

The following requirements must be met at the time the proposal is submitted:

- 1. At least one (1) principal of the prime consultant shall be professionally competent in collecting and providing traffic monitoring data required for the project.
- 2. At least one (1) principal or responsible member of the prime consultant shall have a minimum of five (5) years of experience in responsible charge of managing projects for collecting and providing traffic monitoring data.
- 3. At least one (1) individual assigned to the project shall have a minimum of one (1) year of experience in all of the traffic monitoring data collection required

MPRS ARE TO BE MET BY SEPARATE INDIVIDUALS, UNLESS STATED OTHERWISE BELOW.

MPR Nos. 1 and 2 may be met by the same person.

NOTE: WHEN SATISFYING A MINIMUM PERSONNEL REQUIREMENT, PLEASE ENSURE THE RÉSUMÉ REFLECTS REQUIRED EXPERIENCE AS REQUESTED.

- Please note the number of MPRs are minimal; however, all relevant personnel necessary to perform the Scope of Services must be identified in Section 14 of the DOTD Form 24-102 and their resumes included in Section 16 of the DOTD Form 24-102.
- The Consultant must show in Section 18 of DOTD Form 24-102 specific expertise and experience relative to collecting and providing the traffic monitoring data described, project management, financial packaging, bidding and estimating, marketing and certification assistance, and demonstrating specialized experience, competence, and qualifications pertinent to traffic monitoring.
 - The complete methodology shall be provided in the proposal for conducting specified traffic monitoring sessions that include short term 48-hour vehicle volume and vehicle classification sessions performed at sites designated by DOTD and the on-demand site-specific traffic monitoring. It shall minimally include:
 - A detailed description of the traffic monitoring equipment and procedures to be used by the contractor.
 - An estimate and description of all the resources that will be provided by the contractor to complete the work described herein.
 - A quotation of unit prices per site for each type of traffic monitoring session assuming a relatively uniform rate of data collection and delivery throughout the contract time reflecting the cost resources to complete the work.
 - A detailed description of the procedures and or plans used to reasonably assure good quality control and quality assurance.