



**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION**

**REQUEST FOR PROPOSALS
FOR
INTEGRATED RIGHT-OF-WAY INFORMATION SYSTEM**

RFP # 40100-51043

RFP CONTENTS

SECTIONS:

- 1. INTRODUCTION**
- 2. RFP SCHEDULE OF EVENTS**
- 3. RESPONSE REQUIREMENTS**
- 4. GENERAL CONTRACTING INFORMATION & REQUIREMENTS**
- 5. EVALUATION & CONTRACT AWARD**

ATTACHMENTS:

- 6.1. Response Statement of Certifications & Assurances**
- 6.2. Technical Response & Evaluation Guide**
- 6.3. Cost Proposal & Scoring Guide**
- 6.4. Reference Questionnaire**
- 6.5. Score Summary Matrix**
- 6.6. *Pro Forma* Contract**

1. INTRODUCTION

The State of Tennessee, Department of Transportation, hereinafter referred to as “the State,” issues this Request for Proposals (RFP) to define minimum contract requirements; solicit responses; detail response requirements; and outline the State’s process for evaluating responses and selecting a contractor to provide the needed goods or services.

Through this RFP, the State seeks to procure necessary goods or services at the most favorable, competitive prices and to give ALL qualified respondents, including those that are owned by minorities, women, service-disabled veterans, persons with disabilities and small business enterprises, an opportunity to do business with the state as contractors, subcontractors or suppliers.

1.1. Statement of Procurement Purpose

The State intends to secure a contract for a web-based solution for an Integrated Right-of-Way Information System, hereinafter referred to as “IRIS” or “system,” required for managing Right-of-Way (ROW) and Utility/Railroad coordination, associated project records and archives, state and federal compliance, and maintaining stringent project budget controls. The system needed shall be tailored to meet specific business processes and workflow among the ROW and Utility/Railroad functions, encompassing appraisal, acquisition, relocation, excess land, property interest inventory, engineering, utilities, permitting, and railroads, which will increase efficiency, project scheduling goals, compliance accountability, and improve project management capabilities.

1.1.2. Background and Description of Current ROW Applications.

Below are the functional requirements that are currently being performed and expected in the replacement system in addition to any enhanced capabilities outlined in Section A.4. of the pro forma contract.

- a. The IRIS system tracks parcels of land affected by road construction project ROW issues. This system holds physical and cost estimate information describing the land parcel and the associated project. It also tracks the status of the required documents that must be generated for each parcel.
- b. The Relocation function tracks the relocation and compensation of property owners displaced by the acquisition. The IRIS system holds physical and cost estimation information which describes the relocation and the associated project. It also tracks the status of the required documents that must be generated for each relocation transaction.
- c. The Utilities function tracks utility facility (including but not limited to water, sewer, gas, electric, fiber optic, etc.) conflict relocation coordination, which is affected by road construction projects. The IRIS system holds physical and cost estimate information which describes the relocation coordination and the project associated with it. It also tracks the status of the required documents that must be generated for each utility conflict.
- d. The Utility Permits function tracks information needed for utility installation permits and then generates the permit documents.
- e. The Mail Out function is an automated mailer system that will issue notices of proposed projects to utilities to coordinate utility facilities potentially affected by the proposed construction.
- f. The Railroad function tracks railroad coordination regarding property operations that conflict with road construction projects. The IRIS system holds data considerations for activity dates, responses, conflict documentation (e.g., grade crossing, bridge RR over, bridge RR under, adjacent property), cost estimates, engineering, railroad inventory (e.g., FRA DOT#, MP, fee or easement), railroad construction specifications relevant to the specific roadway project.
- g. The Excess Land function tracks the disposal, lease, and easement of property under excess land provisions. This system holds physical information which describes the land parcel and the excess land transactions associated with it. It also tracks the inventory of excess lands and the status of the

required documents that must be generated for the transactions. This includes the ability to investigate such transactions as to conflict with known projects being developed and or known utility permits.

- h. The system maintains an inventory of all property acquisitions and generate necessary accounting reports of those acquisitions to meet federal GASB requirements.
- i. The system utilizes Geospatial Information System (GIS) technology to enhance the efficiency of the offices to exchange electronic files with outside entities to access current land ownership, basic parcel configuration, aerial photography, and land use. Maintaining Geospatial records for State-owned ROW supports an inventory of assets held by the State.

1.2. **Scope of Service, Contract Period, & Required Terms and Conditions**

The RFP Attachment 6.6., *Pro Forma* Contract details the State's requirements:

- Scope of Services and Deliverables (Section A);
- Contract Period (Section B);
- Payment Terms (Section C);
- Standard Terms and Conditions (Section D); and,
- Special Terms and Conditions (Section E).

The *pro forma* contract substantially represents the contract document that the successful Respondent must sign.

1.3. **Nondiscrimination**

No person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of a Contract pursuant to this RFP or in the employment practices of the Contractor on the grounds of handicap or disability, age, race, creed, color, religion, sex, national origin, or any other classification protected by federal, Tennessee state constitutional, or statutory law. The Contractor pursuant to this RFP shall, upon request, show proof of such nondiscrimination and shall post in conspicuous places, available to all employees and applicants, notices of nondiscrimination.

1.4. **RFP Communications**

- 1.4.1. The State has assigned the following RFP identification number that must be referenced in all communications regarding this RFP:

RFP # 40100-51043

- 1.4.2. **Unauthorized contact about this RFP with employees or officials of the State of Tennessee except as detailed below may result in disqualification from consideration under this procurement process.**

- 1.4.2.1. Prospective Respondents must direct communications concerning this RFP to the following person designated as the Solicitation Coordinator:
- JOSH POLK
 CENTRAL PROCUREMENT OFFICE
 312 ROSA L. PARKS AVE
 NASHVILLE, TENNESSEE 37243
 (615) 360-4460
 JOSHUA.POLK@TN.GOV

- 1.4.2.2. Notwithstanding the foregoing, Prospective Respondents may alternatively contact:

- a. staff of the Governor's Office of Diversity Business Enterprise for assistance available to minority-owned, woman-owned, service-disabled veteran-owned, businesses owned by persons with disabilities, and small businesses as well as general, public information relating to this RFP (visit <https://www.tn.gov/generalservices/procurement/central-procurement-office--cpo-/governor-s-office-of-diversity-business-enterprise--godbe--/godbe-general-contacts.html> for contact information); and
- b. the following individual designated by the State to coordinate compliance with the nondiscrimination requirements of the State of Tennessee, Title VI of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990, and associated federal regulations:

HELEN CROWLEY
 CENTRAL PROCUREMENT OFFICE
 312 ROSA L. PARKS AVE
 NASHVILLE, TENNESSEE 37243
 (615) 741-3836
HELEN.CROWLEY@TN.GOV

- 1.4.3. Only the State's official, written responses and communications with Respondents are binding with regard to this RFP. Oral communications between a State official and one or more Respondents are unofficial and non-binding.
- 1.4.4. Potential Respondents must ensure that the State receives all written questions and comments, including questions and requests for clarification, no later than the Written Questions & Comments Deadline detailed in the RFP Section 2, Schedule of Events.
- 1.4.5. Respondents must assume the risk of the method of dispatching any communication or response to the State. The State assumes no responsibility for delays or delivery failures resulting from the Respondent's method of dispatch. Actual or digital "postmarking" of a communication or response to the State by a specified deadline is not a substitute for the State's actual receipt of a communication or response. It is encouraged for Respondents to submit bids digitally.
- 1.4.6. The State will convey all official responses and communications related to this RFP to the prospective Respondents from whom the State has received a Notice of Intent to Respond (refer to RFP Section 1.8).
- 1.4.7. The State reserves the right to determine, at its sole discretion, the method of conveying official, written responses and communications related to this RFP. Such written communications may be transmitted by mail, hand-delivery, facsimile, electronic mail, Internet posting, or any other means deemed reasonable by the State. For internet posting, please refer to the following website: <https://www.tn.gov/generalservices/procurement/central-procurement-office--cpo-/supplier-information/request-for-proposals--rfp--opportunities1.html>.
- 1.4.8. The State reserves the right to determine, at its sole discretion, the appropriateness and adequacy of responses to written comments, questions, and requests related to this RFP. The State's official, written responses will constitute an amendment of this RFP.
- 1.4.9. Any data or factual information provided by the State (in this RFP, an RFP amendment or any other communication relating to this RFP) is for informational purposes only. The State will make reasonable efforts to ensure the accuracy of such data or information, however it is the Respondent's obligation to independently verify any data or information provided by the State. The State expressly disclaims the accuracy or adequacy of any information or data that it provides to prospective Respondents.

1.5. Assistance to Respondents With a Handicap or Disability

Prospective Respondents with a handicap or disability may receive accommodation relating to the communication of this RFP and participating in the RFP process. Prospective Respondents may contact the Solicitation Coordinator to request such reasonable accommodation no later than the Disability Accommodation Request Deadline detailed in the RFP Section 2, Schedule of Events.

1.6. Respondent Required Review & Waiver of Objections

- 1.6.1. Each prospective Respondent must carefully review this RFP, including but not limited to, attachments, the RFP Attachment 6.6., *Pro Forma* Contract, and any amendments, for questions, comments, defects, objections, or any other matter requiring clarification or correction (collectively called “questions and comments”).
- 1.6.2. Any prospective Respondent having questions and comments concerning this RFP must provide them in writing to the State no later than the Written Questions & Comments Deadline detailed in the RFP Section 2, Schedule of Events.
- 1.6.3. Protests based on any objection to the RFP shall be considered waived and invalid if the objection has not been brought to the attention of the State, in writing, by the Written Questions & Comments Deadline.

1.7. Pre-Response Conference

A Pre-response Conference will be held at the time and date detailed in the RFP Section 2, Schedule of Events. Pre-response Conference attendance is not mandatory, and prospective Respondents may be limited to a maximum number of attendees depending upon overall attendance and space limitations.

The conference will be held at:

Microsoft Teams meeting

Join on your computer, mobile app or room device

[Click here to join the meeting](#)

Meeting ID: 217 734 460 321

Passcode: B3bJba

[Download Teams](#) | [Join on the web](#)

Join with a video conferencing device

stateoftn@m.webex.com

Video Conference ID: 119 388 645 0

[Alternate VTC instructions](#)

Or call in (audio only)

[+1 629-209-4396, 175689760#](tel:+16292094396175689760) United States, Nashville

Phone Conference ID: 175 689 760#

[Find a local number](#) | [Reset PIN](#)

[Learn More](#) | [Meeting options](#)

The purpose of the conference is to discuss the RFP scope of goods or services. The State will entertain questions, however prospective Respondents must understand that the State’s oral response to any question at the Pre-response Conference shall be unofficial and non-binding. Prospective Respondents must submit all questions, comments, or other concerns regarding the RFP in writing prior to the Written Questions & Comments Deadline date detailed in the RFP Section 2, Schedule of Events. The State will send the official response to these questions and comments to prospective Respondents from whom the

State has received a Notice of Intent to respond as indicated in RFP Section 1.8 and on the date detailed in the RFP Section 2, Schedule of Events.

1.8. **Notice of Intent to Respond**

Before the Notice of Intent to Respond Deadline detailed in the RFP Section 2, Schedule of Events, prospective Respondents should submit to the Solicitation Coordinator a Notice of Intent to Respond (in the form of a simple e-mail or other written communication). Such notice should include the following information:

- the business or individual's name (as appropriate);
- a contact person's name and title; and
- the contact person's mailing address, telephone number, facsimile number, and e-mail address.

A Notice of Intent to Respond creates no obligation and is not a prerequisite for submitting a response, however, it is necessary to ensure receipt of any RFP amendments or other notices and communications relating to this RFP.

1.9. **Response Deadline**

A Respondent must ensure that the State receives a response no later than the Response Deadline time and date detailed in the RFP Section 2, Schedule of Events. The State will not accept late responses, and a Respondent's failure to submit a response before the deadline will result in disqualification of the response. It is the responsibility of the Respondent to ascertain any additional security requirements with respect to packaging and delivery to the State of Tennessee. Respondents should be mindful of any potential delays due to security screening procedures, weather, or other filing delays whether foreseeable or unforeseeable.

2. RFP SCHEDULE OF EVENTS

2.1. The following RFP Schedule of Events represents the State's best estimate for this RFP.

EVENT	TIME (central time zone)	DATE
1. RFP Issued		February 15, 2024
2. Disability Accommodation Request Deadline	2:00 p.m.	February 21, 2024
3. Pre-response Conference	10:00 a.m.	February 22, 2024
4. Notice of Intent to Respond Deadline	2:00 p.m.	February 23, 2024
5. Written "Questions & Comments" Deadline	2:00 p.m.	March 4, 2024
6. State Response to Written "Questions & Comments"		March 22, 2024
7. Response Deadline	2:00 p.m.	April 1, 2024
8. State Completion of Technical Response Evaluations		April 12, 2024
9. State Schedules Respondent Oral Presentation		April 15, 2024
10. Respondent Oral Presentation	8 a.m. - 4:30 p.m.	April 18 – 19, 2024
11. State Opening & Scoring of Cost Proposals	2:00 p.m.	April 22, 2024
12. State Notice of Intent to Award Released <u>and</u> RFP Files Opened for Public Inspection	2:00 p.m.	April 24, 2024
13. End of Open File Period		May 1, 2024
14. State sends contract to Contractor for signature		May 2, 2024
15. Contractor Signature Deadline	2:00 p.m.	May 6, 2024

2.2. **The State reserves the right, at its sole discretion, to adjust the RFP Schedule of Events as it deems necessary.** Any adjustment of the Schedule of Events shall constitute an RFP amendment, and the State will communicate such to prospective Respondents from whom the State has received a Notice of Intent to Respond (refer to section 1.8).

3. RESPONSE REQUIREMENTS

3.1. Response Form

A response to this RFP must consist of two parts, a Technical Response and a Cost Proposal.

- 3.1.1. **Technical Response.** RFP Attachment 6.2., Technical Response & Evaluation Guide provides the specific requirements for submitting a response. This guide includes mandatory requirement items, general qualifications and experience items, and technical qualifications, experience, and approach items all of which must be addressed with a written response and, in some instances, additional documentation.

NOTICE: A technical response must not include any pricing or cost information. If any pricing or cost information amounts of any type (even pricing relating to other projects) is included in any part of the technical response, the state may deem the response to be non-responsive and reject it.

- 3.1.1.1. A Respondent should duplicate and use the RFP Attachment 6.2., Technical Response & Evaluation Guide to organize, reference, and draft the Technical Response by duplicating the attachment, adding appropriate page numbers as required, and using the guide as a table of contents covering the Technical Response.
- 3.1.1.2. A response should be economically prepared, with emphasis on completeness and clarity. A response, as well as any reference material presented, must be written in English and must be written on standard 8 ½" x 11" pages (although oversize exhibits are permissible) and use a 12 point font for text. All response pages must be numbered.
- 3.1.1.3. All information and documentation included in a Technical Response should correspond to or address a specific requirement detailed in the RFP Attachment 6.2., Technical Response & Evaluation Guide. All information must be incorporated into a response to a specific requirement and clearly referenced. Any information not meeting these criteria will be deemed extraneous and will not contribute to evaluations.
- 3.1.1.4. The State may determine a response to be non-responsive and reject it if:
- a. the Respondent fails to organize and properly reference the Technical Response as required by this RFP and the RFP Attachment 6.2., Technical Response & Evaluation Guide; or
 - b. the Technical Response document does not appropriately respond to, address, or meet all of the requirements and response items detailed in the RFP Attachment 6.2., Technical Response & Evaluation Guide.
- 3.1.2. **Cost Proposal.** A Cost Proposal must be recorded on an exact duplicate of the RFP Attachment 6.3., Cost Proposal & Scoring Guide.

NOTICE: If a Respondent fails to submit a cost proposal exactly as required, the State may deem the response to be non-responsive and reject it.

- 3.1.2.1. A Respondent must only record the proposed cost exactly as required by the RFP Attachment 6.3., Cost Proposal & Scoring Guide and must NOT record any other rates, amounts, or information.

- 3.1.2.2. The proposed cost shall incorporate ALL costs for services under the contract for the total contract period, including any renewals or extensions.
- 3.1.2.3. A Respondent must sign and date the Cost Proposal.
- 3.1.2.4. A Respondent must submit the Cost Proposal to the State in a sealed package separate from the Technical Response (as detailed in RFP Sections 3.2.3., *et seq.*).

3.2. Response Delivery

- 3.2.1. A Respondent must ensure that both the original Technical Response and Cost Proposal documents meet all form and content requirements, including all required signatures, as detailed within this RFP, as may be amended.
- 3.2.2. A Respondent must submit original Technical Response and Cost Proposal documents and copies as specified below.

- 3.2.2.1. One (1) original Technical Response paper document labeled:

“RFP # 40100-51043 TECHNICAL RESPONSE ORIGINAL”

and five (5) digital copies of the Technical Response each in the form of one (1) digital document in “PDF” format properly recorded on its own otherwise blank USB flash drive labeled:

“RFP # 40100-51043 TECHNICAL RESPONSE COPY”

The digital copies should not include copies of sealed customer references, however any other discrepancy between the paper Technical Response document and any digital copies may result in the State rejecting the proposal as non-responsive.

- 3.2.2.2. One (1) original Cost Proposal paper document labeled:

“RFP # 40100-51043 COST PROPOSAL ORIGINAL”

and five (5) copies in the form of a digital document in “XLS” format properly recorded on separate, blank USB flash drive labeled:

“RFP # 40100-51043 COST PROPOSAL COPY”

In the event of a discrepancy between the original Cost Proposal document and the digital copy, the original, signed document will take precedence.

- 3.2.3. A Respondent must separate, seal, package, and label the documents and copies for delivery as follows:

- 3.2.3.1. The Technical Response original document and digital copies must be placed in a sealed package that is clearly labeled:

“DO NOT OPEN... RFP # 40100-51043 TECHNICAL RESPONSE FROM [RESPONDENT LEGAL ENTITY NAME]”

- 3.2.3.2. The Cost Proposal original document and digital copy must be placed in a separate, sealed package that is clearly labeled:

“DO NOT OPEN... RFP # 40100-51043 COST PROPOSAL FROM [RESPONDENT LEGAL ENTITY NAME]”

- 3.2.3.3. The separately, sealed Technical Response and Cost Proposal components may be enclosed in a larger package for mailing or delivery, provided that the outermost package is clearly labeled:

“RFP # 40100-51043 SEALED TECHNICAL RESPONSE & SEALED COST PROPOSAL FROM [RESPONDENT LEGAL ENTITY NAME]”

- 3.2.4. A Respondent must ensure that the State receives a response no later than the Response Deadline time and date detailed in the RFP Section 2, Schedule of Events at the following address:

JOSH POLK
CENTRAL PROCUREMENT OFFICE
312 ROSA L. PARKS AVE
NASHVILLE, TENNESSEE 37243
JOSHUA.POLK@TN.GOV

3.3. Response & Respondent Prohibitions

- 3.3.1. A response must not include alternate contract terms and conditions. If a response contains such terms and conditions, the State, at its sole discretion, may determine the response to be a non-responsive counteroffer and reject it.
- 3.3.2. A response must not restrict the rights of the State or otherwise qualify either the offer to deliver goods or provide services as required by this RFP or the Cost Proposal. If a response restricts the rights of the State or otherwise qualifies either the offer to deliver goods or provide services as required by this RFP or the Cost Proposal, the State, at its sole discretion, may determine the response to be a non-responsive counteroffer and reject it.
- 3.3.3. A response must not propose alternative goods or services (*i.e.*, offer services different from those requested and required by this RFP) unless expressly requested in this RFP. The State may consider a response of alternative goods or services to be non-responsive and reject it.
- 3.3.4. A Cost Proposal must be prepared and arrived at independently and must not involve any collusion between Respondents. The State will reject any Cost Proposal that involves collusion, consultation, communication, or agreement between Respondents. Regardless of the time of detection, the State will consider any such actions to be grounds for response rejection or contract termination.
- 3.3.5. A Respondent must not provide, for consideration in this RFP process or subsequent contract negotiations, any information that the Respondent knew or should have known was materially incorrect. If the State determines that a Respondent has provided such incorrect information, the State will deem the Response non-responsive and reject it.
- 3.3.6. A Respondent must not submit more than one Technical Response and one Cost Proposal in response to this RFP, except as expressly requested by the State in this RFP. If a Respondent submits more than one Technical Response or more than one Cost Proposal, the State will deem all of the responses non-responsive and reject them.
- 3.3.7. A Respondent must not submit a response as a prime contractor while also permitting one or more other Respondents to offer the Respondent as a subcontractor in their own responses. Such may result in the disqualification of all Respondents knowingly involved. This restriction does not, however, prohibit different Respondents from offering the same subcontractor as a part

of their responses (provided that the subcontractor does not also submit a response as a prime contractor).

3.3.8. The State shall not consider a response from an individual who is, or within the past six (6) months has been, a State employee. For purposes of this RFP:

3.3.8.1. An individual shall be deemed a State employee until such time as all compensation for salary, termination pay, and annual leave has been paid;

3.3.8.2. A contract with or a response from a company, corporation, or any other contracting entity in which a controlling interest is held by any State employee shall be considered to be a contract with or proposal from the employee; and

3.3.8.3. A contract with or a response from a company, corporation, or any other contracting entity that employs an individual who is, or within the past six (6) months has been, a State employee shall not be considered a contract with or a proposal from the employee and shall not constitute a prohibited conflict of interest.

3.3.9. This RFP is also subject to Tenn. Code Ann. § 12-4-101—105.

3.4. **Response Errors & Revisions**

A Respondent is responsible for any and all response errors or omissions. A Respondent will not be allowed to alter or revise response documents after the Response Deadline time and date detailed in the RFP Section 2, Schedule of Events unless such is formally requested, in writing, by the State.

3.5. **Response Withdrawal**

A Respondent may withdraw a submitted response at any time before the Response Deadline time and date detailed in the RFP Section 2, Schedule of Events by submitting a written request signed by an authorized Respondent representative. After withdrawing a response, a Respondent may submit another response at any time before the Response Deadline. After the Response Deadline, a Respondent may only withdraw all or a portion of a response where the enforcement of the response would impose an unconscionable hardship on the Respondent.

3.6. **Additional Services**

If a response offers goods or services in addition to those required by and described in this RFP, the State, at its sole discretion, may add such services to the contract awarded as a result of this RFP. Notwithstanding the foregoing, a Respondent must not propose any additional cost amounts or rates for additional goods or services. Regardless of any additional services offered in a response, the Respondent's Cost Proposal must only record the proposed cost as required in this RFP and must not record any other rates, amounts, or information.

NOTICE: If a Respondent fails to submit a Cost Proposal exactly as required, the State may deem the response non-responsive and reject it.

3.7. **Response Preparation Costs**

The State will not pay any costs associated with the preparation, submittal, or presentation of any response.

4. GENERAL CONTRACTING INFORMATION & REQUIREMENTS

4.1. RFP Amendment

The State at its sole discretion may amend this RFP, in writing, at any time prior to contract award. However, prior to any such amendment, the State will consider whether it would negatively impact the ability of potential Respondents to meet the response deadline and revise the RFP Schedule of Events if deemed appropriate. If an RFP amendment is issued, the State will convey it to potential Respondents who submitted a Notice of Intent to Respond (refer to RFP Section 1.8). A response must address the final RFP (including its attachments) as amended.

4.2. RFP Cancellation

The State reserves the right, at its sole discretion, to cancel the RFP or to cancel and reissue this RFP in accordance with applicable laws and regulations.

4.3. State Right of Rejection

4.3.1. Subject to applicable laws and regulations, the State reserves the right to reject, at its sole discretion, any and all responses.

4.3.2. The State may deem as non-responsive and reject any response that does not comply with all terms, conditions, and performance requirements of this RFP. Notwithstanding the foregoing, the State reserves the right to waive, at its sole discretion, minor variances from full compliance with this RFP. If the State waives variances in a response, such waiver shall not modify the RFP requirements or excuse the Respondent from full compliance, and the State may hold any resulting Contractor to strict compliance with this RFP.

4.4. Assignment & Subcontracting

4.4.1. The Contractor may not subcontract, transfer, or assign any portion of the Contract awarded as a result of this RFP without prior approval of the State. The State reserves the right to refuse approval, at its sole discretion, of any subcontract, transfer, or assignment.

4.4.2. If a Respondent intends to use subcontractors, the response to this RFP must specifically identify the scope and portions of the work each subcontractor will perform (refer to RFP Attachment 6.2., Section B, General Qualifications & Experience Item B.14.).

4.4.3. Subcontractors identified within a response to this RFP will be deemed as approved by the State unless the State expressly disapproves one or more of the proposed subcontractors prior to signing the Contract.

4.4.4. After contract award, a Contractor may only substitute an approved subcontractor at the discretion of the State and with the State's prior, written approval.

4.4.5. Notwithstanding any State approval relating to subcontracts, the Respondent who is awarded a contract pursuant to this RFP will be the prime contractor and will be responsible for all work under the Contract.

4.5. Right to Refuse Personnel or Subcontractors

The State reserves the right to refuse, at its sole discretion and notwithstanding any prior approval, any personnel of the prime contractor or a subcontractor providing goods or services in the performance of a contract resulting from this RFP. The State will document in writing the reason(s) for any rejection of personnel.

4.6. **Insurance**

The State will require the awarded Contractor to provide a Certificate of Insurance issued by an insurance company licensed or authorized to provide insurance in the State of Tennessee. Each Certificate of Insurance shall indicate current insurance coverages meeting minimum requirements as may be specified by this RFP. A failure to provide a current, Certificate of Insurance will be considered a material breach and grounds for contract termination.

4.7. **Professional Licensure and Department of Revenue Registration**

- 4.7.1. All persons, agencies, firms, or other entities that provide legal or financial opinions, which a Respondent provides for consideration and evaluation by the State as a part of a response to this RFP, shall be properly licensed to render such opinions.
- 4.7.2. Before the Contract resulting from this RFP is signed, the apparent successful Respondent (and Respondent employees and subcontractors, as applicable) must hold all necessary or appropriate business or professional licenses to provide the goods or services as required by the contract. The State may require any Respondent to submit evidence of proper licensure.
- 4.7.3. Before the Contract resulting from this RFP is signed, the apparent successful Respondent must be registered with the Tennessee Department of Revenue for the collection of Tennessee sales and use tax. The State shall not award a contract unless the Respondent provides proof of such registration or provides documentation from the Department of Revenue that the Contractor is exempt from this registration requirement. The foregoing is a mandatory requirement of an award of a contract pursuant to this solicitation. To register, please visit the Department of Revenue's Tennessee Taxpayer Access Point (TNTAP) website for Online Registration and the Vendor Contract Questionnaire. These resources are available at the following:
<https://tntap.tn.gov/eservices/#1>

4.8. **Disclosure of Response Contents**

- 4.8.1. All materials submitted to the State in response to this RFP shall become the property of the State of Tennessee. Selection or rejection of a response does not affect this right. By submitting a response, a Respondent acknowledges and accepts that the full response contents and associated documents will become open to public inspection in accordance with the laws of the State of Tennessee.
- 4.8.2. The State will hold all response information, including both technical and cost information, in confidence during the evaluation process.
- 4.8.3. Upon completion of response evaluations, indicated by public release of a Notice of Intent to Award, the responses and associated materials will be open for review by the public in accordance with Tenn. Code Ann. § 10-7-504(a)(7).

4.9. **Contract Approval and Contract Payments**

- 4.9.1. After contract award, the Contractor who is awarded the contract must submit appropriate documentation with the Department of Finance and Administration, Division of Accounts.
- 4.9.2. This RFP and its contractor selection processes do not obligate the State and do not create rights, interests, or claims of entitlement in either the Respondent with the apparent best-evaluated response or any other Respondent. State obligations pursuant to a contract award shall commence only after the Contract is signed by the State agency head and the Contractor and after the Contract is approved by all other state officials as required by applicable laws and regulations.

- 4.9.3. No payment will be obligated or made until the relevant Contract is approved as required by applicable statutes and rules of the State of Tennessee.
- 4.9.3.1. The State shall not be liable for payment of any type associated with the Contract resulting from this RFP (or any amendment thereof) or responsible for any goods delivered or services rendered by the Contractor, even goods delivered or services rendered in good faith and even if the Contractor is orally directed to proceed with the delivery of goods or the rendering of services, if it occurs before the Contract Effective Date or after the Contract Term.
- 4.9.3.2. All payments relating to this procurement will be made in accordance with the Payment Terms and Conditions of the Contract resulting from this RFP (refer to RFP Attachment 6.6., *Pro Forma* Contract, Section C).
- 4.9.3.3. If any provision of the Contract provides direct funding or reimbursement for the competitive purchase of goods or services as a component of contract performance or otherwise provides for the reimbursement of specified, actual costs, the State will employ all reasonable means and will require all such documentation that it deems necessary to ensure that such purchases were competitive and costs were reasonable, necessary, and actual. The Contractor shall provide reasonable assistance and access related to such review. Further, the State shall not remit, as funding or reimbursement pursuant to such provisions, any amounts that it determines do not represent reasonable, necessary, and actual costs.

4.10. **Contractor Performance**

The Contractor who is awarded a contract will be responsible for the delivery of all acceptable goods or the satisfactory completion of all services set out in this RFP (including attachments) as may be amended. All goods or services are subject to inspection and evaluation by the State. The State will employ all reasonable means to ensure that goods delivered or services rendered are in compliance with the Contract, and the Contractor must cooperate with such efforts.

4.11. **Contract Amendment**

After Contract award, the State may request the Contractor to deliver additional goods or perform additional services within the general scope of the Contract and this RFP, but beyond the specified Scope, and for which the Contractor may be compensated. In such instances, the State will provide the Contractor a written description of the additional goods or services. The Contractor must respond to the State with a time schedule for delivering the additional goods or accomplishing the additional services based on the compensable units included in the Contractor's response to this RFP. If the State and the Contractor reach an agreement regarding the goods or services and associated compensation, such agreement must be effected by means of a contract amendment. Further, any such amendment requiring additional goods or services must be signed by both the State agency head and the Contractor and must be approved by other state officials as required by applicable statutes, rules, policies and procedures of the State of Tennessee. The Contractor must not provide additional goods or render additional services until the State has issued a written contract amendment with all required approvals.

4.12. **Severability**

If any provision of this RFP is declared by a court to be illegal or in conflict with any law, said decision will not affect the validity of the remaining RFP terms and provisions, and the rights and obligations of the State and Respondents will be construed and enforced as if the RFP did not contain the particular provision held to be invalid.

4.13. **Next Ranked Respondent**

The State reserves the right to initiate negotiations with the next ranked Respondent should the State cease doing business with any Respondent selected via this RFP process.

5. EVALUATION & CONTRACT AWARD

5.1. Evaluation Categories & Maximum Points

The State will consider qualifications, experience, technical approach, and cost in the evaluation of responses and award points in each of the categories detailed below (up to the maximum evaluation points indicated) to each response deemed by the State to be responsive.

EVALUATION CATEGORY	MAXIMUM POINTS POSSIBLE
General Qualifications & Experience (refer to RFP Attachment 6.2., Section B)	20
Technical Qualifications, Experience & Approach (refer to RFP Attachment 6.2., Section C)	40
Oral Presentation (refer to RFP Attachment 6.2., Section D)	10
Cost Proposal (refer to RFP Attachment 6.3.)	30

5.2. Evaluation Process

The evaluation process is designed to award the contract resulting from this RFP not necessarily to the Respondent offering the lowest cost, but rather to the Respondent deemed by the State to be responsive and responsible who offers the best combination of attributes based upon the evaluation criteria. ("Responsive Respondent" is defined as a Respondent that has submitted a response that conforms in all material respects to the RFP. "Responsible Respondent" is defined as a Respondent that has the capacity in all respects to perform fully the contract requirements, and the integrity and reliability which will assure good faith performance.)

5.2.1. **Technical Response Evaluation.** The Solicitation Coordinator and the Proposal Evaluation Team (consisting of three (3) or more State employees) will use the RFP Attachment 6.2., Technical Response & Evaluation Guide to manage the Technical Response Evaluation and maintain evaluation records.

5.2.1.1. The State reserves the right, at its sole discretion, to request Respondent clarification of a Technical Response or to conduct clarification discussions with any or all Respondents. Any such clarification or discussion will be limited to specific sections of the response identified by the State. The subject Respondent must put any resulting clarification in writing as may be required and in accordance with any deadline imposed by the State.

5.2.1.2. The Solicitation Coordinator will review each Technical Response to determine compliance with RFP Attachment 6.2., Technical Response & Evaluation Guide, Section A— Mandatory Requirements. If the Solicitation Coordinator determines that a response failed to meet one or more of the mandatory requirements, the Proposal Evaluation Team will review the response and document the team's determination of whether:

- a. the response adequately meets RFP requirements for further evaluation;
- b. the State will request clarifications or corrections for consideration prior to further evaluation; or,

- c. the State will determine the response to be non-responsive to the RFP and reject it.
- 5.2.1.3. Proposal Evaluation Team members will independently evaluate each Technical Response (that is responsive to the RFP) against the evaluation criteria in this RFP, and will score each in accordance with the RFP Attachment 6.2., Technical Response & Evaluation Guide.
- 5.2.1.4. For each response evaluated, the Solicitation Coordinator will calculate the average of the Proposal Evaluation Team member scores for RFP Attachment 6.2., Technical Response & Evaluation Guide, and record each average as the response score for the respective Technical Response section.
- 5.2.1.5. The Solicitation Coordinator will invite the top five (5) ranked Respondents to make an Oral Presentation or Field Test. The ranking will be determined after the Technical Response score is totaled and ranked (e.g., 1 – the best evaluated ranking, etc.).
 - 5.2.1.5.1. The Oral Presentations are mandatory. The Solicitation Coordinator will schedule Respondent Presentations during the period indicated by the RFP Section 2, Schedule of Events. The Solicitation Coordinator will make every effort to accommodate each Respondent's schedules. When the Respondent Presentation schedule has been determined, the Solicitation Coordinator will contact Respondents with the relevant information as indicated by RFP Section 2, Schedule of Events.
 - 5.2.1.5.2. Respondent Presentations are only open to the invited Respondent, Proposal Evaluation Team members, the Solicitation Coordinator, and any technical consultants who are selected by the State to provide assistance to the Proposal Evaluation Team.
 - 5.2.1.5.3. Oral Presentations provide an opportunity for Respondents to explain and clarify their responses and for the State to test to better understand the practical application of the good or service as applicable. Respondents must not materially alter their responses and Presentations will be limited to addressing the items detailed in RFP Attachment 6.2., Technical Response & Evaluation Guide. Respondent pricing shall not be discussed or provided during Oral Presentations.
 - 5.2.1.5.4. The State will maintain an accurate record of each Respondent's Oral Presentation session. The record of the Respondent's Oral Presentation shall be available for review when the State opens the procurement files for public inspection.
 - 5.2.1.5.5. Proposal Evaluation Team members will independently evaluate each Oral Presentation in accordance with the RFP Attachment 6.2., Technical Response & Evaluation Guide, Section D.
 - 5.2.1.5.6. The Solicitation Coordinator will calculate and document the average of the Proposal Evaluation Team member scores for RFP Attachment 6.2., Technical Response & Evaluation Guide, Section D, and record that number as the score for Respondent's Technical Response section.
- 5.2.1.6. Before Cost Proposals are opened, the Proposal Evaluation Team will review the Technical Response Evaluation record and any other available information pertinent to whether or not each Respondent is responsive and responsible. If the Proposal

Evaluation Team identifies any Respondent that does not meet the responsive and responsible thresholds such that the team would not recommend the Respondent for Cost Proposal Evaluation and potential contract award, the team members will fully document the determination.

- 5.2.3. **Cost Proposal Evaluation.** The Solicitation Coordinator will open for evaluation the Cost Proposal of each Respondent deemed by the State to be responsive and responsible and calculate and record each Cost Proposal score in accordance with the RFP Attachment 6.3., Cost Proposal & Scoring Guide.
- 5.2.4. **Total Response Score.** The Solicitation Coordinator will calculate the sum of the Technical Response section scores and the Cost Proposal score and record the resulting number as the total score for the subject Response (refer to RFP Attachment 6.5., Score Summary Matrix).

5.3. Contract Award Process

- 5.3.1 The Solicitation Coordinator will submit the Proposal Evaluation Team determinations and scores to the head of the procuring agency for consideration along with any other relevant information that might be available and pertinent to contract award.
- 5.3.2. The procuring agency head will determine the apparent best-evaluated Response. To effect a contract award to a Respondent other than the one receiving the highest evaluation process score, the head of the procuring agency must provide written justification and obtain the written approval of the Chief Procurement Officer and the Comptroller of the Treasury.
- 5.3.3. The State will issue a Notice of Intent to Award identifying the apparent best-evaluated response and make the RFP files available for public inspection at the time and date specified in the RFP Section 2, Schedule of Events.

NOTICE: The Notice of Intent to Award shall not create rights, interests, or claims of entitlement in either the apparent best-evaluated Respondent or any other Respondent.

- 5.3.4. The Respondent identified as offering the apparent best-evaluated response must sign a contract drawn by the State pursuant to this RFP. The Contract shall be substantially the same as the RFP Attachment 6.6., *Pro Forma* Contract. The Respondent must sign the contract by the Contractor Signature Deadline detailed in the RFP Section 2, Schedule of Events. If the Respondent fails to provide the signed Contract by this deadline, the State may determine that the Respondent is non-responsive to this RFP and reject the response.
- 5.3.5. Notwithstanding the foregoing, the State may, at its sole discretion, entertain limited terms and conditions or pricing negotiations prior to Contract signing and, as a result, revise the *pro forma* contract terms and conditions or performance requirements in the State's best interests, PROVIDED THAT such revision of terms and conditions or performance requirements shall NOT materially affect the basis of response evaluations or negatively impact the competitive nature of the RFP and contractor selection process.
- 5.3.6. If the State determines that a response is non-responsive and rejects it after opening Cost Proposals, the Solicitation Coordinator will re-calculate scores for each remaining responsive Cost Proposal to determine (or re-determine) the apparent best-evaluated response.

RFP ATTACHMENT 6.1.**RFP # 40100-51043 STATEMENT OF CERTIFICATIONS AND ASSURANCES**

The Respondent must sign and complete the Statement of Certifications and Assurances below as required, and it must be included in the Technical Response (as required by RFP Attachment 6.2., Technical Response & Evaluation Guide, Section A, Item A.1.).

The Respondent does, hereby, expressly affirm, declare, confirm, certify, and assure ALL of the following:

1. The Respondent will comply with all of the provisions and requirements of the RFP.
2. The Respondent will provide all services as defined in the Scope of the RFP Attachment 6.6., *Pro Forma* Contract for the total Contract Term.
3. The Respondent, except as otherwise provided in this RFP, accepts and agrees to all terms and conditions set out in the RFP Attachment 6.6., *Pro Forma* Contract.
4. The Respondent acknowledges and agrees that a contract resulting from the RFP shall incorporate, by reference, all proposal responses as a part of the Contract.
5. The Respondent will comply with:
 - (a) the laws of the State of Tennessee;
 - (b) Title VI of the federal Civil Rights Act of 1964;
 - (c) Title IX of the federal Education Amendments Act of 1972;
 - (d) the Equal Employment Opportunity Act and the regulations issued there under by the federal government; and,
 - (e) the Americans with Disabilities Act of 1990 and the regulations issued there under by the federal government.
6. To the knowledge of the undersigned, the information detailed within the response submitted to this RFP is accurate.
7. The response submitted to this RFP was independently prepared, without collusion, under penalty of perjury.
8. No amount shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Respondent in connection with this RFP or any resulting contract.
9. Both the Technical Response and the Cost Proposal submitted in response to this RFP shall remain valid for at least 120 days subsequent to the date of the Cost Proposal opening and thereafter in accordance with any contract pursuant to the RFP.
10. The Respondent affirms the following statement, as required by the Iran Divestment Act Tenn. Code Ann. § 12-12-111: "By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief that each bidder is not on the list created pursuant to §12-12-106." For reference purposes, the list is currently available online at: <https://www.tn.gov/generalservices/procurement/central-procurement-office--cpo-/library-/public-information-library.html>.

By signing this Statement of Certifications and Assurances, below, the signatory also certifies legal authority to bind the proposing entity to the provisions of this RFP and any contract awarded pursuant to it. If the signatory is not the Respondent (if an individual) or the Respondent's company *President* or *Chief Executive Officer*, this document must attach evidence showing the individual's authority to bind the Respondent.

DO NOT SIGN THIS DOCUMENT IF YOU ARE NOT LEGALLY AUTHORIZED TO BIND THE RESPONDENT

SIGNATURE:

PRINTED NAME & TITLE:

DATE:

**RESPONDENT LEGAL ENTITY
NAME:**

RFP ATTACHMENT 6.2. — Section A

TECHNICAL RESPONSE & EVALUATION GUIDE

SECTION A: MANDATORY REQUIREMENTS. The Respondent must address all items detailed below and provide, in sequence, the information and documentation as required (referenced with the associated item references). The Respondent must also detail the response page number for each item in the appropriate space below.

The Solicitation Coordinator will review the response to determine if the Mandatory Requirement Items are addressed as required and mark each with pass or fail. For each item that is not addressed as required, the Proposal Evaluation Team must review the response and attach a written determination. In addition to the Mandatory Requirement Items, the Solicitation Coordinator will review each response for compliance with all RFP requirements.

RESPONDENT LEGAL ENTITY NAME:			
Response Page # (Respondent completes)	Item Ref.	Section A— Mandatory Requirement Items	Pass/Fail
		The Response must be delivered to the State no later than the Response Deadline specified in the RFP Section 2, Schedule of Events.	
		The Technical Response and the Cost Proposal documentation must be packaged separately as required (refer to RFP Section 3.2., <i>et. seq.</i>).	
		The Technical Response must NOT contain cost or pricing information of any type.	
		The Technical Response must NOT contain any restrictions of the rights of the State or other qualification of the response.	
		A Respondent must NOT submit alternate responses (refer to RFP Section 3.3.).	
		A Respondent must NOT submit multiple responses in different forms (as a prime and a subcontractor) (refer to RFP Section 3.3.).	
	A.1.	Provide the Statement of Certifications and Assurances (RFP Attachment 6.1.) completed and signed by an individual empowered to bind the Respondent to the provisions of this RFP and any resulting contract. The document must be signed without exception or qualification.	
	A.2.	Provide a statement, based upon reasonable inquiry, of whether the Respondent or any individual who shall cause to deliver goods or perform services under the contract has a possible conflict of interest (<i>e.g.</i> , employment by the State of Tennessee) and, if so, the nature of that conflict. NOTE: Any questions of conflict of interest shall be solely within the discretion of the State, and the State reserves the right to cancel any award.	
	A.3.	Provide a current bank reference indicating that the Respondent business relationship with the financial institution is in positive standing. Such reference must be written in the form of a standard business letter, signed, and dated within the past three (3) months.	
	A.4.	Provide two current positive credit references from vendors with which the Respondent has done business written in the form of	

RESPONDENT LEGAL ENTITY NAME:			
Response Page # (Respondent completes)	Item Ref.	Section A— Mandatory Requirement Items	Pass/Fail
		standard business letters, signed, and dated within the past three (3) months	
	A.5.	Provide EITHER: (a) an official document or letter from an accredited credit bureau, verified, and dated within the last three (3) months and indicating a positive credit rating for the Respondent (NOTE: A credit bureau report number without the full report is insufficient and will <u>not</u> be considered responsive.); OR (b) a Dun & Bradstreet short-form report, verified and dated within the last three (3) months and indicating a positive credit rating for the Proposer.	
	A.6.	Provide a valid Certificate of Insurance that is verified and dated within the last six (6) months, and which includes <u>all</u> of the following: a. Name of the Insurance Company b. Respondent's Name and Address as the Insured c. Policy Number d. The minimum insurance coverages detailed in RFP Attachment 6.6. <i>Pro Forma</i> Contract Section D.31. e. Coverage Descriptions f. Exceptions and Exclusions g. Policy Effective Date h. Policy Expiration Date i. Limit(s) of Liability	
State Use – Solicitation Coordinator Signature, Printed Name & Date:			

RFP ATTACHMENT 6.2. — SECTION B (continued)
RFP ATTACHMENT 6.2. — SECTION B

TECHNICAL RESPONSE & EVALUATION GUIDE

SECTION B: GENERAL QUALIFICATIONS & EXPERIENCE. The Respondent must address all items detailed below and provide, in sequence, the information and documentation as required (referenced with the associated item references). The Respondent must also detail the response page number for each item in the appropriate space below. Proposal Evaluation Team members will independently evaluate and assign one score for all responses to Section B— General Qualifications & Experience Items.

RESPONDENT LEGAL ENTITY NAME:		
Response Page # (Respondent completes)	Item Ref.	Section B— General Qualifications & Experience Items
	B.1.	Detail the name, e-mail address, mailing address, telephone number, and facsimile number, if applicable, of the person the State should contact regarding the response.
	B.2.	Describe the Respondent's form of business (<i>i.e.</i> , individual, sole proprietor, corporation, non-profit corporation, partnership, limited liability company) and business location (physical location or domicile).
	B.3.	Detail the number of years the Respondent has been in business.
	B.4.	Briefly describe how long the Respondent has been providing the goods or services required by this RFP.
	B.5.	Describe the Respondent's number of employees, client base, and location of offices.
	B.6.	Provide a statement of whether there have been any mergers, acquisitions, or change of control of the Respondent within the last ten (10) years. If so, include an explanation providing relevant details.
	B.7.	Provide a statement of whether the Respondent or, to the Respondent's knowledge, any of the Respondent's employees, agents, independent contractors, or subcontractors, involved in the delivery of goods or performance of services on a contract pursuant to this RFP, have been convicted of, pled guilty to, or pled <i>nolo contendere</i> to any felony. If so, include an explanation providing relevant details.
	B.8.	Provide a statement of whether, in the last ten (10) years, the Respondent has filed (or had filed against it) any bankruptcy or insolvency proceeding, whether voluntary or involuntary, or undergone the appointment of a receiver, trustee, or assignee for the benefit of creditors. If so, include an explanation providing relevant details.
	B.9.	Provide a statement of whether there is any material, pending litigation against the Respondent that the Respondent should reasonably believe could adversely affect its ability to meet contract requirements pursuant to this RFP or is likely to have a material adverse effect on the Respondent's financial condition. If such exists, list each separately, explain the relevant details, and attach the opinion of counsel addressing whether and to what extent it would impair the Respondent's performance in a contract pursuant to this RFP. NOTE: All persons, agencies, firms, or other entities that provide legal opinions regarding the Respondent must be properly licensed to render such opinions. The State may require the Respondent to submit proof of license for each person or entity that renders such opinions.
	B.10.	Provide a statement of whether there are any pending or in progress Securities Exchange Commission investigations involving the Respondent. If such exists, list each separately, explain

RFP ATTACHMENT 6.2. — SECTION B (continued)

RESPONDENT LEGAL ENTITY NAME:		
Response Page # (Respondent completes)	Item Ref.	Section B— General Qualifications & Experience Items
		<p>the relevant details, and attach the opinion of counsel addressing whether and to what extent it will impair the Respondent's performance in a contract pursuant to this RFP.</p> <p>NOTE: All persons, agencies, firms, or other entities that provide legal opinions regarding the Respondent must be properly licensed to render such opinions. The State may require the Respondent to submit proof of license for each person or entity that renders such opinions.</p>
	B.11.	Provide a brief, descriptive statement detailing evidence of the Respondent's ability to deliver the goods or services sought under this RFP (e.g., prior experience, training, certifications, resources, program and quality management systems, etc.).
	B.12.	Provide a narrative description of the proposed project team, its members, and organizational structure along with an organizational chart identifying the key people who will be assigned to deliver the goods or services required by this RFP.
	B.13.	Provide a personnel roster listing the names of key people who the Respondent will assign to meet the Respondent's requirements under this RFP along with the estimated number of hours that each individual will devote to that performance. Follow the personnel roster with a resume for each of the people listed. The resumes must detail the individual's title, education, current position with the Respondent, and employment history.
	B.14.	<p>Provide a statement of whether the Respondent intends to use subcontractors to meet the Respondent's requirements of any contract awarded pursuant to this RFP, and if so, detail:</p> <p>(a) the names of the subcontractors along with the contact person, mailing address, telephone number, and e-mail address for each;</p> <p>(b) a description of the scope and portions of the goods each subcontractor involved in the delivery of goods or performance of the services each subcontractor will perform; <u>and</u></p> <p>(c) a statement specifying that each proposed subcontractor has expressly assented to being proposed as a subcontractor in the Respondent's response to this RFP.</p>
	B.15.	<p>Provide documentation of the Respondent's commitment to diversity as represented by the following:</p> <p>(a) <u>Business Strategy</u>. Provide a description of the Respondent's existing programs and procedures designed to encourage and foster commerce with business enterprises owned by minorities, women, service-disabled veterans, persons with disabilities, and small business enterprises. Please also include a list of the Respondent's certifications as a diversity business, if applicable.</p> <p>(b) <u>Business Relationships</u>. Provide a listing of the Respondent's current contracts with business enterprises owned by minorities, women, service-disabled veterans, persons with disabilities, and small business enterprises. Please include the following information:</p> <p>(i) contract description;</p> <p>(ii) contractor name and ownership characteristics (i.e., ethnicity, gender, service-disabled veteran-owned or persons with disabilities);</p> <p>(iii) contractor contact name and telephone number.</p> <p>(c) <u>Estimated Participation</u>. Provide an estimated level of participation by business enterprises owned by minorities, women, service-disabled veterans, persons with disabilities and small business enterprises if a contract is awarded to the Respondent pursuant to this RFP. Please include the following information:</p> <p>(i) a percentage (%) indicating the participation estimate. (Express the estimated participation number as a percentage of the total estimated contract value that will be</p>

RFP ATTACHMENT 6.2. — SECTION B (continued)

RESPONDENT LEGAL ENTITY NAME:		
Response Page # (Respondent completes)	Item Ref.	Section B— General Qualifications & Experience Items
		<p>dedicated to business with subcontractors and supply contractors having such ownership characteristics only and DO NOT INCLUDE DOLLAR AMOUNTS;</p> <p>(ii) anticipated goods or services contract descriptions;</p> <p>(iii) names and ownership characteristics (i.e., ethnicity, gender, service-disabled veterans, or disability) of anticipated subcontractors and supply contractors.</p> <p>NOTE: In order to claim status as a Diversity Business Enterprise under this contract, businesses must be certified by the Governor's Office of Diversity Business Enterprise (Go-DBE). Please visit the Go-DBE website at https://tn.diversitysoftware.com/FrontEnd/StartCertification.asp?TN=tn&XID=9810 for more information.</p> <p>(d) <u>Workforce</u>. Provide the percentage of the Respondent's total current employees by ethnicity and gender.</p> <p>NOTE: Respondents that demonstrate a commitment to diversity will advance State efforts to expand opportunity to do business with the State as contractors and subcontractors. Response evaluations will recognize the positive qualifications and experience of a Respondent that does business with enterprises owned by minorities, women, service-disabled veterans, persons with disabilities, and small business enterprises and who offer a diverse workforce.</p>
	B.16.	<p>Provide a statement of whether or not the Respondent has any current contracts with the State of Tennessee or has completed any contracts with the State of Tennessee within the previous five (5) year period. If so, provide the following information for all of the current and completed contracts:</p> <p>(a) the name, title, telephone number and e-mail address of the State contact knowledgeable about the contract;</p> <p>(b) the procuring State agency name;</p> <p>(c) a brief description of the contract's scope of services;</p> <p>(d) the contract period; and</p> <p>(e) the contract number.</p>
	B.17.	<p>Provide a statement and any relevant details addressing whether the Respondent is any of the following:</p> <p>(a) is presently debarred, suspended, proposed for debarment, or voluntarily excluded from covered transactions by any federal or state department or agency;</p> <p>(b) has within the past three (3) years, been convicted of, or had a civil judgment rendered against the contracting party from commission of fraud, or a criminal offence in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or grant under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;</p> <p>(c) is presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) with commission of any of the offenses detailed above; and</p> <p>(d) has within a three (3) year period preceding the contract had one or more public transactions (federal, state, or local) terminated for cause or default.</p>

RFP ATTACHMENT 6.2. — SECTION B (continued)

RESPONDENT LEGAL ENTITY NAME:		
Response Page # (Respondent completes)	Item Ref.	Section B— General Qualifications & Experience Items
SCORE (for <u>all</u> Section B—Qualifications & Experience Items above): (maximum possible score = 20)		
<i>State Use – Evaluator Identification:</i>		

RFP ATTACHMENT 6.2. — SECTION C (continued)
RFP ATTACHMENT 6.2. — SECTION C

TECHNICAL RESPONSE & EVALUATION GUIDE

SECTION C: TECHNICAL QUALIFICATIONS, EXPERIENCE & APPROACH. The Respondent must address all items (below) and provide, in sequence, the information and documentation as required (referenced with the associated item references). The Respondent must also detail the response page number for each item in the appropriate space below.

A Proposal Evaluation Team, made up of three or more State employees, will independently evaluate and score the response to each item. Each evaluator will use the following whole number, raw point scale for scoring each item:

0 = little value 1 = poor 2 = fair 3 = satisfactory 4 = good 5 = excellent

The Solicitation Coordinator will multiply the Item Score by the associated Evaluation Factor (indicating the relative emphasis of the item in the overall evaluation). The resulting product will be the item's Raw Weighted Score for purposes of calculating the section score as indicated.

RESPONDENT LEGAL ENTITY NAME:					
Response Page # (Respondent completes)	Item Ref.	Section C— Technical Qualifications, Experience & Approach Items	Item Score	Evaluation Factor	Raw Weighted Score
	C.1.	Provide a narrative that illustrates the Respondent's understanding of the State's requirements and project schedule.		3	
	C.2.	Provide a narrative that illustrates how the Respondent will complete the scope of services, accomplish required objectives, and meet the State's project schedule.		3	
	C.3.	Provide a narrative that illustrates how the Respondent will manage the project, ensure completion of the scope of services, and accomplish required objectives within the State's project schedule.		3	
	C.4.	Describe the Respondent project methodologies and how this shall enable a coherent working relationship with the State's internal Project Management team.		2	
	C.5.	Provide a narrative that illustrates how the Respondent shall work with the State's Internal Project Management team to resolve project issues.		2	
	C.6	Provide a detailed narrative of the three (3) completed projects referenced in RFP Attachment 6.4, Reference Questionnaire . Explain the specifications of the contract and the services provided. Explain parallels to what is being requested by the State in this RFP. DO NOT INCLUDE CONTRACT BUDGET OR MAXIMUM LIABILITY.		4	
	C.7.	Provide a detailed narrative, including illustrations, of the Software Development Life Cycle used to develop DOT Right-of-Way information system.		3	
	C.8.	Which design model methodology has the Respondent used for other Right-of-Way or similar DOT projects? Provide documentation and a narrative from a completed development project outlining why this methodology was chosen and include the pros and cons of your decision.		3	

RFP ATTACHMENT 6.2. — SECTION C (continued)

RESPONDENT LEGAL ENTITY NAME:					
Response Page # (Respondent completes)	Item Ref.	Section C— Technical Qualifications, Experience & Approach Items	Item Score	Evaluation Factor	Raw Weighted Score
	C.9.	What are your hardware requirements for a Right-of- Way system? Do these requirements include specifications for running the system in a cloud-based hosted environment? Please provide a detailed narrative to include documentation from prior installations to support these requirements.		3	
	C.10.	Describe change control process to include how it can benefit in a development project. Include the end-to-end steps necessary in managing change control.		3	
	C.11.	Describe a source control system and how it is managed during a project, and how it can be effectively utilized upon completion of the project.		3	
	C.12.	How would you integrate Right-of-Way Utilities into a system, and how would you scale the system to meet the needs of the State?		5	
	C.13.	Submit Test Plan documentation that accurately captures the size of the environment, and how you would submit updates to tailor the plan accordingly. (NOTE - Respondent may provide an outline, documents, and samples that can be used to assess Respondent's Test methodologies.)		1	
	C.14.	Provide a narrative that describes how the Respondent shall meet the web mapping integration requirements including technology(s) utilized and architecture of the solution.		1	
	C.15.	Please provide a narrative detailing the Respondent's approach to managing parcel data geometry related to ROW needs as detailed in the RFP. Please include interface, tools, and proposed workflows that shall ensure the accuracy of the geometry created as it relates to surveyed coordinate parcel data and project control points.		1	
	C.16.	Please provide a narrative describing how the Respondent shall interface with TDOT's existing Roadway Network LRS to: <ol style="list-style-type: none"> 1. Retrieve location information (linear reference and/or coordinate reference) to maintain information relevant to ongoing ROW projects. 2. Create and update events related to ROW. 		2	
	C.17.	Provide a narrative that describes the components of a file management system and how it is best utilized in conjunction with the system. Provide documentation showing the Respondent's experience with FileNet and other electronic document repository systems		2	
	C.18.	Provide a narrative that illustrates in detail how the Respondent will meet the requirements in Pro Forma Section A.19., "IRIS Support Hosting, Support and Maintenance". In the narrative, the respondent should		2	

RFP ATTACHMENT 6.2. — SECTION C (continued)

RESPONDENT LEGAL ENTITY NAME:					
Response Page # (Respondent completes)	Item Ref.	Section C— Technical Qualifications, Experience & Approach Items	Item Score	Evaluation Factor	Raw Weighted Score
		describe and provide applicable system screenshots for: (a) The Respondent’s approach to hosting, including if and to what extent the proposed solution requires modification to run in a cloud-hosted environment. (b) The Respondent’s approach to help desk support. (c) The Respondent’s approach to Trouble Ticket submission, tracking, and resolution. (d) The Respondent’s approach to software Defect corrections. The Respondent’s approach to software upgrades and maintenance.			
	C.19.	Describe the Respondent’s expertise with Power BI (e.g., the capability of creating on-demand reporting and dashboard).		2	
	C.20.	Describe the Public versus Private components within appraisal, relocation, and acquisition functional areas of Right- of-Way and how these components are managed within the system.		5	
	C.21.	Provide a narrative explaining what kind of exports can be produced from the system.		5	
	C.22.	Explain how the system is scalable for additional users who need access to the system.		4	
	C.23.	Describe how historical and current data from an existing Oracle database can be migrated to interface with a new or different application. (Provide examples.)		5	
<i>The Solicitation Coordinator will use this sum and the formula below to calculate the section score. All calculations will use and result in numbers rounded to two (2) places to the right of the decimal point.</i>					Total Raw Weighted Score: <i>(sum of Raw Weighted Scores above)</i>
Total Raw Weighted Score <hr/> Maximum Possible Raw Weighted Score <i>(i.e., 5 x the sum of item weights above)</i>			X 40 <i>(maximum possible score)</i>	= SCORE:	
<i>State Use – Evaluator Identification:</i>					
<i>State Use – Solicitation Coordinator Signature, Printed Name & Date:</i>					

RFP ATTACHMENT 6.2.— SECTION D

TECHNICAL RESPONSE & EVALUATION GUIDE

SECTION D: ORAL PRESENTATION. The Respondent must address ALL Oral Presentation Items (below).

A Proposal Evaluation Team, made up of three or more State employees, will independently evaluate and score the oral presentation or field test response to each item. Each evaluator will use the following whole-number, raw point scale for scoring each item:

0 = little value 1 = poor 2 = fair 3 = satisfactory 4 = good 5 = excellent

The Solicitation Coordinator will multiply the Item Score by the associated Evaluation Factor (indicating the relative emphasis of the item in the overall evaluation). The resulting product will be the item's raw, weighted score for purposes of calculating the section score as indicated.

RESPONDENT LEGAL ENTITY NAME:				
Oral Presentation Items		Item Score	Evaluation Factor	Raw Weighted Score
D.1.	Provide an overview of the system. Demonstrate high-level navigation and security features including any GIS mapping capabilities on both a desktop and mobile platform, where applicable: (a) How the user navigates between each module (b) How user access can be restricted to one or more modules (c) How user access can be restricted based on one or more geographic location and organizational unit		1	
D.2.	Provide a demonstration of any acquired property ROW, coordination of utility relocation, railroad coordination and excess Inventory Management capabilities, including how IRIS can update and receive updated Data from a state's Linear Referencing and any GIS mapping capabilities on both a desktop and mobile platform, where applicable: location photo imagery, assessment of project with respect to property data (Federal, state, county, recreational, railroad, environmental, historical interests).		1	
D.3.	Provide a demonstration of the process capabilities on both a desktop and mobile platform using the sample scenarios described below and any GIS mapping capabilities, where applicable: (a) <u>Scenario 1</u> : Estimation process for potential project considerations for right-of-way acquisition, utility coordination, and railroad coordination for a comprehensive transmittal for project funding. (b) <u>Scenario 2</u> : Process of right-of-way acquisition inclusive of title search, acquisition legal description generation, contracting for consultant appraisal, review of appraisals by staff and/or consultant appraisal review, approval of offer, negotiation with property owner, tenants, and any liens, utility adjustment services, relocation compensation, closing, and condemnation judgements. (c) <u>Scenario 3</u> : Process of property relocation services compliance with federal regulations inclusive of replacement, residential and commercial, considerations and invoicing for, moving, demolition, rent back, acquired property maintenance services, modifications of remainder, utility adjustments. (d) <u>Scenario 4</u> : Process for early notification of utilities for potential projects, coordination of utilities that may be impacted by the project, utility approval of consultant engineering services,		1	

RESPONDENT LEGAL ENTITY NAME:			
submittal of utility coordination estimates for relocation contracting, contracting for relocation, supplemental contracts, invoices submitted for contracts, approval of invoices, and project closeout of contracts. (e) <u>Scenario 5</u> Process for the disposal of excess right of way inventory inclusive of inventory, advertising excess property, leasing property, licensing of property. (f) <u>Scenario 6:</u> Process of coordinating railroad involvement inclusive of railroad property acquisition of rights easement and fee, estimation of potential project cost, preliminary engineering, grade crossing inventory, railroad structure involvement, adjacent railroad operations involvement, contracting railroad services, railroad protective services provisions in the state project bid contract, submittal of invoices, approval of invoices, and contract closeout.			
D.4. Provide a demonstration of the system's Trouble Ticket System capabilities and any GIS mapping capabilities on both a desktop and mobile platform, where applicable.		1	
Total Raw Weighted Score (<i>sum of Raw Weighted Scores above</i>): The Solicitation Coordinator will use this sum and the formula below to calculate the score. Numbers rounded to two (2) places to the right of the decimal point will be standard for calculations.			
$\frac{\text{total raw weighted score}}{\text{maximum possible raw weighted score}} \times 10 = \text{SCORE:}$ (i.e., 5 x the sum of item weights above) (maximum section score)			
<i>State Use – Evaluator Identification:</i>			
<i>State Use – Solicitation Coordinator Signature, Printed Name & Date:</i>			

RFP ATTACHMENT 6.3.

COST PROPOSAL & SCORING GUIDE

NOTICE: THIS COST PROPOSAL MUST BE COMPLETED EXACTLY AS REQUIRED

COST PROPOSAL SCHEDULE— The Cost Proposal, detailed below, shall indicate the proposed price for goods or services defined in the Scope of Services of the RFP Attachment 6.6., *Pro Forma* Contract and for the entire contract period. The Cost Proposal shall remain valid for at least one hundred twenty (120) days subsequent to the date of the Cost Proposal opening and thereafter in accordance with any contract resulting from this RFP. All monetary amounts shall be in U.S. currency and limited to two (2) places to the right of the decimal point.

NOTICE: The Evaluation Factor associated with each cost item is for evaluation purposes only. The evaluation factors do NOT and should NOT be construed as any type of volume guarantee or minimum purchase quantity. The evaluation factors shall NOT create rights, interests, or claims of entitlement in the Respondent.

Notwithstanding the cost items herein, pursuant to the second paragraph of the *Pro Forma* Contract section C.1. (refer to RFP Attachment 6.6.), "The State is under no obligation to request work from the Contractor in any specific dollar amounts or to request any work at all from the Contractor during any period of this Contract."

This Cost Proposal must be signed, in the space below, by an individual empowered to bind the Respondent to the provisions of this RFP and any contract awarded pursuant to it. If said individual is not the *President* or *Chief Executive Officer*, this document must attach evidence showing the individual's authority to legally bind the Respondent.

RESPONDENT SIGNATURE:			
PRINTED NAME & TITLE:			
DATE:			
RESPONDENT LEGAL ENTITY NAME:			
Cost Item Description	Proposed Cost	State Use Only	
		Evaluation Factor	Evaluation Cost (cost x factor)
IRIS Implementation Total Cost	\$	1	
IRIS Hosting, Support, and Maintenance – Year 1 (Note: Actual Year 1 hosting, support and maintenance payment shall be prorated from the date of the implementation phases are completed to the end of the year in which implementation is completed.)	\$	1	
IRIS Hosting, Support, and Maintenance – Year 2	\$	12	
IRIS Hosting, Support, and Maintenance – Year 3	\$	12	

RESPONDENT LEGAL ENTITY NAME:			
Cost Item Description	Proposed Cost	State Use Only	
		Evaluation Factor	Evaluation Cost (cost x factor)
IRIS Hosting, Support, and Maintenance – Year 4	\$ / MONTH	12	
IRIS Hosting, Support, and Maintenance – Year 5	\$ / MONTH	12	
IRIS Hosting, Support and Maintenance Renewal Option 1	\$ / MONTH	12	
IRIS Hosting, Support and Maintenance Renewal Option 2	\$ / MONTH	12	
IRIS Hosting, Support and Maintenance Renewal Option 3	\$ / MONTH	12	
IRIS Hosting, Support and Maintenance Renewal Option 4	\$ / MONTH	12	
IRIS Hosting, Support and Maintenance Renewal Option 5	\$ / MONTH	12	
EVALUATION COST AMOUNT (sum of evaluation costs above): The Solicitation Coordinator will use this sum and the formula below to calculate the Cost Proposal Score. Numbers rounded to two (2) places to the right of the decimal point will be standard for calculations.			
lowest evaluation cost amount from <u>all</u> proposals <hr/> evaluation cost amount being evaluated		x 30 (maximum section score)	= SCORE:
<i>State Use – Solicitation Coordinator Signature, Printed Name & Date:</i>			

Change Orders					
Job Classification (See Contract Attachment B for Job Descriptions)	Year 1	Year 2	Year 3	Year 4	Year 5
	Hourly Rate	Hourly Rate	Hourly Rate	Hourly Rate	Hourly Rate
Jr. Developer	\$	\$	\$	\$	\$
Sr. Developer	\$	\$	\$	\$	\$
Jr. Architect	\$	\$	\$	\$	\$
Sr. Architect	\$	\$	\$	\$	\$
Project Manager	\$	\$	\$	\$	\$
Sr. Project Manager	\$	\$	\$	\$	\$
Business Analyst	\$	\$	\$	\$	\$
Technical Writer	\$	\$	\$	\$	\$
Database Administrator	\$	\$	\$	\$	\$

*Beginning the sixth (6th) anniversary of the Contract Effective Date, the Contractor shall be granted an hourly rate increase effective as of that anniversary and each anniversary thereafter. Any annual increase in the not-to-exceed hourly rates shall be based on (a) Year 5 rates and (b) be lesser or capped at the percentage increase, if any, in the Consumer Price Index for all Urban Consumers (Professional Services) ("CPI"), South Region, published by the United States Bureau of Labor Statistics, in effect for the immediately preceding calendar year.

REFERENCE QUESTIONNAIRE

The standard reference questionnaire provided on the following pages of this attachment should be completed by all individuals offering a reference for the Respondent.

The Respondent will be solely responsible for obtaining completed reference questionnaires as detailed below.. Provide references from individuals who are not current State employees of the procuring State Agency for projects similar to the goods or services sought under this RFP and which represent:

- two (2) contracts Respondent currently services that are similar in size and scope to the services required by this RFP; and
- three (3) completed contracts that are similar in size and scope to the services required by this RFP.

References from at least three (3) different individuals are required to satisfy the requirements above, e.g., an individual may provide a reference about a completed project and another reference about a currently serviced account. The individual contact reference provided for each contract or project shall not be a current State employee of the procuring State agency. Procuring State agencies that accept references from another State agency shall document, in writing, a plan to ensure that no contact is made between the procuring State agency and a referring State agency. The standard reference questionnaire, should be used and completed, and is provided on the next page of this RFP Attachment 6.4.

In order to obtain and submit the completed reference questionnaires following one of the two processes below.

Written:

- (a) Add the Respondent's name to the standard reference questionnaire at RFP Attachment 6.4. and make a copy for each reference.
- (b) Send a reference questionnaire and new, standard #10 envelope to each reference.
- (c) Instruct the reference to:
 - (i) complete the reference questionnaire;
 - (ii) sign and date the completed reference questionnaire;
 - (iii) seal the completed, signed, and dated reference questionnaire within the envelope provided;
 - (iv) sign his or her name in ink across the sealed portion of the envelope; and
 - (v) return the sealed envelope directly to the Respondent (the Respondent may wish to give each reference a deadline, such that the Respondent will be able to collect all required references in time to include them within the sealed Technical Response).
- (d) Do NOT open the sealed references upon receipt.
- (e) Enclose all sealed reference envelopes within a larger, labeled envelope for inclusion in the Technical Response as required.

Email:

- (a) Add the Respondent's name to the standard reference questionnaire at RFP Attachment 6.4. and make a copy for each reference.
- (b) E-mail a reference questionnaire to each reference.
- (c) Instruct the reference to:
 - (i) complete the reference questionnaire;
 - (ii) sign and date the completed reference questionnaire;
 - (iii) E-mail the reference directly to the Solicitation Coordinator by the RFP Technical Response Deadline with the Subject line of the e-mail as "[Respondent's Name] Reference for RFP # 40100-51043".

NOTES:

- The State will not accept late references or references submitted by any means other than the two which are described above, and each reference questionnaire submitted must be completed as required.

- The State will not review more than the number of required references indicated above.
- While the State will base its reference check on the contents of the reference e-mails or sealed reference envelopes included in the Technical Response package, the State reserves the right to confirm and clarify information detailed in the completed reference questionnaires, and may consider clarification responses in the evaluation of references.
- The State is under no obligation to clarify any reference information.

RFP # 40100-51043 REFERENCE QUESTIONNAIRE

REFERENCE SUBJECT: RESPONDENT NAME (completed by Respondent before reference is requested)

The “reference subject” specified above, intends to submit a response to the State of Tennessee in response to the Request for Proposals (RFP) indicated. As a part of such response, the reference subject must include a number of completed and sealed reference questionnaires (using this form).

Each individual responding to this reference questionnaire is asked to follow these instructions:

- complete this questionnaire (either using the form provided or an exact duplicate of this document);
- sign and date the completed questionnaire and follow either process outlined below;

Physical:

- seal the completed, signed, and dated questionnaire in a new standard #10 envelope;
- sign in ink across the sealed portion of the envelope; and
- return the sealed envelope containing the completed questionnaire directly to the reference subject.

E-Mail:

- e-mail the completed questionnaire to:
Josh PolkJoshua.Polk@tn.gov

(1) What is the name of the individual, company, organization, or entity responding to this reference questionnaire?

(2) Please provide the following information about the individual completing this reference questionnaire on behalf of the above-named individual, company, organization, or entity.

NAME:	
TITLE:	
TELEPHONE #	
E-MAIL ADDRESS:	

(3) What goods or services does/did the reference subject provide to your company or organization?

- (4) **If the goods or services that the reference subject provided to your company or organization are completed, were the goods or services provided in compliance with the terms of the contract, on time, and within budget? If not, please explain.**

- (5) **How satisfied are you with the reference subject's ability to perform based on your expectations and according to the contractual arrangements?**

- (6) **In what service delivery areas of does /did the reference subject excel?**

- (7) **In what areas of service delivery does /did the reference subject fall short?**

- (8) **What is the level of your satisfaction with the reference subject's project management structures, processes, and personnel?**

Please respond by circling the appropriate number on the scale below.

1 2 3 4 5
least satisfied ----- most satisfied

What, if any, comments do you have regarding the score selected above?

- (9) **Considering the staff assigned by the reference subject to deliver the services described in response to question 3 above, how satisfied are you with the technical abilities, professionalism, and interpersonal skills of the individuals assigned?**

Please respond by circling the appropriate number on the scale below.

1 2 3 4 5
least satisfied ----- most satisfied

What, if any, comments do you have regarding the score selected above?

(10) Would you contract with the reference subject for the same or similar services again?

Please respond by circling the appropriate number on the scale below.

1 2 3 4 5
least satisfied ----- most satisfied

What, if any, comments do you have regarding the score selected above?

REFERENCE SIGNATURE:

(by the individual completing this request for reference information)

(must be the same as the signature across the envelope seal)

DATE:

RFP ATTACHMENT 6.5.

SCORE SUMMARY MATRIX

	<i>RESPONDENT NAME</i>		<i>RESPONDENT NAME</i>		<i>RESPONDENT NAME</i>	
GENERAL QUALIFICATIONS & EXPERIENCE (maximum: 20)						
<i>EVALUATOR NAME</i>						
<i>EVALUATOR NAME</i>						
<i>REPEAT AS NECESSARY</i>						
	AVERAGE:		AVERAGE:		AVERAGE:	
TECHNICAL QUALIFICATIONS, EXPERIENCE & APPROACH (maximum: 40)						
<i>EVALUATOR NAME</i>						
<i>EVALUATOR NAME</i>						
<i>REPEAT AS NECESSARY</i>						
	AVERAGE:		AVERAGE:		AVERAGE:	
ORAL PRESENTATION (maximum: 10)						
<i>EVALUATOR NAME</i>						
<i>EVALUATOR NAME</i>						
<i>REPEAT AS NECESSARY</i>						
	AVERAGE:		AVERAGE:		AVERAGE:	
COST PROPOSAL (maximum: 30)	SCORE:		SCORE:		SCORE:	
TOTAL RESPONSE EVALUATION SCORE: (maximum: 100)						

Solicitation Coordinator Signature, Printed Name & Date:

RFP # 40100-51043 *PRO FORMA* CONTRACT

The *Pro Forma* Contract detailed in following pages of this exhibit contains some “blanks” (signified by descriptions in capital letters) that will be completed with appropriate information in the final contract resulting from the RFP.

PRO FORMA CONTRACT
DRAFTED IN COMPLIANCE WITH CURRENT APPLICABLE MODEL

**CONTRACT
BETWEEN THE STATE OF TENNESSEE,
DEPARTMENT OF TRANSPORTATION
AND
CONTRACTOR NAME**

This Contract, by and between the State of Tennessee, Department of Transportation (“State”) and **Contractor Legal Entity Name** (“Contractor”), is for the provision of an Integrated Right-of-Way Information System (“IRIS”), as further defined in the "SCOPE." State and Contractor may be referred to individually as a “Party” or collectively as the “Parties” to this Contract.

The Contractor is **a/an Individual, For-Profit Corporation, Non-Profit Corporation, Special Purpose Corporation Or Association, Partnership, Joint Venture, Or Limited Liability Company.**

Contractor Place of Incorporation or Organization: **Location**

Contractor Edison Registration ID # **Number**

A. SCOPE:

A.1. The Contractor shall provide all goods or services and deliverables as required, described, and detailed below and shall meet all service and delivery timelines as specified by this Contract.

A.2. Definitions. For purposes of this Contract, definitions shall be as follows and as set forth in the Contract:

- a. Active Directory: shall mean a Microsoft developed product that provides a broad range of directory-based identity-related services.
- b. Azure Active Directory (“AAD”): shall mean a cloud-based identity and access management service.
- c. Application Programming Interface (API): shall mean set of defined rules that enable different applications to communicate with each other. It acts as an intermediary layer that processes data transfers between systems, letting companies open their application data and functionality to external third-party developers, business partners, and internal departments within their companies.
- d. Architectural Team: shall mean a team of Contractor’s staff responsible for reviewing infrastructure solutions and key decisions on development.
- e. Change Order: shall mean as defined and outlined in Contract Section A.25.
- f. Computer-Aided Design (“CAD”): shall mean computer-based software to aid in design processes.
- g. Data: shall mean all State data uploaded to IRIS, and all data generated through operation of IRIS.
- h. Data Set: shall mean a collection of related sets of information that is composed of separate elements but can be manipulated as a unit by a computer.
- i. Database Administrator (DBA): shall mean the person or persons responsible for all activities related to maintaining an organization's database and keeping data secure. A DBA's priority is maintaining data integrity, keeping it available to users, and preventing unauthorized access. They're responsible for understanding and managing the overall database environment. They also adjust, upgrade, and test modifications to the database as needed.
- j. Development (DEV): shall mean the Development environment/server.
- k. Edison: shall mean the State’s Enterprise Resource Planning (ERP) System.
- l. Esri ArcGIS Linear Referencing Service: shall mean linear referencing services provide access to the data, metadata, and behaviors of a linear referencing system (LRS) in a geodatabase. The root linear referencing resource contains lists of the LRS related layers and LRS workspaces in your published map.

- m. Esri ArcGIS Parcel Fabric Service: shall mean the parcel fabric service performs management and editing operations such as building parcels, merging parcels and assigning parcels to records.
- n. Esri Roads and Highways: shall mean ArcGIS Roads and Highways is a linear referencing system solution providing industry-specific functionality to manage and locate roadway data.
- o. Executive Leadership Team (ELT): shall mean individuals responsible for making key projects decision.
- p. Federal Railroad Administration (FAR): shall mean the agency responsible for creating and enforcing rail safety regulations, administering rail funding, and researching rail improvement strategies and technologies.
- q. FileNet: shall mean the State's current electronic document repository for current and archived documentation. All documents within IRIS would need to be archived into the FileNet system and be retrievable as needed.
- r. Government Accounting Standards Board (GASB): shall mean the independent, private-sector organization based in Norwalk, Connecticut, that establishes accounting and financial reporting standards for U.S. state and local governments that follow Generally Accepted Accounting Principles (GAAP).
- s. Geospatial Information System (GIS): shall mean the integrated computer hardware and software that store, manage, analyze, edit, output, and visualize geographic data.
- t. Graphis User Interface (GUI): shall mean the user interface that allows users to interact with electronic devices through graphical icons and audio, such as primary notation, instead of text-based user interfaces.
- u. Hashing (Hashed Password): shall mean converting a password into something that appears different from its original form through a mathematical algorithm. A password stored in the Video Analytics system database is the "hash" and not the actual password. To verify the users identity, the password provided by a user logging into the Video Analytics system is hashed and then checked against the hash stored in the database.
- v. Inroads: shall mean the software suite of tools currently used by TDOT for GIS managed outside the IRIS system.
- w. Integrated Right-of-Way Information System (IRIS): shall mean a software platform used by the Right-of Way division of the Tennessee Department of Transportation.
- x. Project Management Body of Knowledge (PMBOK): shall mean standard terminology, best practices, and process guidelines governing project management issued by the Project Management Institute.
- y. Project Management Processes: shall mean the procedures for organizing and controlling the work of the project, which shall extend over one or more Product Development Phases.
- z. Program, Project, Resource Management system (PPRM): shall mean the proprietary state portfolio project management system used for managing construction project materials, resources, and scheduling, and exchanges data with IRIS bi-directionally using an API.
- aa. Quality Assurance (QA): shall mean the IRIS Quality Assurance environment/server.
- bb. Relocation Housing Payment (RHP): IRIS shall mean the type of financial assistance provided to tenants who are displaced from their homes due to rehabilitation, demolition, or acquisition for a project in which Federal funds are used.
- cc. Right-of-Way (ROW): shall mean the Division of TDOT responsible for managing all railroad crossings (HELP) and is generally referred to as an easement that is granted, reserved, or purchased for land transportation including accommodation of utilities and other issues affected by or needed for the creation of the project.
- dd. ROW Engineering Office: shall mean the functional office within ROW responsible for reviewing proposed design plan revisions, making recommendations, and creating the "legal

description” (metes and bound) for the boundaries of the property being acquired as the provision of the deed.

- ee. Recovery Point Objective (RPO): shall mean the maximum targeted period in which data might be lost from an IT service due to a major incident
 - ff. Recovery Time Objective (RTO): shall mean the targeted duration of time and a service level within which a business process must be restored after a disaster (or disruption) in order to avoid unacceptable consequences associated with a break in business continuity.
 - gg. Salting (Salted) Password: shall mean adding an additional string of thirty-two (32) or more characters that are randomly generated by a cryptographically secure function to a password before it gets hashed (see “Hashing” definition above). Password salting increases password complexity without affecting user experience.
 - hh. Services: shall mean the deliverables and services described in Sections A.1. – A.28. and Section E.11. of this Contract.
 - ii. System and Organization Controls (SOC), (also sometimes referred to as service organizations controls) as defined by the American Institute of Certified Public Accountants (AICPA), shall mean the name of a suite of reports produced during an audit.
 - jj. State Administrative Personnel: shall mean the authorized persons that perform administrative functions within the IRIS system on behalf of the State.
 - kk. State Administrator: shall mean the singular for State Administrative Personnel.
 - ll. Software as a Service (SaaS): shall mean the software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted. SaaS is typically accessed by users via a web browser.
 - mm. Software Development Life Cycle (SDLC): shall mean the process and methodology through which the product shall be developed, managed, and organized.
 - nn. Transport Layer Security (TLS): shall mean the cryptographic protocol that provides communications security over a computer network. Websites are able to use TLS to secure all communications between their servers and web browsers.
 - oo. Transportation Planning Reporting (TPR) System: shall mean the system that exchanges information about long-range and short-range project planning initiatives with the IRIS system.
 - pp. Tennessee Roadway Information Management System (TRIMS): shall mean the system that exchanges information with the IRIS system about existing road surface conditions.
 - qq. User Acceptance Testing (UAT): shall mean the user acceptance testing environment/server.
 - rr. Virtual Private Network (VPN): shall mean an arrangement whereby a secure, apparently private network is achieved using encryption over a public network, typically the Internet.
 - ss. Work Breakdown Structure (WBS): shall mean a project deliverable that organizes the Contractor's work into manageable sections.
- A.3. The Contractor shall provide a hosted web-based solution for an Integrated Right-of-Way Information System, hereinafter referred to as “IRIS” or “system,” tailored to meet the requirements expressed herein. The Contractor shall provide a solution that meets all State Right-of-Way (ROW) IRIS business/functional requirements. The Contractor shall provide services including the following:
- a. Dedicated project management team
 - b. Weekly stakeholder meetings and status reports with the State
 - c. Comprehensive and end-user friendly reporting functions
 - d. Ability to host Development (DEV), Testing (UAT), and Production (PROD)

- e. Data migration and transition from physical (ORACLE) toward a SaaS solution
- f. Security and Data Integrity
- g. Geospatial Information System integration requiring in-the-system functionality
- h. Self-help end-user knowledge base
- i. Help desk logistics, training, and notifications
- j. Implementation / SDLC Plan and environment synchronization
- k. Post implementation support strategy

A.4. Functional and System Requirements for IRIS:

- a. All design and development of the IRIS system relative to the Functional and System Requirements as stated herein, shall be in keeping with the functional workflow processes for each specific ROW and Utility function.
- b. The IRIS system must have or create Web APIs for connectivity between them and other systems that TDOT deems necessary.
- c. The IRIS system must have an API to interface with the FRA, or a State managed dataset to accept and download required data related to crossings (such as the number of trains, Railroad owners, etc.).
- d. The IRIS system shall interface with the GIS data environment so that translation is an automated and seamless process used by other State agencies.
- e. The IRIS system must accept attachments that can be permanently archived within the system or TDOT's electronic document repository system.
- f. The IRIS system must be able to search and retrieve archived documentation of historical transactions related to the current projects.
- g. Road projects within the system shall be able to draw applicable data from other functional areas within the same overall road project. (For instance, the Acquisition function for a certain tract should be able to draw data from the Appraisal function of the same tract, and the Appraisal function should be able to draw information from the ROW Design function)
- h. The IRIS system must contain an automated assistant component that can guide users through each process when setting up and entering information into one or more functional areas to include form data, submissions, red flags, error reporting, approvals, and overrides. The application automation must be able to recall previous "unfinished" or "incomplete" data that can prompt the user to complete the process until all relevant data entry is complete. Previous sessions by the user must be able to be recalled and prompt the user to the place where the user last stopped working.
- i. The IRIS system must contain an automated billing component for excess land leases.
- j. The IRIS system shall capture, archive and track pictures uploaded from a digital camera, camera phone, and compressed video files.
- k. The IRIS system shall provide the requestor with digital and printable version of completed plans.
- l. Documents shall be in digital form to be shared between ROW Headquarters and ROW Regional offices.

- m. The IRIS documents must be able to be stored electronically both in the vendor cloud and on the State system.
- n. The IRIS must have a plotting capability for deeds.
- m. Project historical records must be reviewable and allow individual updates of tracts as needed.
- n. Projects require an 'Approval' function to finalize the project as finished and it is a supervisory function. This shall initiate a 'Review' and a 'Submit to Supervisor' functions as notifications requesting secure approval requests. Consultants shall have project data entry capability and system access. All project plan documents and activities must be versioned with full rollback capability.
- o. IRIS must track consultants' work and project status including Right of Way Acquisitions, Appraisals, Titles, Relocation, coordination between Utilities and other associated items required for reporting.
- p. The Reporting function shall allow the generation of ad hoc reports from data in the IRIS system.
- q. The Reviewer(s) must be able to access completed forms in IRIS, as well as the ability to add/edit data and view reviewer comments.
- r. Tract information shall be auditable by users with the required permissions. All data records, entries, and user changes shall be auditable.
- s. Access and Permissions for tract information should be auditable. The end-users must have the ability to manage, edit, and add documentation as needed.
- t. The IRIS shall show the status of tracts, send stop-work notices when tract status is changed and resume-work notices shall be sent to resume work. When the status is changed IRIS shall provide summary dashboard capabilities for executive assessment of project status.
- u. Data can only be visible to the appropriate people via role-based security access, and this shall also include consultants who use the system. It is the Contractor's responsibility to maintain the user accesses and controls at the direction of TDOT. Contractor shall meet all security requirements describe in Section A.15. below.
- v. Automated data population retrieves data from common fields within the system to provide metrics for reporting.
- w. The IRIS system shall store ALL documents prepared by all regions. The ROW Engineering Office shall use IRIS to create deeds and hard copies of leases and licenses as required. Legal information shall auto-populate where needed to include legal descriptions of parcels. Upon completing the system, forms shall automatically be moved or have the capability to be transferred and stored as permanent versions in FileNet or the current electronic document repository used by the State.
- x. The IRIS system shall provide the State Attorney General (AG) office data considerations for litigation coordination (e.g., condemnation transactions) pursuant to the security and confidentiality requirements of the AG office.
- w. The Reports Function must track the tract summary, quantity of deeds, show tracts for certification that are closed or complete. It must include a dashboard that allows users to view work queue and project status.
- x. Approval between functional areas is required to control movement from one functional area to the next within the application.
- y. The IRIS system tracks projects completion and prompts users to close completed projects.

- z. Users must be able to move from project to project within one county or from county to county within one project.
- aa. Users must be able to use active forms within IRIS. Word, or Excel documents can be saved, submitted, exported, or cancelled.
- bb. The IRIS system must have functionality to export/import in industry standard formats.
- cc. The IRIS system must be able to provide approvals to capture completed interviews, comments from the interviews and changes.
- dd. The IRIS system shall calculate data for moves, estimates, and scheduling.
- ee. The IRIS system shall print forms for moves for residential and/or non-residential tracts and not add the figures for non-residential and residential into one field; these figures must be separate.
- ff. The IRIS system must capture consultant data sufficient to track all consultant invoices and expenses.
- gg. The IRIS system audit findings must include email notifications to the appropriate parties.
- hh. The IRIS system shall contain all the guidelines, boundaries, scales, etc., to apply the business logic needed to track consultants.
- ii. The IRIS system shall contain a feature allowing users in adjoining regions to grant temporary access to project files for users in another region on projects across regions.
- jj. The IRIS system must be able to pull estimates from each of the ROW and Utility functions described above, and must be able to prefill fields within contracts generated by IRIS with estimate data.
- kk. The IRIS system shall Import Acquisition data into the IRIS database.
- ll. The IRIS system transmission of forms and reports must be done digitally except where a form is required by law to be printed, signed, or notarized.
- mm. The IRIS system must track workflow history and correspondence.
- nn. The IRIS system shall record and track excess land and uneconomic remnants with complete GIS location information track parcel and the date of closing or date of acquisition.
- oo. The IRIS system users must be able to create an excess land record not attached to an existing project to create skeletal project information captured at initial entry.
- pp. All excess land inventory, permits, and project tracts must be track-able through GIS.
- qq. The IRIS system must generate annual invoices for leased properties where funds are due each month, automatically send email versions of the invoices and compile a monthly report of lease billing activity.
- rr. The invoice shall contain text detailing the consumer price index for informational purposes.
- ss. The IRIS system shall capture uneconomic remnants for excess land inventory and a monthly report of uneconomic remnant purchases.
- tt. The IRIS system must record tract information separately for tracts bought for roadway, tracts for mitigation, and tracts for uneconomic remnants.

- uu. The IRIS system must send automated notifications of project milestones to the appropriate personnel. This notification data shall reside and be maintained in the IRIS database.
- vv. Notification of project and process status, levels of notification and reporting needs shall be user configurable. Ad hoc reporting: notification or reporting can be activated for roles or user IDs individually.
- ww. The IRIS system must support communications with other groups which create, consume, or which affect ROW plan components. These groups are Environmental, Design, Regional ROW Engineers, and GIS.
- xx. The IRIS system must pull letting dates from TDOT project management system, i.e., letting dates, project descriptions, project numbers, authorization dates, project contacts, etc.
- yy. The IRIS system shall interface with a TDOT construction management system.
- zz. Form 107C and ROW Certification documentation must be generated within IRIS.
- aaa. The IRIS system must show tracts that are closed or complete for certifications. Utility railroad and ROW certifications shall be automated based on project status, and electronically generated.
- bbb. The IRIS system shall create an appraisal work order estimate, capture data and print appraisal reports.
- ccc. The IRIS system must be able to process relocation benefits in compliance with state and federal regulations.
- ddd. Offer information generated for relocation must have a full disclosure for owners and partial disclosure for tenants.
- eee. Printed forms shall reflect the variable nature of relocation case data needs and only print what applies thus accounting for required fields vs. non-required fields (acquisition shall be included).
 - (1) Capture Form 44A and Form 44 (forms used for estimates), and all other data related to the cost estimate. Capability to assimilate historical data and provide parametric estimations for ROW, utility, and railroad costs.
 - (2) ROW cost estimates must be made for Preliminary and Final ROW plans.
- fff. System Administrators must have appropriate system access to all screens in the IRIS system.
 - (1) For the Utility Permitting process, IRIS must check for existing general agreements which might *affect* the permit.
- ggg. Early Notification, Permitting, and Excess Land processes must have GIS search information that is easily searchable.
- kkk. For Utilities, allow multiple contact groups for each utility.
- lll. Lead a complete, detailed, and thorough training for ALL system users including operators and end users. Provide user trainings, periodic updates through on-site, virtual, or video recorded sessions. Provide up-to-date manual and/or online presentations of application learning.
- mmm. Permitting must be able to do a GIS search of facilities within a specified polygon.
- nnn. Contractor's design shall include a reliable, robust solution with web interface that shall reside in a vendor-hosted secure server environment.

- ooo. Interfaces shall interface with and allow extensive and customizable reporting capabilities for right of way information from the TDOT project management system.
- ppp. The IRIS system shall contain automation allowing for email notifications.
- qqq. For Projects within IRIS, Project ID must be viewable on each screen
- rrr. Project files must have a save function to save to its current state, as well as an auto-save prompt upon exit whereby a user can exit safely and then come back to point where the work was saved.
- sss. Estimates for projects must be viewable for historical trending.
- ttt. The IRIS system must allow team collaboration, or redlining, on electronic design plans revisions. necessary for ROW acquisition, condemnation, utility coordination and/or, if applicable, railroad coordination.
- uuu. ROW's commitments to property owners must be captured and tracked in the IRIS system. Any additional commitments are communicated to the appropriate office or commensurate application (Environmental, construction, maintenance, etc.) Stream mitigation considerations are documented for location and transmitted to appropriate offices. Railroad easements/acquisition/permits are documented for location.
- vvv. The IRIS system system must have remote access capability through a Certificate based Secure Web Portal.
- www. The IRIS shall have collaboration features that can be used and shared between users, groups, and departments.
- xxx. Invoicing and billing functions for ROW shall be available in IRIS.
- yyy. The system shall be able to print the brochure for ROW administrative purposes. Should be able to print all materials to be provided as hardcopies to property owners.
- zzz. Geospatial Information Systems (GIS) requirements for IRIS are as follows:
 - (1) Map Integration and Display:
 - i. Mapping Interface: Each section of the application requiring a map should have a designated map container where the map shall be displayed.
 - ii. Map Controls: Include navigation controls (zoom in, zoom out, pan) to allow users to interact with the map.
 - iii. Map Layers Panel: Provide a panel or toggle buttons to allow users to select and toggle different data layers relevant to that area.
 - iv. Basemaps: Users should be able to switch between various basemap options, such as street maps, satellite imagery, topographic maps, etc. The option of TNMap Imagery Basemap service is required.
 - (2) Map Functionality:
 - i. Search and Geolocation: Allow users to search for specific locations within the area or find their desired location on the map. Also allow for searching of data layer attributes to find records of interest.
 - ii. Data Creation and Editing: Include tools to allow users to edit data layers relevant to the application section accessed, such as utility permits and parcel acquisitions.
 - (3) Map Data Layer Management:
 - i. Layer Selection: Users should be able to choose from a predefined set of data layers specific to the area they are viewing .
 - ii. Default Layers: Set up default layers that are commonly relevant to the specific area. These layers should be displayed when the map loads.
 - iii. Layer Interaction: Users should be able to toggle layers on and off.

- iv. Layer Legend and Information: Provide a legend or tooltip to explain the meaning of each layer's symbols or colors.

(4) Geographic Data Integration:

- i. Referenced Data: Configure Map Data Layers relevant to each application section map to be used for visualized reference as determined by TDOT needs. These layers shall not be editable within the map display. Examples are web services from: TNMap, TDEC, TWRA, FRA, etc.
- ii. Operational Data: Configure Map Data Layers relevant to each application section map to be used for management of geographic data as determined by TDOT needs. These layers shall be editable within the map display.
- iii. Data Sources: Sources of geographic data shall originate from internal (TDOT) web servers, external (public) web servers and file-based sources (CSV, Text, CAD, Esri Geodatabase, etc.).
- iv. Data Formats: Internal and external web data sources shall be accessed via ArcGIS REST endpoints of Esri ArcGIS Map or Feature services. File-based sources should be accessed through standard methods.

(5) Geographic Data Management

- a. Parcel Data Management: Enable users to create and update acquired parcels with attributes required to maintain geometry in the Esri ArcGIS Parcel Fabric data model using the API capabilities of the Esri ArcGIS Parcel Fabric Service REST endpoints.
 - i. Parcel Types: Parcel data shall include, as a minimum, the following:
 1. Original parcel impacted by acquisition
 2. Acquired portion of the original parcel
 3. Portion of acquired parcel representing ROW
 4. Portion of acquired parcel representing roadway
 5. Portion of parcel considered an Uneconomic Remnant
 6. Portion of acquired parcel for mitigation effort
 7. Portions of acquired parcel identified as having an easement
 8. Portion of acquired parcel identified as Excess Land
 9. Requests for purchase of existing ROW
 10. ROW sold as Excess Land
 11. ROW permitted and/or leased for use by external entities
 12. Leased ROW
 - ii. Parcel Geometry Origin Sources: Enable users to create parcel geometry from sources including CAD Design files, geographic files, geographic web services, and/or surveyed coordinates in text, CSV, or spreadsheets.
 - iii. Parcel Data Maintenance: Enable users to perform the following parcel geometry functions programmatically through Esri ArcGIS Parcel Fabric Service REST API endpoints: Creation, Adjustment, Validation, Version History, etc.
- b. Roadway Event Data Management: Enable users to create and update Roadway events related to ROW and/or retrieve TDOT Roadway Network Linear Reference System (LRS) attributes through the capabilities of the Esri ArcGIS Linear Referencing Service REST endpoints. TDOT uses the Esri Roads and Highways data model for the roadway network.

(6) Geoprocessing Services:

- a. TDOT Geoprocessing Services: Web services for performing geographic functions are hosted by TDOT and made available through Esri ArcGIS Servers hosted within the TDOT technology environment. They are accessible through REST API endpoints on those servers. These shall include default services for the Parcel Fabric and Linear Referencing capabilities.
- b. Custom Application Geoprocessing Services: Any geoprocessing services required solely for functionality of the IRIS application shall be hosted on the vendor's infrastructure.

A.5. Project Management.

- a. The Contractor shall produce various Project Management Process deliverables and outputs throughout the project, and shall be managed, produced, and updated by the Contractor, while others are natural work-products arising from the shared effort between the Contractor and the State.
- b. The Master Project Work Plan shall be completed using Microsoft Project Schedule. Project Schedules should be kept updated weekly as Gantt charts and network diagrams shall be used frequently to track the project status by the State's Management Team.
- c. Microsoft Project Schedule, Status Reports, Meeting Notes and Minutes, Management Plan, Work Plan, Communications Plan, Technical Plan, and all other project-related documents including all project document deliverables, shall be maintained and updated on the State's SharePoint website.
- d. The State's project team includes a Project Manager, Right-of-Way Subject Matter Expert, Business Analyst and Database Administrator. The Contractor's project team staff shall be on-site at the State's project site and dedicated full-time. The Contractor's project team staff shall be on-site at the State's project site and dedicated full-time.

A.6. Definition Phase Requirements. Contractor shall develop and validate detailed Requirements. This Phase shall begin after the Notice to Proceed is received from the State. Notice to Proceed shall be in writing and occur once the Contractor receives the Notice of Proceed.

- a. Work Plan – Within two (2) weeks of the State issuing the Notice to Proceed, the Contractor shall generate and deliver to the State a detailed work plan and schedule addressing all work scope defined in the contract for the provisioning of a fully functional and integrated IRIS system. The work plan shall include a Work Breakdown Structure (WBS) and a responsibility matrix. The work plan shall be subject to review and approval by the State.
- b. General - For purposes of this Contract, the Requirements Definition Phase shall combine project start-up and planning activities with requirements validation activities. The purpose of this phase is two-fold. First, processes and procedures are put in place that shall govern how the project is organized and managed. Second, business and user needs are analyzed to validate existing requirements.

The Contractor shall adhere to the State's IT Methodology which is based on the Project Management Institute's Project Management Body of Knowledge (PMBOK) processes. PMBOK is a widely recognized standard that brings together the best practices for project management. Any variation or change in Project Management procedures require prior approval by the State's Management team.

A project such as the IRIS development and implementation shall require the coordination of skilled information technology professionals and effective communications both within the organization and with external stakeholders. Ongoing project management activities focus on ensuring that project resources are used efficiently and that the project outcome delivers the desired product.

- c. Tasks and Activities (Project Management) -The following Project Management tasks and activities shall be provided by the Contractor during this phase:
- (1) Create a Project Management Plan that includes the following:
 - i. Management Plan
 - ii. Communications Plan
 - iii. Technical Plan and Approach
 - iv. Work Plan
 - v. Quality Management Plan
 - vi. Configuration Control Plan
 - vii. Risk Management Plan
 - viii. Knowledge Transfer Plan and Training
 - ix. Create Microsoft Project Schedule for the entire project
 - (2) Conduct On-going Project Management:
 - i. Conduct project team meetings
 - ii. Monitor progress toward the key milestones
 - iii. Monitor Microsoft Project Gantt Charts and Network Diagrams that show critical path manage open issues
 - iv. Coordinate project team activities
 - v. Provide weekly schedule updates
 - vi. Provide an open issues management report
 - vii. Provide a weekly status report
 - viii. Maintain a "Lessons Learned" database / spreadsheet
 - (3) End of Phase Life Cycle Review:
 - i. Review deliverables
 - ii. Obtain deliverable approval / sign-off
 - iii. Review project progress / issues
 - iv. Obtain end-of-phase concurrence
 - v. Obtain authorization to proceed to next phase
- d. Tasks and Activities (Requirements Validation). The Contractor shall provide the following requirements validation tasks and activities shall be provided by the Contractor during this phase.
- (1) Validate existing requirements. This shall involve joint sessions with appropriate State staff to review all requirements and ensure that the Contractor's understanding of the requirement conforms to that of the State.
 - (2) Modify, clarify, and add detail to system requirements as necessary
 - (3) Review and validate business process workflows.
 - (4) Create a detailed Requirements Document.
- e. Products and Delivery Schedule
- (1) Project Management Plan Per the Work Plan

(2) Management Plan	Per the Work Plan
(3) Communications Plan	Per the Work Plan
(4) Technical Plan and Approach Work Plan (MS project)	Per the Work Plan
(5) Quality Management Plan	Per the Work Plan
(6) Configuration Control Plan	Per the Work Plan
(7) Risk Management Plan	Per the Work Plan
(8) Knowledge Transfer Plan	Per the Work Plan
(9) Project Status Report	Per the Work Plan
(10) Provide updated Microsoft Project Schedule with Gantt Chart and Network Diagram showing critical path	Per the Work Plan
(11) Open Issues Management Report	Per the Work Plan
(12) Lessons Learned Report	Per the Work Plan
(13) Phase End Review	Per the Work Plan

f. Deliverables and Delivery Schedule

(1) Detailed Requirements Document	Per the Work Plan
(2) Data Requirements Definition	Per the Work Plan
(3) Logical Data Model	Per the Work Plan

A.7. Design Phase Requirements. Design the IRIS and provide the framework for constructing the product.

a. General

The purpose of the Design Phase is to transform the requirements defined in the previous phase into a complete, detailed specification for the system. The analysis of this phase is performed within the framework of the system initiative, converting the functional requirements into a complete system design that shall guide the work of the build phase. The decisions in this phase detail how the system shall meet the previously defined functional requirements.

b. Tasks and Activities - The Contractor shall provide the following

tasks and activities during this phase:

- (1) Provide updates to previous deliverables as necessary
- (2) Create the Design Document
- (3) Create the Data Management Plan
- (4) Conduct On-going Project Management:
 - i. Conduct project team meetings
 - ii. Monitor progress toward the development and implementation plan and key milestones
 - iii. Manage open issues
 - iv. Coordinate project team activities
 - v. Provide weekly schedule updates
 - vi. Provide an open issues management report
 - vii. Provide a weekly status report (the Contractor should submit a proposed format for State approval)
 - viii. Maintain a "Lessons Learned" database / spreadsheet
- (5) End of Phase Life Cycle Review:
 - i. Review deliverables
 - ii. Obtain deliverable approval/sign-off
 - iii. Review project progress/ issues
 - iv. Obtain end-of-phase concurrence
 - v. Obtain authorization to proceed to the next phase

c. Products and Delivery Schedule

- | | |
|-----------------------------------|-------------------|
| (1) Project Status Report | Per the Work Plan |
| (2) Open Issues Management Report | Per the Work Plan |
| (3) Lesson Learned Report | Per the Work Plan |
| (4) Brief the ELT Committee | Per the Work Plan |
| (5) End of Phase Review | Per the Work Plan |

d. Deliverables and Delivery Schedule

- | | |
|---|-------------------|
| (1) Update Previous Phase Deliverables | Per the Work Plan |
| (2) Data Management Plan Configuration and Capacity Planning Information System Requirements from the Definitions Phase | Per the Work Plan |
| (3) Logical and Physical Data Model Design Plan | Per the Work Plan |
| (4) Integration Plan | Per the Work Plan |
| (5) Production Requirements | Per the Work Plan |
| (6) Data Population Requirements for IRIS | Per the Work Plan |

(7) Backup and Recovery Requirements	Per the Work Plan
(8) General Design Documents	Per the Work Plan
(9) System Overview	Per the Work Plan
(10) System Architecture	Per the Work Plan
(11) Design Considerations	Per the Work Plan
(12) Detailed Design Documents and Plan	Per the Work Plan
(13) System Overview	Per the Work Plan
(14) Process Decomposition	Per the Work Plan
(15) Requirements Allocation to Components	Per the Work Plan
(16) Detailed Design Specification	Per the Work Plan
(17) Review and Approval of Design by State	Per the Work Plan

A.8. Build Phase Requirements. The Contractor shall build and test IRIS components, integrate and test component assemblies, and prepare for acceptance tests.

- a. General - The purpose of the Build Phase is to convert the deliverables of the design phase into a complete information system. The activity in the Build Phase addresses the computer programs that make up the system. The activities of this phase translate the system design produced in the design phase into a working information system capable of addressing the information system requirements. The elements of the system are developed, tested, and integrated: system software, applications, procedures, and associated documentation. At the end of this phase, the system is ready for the activities of the acceptance test phase.
- b. Tasks and Activities - The Contractor shall provide the following tasks and activities during this phase:
 - (1) Provide updates to previous deliverables as necessary
 - (2) Inclusion of unlimited licensing
 - (3) Create program code (where required) and compile and refine the program modules
 - (4) Create and test Databases
 - (5) Build and test IRIS components
 - (6) Integrate and test component assemblies
 - (7) Prepare Test Documentation
 - (8) Prepare Implementation Plan
 - (9) Perform a test readiness review

- (10) Conduct On-going Project Management:
 - i. Conduct project team meetings
 - ii. Monitor progress toward key milestones
 - iii. Manage open issues
 - iv. Coordinate project team activities
 - v. Brief ELT on project progress
 - vi. Provide weekly work plan/ schedule updates
 - vii. Provide an Open Issues Management Report
 - viii. Provide a Weekly Status Report
 - ix. Maintain a "Lessons Learned" database/ spreadsheet
- (11) End of Phase Life Cycle Review:
 - i. Review deliverables
 - ii. Obtain deliverable approval/ sign-off
 - iii. Review project progress/issues
 - iv. Obtain end-of-phase concurrence
 - v. Obtain authorization to proceed to the next phase

c. Tasks and Activities Delivery Schedule

- | | | |
|-----|--|-------------------|
| (1) | Provide Base License Initial Licensure | Per the Work Plan |
| (2) | Create program code and compile and refine the program modules | Per the Work Plan |
| | (3) Build and Test IRIS components | |
| (4) | Provide migration process for populating IRIS with the State's existing Oracle production database | Per the Work Plan |
| (5) | Create and Test Databases | Per the Work Plan |
| (6) | Project Status Report | Per the Work Plan |
| (7) | Open Issues Management Report | Per the Work Plan |
| (8) | Lessons Learned Report | Per the Work Plan |
| (9) | End of Phase Review | Per the Work Plan |

d. Deliverables and Delivery Schedule

- | | | |
|----|------------------------------------|-------------------|
| 1. | Update Previous Phase Deliverables | Per the Work Plan |
| 2. | Prepare Test Documentation | Per the Work Plan |
| | Test Strategy | Per the Work Plan |
| | Pilot Test Approach | Per the Work Plan |
| | Test Management Plan | Per the Work Plan |
| | Integration Test Plan | Per the Work Plan |
| | System Test Plan | Per the Work Plan |

Capacity Evaluation Plan	Per the Work Plan
Capacity Evaluation Report	Per the Work Plan
Acceptance Test Plan	Per the Work Plan
Functional Testing	Per the Work Plan
Performance/Load Testing	Per the Work Plan
Interface Testing	Per the Work Plan
3. Prepare Implementation Plan	Per the Work Plan
Training Approach	Per the Work Plan
Implementation Approach	Per the Work Plan
Contingency Approach	Per the Work Plan

A.9. Acceptance Test Phase Requirements. The Contractor shall evaluate the ability of IRIS to satisfy all product requirements by the customer organization and obtain necessary signoff on the product.

- a. General - The primary purpose of the Acceptance Test Phase is to prove that the developed system satisfies the requirements defined in the Requirements Document. The secondary purpose is to perform a system / integration test as specified by the design parameters. This function shall be the responsibility of the quality assurance staff and will be heavily supported by the user participants.
- b. Tasks and Activities - The Contractor shall provide the following tasks and activities during this phase:
 - (1) Provide updates to previous deliverables as necessary
 - (2) Prepare Operations Manual
 - (3) Prepare User's Manual
 - (4) Prepare training plan
 - (5) Initiate user training
 - (6) Conduct unit/ module, subsystem integration, system qualification, system acceptance and security tests
 - (7) Prepare test analysis reports documenting the results of each formal test
 - (8) Finalize program modules
 - (9) Initiate Help Desk Support
 - (10) Conduct On-going Project Management:
 - i. Conduct project team meetings
 - ii. Monitor progress toward key milestones
 - iii. Manage open issues
 - iv. Coordinate project team activities
 - v. Brief stakeholders on project progress
 - vi. Provide weekly work plan / schedule updates
 - vii. Provide an Open Issues Management Report
 - viii. Provide a Weekly Status Report
 - ix. Maintain a "Lessons Learned" database/ spreadsheet

- (11) End of Phase Life Cycle Review:
 - i. Review deliverables
 - ii. Obtain deliverable approval / sign-off
 - iii. Review project progress / issues
 - iv. Obtain end-of-phase concurrence
 - v. Obtain authorization to proceed to next phase

c. Products and Delivery Schedule

- | | | |
|---|---------------|-------------------|
| (1) Prepare Operations Manual | | Per the Work Plan |
| (2) Prepare Users' Manual | | Per the Work Plan |
| (3) Prepare Training Plan | | Per the Work Plan |
| (4) Classroom-Based | Instructional | Per the Work Plan |
| | Materials | |
| (5) Online/Computer-Based Training | | Per the Work Plan |
| (6) Initiate User Training for QA/Testers | | Per the Work Plan |
| (7) Prepare Test Analysis Reports | | Per the Work Plan |
| (8) Finalize Program Modules | | Per the Work Plan |
| (9) Initiate Help Desk Support | | |
| i. Help Desk Transition Plan | | Per the Work Plan |
| ii. Help Desk Scripts | | Per the Work Plan |
| (10) Project Status Report | | Per the Work Plan |
| (11) Open Issues Management Report | | Per the Work Plan |
| (12) Lessons Learned Report | | Per the Work Plan |
| (13) End of Phase Review | | Per the Work Plan |

d. Deliverables and Delivery Schedule

- (1) Update Previous Phase Deliverables
Per the Work Plan

A.10. Implementation Phase Requirements. Complete IRIS integration, train users, monitor product operation, and update documentation.

- a. General - The Implementation Phase shall build on the results of all prior phases. The Implementation Phase includes efforts required to prepare for the implementation of the new system, implementation of the system in a production environment, and resolution of any problems identified during the implementation process. During this Phase, the system or system modifications are installed and operational in a production environment; user training is conducted; and IRIS is turned over to the State of Tennessee.

The Implementation Phase implements the system components of the system developed during the build phase. Any deficiencies in implementing the system will handicap the initial use of the system. Therefore, deficiencies must be addressed prior to fully implementing the system in a production environment before is turned over to the user. Modifications to the

system should be completely documented to provide accurate documentation to users, operators, and other affected personnel. At the end of this phase, the production baseline is established, and it consists of the production system, database(s), and data dictionary.

- b. Tasks and Activities - The Contractor shall provide the following tasks and activities during this phase:
 - (1) Provide updates to previous deliverables as necessary
 - (2) Provide Base License System Support
 - (3) Conduct system tuning tests
 - (4) Complete user and operator training
 - (5) Load design data dictionary to production data dictionary
 - (6) Deliver IRIS code and install it in a production environment
 - (7) Populate data from old ROW systems to use with the new IRIS system.
 - (8) Confirm that the system is ready for operation
 - (9) Work with the data administrator to enter metadata about IRIS into the data repository. The project team will coordinate with the DBA regarding what metadata components related to the data will be maintained and its location.
 - (10) Prepare the Disaster Recovery Plan
 - (11) Certify State system security and readiness features (certification and accreditation)
 - (12) Prepare the IRIS documentation in conjunction as defined in the work plan.
 - (13) Provide Help Desk Support
 - (14) Conduct On-going Project Management:
 - i. Conduct project team meetings
 - ii. Monitor progress toward key milestones
 - iii. Manage open issues
 - iv. Coordinate project team activities
 - v. Brief stakeholders on project progress
 - vi. Provide weekly work plan / schedule updates
 - vii. Provide an Open Issues Management Report
 - viii. Provide a Weekly Status Report
 - ix. Maintain a "Lessons Learned" database / spreadsheet
- c. End of Phase Life Cycle Review:
 - i. Review deliverables
 - ii. Obtain deliverable approval / sign-off
 - iii. Review project progress/ issues
 - iv. Obtain end-of-phase concurrence
- d. Products and Delivery Schedule
 - (1) Provide Base System License Support Per the Work Plan
 - (2) Conduct System Tuning Tests Per the Work Plan

- | | |
|---|-------------------|
| (3) Complete User and Operator Training | Per the Work Plan |
| (4) Load Design Data Dictionary to Production Data Dictionary | Per the Work Plan |
| (5) Deliver and Install IRIS in Production | Per the Work Plan |
| (6) Enter IRIS Information into Data Repository | Per the Work Plan |
| (7) Provide Help Desk Support | Per the Work Plan |
| (8) Review and Certify the System is Ready for Production/Conduct Cut-Over Activities | Per the Work Plan |
| (9) Conduct Post Implementation Review | Per the Work Plan |
| (10) Project Status Report | Per the Work Plan |
| (11) Open Issues Management Report | Per the Work Plan |
| (12) Lessons Learned Report | Per the Work Plan |
| (13) End of Phase | Per the Work Plan |

e. Deliverables and Delivery Schedule

- (1) Update Previous Phase Deliverables
- (2) Prepare Disaster Recovery or Business Continuity Document
- (3) Prepare the IRIS system Assessment Review Document

- A.11. Base License. The Contractor shall provide unlimited USER licenses and ACCESS to the State for using IRIS (licenses are referred to herein as the "base license"). These licenses shall include production, test and development systems.
- A.12. Data Access. IRIS shall provide direct database access and the capability for the State to access bulk and individual record Data from IRIS with no impact to user operation of IRIS.
- A.13. IRIS Architecture. The Contractor shall provide a system that conforms to the architectural guidelines outlined in Attachment D by the State. At a minimum this shall:
- a. Ensure a compatible statewide network of information technology hardware, software, and communications resources.
 - b. Enables the interchange of data.
 - c. Allows for the use of information technology systems while maintaining maximum compatibility statewide.
- A.14. The Contractor shall present the IRIS Architecture (General and Detailed Design Documents) to the State's Management Team. The State's Management Team may request that the Contractor present the IRIS architecture to the State's Architectural Team for review and approval if determined to be necessary. If submitted to the Architectural Team, any further recommended changes to the baseline IRIS architecture must be returned to the Architectural Team for

consideration and approval. Included within the General and Detailed Design Documents shall be the following:

- a. Network Diagram – depicts the nodes and connections amongst nodes in a computer network.
- b. Deployment Diagram – models the hardware used in system implementations, the components deployed on the hardware, and the associations between those components.
- c. Data Model – a physical description of the data model instance – concentrating on the implementation features of the particular database hosting the model.

A.15. IRIS Security. The Contractor shall provide a solid risk management approach to application development and deployment in terms of threat and vulnerability identification, analysis and prioritization, and mitigation techniques. All solutions shall follow the state of Tennessee’s EISP found here: [Enterprise-Information-Security-Policies-v2-3-ISO-27002-12-21-2018-Internal-FINAL-with-Sigs \(tn.gov\)](#)

- a. Restrict Access. IRIS shall restrict access by role to protect against fraud and error.
- b. User Account Security. IRIS shall require a unique username and password to be created for each account and require the user to enter the unique username and password in order to access IRIS. Access to the account shall only be granted to a user that correctly enters the username and password combination. The user shall be allowed to change the password at any time. IRIS shall securely maintain usernames and passwords.
- c. Account Security Audit Trails. IRIS shall create a security audit trail of account management activities, including the time of activity and identify the State Administrator who added, suspended, deleted, flagged, reactivated or changed information in an account. IRIS shall require a State Administrator performing a suspension, deletion or re-activation to give a reason for the action.
- d. Password Protections. IRIS shall reject passwords considered too simple or easily guessed.
 - 1) The password cannot contain the user name. must be at least eight (8) characters, support Four Factor Authentication (4FA) and include all of the following four (4) criteria:
 - i. Uppercase characters of European languages (A through Z, with diacritic marks, Greek and Cyrillic characters)
 - ii. Lowercase characters of European languages (a through z, sharp-s, with diacritic marks, Greek and Cyrillic characters)
 - iii. Numeric character of base 10 digits (0 through 9)
 - iv. Non-alphanumeric characters: ~!@#%&* _-+=`|()\{}[];:”<>.,?/, including any Unicode character that is categorized as an alphabetic character but is not uppercase or lowercase. This includes Unicode characters from Asian languages
 - 2) IRIS shall provide the capability to activate and enter a schedule for user passwords to be changed. Passwords must be changed every 90 days or less from the last change. Temporary or default passwords assigned by system administrators or dictated by the operating system must be changed immediately after initial login.
 - 3) IRIS shall contain “forgot password” functionality allowing users the ability to retrieve or reset their password in an automated fashion.
 - 4) User ID Suspension after Failed Login. IRIS shall suspend a user ID after a State configurable number of failed login attempts (e.g., requiring a State Administrator to reset a password). User ID's will be revoked after five (5) consecutive attempts to login with an invalid password.
 - 5) TN Trips shall be configured to remember a password history of 4 at a minimum.
 - 6) All passwords should be hashed and salted

- e. Authentication Rules. IRIS shall apply different authentication rules to different user roles such that State Administrative Personnel have stricter and more secure rules than the public. For example, State Administrator account passwords must meet all of the requirements named in Section A.15.d. above, contain a minimum of eight (8) characters, may have more rigid rules regarding the characters allowed in a password, and may be required to change their passwords more frequently. A State Administrator must use a multifactor VPN solution to obtain access to IRIS.
 - f. Data Security. The Contractor shall prevent security breaches, including but not limited to unauthorized usage, denial of service attacks, and data breaches.
 - 1. All data generated through operation of IRIS ("Data") shall reside and be stored within the continental USA, inclusive of backup Data, and Contractor shall prevent any transmission of this Data outside the USA.
 - 2. The Contractor may perform tasks at any geographical location as long as the Contractor does not transmit Data outside of the USA. Any work performed outside of the USA must be the result of a work product that was developed independently from the State Data.
 - g. Data Ownership. The Data collected and stored by IRIS shall be the sole property of the State. The State solely and exclusively owns and retains all right, title and interest, whether express or implied, in and to any and all State Data. Contractor has no and acquires no right, title or interest, whether express or implied, in and to State data. Contractor will only use State data for the purposes set forth in the Contract.
 - h. Data Portability. TDOT is the ultimate owner of all data uploaded to and/or created within any hosted solution. The vendor will port that data in its entirety to common technical standards upon request from TDOT.
 - i. Data Privacy & Secure Communication. All Data shall be encrypted both at rest and in transit using validated encryption technologies. All Data shall be communicated over TLS version 1.2 or higher.
 - j. Active Directory Integration. IRIS shall utilize a Single Sign On ("SSO") using the State of Tennessee's Active Directory ("AD") for employee enterprise login, accessed externally by cloud providers from Azure Active Directory ("AAD"), so that State employees, along with ad hoc users for external entities, will have the capability to access IRIS using their enterprise login. IRIS shall leverage AAD/Security Assertion Markup Language (SAML) for SSO for web interface and through any supported native applications.
 - k. Facility Audits. With advance notice from the State, and no more than one (1) time per calendar year, the Contractor agrees to allow the State to perform logical and physical audits of the Contractor's facility and systems that are hosting Confidential Information and other Data.
- A.16. Mobile Technology Integration. The IRIS system shall have the ability to interface with communications systems to send mobile alerts and notifications to cell phone devices where required to users in the field, i.e., appraisers, management.
- A.17. Migration. The Contractor shall provide a migration process for populating IRIS with the State's existing Oracle production database.
- A.18. Interface Development. IRIS shall provide an electronic data interface with the following systems and applications:
- a. TDOT's project management system will exchange information about construction project materials, resources, and scheduling with IRIS. This interface would require the exchange of data between the two systems.
 - b. Esri Roads and Highways will exchange information about existing road surface conditions with IRIS.

- c. TDOT's electronic document repository for current and archived documentation. All documents (forms, etc.) within IRIS must be archived into the FileNet system and be retrievable as needed.
- d. MicroStation CADD - computer-aided drafting and design program used by the design and engineering teams to generate plan drawings pertinent to Right-of-Way. CADD information needs to be made available to IRIS.
- e. TDOT's portal that contains the State's Bid Letting information. This system must to exchange data with IRIS and provide letting information and dates.
- f. TDOT's Construction Management System contains roadway construction project information that must be exchanged with IRIS.
- g. TDOT's transportation planning reporting that will exchange information with IRIS about long range and short-range project planning initiatives.

A.19. IRIS Hosting, Support, and Maintenance. The Contractor shall provide annual hosting, support and maintenance for IRIS, including the following:

- a. IRIS Reliability. IRIS shall provide full functionality twenty-four (24) hours/day, seven (7) days/week, ninety-nine-point nine percent (99.9%) of the time, except for scheduled maintenance and planned software updates. If annual IRIS reliability fails to meet this requirement, the Contractor shall provide to the State a prorated hosting, maintenance, and support service credit for the total minutes of downtime for the year.
- b. Help Desk. The Contractor shall have a help desk with project management and support personnel available for electronic submittal, active tracking, status, resolution, updated documentation for IRIS during the time of the contract, capability for users to phone, chat online, Microsoft Teams inactive control of user session, and email consultation during the hours of 7:00 AM to 5:00 PM Central Time, Monday through Friday, (AWS begins at 6:00 AM) excluding State holidays. Contractor and State users shall mutually identify email and phone numbers for non-business-hour critical issues.
- c. Trouble Tickets. The Contractor shall maintain an on-line Trouble Ticket System ("Trouble Ticket System") that allows State Users to submit IRIS performance, maintenance, support, and any other IRIS technical issues or defects to the Contractor. The Trouble Ticket System shall provide ticket status visibility to the Contractor and the State. The Trouble Ticket System shall be used to track all IRIS performance, maintenance, support, and any other IRIS technical issues or defects, and shall maintain ticket status including, ticket submission date, the submitter, the Contractor staff assigned to address the ticket, and the ticket resolution date.
- d. Response Time. The Contractor shall confirm receipt and begin resolving technical issue(s) or Defects in IRIS within (1) one working hour of being notified. The Contractor shall document all issues and their fixes.
- e. Documentation. Complete documentation of all IRIS enhancements or revisions shall be provided with new releases of software. Documentation shall describe, in a user-friendly manner, what State Users need to know to understand each level on which the software operates. The documentation shall specifically include documentation of the database, including Data entity and attribute definitions, table and field names, Data types, Data sizes, business rules, and entity-relationship diagrams that depict all relationships between tables and fields in the database using industry and State standards. Documentation shall include a tutorial quick start outline for "new" users as well as an index for advanced users to detailed documentation.
- f. Time Frames for Services. Contractor shall provide emergency maintenance services to correct code problems, or any performance or operational problems related to the design or coding of the IRIS software. Products and services shall be either replaced, revised, repaired, or corrected within a reasonable timeframe of thirty (30) days if written notification is issued by the State of the Defects; provided, however, that if the continued use of a Defective product or

service would cause damage to the State computer system(s) or associated Data, or would otherwise seriously impair, as determined by the State, the ability of users of the system(s) to do their jobs or the functions for which IRIS was established, then Contractor shall act to repair the Defect immediately, unless an extension is otherwise granted in writing, by the State. The State shall determine when any Defects have been resolved.

- g. Contact for Services. The Contractor shall be the initial contact point for all IRIS maintenance and support notifications and support requests, regardless of the perceived source of the problem, or whether the Contractor or a subcontractor/third party owns and/or directly maintains the faulty software.
 - 1) The Contractor may elect to have support services performed by subcontracted personnel, in accordance with Section D.7.; however, if this is the case, the Contractor shall be responsible for coordinating the effort so that the use of any third-party support is transparent to the State and so that the State shall not have to deal directly with the subcontractor. Contractor cannot tender or transfer such services to a third party.
- h. Maintenance Schedules. The Contractor shall provide written notification to the State at least three (3) weeks in advance of planned software upgrades, maintenance and/or application software releases, including for critical emergency releases to maintain operations. Planned software upgrades and maintenance shall be performed during the non-peak usage hours of 6:00 PM – 5:00 AM Central Time Monday through Friday, and Friday 6:00 PM through Monday 5:00 AM. Software upgrades shall be fully tested by both the Contractor and the State prior to implementation to ensure that there are no version incompatibilities. The Contractor shall ensure that all potentially affected users are notified in advance if IRIS shall be halted to provide maintenance.
- i. Interface / Integration Management. The Contractor shall maintain IRIS interfaces to ensure that the interfaces and integration remain compatible for all current interface and integration versions.
- j. Maintenance of Operations and Services during Work. The correction of Defects shall not detract from or interfere with software maintenance or operational tasks.
- k. Problems Not Caused by Contractor Fault. If Contractor personnel determine that the problem is not the fault of Contractor-provided software or hardware, then the Contractor shall notify State support personnel immediately. If the State agrees that the problem is due to software, hardware, or project management decisions that are not the fault of Contractor, the Contractor shall not be responsible for resolving the problem. However, in this case, if requested by the State, Contractor personnel shall be dedicated to the problem to perform any required joint functions until the problem is resolved.
- l. Software Updates and Upgrades. The Contractor shall provide software updates and upgrades to the State during the term of the Contract at no additional cost as enhancements, improvements, and upgrades are made to software products and associated documentation. Updates and upgrades shall be provided to the State within thirty (30) days from date of release. Updates and upgrades shall be deliverable by download. State personnel shall install the updates and upgrades with assistance provided by the Contractor as needed via phone or electronically.
- m. IRIS Software Corrections.
 - i. The Contractor shall provide maintenance, including Defect corrections, for any customized software provided by Contractor.
 - ii. Software Corrections. IRIS maintenance for custom software Defect corrections shall entitle the State to the correction of a software Defect. There shall be no set maximum limit on the number verified software Defects corrected, tested, and implemented by the Contractor during the Contract Term. There shall be no maximum limit on the

number of hours spent by the Contractor necessary to correct verified software Defects.

- n. Archiving. The Contractor shall maintain daily backups for a rolling thirty (30) day period, and monthly backups throughout the Contract Term. Backup Data shall be available within twenty-four (24) hours of notification by an authorized State person.
- o. Data Storage Capacity. IRIS shall provide sufficient Data storage capacity to maintain all Data throughout the Contract Term.

A.20. Contractor Personnel. The Contractor shall assign all key personnel to complete all of its planned and assigned work to fulfill its contractual obligations.

In the event any one of the Contractor's key personnel or staff members is reassigned, becomes incapacitated, or ceases to be employed by the Contractor and therefore becomes unable to perform the functions or responsibilities assigned to them, the Contractor shall:

- a. Within two (2) business days, temporarily replace such person with another person qualified to perform the functions of such replaced person, and
- b. Within twenty (20) business days, permanently replace such replaced person with another person qualified to perform the functions of such replaced person.

The State reserves the right, at its sole discretion, to require the Contractor to replace the Contractor and / or subcontractor employees whom the State judges to be incompetent, careless, or whose continued use is deemed contrary to the best interests of the State.

A.21. Contractor Official Station and Work Hours. Most work under this Contract shall be performed, completed and managed at the James K. Polk office building, 5th floor, 505 Deaderick Street, Nashville, Tennessee.

Notwithstanding the above, at the State's discretion, the State may require Contractor personnel to be on-site in Nashville during any project phase at no extra cost if the State deems this necessary and in the best interest of the IRIS project.

The State may also request that Contractor personnel travel away from the official station of Nashville, Tennessee to the State's Regional Offices to perform project-related interviews, tasks, activities, and assessments.

Normal State work hours are 8:00 a.m. to 4:30 p.m., Central Time, with additional hours worked as necessary to meet project deadlines. All work performed on the State's premises shall be completed during the State's standard business hours, or the alternate State work hours of 7:30a.m. to 4:00 p.m. unless otherwise agreed to by the State.

A.22. Knowledge Transfer and Training. The Contractor shall provide an IRIS Knowledge Transfer Plan / Training solution.

As part of the Knowledge Transfer and Training Plan, the Contractor shall detail the process for transitioning the application from the Contractor to the State staff. The training details shall include roles and responsibilities for both State and Contractor staff; points of contact; methodology; tools; techniques; strategy; schedules; installations; operations; support; interfaces; maintenance; risks; State resource requirements to maintain IRIS after transition; acceptance criteria; management controls; transition reports; transition team; impact; review process; and configuration control.

The Contractor's Knowledge Transfer strategy shall be a key component to the long-term success of IRIS for the State. Training shall be provided during the Implementation Phase. Ongoing training will be scheduled at the State's convenience and shall be at no additional cost to the State.

Training of IRIS users, technical staff, and other personnel (Quality Assurance/ Independent Validation and Verification staff) shall be comprehensive and tailored to the specific audience. Training activities will include:

- a. Defining training goals and requirements
- b. Creating a classroom-based training curriculum

c. Creating classroom-based training materials

- A.23. Performance Standards. The system shall be designed and implemented to meet the response time and availability standards described herein. For IRIS, the Contractor should assume that the State may have a user load of up to 250 concurrent users accessing IRIS during an average day. If response time and / or system availability degrades to a level of non-compliance during the periods specified, the Contractor shall take the necessary steps to bring the system back to the required level unless the State determines that factors outside the Contractor's control, such as the State's infrastructure, are the cause.

IRIS shall be available and fully functional 99.95% of the time, excluding scheduled downtime. This standard translates into a maximum allowed unscheduled downtime of twenty-two (22) minutes per month. Scheduled downtime is limited to two (2) hours per week and shall occur during non-core business hours. The State defines core business hours as 7:00 a.m. to 5:59 p.m. (CST), Monday through Friday. The State defines non-core hours as 6:00 p.m. to 6:59 a.m. (CST), Monday through Friday and all-day Saturday and Sunday, and all State holidays.

- A.24. Correction of Deficiencies. Any corrections of deficiencies relating to the Contract Scope of Services requirements or deliverables and any investigation necessary to determine the source of such deficiencies shall be completed by the Contractor at no cost to the State.

- A.25. Change Orders. The State may, at its sole discretion and with written notice to the Contractor, request changes in the Scope that are necessary but were inadvertently unspecified in this Contract.

- a. Change Order Creation. After receipt of a written request for additional services from the State, the Contractor shall respond to the State, within a maximum of ten (10) business days, with a written proposal for completing the service. Contractor's proposal must specify:
 1. the effect, if any, of implementing the requested change(s) on all other services required under this Contract;
 2. the specific effort involved in completing the change(s);
 3. the expected schedule for completing the change(s);
 4. the maximum number of person hours required for the change(s); and
 5. the maximum cost for the change(s)— this maximum cost shall in no instance exceed the product of the person hours required multiplied by the appropriate payment rate proposed for such work.
- b. State Approval. The Contractor shall not perform any additional service until the State has approved the proposal. If approved, the State will sign the proposal, and it shall constitute a Change Order between the Contract Parties pertaining to the specified change(s) and shall be incorporated, hereby, as a part of this Contract.
- c. Change Order Performance. Subsequent to creation of a Change Order, the Contractor shall complete the required services. The State will be the sole judge of the acceptable completion of work and, upon such determination, shall provide the Contractor written approval.
- d. Change Order Remuneration. The State will remunerate the Contractor only for acceptable work. All acceptable work performed pursuant to an approved Change Order, without a formal amendment of this Contract, shall be remunerated in accordance with and further limited by Contract Section C.3.c., PROVIDED THAT, the State shall be liable to the Contractor only for the cost of the actual goods or services provided to complete the necessary work, not to exceed the maximum cost for the change detailed in the Change Order. In no instance shall the State be liable to the Contractor for any amount exceeding the maximum cost specified by the Change Order authorizing the goods or services. Upon State approval of the work, the Contractor shall invoice the State in accordance with the relevant provisions of this Contract.

- A.26. Inspection and Acceptance. The State shall have the right to inspect all goods or services provided by Contractor under this Contract. If, upon inspection, the State determines that the goods or services are defective, the State shall notify Contractor, and Contractor shall re-deliver the goods or provide the services at no additional cost to the State. If after a period of thirty (30) days following delivery of goods or performance of services the State does not provide a notice of any Defects, the goods or services shall be deemed to have been accepted by the State.
- A.27. Warranty. Contractor represents and warrants that the term of the warranty (“Warranty Period”) shall be the greater of the Term of this Contract or any other warranty generally offered by Contractor, its suppliers, or manufacturers to customers of its goods or services. The goods or services provided under this Contract shall conform to the terms and conditions of this Contract throughout the Warranty Period. Any nonconformance of the goods or services to the terms and conditions of this Contract shall constitute a “Defect” and shall be considered “Defective.” If Contractor receives notice of a Defect during the Warranty Period, then Contractor shall correct the Defect, at no additional charge.

Contractor represents and warrants that the State is authorized to possess and use all equipment, materials, software, and deliverables provided under this Contract.

Contractor represents and warrants that all goods or services provided under this Contract shall be provided in a timely and professional manner, by qualified and skilled individuals, and in conformity with standards generally accepted in Contractor’s industry.

If Contractor fails to provide the goods or services as warranted, then Contractor will re-provide the goods or services at no additional charge. If Contractor is unable or unwilling to re-provide the goods or services as warranted, then the State shall be entitled to recover the fees paid to Contractor for the Defective goods or services. Any exercise of the State’s rights under this Section shall not prejudice the State’s rights to seek any other remedies available under this Contract or applicable law.

A.28. Transition Prior to Expiration or Termination of the Contract.

- a. Preliminary Transition of Services Plan. During the Initial Implementation, the Contractor shall create and deliver to the State, in writing, a mutually agreeable preliminary transition plan (“Preliminary Transition Plan”).
- 1) The Preliminary Transition Plan shall provide for the Contractor to reasonably assist the State in the migration of all State Data described in Section A.15.g. and the transition of all of the services defined in Sope Section A of this Contract, or any portion thereof as the State may reasonably require, and to a State-selected supplier or service provider and/or to a State-selected software solution (hereinafter “Service Provider”) on or prior to the end of the Term, renewal option or extension as defined in Section B, or upon termination of this Contract pursuant to Sections D.4., D.5. or D.6. (the “Transition” or “Transition of Services”).
 - 2) The Preliminary Transition Plan shall:
 - i. Define a mutually agreeable data format for the State (or Service Provider) to receive the State Data held by the Contractor during the contract Term,
 - ii. Facilitate communication between the parties regarding Transition Services,
 - iii. Provide for the Contractor to reasonably assist the State in anticipating and mitigating potential risks or problems that may affect the Transition based on the Contractor’s prior data migration experience (technical glitches, data breaches, etc.)
 - iv. Include any data deliverables,

- v. Outline the anticipated scope of the Transition Services; the efforts and responsibilities of all stakeholders required to Transition and securely migrate the Services to the new Service Provider with minimal disruption and downtime such as, for example, minimal Contractor staffing to assist with contingencies and unexpected situations which could arise during the Transition,
 - vi. Provide for the Contractor to reasonably cooperate with the State to verify, validate, and close the Transition process.
- b. Final Transition Services Plan. Upon notice by the State, or not less than one year prior to the end of the Term, the Contractor shall review the Preliminary Transition Plan and finalize the specific details related to the Transition of Services to the new Service Provider. The Final Transition Plan shall be defined through a Change Order as described in Section A.25. (the "Final Transition Plan").
- c. Transition Timeline. The Contractor shall work with the State and mutually define the timeline for all Transition activities described in the Final Transition Plan such that the Transition including migration of all State Data shall occur no later than the expiration date of the Term or on a mutually agreed upon date prior to the expiration date of the Term.
- d. Reliability of Services During Transition. The Contractor shall ensure there is no unscheduled interruption of the Services or reduction in the reliability of the Services as required by Section A.19.a. during the execution of the Transition.
- e. Most Current Data. The Contractor shall ensure the Final Transition Plan includes delivering to the State or the State's new Service Provider, as required by the State, the most current version of the State's Data in a format determined by the State.
- f. Execution of the Transition. The Contractor shall:
 - 1) Deliver each of the milestones and Data described in the Final Transition Plan on time.
 - 2) Hold briefings on the status of the Transition and comprehensive nature of all items and data handed over.
 - 3) Complete knowledge transfer of the Services to the State or new Service Provider(s) by introducing the State staff and new Service Provider to all relevant information and training developed during the Term of the Contract to allow the State or new Service Provider to leverage all systems, tools, and services, as required (i.e. cloud licenses, if applicable).
 - 4) Where applicable, identify and complete the transfer to the State for the remainder of the Contract Term the relevant license of all hardware, software, and other licenses used in the provisioning and delivering of the Services.
 - 5) Participate in and/or manage regularly scheduled and ad hoc meetings, as well as other communications during the Transition to address issues that may affect how each of the stakeholders perform their responsibilities in relation to the Transition Plan.
- g. Period of Performance of Transition Services. Contractor shall provide Transition Services pursuant to the Final Transition Plan:
 - 1. Contractor shall meet with the State as reasonably required to finalize the Final Transition Plan and Transition Timeline as soon as the new Service Provider is selected by the State and no less than one (1) year prior to the expiration date of the Term (or a date mutually agreed upon by the parties in writing) such that the Transition including the migration of State Data shall be completed prior to the expiration date of the Term pursuant to Contract Section B where no notice is required, or

2. Contractor shall promptly assist the State with the Transition to an alternate Service Provider pursuant to the Final Transition Plan starting no later than thirty (30) days prior to the termination date described in a termination notice pursuant to Section D.5., or
 3. Five (5) business days after the notice of termination of this Contract for Cause pursuant to Section D.6. and
 4. Ending no later than 90 (ninety) days after termination of this Agreement pursuant to Sections D.5. or D.6., unless the State issues written notice of an earlier end-date to the Transition Services.
 5. The State shall provide written notice of the successful completion of the Transition to the Contractor Contact person named in Section D.2. Electronic mail shall suffice for such notice. The State shall not be responsible for payment of any Services provided on after the date of notice of successful completion of the Transition.
- h. The Services provided by this Contract are considered “mission critical” for TDOT, so to prevent public safety issues which could be caused by an interruption of the Services, Contractor shall reasonably cooperate with the State and the new Service Provider to execute the Final Transition Plan. Contractor may not refuse or delay Transition Services under any circumstances, including, without limitation, the State’s material breach of this Contract. Any Termination of the Contract shall not otherwise limit any of either party’s rights or remedies either in law or in equity or relieve either party of any obligation incurred prior to the effective date of such Termination.
- i. State Data Retention. Provider may not destroy State Data as required by Contract Section E.10.a.(6) without the State’s prior written consent until 30 (thirty) days after the State provides notice of the successful Transition to the new Services Provider. All Data Security requirements of this Contract shall remain in effect until the State provides written notice of successful completion of the Transition as detailed in Section A.28.g.(5). above, and Contractor returns or destroys all State data pursuant to section A.15.g., and E.9.a.(6).
- j. Licensed Products. If this Contract includes Contractor’s provision of licensed products, Contractor agrees that, without the express prior consent of the State, no action will be taken by Contractor to restrict or terminate the use of such licensed products after the date of expiration or termination of the Contract and/or during any Transition Period in which Contractor is contractually committed to work with the State or any Authorized User. The State agrees to pay for additional maintenance or licensing fees during any Transition Period at the rate described in the applicable Change Order. Contractor shall provide all reasonable assistance as requested by the State or such Authorized User to allow for the expired or terminated portion of the Services to continue without interruption or adverse effect, and to facilitate the orderly transfer of such Services to the new Service Provider. Such transition assistance will be deemed by the parties to be governed by the terms and conditions of this Contract, except for those terms or conditions that do not reasonably apply to such transition assistance. Further, any period of transition will not affect the State’s or any Authorized User’s rights in regard to any purchased software perpetual licenses which are paid in full.

B. TERM OF CONTRACT:

- B.1. This Contract shall be effective on July 1, 2025 (“Effective Date”) and ending on June 30, 2030. The State shall have no obligation for goods or services provided by the Contractor prior to the Effective Date.
- B.2. **Renewal Options.** This Contract may be renewed upon satisfactory completion of the Term. The State reserves the right to execute up to five (5) renewal options under the same terms and conditions for a period not to exceed twelve (12) months each by the State, at the State’s sole

option. In no event, however, shall the maximum Term, including all renewals or extensions, exceed a total of one hundred-twenty (120) months.

C. PAYMENT TERMS AND CONDITIONS:

- C.1. Maximum Liability. In no event shall the maximum liability of the State under this Contract exceed **Written Dollar Amount** (\$**Number**) (“Maximum Liability”). This Contract does not grant the Contractor any exclusive rights. The State does not guarantee that it will buy any minimum quantity of goods or services under this Contract. Subject to the terms and conditions of this Contract, the Contractor will only be paid for goods or services provided under this Contract after a purchase order is issued to Contractor by the State or as otherwise specified by this Contract.
- C.2. Compensation Firm. The payment methodology in Section C.3. of this Contract shall constitute the entire compensation due the Contractor for all goods or services provided under this Contract regardless of the difficulty, materials or equipment required. The payment methodology includes all applicable taxes, fees, overhead, and all other direct and indirect costs incurred or to be incurred by the Contractor.
- C.3. Payment Methodology. The Contractor shall be compensated based on the payment methodology for goods or services authorized by the State in a total amount as set forth in Section C.1.
 - a. The Contractor’s compensation shall be contingent upon the satisfactory provision of goods or services as set forth in Section A.
 - b. The Contractor shall be compensated based upon the following payment methodology:

Table C.3.b.1.

Implementation Total Cost – All Deliverables:	\$ _____
Goods or Services Description	Compensable Amount (% of Total Cost of Implementation) Subject to State Written Approval
Deliverable 1: Definition Phase (Section A.6.)	10%
Deliverable 2: Design Phase (Section A.7.)	15%
Deliverable 3: Build Phase (Section A.8.)	20%
Deliverable 4: Acceptance Phase (Section A.9.):	35%
Deliverable 5: Implementation Phase (Section A.10.):	20%

Table C.3.b.2.

Post – Implementation Total Cost:	\$ _____
<u>IRIS Unlimited User License, Including Hosting, Support, and Maintenance – Year 1</u> (Note: Actual First year hosting, support and maintenance payment shall be prorated from the date of the implementation)	\$ _____ /Year

phases are completed to the end of the year in which implementation is completed.)		
<u>IRIS Unlimited User License, Including Hosting, Support, and Maintenance – Year 2</u>	\$	/Year
<u>IRIS Unlimited User License, Including Hosting, Support, and Maintenance – Year 3</u>	\$	/Year
<u>IRIS Unlimited User License, Including Hosting, Support, and Maintenance – Year 4</u>	\$	/Year
<u>IRIS Unlimited User License, Including Hosting, Support, and Maintenance – Year 5</u>	\$	/Year
<u>IRIS Unlimited User License, Including Hosting, Support and Maintenance Renewal Option 1</u>	\$	/Year
<u>IRIS Unlimited User License, Including Hosting, Support and Maintenance Renewal Option 2</u>	\$	/Year
<u>IRIS Unlimited User License, Including Hosting, Support and Maintenance Renewal Option 3</u>	\$	/Year
<u>IRIS Unlimited User License, Including Hosting, Support and Maintenance Renewal Option 4</u>	\$	/Year
<u>IRIS Unlimited User License, Including Hosting, Support and Maintenance Renewal Option 5</u>	\$	/Year

c. Change Order Compensation. The Contractor shall be compensated for changes requested and performed pursuant to Contract Section A.25., without a formal amendment of this contract based upon the payment rates detailed in the Table C.3.c.1. below PROVIDED THAT:

(1) Compensation to the Contractor for Change Orders not issued for A.28.b., not related to the Final Transition Services Plan, shall not exceed \$NUMBER which is ten percent (10 %) of the sum of the Implementation Total Cost in Table C.3.b.1 above.

(2) Compensation to the Contractor for all Change Orders issued for the Final Transition Services Plan under Section A.28.b. shall not exceed \$NUMBER which is ten percent (10 %) of the sum of the Implementation Total Cost in Table C.3.b.1 above AND the Post-Implementation Total Cost in Table C.3.b.2 above..

(3) If, at any point during the Contract period, the State determines that the cost of necessary "Change order" work would exceed said maximum amount in C.3.c.(1) OR C.3.c.(2), the State may amend this Contract to address the need.

Table C.3.c.1.

Change Orders					
Job Classification (See Contract Attachment B for Job Descriptions)	Year 1	Year 2	Year 3	Year 4	Year 5
	Hourly Rate	Hourly Rate	Hourly Rate	Hourly Rate	Hourly Rate
Jr. Developer	\$	\$	\$	\$	\$
Sr. Developer	\$	\$	\$	\$	\$
Jr. Architect	\$	\$	\$	\$	\$
Sr. Architect	\$	\$	\$	\$	\$
Project Manager	\$	\$	\$	\$	\$
Sr. Project Manager	\$	\$	\$	\$	\$
Business Analyst	\$	\$	\$	\$	\$
Technical Writer	\$	\$	\$	\$	\$
Database Administrator	\$	\$	\$	\$	\$
*Beginning the sixth (6 th) anniversary of the Contract Effective Date, the Contractor shall be granted an hourly rate increase effective as of that anniversary and each anniversary thereafter. Any annual increase in the not-to-exceed hourly rates shall be based on (a) Year 5 rates and (b) be lesser or capped at the percentage increase, if any, in the Consumer Price Index for all Urban Consumers (Professional Services) ("CPI"), South Region, published by the United States Bureau of Labor Statistics, in effect for the immediately preceding calendar year.					

C.4. Travel Compensation. The Contractor shall not be compensated or reimbursed for travel time, travel expenses, meals, or lodging.

C.5. Invoice Requirements. The Contractor shall invoice the State only for goods delivered and accepted by the State or services satisfactorily provided at the amounts stipulated in Section C.3., above. Contractor shall submit invoices and necessary supporting documentation, no more frequently than once a month, and no later than thirty (30) days after goods or services have been provided to the following address:

Tennessee Department of Transportation Information Technology Division
 505 Deaderick Street, Suite 500
 Nashville, Tennessee 37243

a. Each invoice, on Contractor's letterhead, shall clearly and accurately detail all of the following information (calculations must be extended and totaled correctly):

- (1) Invoice number (assigned by the Contractor);
- (2) Invoice date;
- (3) Contract number (assigned by the State);
- (4) Customer account name: Tennessee Department of Transportation, IT Division;
- (5) Customer account number (assigned by the Contractor to the above-referenced Customer);
- (6) Contractor name;
- (7) Contractor Tennessee Edison registration ID number;
- (8) Contractor contact for invoice questions (name, phone, or email);
- (9) Contractor remittance address;
- (10) Description of delivered goods or services provided and invoiced, including identifying information as applicable;

- (11) Number of delivered or completed units, increments, hours, or days as applicable, of each good or service invoiced;
- (12) Applicable payment methodology (as stipulated in Section C.3.) of each good or service invoiced;
- (13) Amount due for each compensable unit of good or service; and
- (14) Total amount due for the invoice period.

b. Contractor's invoices shall:

- (1) Only include charges for goods delivered or services provided as described in Section A and in accordance with payment terms and conditions set forth in Section C;
- (2) Only be submitted for goods delivered or services completed and shall not include any charge for future goods to be delivered or services to be performed;
- (3) Not include Contractor's taxes, which includes without limitation Contractor's sales and use tax, excise taxes, franchise taxes, real or personal property taxes, or income taxes; and
- (4) Include shipping or delivery charges only as authorized in this Contract.

c. The timeframe for payment (or any discounts) begins only when the State is in receipt of an invoice that meets the minimum requirements of this Section C.5.

C.6. Payment of Invoice. A payment by the State shall not prejudice the State's right to object to or question any payment, invoice, or other matter. A payment by the State shall not be construed as acceptance of goods delivered, any part of the services provided, or as approval of any amount invoiced.

C.7. Invoice Reductions. The Contractor's invoice shall be subject to reduction for amounts included in any invoice or payment that is determined by the State, on the basis of audits conducted in accordance with the terms of this Contract, to not constitute proper compensation for goods delivered or services provided.

C.8. Deductions. The State reserves the right to deduct from amounts, which are or shall become due and payable to the Contractor under this or any contract between the Contractor and the State of Tennessee, any amounts that are or shall become due and payable to the State of Tennessee by the Contractor.

C.9. Prerequisite Documentation. The Contractor shall not invoice the State under this Contract until the State has received the following, properly completed documentation.

- a. The Contractor shall complete, sign, and present to the State the "Authorization Agreement for Automatic Deposit Form" provided by the State. By doing so, the Contractor acknowledges and agrees that, once this form is received by the State, payments to the Contractor, under this or any other contract the Contractor has with the State of Tennessee, may be made by ACH; and
- b. The Contractor shall complete, sign, and return to the State the State-provided W-9 form. The taxpayer identification number on the W-9 form must be the same as the Contractor's Federal Employer Identification Number or Social Security Number referenced in the Contractor's Edison registration information.

D. MANDATORY TERMS AND CONDITIONS:

D.1. Required Approvals. The State is not bound by this Contract until it is duly approved by the Parties and all appropriate State officials in accordance with applicable Tennessee laws and regulations. Depending upon the specifics of this Contract, this may include approvals by the Commissioner of Finance and Administration, the Commissioner of Human Resources, the Comptroller of the Treasury, and the Chief Procurement Officer. Approvals shall be evidenced by a signature or electronic approval.

D.2. Communications and Contacts. All instructions, notices, consents, demands, or other communications required or contemplated by this Contract shall be in writing and shall be made by certified, first class mail, return receipt requested and postage prepaid, by overnight courier service with an asset tracking system, or by email or facsimile transmission with recipient confirmation. All communications, regardless of method of transmission, shall be addressed to the respective Party at the appropriate mailing address, facsimile number, or email address as stated below or any other address provided in writing by a Party.

The State:

Justin Underwood, Director
Central Services Division
James K. Polk Building, 8th Floor
505 Deaderick Street, Nashville, TN 372430
justin.underwood@tn.gov
Telephone # (615) 253-8813

Alternate Contacts (CC on all Communications):

Jermaine Scales, Chief Information Officer
Tennessee Department of Transportation
505 Deaderick Street
Nashville, TN 37243
jermaine.a.scales@tn.gov
Telephone # (615) 253-6411

Marta Ferreira, IT Business Services
Tennessee Department of Transportation
505 Deaderick Street
Nashville, TN 37243
marta.ferreira@tn.gov
Telephone # (615) 687-4732

The Contractor:

Contractor Contact Name & Title
Contractor Name
Address
Email Address
Telephone # Number
FAX # Number

All instructions, notices, consents, demands, or other communications shall be considered effective upon receipt or recipient confirmation as may be required.

D.3. Modification and Amendment. This Contract may be modified only by a written amendment signed by all Parties and approved by all applicable State officials.

D.4. Subject to Funds Availability. The Contract is subject to the appropriation and availability of State or federal funds. In the event that the funds are not appropriated or are otherwise unavailable, the State reserves the right to terminate this Contract upon written notice to the Contractor. The State's exercise of its right to terminate this Contract shall not constitute a breach of Contract by the State. Upon receipt of the written notice, the Contractor shall cease all work associated with the Contract. If the State terminates this Contract due to lack of funds availability, the Contractor shall be entitled to compensation for all conforming goods requested and accepted by the State and for all satisfactory and authorized services completed as of the termination date. Should the State exercise its right to terminate this Contract due to unavailability of funds, the Contractor shall have no right to recover from the State any actual, general, special, incidental, consequential, or any other damages of any description or amount.

D.5. Termination for Convenience. The State may terminate this Contract for convenience without cause and for any reason. The State shall give the Contractor at least thirty (30) days written notice before the termination date. The Contractor shall be entitled to compensation for all conforming goods delivered and accepted by the State or for satisfactory, authorized services

completed as of the termination date. In no event shall the State be liable to the Contractor for compensation for any goods neither requested nor accepted by the State or for any services neither requested by the State nor satisfactorily performed by the Contractor. In no event shall the State's exercise of its right to terminate this Contract for convenience relieve the Contractor of any liability to the State for any damages or claims arising under this Contract.

- D.6. Termination for Cause. If the Contractor fails to properly perform its obligations under this Contract in a timely or proper manner, or if the Contractor materially violates any terms of this Contract ("Breach Condition"), the State shall have the right to immediately terminate the Contract and withhold payments in excess of compensation for completed services or provided goods. Notwithstanding the above, the Contractor shall not be relieved of liability to the State for damages sustained by virtue of any Breach Condition and the State may seek other remedies allowed at law or in equity for breach of this Contract.
- D.7. Assignment and Subcontracting. The Contractor shall not assign this Contract or enter into a subcontract for any of the goods or services provided under this Contract without the prior written approval of the State. Notwithstanding any use of the approved subcontractors, the Contractor shall be the prime contractor and responsible for compliance with all terms and conditions of this Contract. The State reserves the right to request additional information or impose additional terms and conditions before approving an assignment of this Contract in whole or in part or the use of subcontractors in fulfilling the Contractor's obligations under this Contract.
- D.8. Conflicts of Interest. The Contractor warrants that no part of the Contractor's compensation shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Contractor in connection with any work contemplated or performed under this Contract.

The Contractor acknowledges, understands, and agrees that this Contract shall be null and void if the Contractor is, or within the past six (6) months has been, an employee of the State of Tennessee or if the Contractor is an entity in which a controlling interest is held by an individual who is, or within the past six (6) months has been, an employee of the State of Tennessee.

- D.9. Nondiscrimination. The Contractor hereby agrees, warrants, and assures that no person shall be excluded from participation in, be denied benefits of, or be otherwise subjected to discrimination in the performance of this Contract or in the employment practices of the Contractor on the grounds of handicap or disability, age, race, creed, color, religion, sex, national origin, or any other classification protected by federal or state law. The Contractor shall, upon request, show proof of nondiscrimination and shall post in conspicuous places, available to all employees and applicants, notices of nondiscrimination.
- D.10. Prohibition of Illegal Immigrants. The requirements of Tenn. Code Ann. § 12-3-309 addressing the use of illegal immigrants in the performance of any contract to supply goods or services to the state of Tennessee, shall be a material provision of this Contract, a breach of which shall be grounds for monetary and other penalties, up to and including termination of this Contract.
- a. The Contractor agrees that the Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant in the performance of this Contract. The Contractor shall reaffirm this attestation, in writing, by submitting to the State a completed and signed copy of the document at Attachment A, semi-annually during the Term. If the Contractor is a party to more than one contract with the State, the Contractor may submit one attestation that applies to all contracts with the State. All Contractor attestations shall be maintained by the Contractor and made available to State officials upon request.
- b. Prior to the use of any subcontractor in the performance of this Contract, and semi-annually thereafter, during the Term, the Contractor shall obtain and retain a current, written attestation that the subcontractor shall not knowingly utilize the services of an

illegal immigrant to perform work under this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant to perform work under this Contract. Attestations obtained from subcontractors shall be maintained by the Contractor and made available to State officials upon request.

- c. The Contractor shall maintain records for all personnel used in the performance of this Contract. Contractor's records shall be subject to review and random inspection at any reasonable time upon reasonable notice by the State.
 - d. The Contractor understands and agrees that failure to comply with this section will be subject to the sanctions of Tenn. Code Ann. § 12-3-309 for acts or omissions occurring after its effective date.
 - e. For purposes of this Contract, "illegal immigrant" shall be defined as any person who is not: (i) a United States citizen; (ii) a Lawful Permanent Resident; (iii) a person whose physical presence in the United States is authorized; (iv) allowed by the federal Department of Homeland Security and who, under federal immigration laws or regulations, is authorized to be employed in the U.S.; or (v) is otherwise authorized to provide services under the Contract.
- D.11. Records. The Contractor shall maintain documentation for all charges under this Contract. The books, records, and documents of the Contractor, for work performed or money received under this Contract, shall be maintained for a period of five (5) full years from the date of the final payment and shall be subject to audit at any reasonable time and upon reasonable notice by the State, the Comptroller of the Treasury, or their duly appointed representatives. The financial statements shall be prepared in accordance with generally accepted accounting principles.
- D.12. Monitoring. The Contractor's activities conducted and records maintained pursuant to this Contract shall be subject to monitoring and evaluation by the State, the Comptroller of the Treasury, or their duly appointed representatives.
- D.13. Progress Reports. The Contractor shall submit brief, periodic, progress reports to the State as requested.
- D.14. Strict Performance. Failure by any Party to this Contract to require, in any one or more cases, the strict performance of any of the terms, covenants, conditions, or provisions of this Contract shall not be construed as a waiver or relinquishment of any term, covenant, condition, or provision. No term or condition of this Contract shall be held to be waived, modified, or deleted except by a written amendment signed by the Parties.
- D.15. Independent Contractor. The Parties shall not act as employees, partners, joint venturers, or associates of one another. The Parties are independent contracting entities. Nothing in this Contract shall be construed to create an employer/employee relationship or to allow either Party to exercise control or direction over the manner or method by which the other transacts its business affairs or provides its usual services. The employees or agents of one Party are not employees or agents of the other Party.
- D.16. Patient Protection and Affordable Care Act. The Contractor agrees that it will be responsible for compliance with the Patient Protection and Affordable Care Act ("PPACA") with respect to itself and its employees, including any obligation to report health insurance coverage, provide health insurance coverage, or pay any financial assessment, tax, or penalty for not providing health insurance. The Contractor shall indemnify the State and hold it harmless from any costs to the State arising from Contractor's failure to fulfill its PPACA responsibilities for itself or its employees.
- D.17. Limitation of State's Liability. The State shall have no liability except as specifically provided in this Contract. In no event will the State be liable to the Contractor or any other party for any lost revenues, lost profits, loss of business, decrease in the value of any securities or cash position, time, goodwill, or any indirect, special, incidental, punitive, exemplary or consequential damages

of any nature, whether based on warranty, contract, statute, regulation, tort (including but not limited to negligence), or any other legal theory that may arise under this Contract or otherwise. The State's total liability under this Contract (including any exhibits, schedules, amendments or other attachments to the Contract) or otherwise shall under no circumstances exceed the Maximum Liability. This limitation of liability is cumulative and not per incident.

D.18. Limitation of Contractor's Liability. In accordance with Tenn. Code Ann. § 12-3-701, the Contractor's liability for all claims arising under this Contract shall be limited to an amount equal to two (2) times the Maximum Liability amount detailed in Section C.1. and as may be amended, PROVIDED THAT in no event shall this Section limit the liability of the Contractor for: (i) intellectual property or any Contractor indemnity obligations for infringement for third-party intellectual property rights; (ii) any claims covered by any specific provision in the Contract providing for liquidated damages; or (iii) any claims for intentional torts, criminal acts, fraudulent conduct, or acts or omissions that result in personal injuries or death. For clarity, except as otherwise expressly set forth in this Section, Contractor's indemnification obligations and other remedies available under this Contract are subject to the limitations on liability set forth in this Section.

D.19. Hold Harmless. The Contractor agrees to indemnify and hold harmless the State of Tennessee as well as its officers, agents, and employees from and against any and all claims, liabilities, losses, and causes of action which may arise, accrue, or result to any person, firm, corporation, or other entity which may be injured or damaged as a result of acts, omissions, or negligence on the part of the Contractor, its employees, or any person acting for or on its or their behalf relating to this Contract. The Contractor further agrees it shall be liable for the reasonable cost of attorneys' fees, court costs, expert witness fees, and other litigation expenses for the State to enforce the terms of this Contract.

In the event of any suit or claim, the Parties shall give each other immediate notice and provide all necessary assistance to respond. The failure of the State to give notice shall only relieve the Contractor of its obligations under this Section to the extent that the Contractor can demonstrate actual prejudice arising from the failure to give notice. This Section shall not grant the Contractor, through its attorneys, the right to represent the State in any legal matter, as the right to represent the State is governed by Tenn. Code Ann. § 8-6-106.

D.20. HIPAA Compliance. The State and Contractor shall comply with obligations under the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), Health Information Technology for Economic and Clinical Health ("HITECH") Act and any other relevant laws and regulations regarding privacy (collectively the "Privacy Rules"). The obligations set forth in this Section shall survive the termination of this Contract.

- a. Contractor warrants to the State that it is familiar with the requirements of the Privacy Rules, and will comply with all applicable requirements in the course of this Contract.
- b. Contractor warrants that it will cooperate with the State, including cooperation and coordination with State privacy officials and other compliance officers required by the Privacy Rules, in the course of performance of the Contract so that both parties will be in compliance with the Privacy Rules.
- c. The State and the Contractor will sign documents, including but not limited to business associate agreements, as required by the Privacy Rules and that are reasonably necessary to keep the State and Contractor in compliance with the Privacy Rules. This provision shall not apply if information received or delivered by the parties under this Contract is NOT "protected health information" as defined by the Privacy Rules, or if the Privacy Rules permit the parties to receive or deliver the information without entering into a business associate agreement or signing another document.
- d. The Contractor will indemnify the State and hold it harmless for any violation by the Contractor or its subcontractors of the Privacy Rules. This includes the costs of

responding to a breach of protected health information, the costs of responding to a government enforcement action related to the breach, and any fines, penalties, or damages paid by the State because of the violation.

- D.21. Tennessee Consolidated Retirement System. Subject to statutory exceptions contained in Tenn. Code Ann. §§ 8-36-801, *et seq.*, the law governing the Tennessee Consolidated Retirement System (“TCRS”), provides that if a retired member of TCRS, or of any superseded system administered by TCRS, or of any local retirement fund established under Tenn. Code Ann. §§ 8-35-101, *et seq.*, accepts State employment, the member's retirement allowance is suspended during the period of the employment. Accordingly and notwithstanding any provision of this Contract to the contrary, the Contractor agrees that if it is later determined that the true nature of the working relationship between the Contractor and the State under this Contract is that of “employee/employer” and not that of an independent contractor, the Contractor, if a retired member of TCRS, may be required to repay to TCRS the amount of retirement benefits the Contractor received from TCRS during the Term.
- D.22. Tennessee Department of Revenue Registration. The Contractor shall comply with all applicable registration requirements contained in Tenn. Code Ann. §§ 67-6-601 – 608. Compliance with applicable registration requirements is a material requirement of this Contract.
- D.23. Debarment and Suspension. The Contractor certifies, to the best of its knowledge and belief, that it, its current and future principals, its current and future subcontractors and their principals:
- a. are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal or state department or agency;
 - b. have not within a three (3) year period preceding this Contract been convicted of, or had a civil judgment rendered against them from commission of fraud, or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state, or local) transaction or grant under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification, or destruction of records, making false statements, or receiving stolen property;
 - c. are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, state, or local) with commission of any of the offenses detailed in section b. of this certification; and
 - d. have not within a three (3) year period preceding this Contract had one or more public transactions (federal, state, or local) terminated for cause or default.

The Contractor shall provide immediate written notice to the State if at any time it learns that there was an earlier failure to disclose information or that due to changed circumstances, its principals or the principals of its subcontractors are excluded, disqualified, or presently fall under any of the prohibitions of sections a-d.

- D.24. Force Majeure. “Force Majeure Event” means fire, flood, earthquake, elements of nature or acts of God, wars, riots, civil disorders, rebellions or revolutions, acts of terrorism or any other similar cause beyond the reasonable control of the Party except to the extent that the non-performing Party is at fault in failing to prevent or causing the default or delay, and provided that the default or delay cannot reasonably be circumvented by the non-performing Party through the use of alternate sources, workaround plans or other means. A strike, lockout or labor dispute shall not excuse either Party from its obligations under this Contract. Except as set forth in this Section, any failure or delay by a Party in the performance of its obligations under this Contract arising from a Force Majeure Event is not a default under this Contract or grounds for termination. The non-performing Party will be excused from performing those obligations directly affected by the Force Majeure Event, and only for as long as the Force Majeure Event continues, provided that the Party continues to use diligent, good faith efforts to resume performance without delay. The occurrence of a Force Majeure Event affecting Contractor’s representatives, suppliers,

subcontractors, customers or business apart from this Contract is not a Force Majeure Event under this Contract. Contractor will promptly notify the State of any delay caused by a Force Majeure Event (to be confirmed in a written notice to the State within one (1) day of the inception of the delay) that a Force Majeure Event has occurred, and will describe in reasonable detail the nature of the Force Majeure Event. If any Force Majeure Event results in a delay in Contractor's performance longer than forty-eight (48) hours, the State may, upon notice to Contractor: (a) cease payment of the fees for the affected obligations until Contractor resumes performance of the affected obligations; or (b) immediately terminate this Contract or any purchase order, in whole or in part, without further payment except for fees then due and payable. Contractor will not increase its charges under this Contract or charge the State any fees other than those provided for in this Contract as the result of a Force Majeure Event.

- D.25. State and Federal Compliance. The Contractor shall comply with all State and federal laws and regulations applicable to Contractor in the Contractor's performance of this Contract.
- D.26. Governing Law. This Contract shall be governed by and construed in accordance with the laws of the State of Tennessee, without regard to its conflict or choice of law rules. The Tennessee Claims Commission or the state or federal courts in Tennessee shall be the venue for all claims, disputes, or disagreements arising under this Contract. The Contractor acknowledges and agrees that any rights, claims, or remedies against the State of Tennessee or its employees arising under this Contract shall be subject to and limited to those rights and remedies available under Tenn. Code Ann. §§ 9-8-101 - 408.
- D.27. Entire Agreement. This Contract is complete and contains the entire understanding between the Parties relating to its subject matter, including all the terms and conditions of the Parties' agreement. This Contract supersedes any and all prior understandings, representations, negotiations, and agreements between the Parties, whether written or oral.
- D.28. Severability. If any terms and conditions of this Contract are held to be invalid or unenforceable as a matter of law, the other terms and conditions of this Contract shall not be affected and shall remain in full force and effect. The terms and conditions of this Contract are severable.
- D.29. Headings. Section headings of this Contract are for reference purposes only and shall not be construed as part of this Contract.
- D.30. Incorporation of Additional Documents. Each of the following documents is included as a part of this Contract by reference. In the event of a discrepancy or ambiguity regarding the Contractor's duties, responsibilities, and performance under this Contract, these items shall govern in order of precedence below:
- a. any amendment to this Contract, with the latter in time controlling over any earlier amendments;
 - b. this Contract with any attachments or exhibits (excluding the items listed at subsections c. through f., below), which includes Attachments A, B, C, and D;
 - c. any clarifications of or addenda to the Contractor's proposal seeking this Contract;
 - d. the State solicitation, as may be amended, requesting responses in competition for this Contract;
 - e. any technical specifications provided to proposers during the procurement process to award this Contract; and
 - f. the Contractor's response seeking this Contract.
- D.31. Iran Divestment Act. The requirements of Tenn. Code Ann. § 12-12-101, *et seq.*, addressing contracting with persons as defined at Tenn. Code Ann. §12-12-103(5) that engage in investment activities in Iran, shall be a material provision of this Contract. The Contractor certifies, under penalty of perjury, that to the best of its knowledge and belief that it is not on the list created pursuant to Tenn. Code Ann. § 12-12-106.
- D.32. Insurance. Contractor shall maintain insurance coverage as specified in this Section. The State reserves the right to amend or require additional insurance coverage, coverage amounts, and

endorsements required under this Contract. Contractor's failure to maintain or submit evidence of insurance coverage, as required, is a material breach of this Contract. If Contractor loses insurance coverage, fails to renew coverage, or for any reason becomes uninsured during the Term, Contractor shall immediately notify the State. All insurance companies providing coverage must be: (a) acceptable to the State; (b) authorized by the Tennessee Department of Commerce and Insurance ("TDCI"); and (c) rated A- / VII or better by A.M. Best. All coverage must be on a primary basis and noncontributory with any other insurance or self-insurance carried by the State. Contractor agrees to name the State as an additional insured on any insurance policy with the exception of workers' compensation (employer liability) and professional liability (errors and omissions) insurance. All policies must contain an endorsement for a waiver of subrogation in favor of the State. Any deductible or self insured retention ("SIR") over fifty thousand dollars (\$50,000) must be approved by the State. The deductible or SIR and any premiums are the Contractor's sole responsibility. The Contractor agrees that the insurance requirements specified in this Section do not reduce any liability the Contractor has assumed under this Contract including any indemnification or hold harmless requirements.

To achieve the required coverage amounts, a combination of an otherwise deficient specific policy and an umbrella policy with an aggregate meeting or exceeding the required coverage amounts is acceptable. For example: If the required policy limit under this Contract is for two million dollars (\$2,000,000) in coverage, acceptable coverage would include a specific policy covering one million dollars (\$1,000,000) combined with an umbrella policy for an additional one million dollars (\$1,000,000). If the deficient underlying policy is for a coverage area without aggregate limits (generally Automobile Liability and Employers' Liability Accident), Contractor shall provide a copy of the umbrella insurance policy documents to ensure that no aggregate limit applies to the umbrella policy for that coverage area. In the event that an umbrella policy is being provided to achieve any required coverage amounts, the umbrella policy shall be accompanied by an endorsement at least as broad as the Insurance Services Office, Inc. (also known as "ISO") "Noncontributory—Other Insurance Condition" endorsement or shall be written on a policy form that addresses both the primary and noncontributory basis of the umbrella policy if the State is otherwise named as an additional insured.

Contractor shall provide the State a certificate of insurance ("COI") evidencing the coverages and amounts specified in this Section. The COI must be on a form approved by the TDCI (standard ACORD form preferred). The COI must list each insurer's National Association of Insurance Commissioners (NAIC) number and be signed by an authorized representative of the insurer. The COI must list the State of Tennessee – CPO Risk Manager, 312 Rosa L. Parks Ave., 3rd floor Central Procurement Office, Nashville, TN 37243 as the certificate holder. Contractor shall provide the COI ten (10) business days prior to the Effective Date and again thirty (30) calendar days before renewal or replacement of coverage. Contractor shall provide the State evidence that all subcontractors maintain the required insurance or that subcontractors are included under the Contractor's policy. At any time, the State may require Contractor to provide a valid COI. The Parties agree that failure to provide evidence of insurance coverage as required is a material breach of this Contract. If Contractor self-insures, then a COI will not be required to prove coverage. Instead Contractor shall provide a certificate of self-insurance or a letter, on Contractor's letterhead, detailing its coverage, policy amounts, and proof of funds to reasonably cover such expenses. The State reserves the right to require complete copies of all required insurance policies, including endorsements required by these specifications, at any time.

The State agrees that it shall give written notice to the Contractor as soon as practicable after the State becomes aware of any claim asserted or made against the State, but in no event later than thirty (30) calendar days after the State becomes aware of such claim. The failure of the State to give notice shall only relieve the Contractor of its obligations under this Section to the extent that the Contractor can demonstrate actual prejudice arising from the failure to give notice. This Section shall not grant the Contractor or its insurer, through its attorneys, the right to represent the State in any legal matter, as the right to represent the State is governed by Tenn. Code Ann. § 8-6-106.

The insurance obligations under this Contract shall be: (1)—all the insurance coverage and policy limits carried by the Contractor; or (2)—the minimum insurance coverage requirements and policy limits shown in this Contract; whichever is greater. Any insurance proceeds in excess of or broader than the minimum required coverage and minimum required policy limits, which are applicable to a given loss, shall be available to the State. No representation is made that the minimum insurance requirements of the Contract are sufficient to cover the obligations of the Contractor arising under this Contract. The Contractor shall obtain and maintain, at a minimum, the following insurance coverages and policy limits.

a. Commercial General Liability (“CGL”) Insurance

- 1) The Contractor shall maintain CGL, which shall be written on an ISO Form CG 00 01 occurrence form (or a substitute form providing equivalent coverage) and shall cover liability arising from property damage, premises and operations products and completed operations, bodily injury, personal and advertising injury, and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

The Contractor shall maintain single limits not less than one million dollars (\$1,000,000) per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this policy or location of occurrence or the general aggregate limit shall be twice the required occurrence limit.

b. Workers’ Compensation and Employer Liability Insurance

- 1) For Contractors statutorily required to carry workers’ compensation and employer liability insurance, the Contractor shall maintain:
 - i. Workers’ compensation in an amount not less than one million dollars (\$1,000,000) including employer liability of one million dollars (\$1,000,000) per accident for bodily injury by accident, one million dollars (\$1,000,000) policy limit by disease, and one million dollars (\$1,000,000) per employee for bodily injury by disease.
- 2) If the Contractor certifies that it is exempt from the requirements of Tenn. Code Ann. §§ 50-6-101 – 103, then the Contractor shall furnish written proof of such exemption for one or more of the following reasons:
 - i. The Contractor employs fewer than five (5) employees;
 - ii. The Contractor is a sole proprietor;
 - iii. The Contractor is in the construction business or trades with no employees;
 - iv. The Contractor is in the coal mining industry with no employees;
 - v. The Contractor is a state or local government; or
 - vi. The Contractor self-insures its workers’ compensation and is in compliance with the TDCI rules and Tenn. Code Ann. § 50-6-405.

c. Automobile Liability Insurance

- 1) The Contractor shall maintain automobile liability insurance which shall cover liability arising out of any automobile (including owned, leased, hired, and non-owned automobiles).
- 2) The Contractor shall maintain bodily injury/property damage with a limit not less than one million dollars (\$1,000,000) per occurrence or combined single limit.

d. Technology Professional Liability (Errors & Omissions)/Cyber Liability Insurance

- 1) The Contractor shall maintain technology professional liability (errors & omissions)/cyber liability insurance appropriate to the Contractor's profession in an amount not less than ten million dollars (\$10,000,000) per occurrence or claim and ten million dollars (\$10,000,000) annual aggregate, covering all acts, claims, errors, omissions, negligence, infringement of intellectual property (including copyright, patent and trade secret); network security and privacy risks, including but not limited to unauthorized access, failure of security, information theft, damage to destruction of or alteration of electronic information, breach of privacy perils, wrongful disclosure and release of private information, collection, or other negligence in the handling of confidential information, and including coverage for related regulatory fines, defenses, and penalties.
- 2) Such coverage shall include data breach response expenses, in an amount not less than ten million dollars (\$10,000,000) and payable whether incurred by the State or Contractor, including but not limited to consumer notification, whether or not required by law, computer forensic investigations, public relations and crisis management firm fees, credit file or identity monitoring or remediation services and expenses in the performance of services for the State or on behalf of the State hereunder.

e. Crime Insurance

- 1) The Contractor shall maintain crime insurance, which shall be written on a "loss sustained form" or "loss discovered form" providing coverage for third party fidelity, including cyber theft and extortion. The policy must allow for reporting of circumstances or incidents that may give rise to future claims, include an extended reporting period of no less than two (2) years with respect to events which occurred but were not reported during the term of the policy, and not contain a condition requiring an arrest or conviction.
- 2) Any crime insurance policy shall have a limit not less than one million dollars (\$1,000,000) per claim and one million dollars (\$1,000,000) in the aggregate. Any crime insurance policy shall contain a Social Engineering Fraud Endorsement with a limit of not less than two hundred and fifty thousand dollars (\$250,000). This insurance may be written on a claims-made basis, but in the event that coverage is cancelled or non-renewed, the Contractor shall purchase an extended reporting or "tail coverage" of at least two (2) years after the Term.

D.33. Major Procurement Contract Sales and Use Tax. Pursuant to Tenn. Code Ann. § 4-39-102 and to the extent applicable, the Contractor and the Contractor's subcontractors shall remit sales and use taxes on the sales of goods or services that are made by the Contractor or the Contractor's subcontractors and that are subject to tax.

D.34. Confidentiality of Records. Strict standards of confidentiality of records and information shall be maintained in accordance with applicable state and federal law. All material and information, regardless of form, medium or method of communication, provided to the Contractor by the State or acquired by the Contractor on behalf of the State that is regarded as confidential under state or federal law shall be regarded as "Confidential Information." Nothing in this Section shall permit Contractor to disclose any Confidential Information, regardless of whether it has been disclosed

or made available to the Contractor due to intentional or negligent actions or inactions of agents of the State or third parties. Confidential Information shall not be disclosed except as required or permitted under state or federal law. Contractor shall take all necessary steps to safeguard the confidentiality of such material or information in conformance with applicable state and federal law.

The obligations set forth in this Section shall survive the termination of this Contract.

- D.35. Boycott of Israel. The Contractor certifies that it is not currently engaged in, and covenants that it will not, for the duration of the Contract, engage in a Boycott of Israel, as that term is defined in Tenn. Code Ann. § 12-4-119.
- D.36. Prohibited Contract Terms. The prohibited contract terms and conditions enumerated in Pub. Ch. 113, § 5, shall be a material provision of this Contract. The Contractor acknowledges, understands, and agrees that the inclusion of a term or condition prohibited by Pub. Ch. 113, § 5, shall be null and void and the Contract shall be enforceable as if the Contract did not contain such term or condition.

E. SPECIAL TERMS AND CONDITIONS:

- E.1. Conflicting Terms and Conditions. Should any of these special terms and conditions conflict with any other terms and conditions of this Contract, the special terms and conditions shall be subordinate to the Contract's other terms and conditions.
- E.2. Contractor Commitment to Diversity. The Contractor shall comply with and make reasonable business efforts to exceed the commitment to diversity represented by the Contractor's Response to RFP #40100-51043 RFP Attachment 6.2. – Section B Item B.15.) and resulting in this Contract.

The Contractor shall assist the State in monitoring the Contractor's performance of this commitment by providing, as requested, a monthly report of participation in the performance of this Contract by small business enterprises and businesses owned by minorities, women, service-disabled veterans, and persons with disabilities. Such reports shall be provided to the State of Tennessee Governor's Office of Diversity Business Enterprise in the TN Diversity Software available online at: <https://tn.diversitysoftware.com/FrontEnd/StartCertification.asp?TN=tn&XID=9810>.

- E.3. Intellectual Property Indemnity. The Contractor agrees to indemnify and hold harmless the State of Tennessee as well as its officers, agents, and employees from and against any and all claims or suits which may be brought against the State concerning or arising out of any claim of an alleged patent, copyright, trade secret or other intellectual property infringement. In any such claim or action brought against the State, the Contractor shall satisfy and indemnify the State for the amount of any settlement or final judgment, and the Contractor shall be responsible for all legal or other fees or expenses incurred by the State arising from any such claim. The State shall give the Contractor notice of any such claim or suit, however, the failure of the State to give such notice shall only relieve Contractor of its obligations under this Section to the extent Contractor can demonstrate actual prejudice arising from the State's failure to give notice. This Section shall not grant the Contractor, through its attorneys, the right to represent the State of Tennessee in any legal matter, as provided in Tenn. Code Ann. § 8-6-106.
- E.4. Software License Warranty. Contractor grants a license to the State to use all software provided under this Contract in the course of the State's business and purposes.
- E.5. Software Support and Maintenance Warranty. Contractor shall provide to the State ALL software upgrades, modifications, bug fixes, or other improvements in its software that it makes generally available to its customers.
- E.6. Extraneous Terms and Conditions. Contractor shall fill all orders submitted by the State under this Contract. No purchase order, invoice, or other documents associated with any sales, orders, or supply of any good or service under this Contract shall contain any terms or conditions other than as set forth in the Contract. Any such extraneous terms and conditions shall be void, invalid and

unenforceable against the State. Any refusal by Contractor to supply any goods or services under this Contract conditioned upon the State submitting to any extraneous terms and conditions shall be a material breach of the Contract and constitute an act of bad faith by Contractor.

- E.7. State Furnished Property. The Contractor shall be responsible for the correct use, maintenance, and protection of all articles of nonexpendable, tangible personal property furnished by the State for the Contractor's use under this Contract. Upon termination of this Contract, all property furnished by the State shall be returned to the State in the same condition as when received, less ordinary wear and tear. Should the property be destroyed, lost, or stolen, the Contractor shall be responsible to the State for the fair market value of the property at the time of loss.
- E.8. Prohibited Advertising or Marketing. The Contractor shall not suggest or imply in advertising or marketing materials that Contractor's goods or services are endorsed by the State. The restrictions on Contractor advertising or marketing materials under this Section shall survive the termination of this Contract.
- E.9. Personally Identifiable Information. While performing its obligations under this Contract, Contractor may have access to Personally Identifiable Information held by the State ("PII"). For the purposes of this Contract, "PII" includes "Nonpublic Personal Information" as that term is defined in Title V of the Gramm-Leach-Bliley Act of 1999 or any successor federal statute, and the rules and regulations thereunder, all as may be amended or supplemented from time to time ("GLBA") and personally identifiable information and other data protected under any other applicable laws, rule or regulation of any jurisdiction relating to disclosure or use of personal information ("Privacy Laws"). Contractor agrees it shall not do or omit to do anything which would cause the State to be in breach of any Privacy Laws. Contractor shall, and shall cause its employees, agents and representatives to: (i) keep PII confidential and may use and disclose PII only as necessary to carry out those specific aspects of the purpose for which the PII was disclosed to Contractor and in accordance with this Contract, GLBA and Privacy Laws; and (ii) implement and maintain appropriate technical and organizational measures regarding information security to: (A) ensure the security and confidentiality of PII; (B) protect against any threats or hazards to the security or integrity of PII; and (C) prevent unauthorized access to or use of PII. Contractor shall immediately notify State: (1) of any disclosure or use of any PII by Contractor or any of its employees, agents and representatives in breach of this Contract; and (2) of any disclosure of any PII to Contractor or its employees, agents and representatives where the purpose of such disclosure is not known to Contractor or its employees, agents and representatives. The State reserves the right to review Contractor's policies and procedures used to maintain the security and confidentiality of PII and Contractor shall, and cause its employees, agents and representatives to, comply with all reasonable requests or directions from the State to enable the State to verify or ensure that Contractor is in full compliance with its obligations under this Contract in relation to PII. Upon termination or expiration of the Contract or at the State's direction at any time in its sole discretion, whichever is earlier, Contractor shall immediately return to the State any and all PII which it has received under this Contract and shall destroy all records of such PII.

The Contractor shall report to the State any instances of unauthorized access to or potential disclosure of PII in the custody or control of Contractor ("Unauthorized Disclosure") that come to the Contractor's attention. Any such report shall be made by the Contractor within twenty-four (24) hours after the Unauthorized Disclosure has come to the attention of the Contractor. Contractor shall take all necessary measures to halt any further Unauthorized Disclosures. The Contractor, at the sole discretion of the State, shall provide no cost credit monitoring services for individuals whose PII was affected by the Unauthorized Disclosure. The Contractor shall bear the cost of notification to all individuals affected by the Unauthorized Disclosure, including individual letters and public notice. The remedies set forth in this Section are not exclusive and are in addition to any claims or remedies available to this State under this Contract or otherwise available at law. The obligations set forth in this Section shall survive the termination of this Contract.

- E.10. Contractor Hosted Services Confidential Data, Audit, and Other Requirements.

- a. "Confidential State Data" is defined as data deemed confidential by State or Federal statute or regulation. The Contractor shall protect Confidential State Data as follows:
- (1) The Contractor shall ensure that all Confidential State Data is housed in the continental United States, inclusive of backup data.
 - (2) The Contractor shall encrypt Confidential State Data at rest and in transit using the current version of Federal Information Processing Standard ("FIPS") 140-2 validated encryption technologies.
 - (3) The Contractor and the Contractor's processing environment containing Confidential State Data shall either (1) be in accordance with at least one of the following security standards: (i) International Standards Organization ("ISO") 27001; (ii) Federal Risk and Authorization Management Program ("FedRAMP"); or (2) be subject to an annual engagement by a CPA firm in accordance with the standards of the American Institute of Certified Public Accountants ("AICPA") for a System and Organization Controls for service organizations ("SOC") Type II audit. The State shall approve the SOC audit control objectives. The Contractor shall provide proof of current ISO certification or FedRAMP authorization for the Contractor and Subcontractor(s) or provide the State with the Contractor's and Subcontractor's annual SOC Type II audit report within 30 days from when the CPA firm provides the audit report to the Contractor or Subcontractor. The Contractor shall submit corrective action plans to the State for any issues included in the audit report within 30 days after the CPA firm provides the audit report to the Contractor or Subcontractor.

If the scope of the most recent SOC audit report does not include all of the current State fiscal year, upon request from the State, the Contractor must provide to the State a letter from the Contractor or Subcontractor stating whether the Contractor or Subcontractor made any material changes to their control environment since the prior audit and, if so, whether the changes, in the opinion of the Contractor or Subcontractor, would negatively affect the auditor's opinion in the most recent audit report.

No additional funding shall be allocated for these certifications, authorizations, or audits as these are included in the Maximum Liability of this Contract.

- (4) The Contractor must annually perform Penetration Tests and Vulnerability Assessments against its Processing Environment. "Processing Environment" shall mean the combination of software and hardware on which the Application runs. "Application" shall mean the computer code that supports and accomplishes the State's requirements as set forth in this Contract. "Penetration Tests" shall be in the form of attacks on the Contractor's computer system, with the purpose of discovering security weaknesses which have the potential to gain access to the Processing Environment's features and data. The "Vulnerability Assessment" shall be designed and executed to define, identify, and classify the security holes (vulnerabilities) in the Processing Environment. The Contractor shall allow the State, at its option, to perform Penetration Tests and Vulnerability Assessments on the Processing Environment.
 - (5) Upon State request, the Contractor shall provide a copy of all Confidential State Data it holds. The Contractor shall provide such data on media and in a format determined by the State
 - (6) Upon termination of this Contract and in consultation with the State, the Contractor shall destroy all Confidential State Data it holds (including any copies such as backups) in accordance with the current version of National Institute of Standards and Technology ("NIST") Special Publication 800-88. The Contractor shall provide a written confirmation of destruction to the State within ten (10) business days after destruction.
- b. Minimum Requirements

- (1) The Contractor and all data centers used by the Contractor to host State data, including those of all Subcontractors, must comply with the State's Enterprise Information Security Policies as amended periodically. The State's Enterprise Information Security Policies document is found at the following URL:
<https://www.tn.gov/finance/strategic-technology-solutions/strategic-technology-solutions/sts-security-policies.html>.
- (2) The Contractor agrees to maintain the Application so that it will run on a current, manufacturer-supported Operating System. "Operating System" shall mean the software that supports a computer's basic functions, such as scheduling tasks, executing applications, and controlling peripherals.
- (3) If the Application requires middleware or database software, Contractor shall maintain middleware and database software versions that are at all times fully compatible with current versions of the Operating System and Application to ensure that security vulnerabilities are not introduced.

c. Comptroller Audit Requirements

Upon reasonable notice and at any reasonable time, the Contractor and Subcontractor(s) agree to allow the State, the Comptroller of the Treasury, or their duly appointed representatives to perform information technology control audits of the Contractor and all Subcontractors used by the Contractor. Contractor will maintain and cause its Subcontractors to maintain a complete audit trail of all transactions and activities in connection with this Contract. Contractor will provide to the State, the Comptroller of the Treasury, or their duly appointed representatives access to Contractor and Subcontractor(s) personnel for the purpose of performing the information technology control audit.

The information technology control audit may include a review of general controls and application controls. General controls are the policies and procedures that apply to all or a large segment of the Contractor's or Subcontractor's information systems and applications and include controls over security management, access controls, configuration management, segregation of duties, and contingency planning. Application controls are directly related to the application and help ensure that transactions are complete, accurate, valid, confidential, and available. The audit shall include the Contractor's and Subcontractor's compliance with the State's Enterprise Information Security Policies and all applicable requirements, laws, regulations or policies.

The audit may include interviews with technical and management personnel, physical inspection of controls, and review of paper or electronic documentation.

For any audit issues identified, the Contractor and Subcontractor(s) shall provide a corrective action plan to the State within 30 days from the Contractor or Subcontractor receiving the audit report.

Each party shall bear its own expenses incurred while conducting the information technology controls audit.

d. Business Continuity Requirements. The Contractor shall maintain set(s) of documents, instructions, and procedures which enable the Contractor to respond to accidents, disasters, emergencies, or threats without any stoppage or hindrance in its key operations ("Business Continuity Requirements"). Business Continuity Requirements shall include:

- (1) "Disaster Recovery Capabilities" refer to the actions the Contractor takes to meet the Recovery Point and Recovery Time Objectives defined below. Disaster Recovery Capabilities shall meet the following objectives:

- i. Recovery Point Objective (“RPO”). The RPO is defined as the maximum targeted period in which data might be lost from an IT service due to a major incident: TWENTY-FOUR (24) HOURS.
 - ii. Recovery Time Objective (“RTO”). The RTO is defined as the targeted duration of time and a service level within which a business process must be restored after a disaster (or disruption) in order to avoid unacceptable consequences associated with a break in business continuity: FORTY-EIGHT (48) HOURS.
- (2) The Contractor and the Subcontractor(s) shall perform at least one Disaster Recovery Test every three hundred sixty-five (365) days. A “Disaster Recovery Test” shall mean the process of verifying the success of the restoration procedures that are executed after a critical IT failure or disruption occurs. The Disaster Recovery Test shall use actual State Data Sets that mirror production data, and success shall be defined as the Contractor verifying that the Contractor can meet the State’s RPO and RTO requirements. A “Data Set” is defined as a collection of related sets of information that is composed of separate elements but can be manipulated as a unit by a computer. The Contractor shall provide written confirmation to the State after each Disaster Recovery Test that its Disaster Recovery Capabilities meet the RPO and RTO requirements.
- e. The Contractor and any Subcontractor used by the Contractor to host State data, including data center vendors, shall be subject to an annual engagement by a CPA firm in accordance with the standards of the American Institute of Certified Public Accountants (“AICPA”) for a System and Organization Controls for service organizations (“SOC”) Type II audit. The State shall approve the SOC audit control objectives. The Contractor shall provide the State with the Contractor’s and Subcontractor’s annual audit report within 30 days from when the CPA firm provides the audit report to the Contractor or Subcontractor. The Contractor shall submit corrective action plans to the State for any issues included in the audit report within 30 days after the CPA firm provides the audit report to the Contractor and Subcontractor.

If the scope of the most recent SOC audit report does not include all of the current State fiscal year, upon request from the State, the Contractor must provide to the State a letter from the Contractor or Subcontractor stating whether the Contractor or Subcontractor made any material changes to their control environment since the prior audit and, if so, whether the changes, in the opinion of the Contractor or Subcontractor, would negatively affect the auditor’s opinion in the most recent audit report.

No additional funding shall be allocated for these audits as they are included in the Maximum Liability of this Contract.

- E.11. Additional lines, items, or options. At its sole discretion, the State may make written requests to the Contractor to add lines, items, or options that are needed and within the Scope but were not included in the original Contract. Such lines, items, or options will be added to the Contract through a Memorandum of Understanding (“MOU”), not an amendment.
- a. After the Contractor receives a written request to add lines, items, or options, the Contractor shall have ten (10) business days to respond with a written proposal. The Contractor’s written proposal shall include:
 - (1) The effect, if any, of adding the lines, items, or options on the other goods or services required under the Contract;
 - (2) Any pricing related to the new lines, items, or options;
 - (3) The expected effective date for the availability of the new lines, items, or options; and
 - (4) Any additional information requested by the State.

- b. The State may negotiate the terms of the Contractor's proposal by requesting revisions to the proposal.
- c. To indicate acceptance of a proposal, the State will sign it. The signed proposal shall constitute a MOU between the Parties, and the lines, items, or options shall be incorporated into the Contract as if set forth verbatim.
- d. Only after a MOU has been executed shall the Contractor perform or deliver the new lines, items, or options.

E.12. Survival. The terms, provisions, representations, and warranties contained in this Contract which by their sense and context are intended to survive the performance and termination of this Contract, shall so survive the completion of performance and termination of this Contract.

IN WITNESS WHEREOF,

CONTRACTOR LEGAL ENTITY NAME:

CONTRACTOR SIGNATURE **DATE**

PRINTED NAME AND TITLE OF CONTRACTOR SIGNATORY (above)

TENNESSEE DEPARTMENT OF TRANSPORTATION:

BUTCH ELEY, COMMISSIONER **DATE**

ATTESTATION RE PERSONNEL USED IN CONTRACT PERFORMANCE

SUBJECT CONTRACT NUMBER:	
CONTRACTOR LEGAL ENTITY NAME:	
EDISON VENDOR IDENTIFICATION NUMBER:	

The Contractor, identified above, does hereby attest, certify, warrant, and assure that the Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this Contract and shall not knowingly utilize the services of any subcontractor who will utilize the services of an illegal immigrant in the performance of this Contract.

CONTRACTOR SIGNATURE

NOTICE: This attestation MUST be signed by an individual empowered to contractually bind the Contractor. Attach evidence documenting the individual's authority to contractually bind the Contractor, unless the signatory is the Contractor's chief executive or president.

PRINTED NAME AND TITLE OF SIGNATORY

DATE OF ATTESTATION

Job Titles and Descriptions

- A. Junior Developer – Involved with developing, designing, and building databases and creating applications. Possesses specialized knowledge related to computer programs, (e.g. SQL Server, ITS Architectures, etc.), writing and designing of complex business applications.
- B. Senior Developer - Responsible for developing, designing, and building databases and creating applications. Possesses specialized knowledge related to computer programs, (e.g. SQL Server, ITS Architectures, etc.), writing and designing of complex business applications. Developers at this level may oversee the work of Junior Developers and other computer technicians.
- C. Junior Architect - This position requires a Bachelor’s Degree in Data Science. Data Scientists at this level work at the general supervision of a senior data scientists. This position uses analytical, statistical, and programming skills to collect large data sets. They develop data-driven solutions explicitly tailored toward the needs of an organization.
- D. Senior Architect - This position requires a minimum of 5 years of experience in Data Management. Data Scientists at this level coordinate the work of team members and manage project budgets.
- E. Project Manager - This position requires at least 8 years of project management experience with exposure to a variety of planning projects and a good understanding of project management concepts. The project manager will set overall objectives, prioritize critical issues and policy matters. The project manager may directly implement smaller projects or phases and tasks within large projects through supervising, coordinating and reviewing the work of the subordinates.
- F. Senior Project Manager - This position requires at least 10 years of project management experience with exposure to a variety of planning projects and a good understanding of project management concepts. The project manager will set overall objectives, prioritize critical issues and policy matters. The project manager may directly implement smaller projects or phases large projects as well as guiding the larger project through supervising, coordinating and reviewing the work of the subordinates.
- G. Business Analyst – Business Analysts gather and analyze data to form business insights and suggest solutions for improvement in support of business projects. The position identifies issues in the IT processes of a business or organization.
- H. Technical Writer – Responsible for determining the most concise and logical way to present information for effective reader comprehension. Meets with subject-matter experts to ensure IT topics are appropriately addressed. Analyzes information needed for developing and updating policy, procedure and form documentation.
- I. Database Administrator - Responsible for all activities related to maintaining an organization's database and keeping data secure, which includes data integrity, keeping it available to users, and preventing unauthorized access. The DBA is responsible for understanding and managing the overall database environment. The DBA also adjusts, upgrades, and tests modifications to the database as needed.

TDOT Architecture Guidelines

On-premises Solution – Systems that will be running on state owned hardware and infrastructure

- Operating System – If solution will reside at the state of Tennessee's data center the approved operating systems are Microsoft Windows Server 2019 or later and Red Hat Enterprise Linux 8.5 or later. For solutions needing to reside at the TDOT TMCs Microsoft Windows Server 2019 or later will be supported.
- Authentication – TDOT uses Microsoft Active Directory for authentication in the environment. Solutions should leverage the existing Microsoft Active Directory for authentication.
- Web Server - TDOT utilizes Microsoft's Internet Information Services (IIS) for web/application hosting. Solutions with web components should utilize this technology.
- Technology Stack - TDOT prefers ASP.NET MVC/WebAPI framework with C# and JavaScript for any custom written solution. No special client-side installations will be allowed (ie: Flash, ActiveX, or Java).
- Web Browser Support - TDOT's browser standard is Edge.
- Application Communication - Solutions must have or create Web APIs for connectivity between them and other systems that TDOT deems necessary.
- Network Connectivity - Servers in state of Tennessee's data center do not have access to the internet. Any access to an external connection must be approved and a security exception granted.

Hosted Solution – Commonly referred to as the cloud, these solutions will be on hardware and infrastructure not owned or managed by TDOT or the state of Tennessee

- Authentication – TDOT uses Microsoft Azure AD for authentication in the environment. Solutions should leverage the state of Tennessee's Azure AD for authentication.
- Application Communication - Solutions must have or create Web APIs for connectivity between them and other systems that TDOT deems necessary.
- Security Requirements - Solutions follow the state of Tennessee's EISP found here: [Enterprise-Information-Security-Policies-v2-3-ISO-27002-12-21-2018-Internal-FINAL- with-Sigs \(tn.gov\)](#)
- Data Portability – TDOT is the ultimate owner of all data uploaded to and/or created within any hosted solution. The vendor will port that data in its entirety to common technical standards upon request from TDOT.

Data Guidelines

- Database - All the applications should be able to work with Oracle backend database and certified to run on the most current major release of 64-bit Oracle enterprise RAC database.
- Database Connectivity - Oracle's connection methods such as LDAP, TNSNAMES should be utilized for connecting from the applications to the database.
- Database Privileges - The applications should be able to function with normal user privileges; no elevated privileges will be given to the application schemas.
- Metadata - All the applications/solutions delivered should be accompanied by the data dictionary and data model (This also applies to Hosted Solutions).
- TDOT does not support the following
 - Any Oracle middleware products such as WebLogic.
 - Any Microsoft Access Frontend/backend based solutions

- Custom database connection configurations that require the server names, ports and database names to be stored in the application configurations are not allowed.
- The schema names, passwords and database names should be configurable and have the ability to be encrypted. Hardcoding for these parameters are not accepted.
- Applications should not execute any Data Definition Language (DDL) statements with the exception of Global temporary tables.

Data Security Guidelines

- We recommend to follow the guidelines specified in 'NIST Special Publication 800-171' (<https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-171r1.pdf>) for the unclassified data.
- Any PII data that is stored within the database should adhere to the 'NIST Special Publication 800-122' standard (<http://nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication800-122.pdf>).

Geospatial Guidelines

- Geospatial Data Web Services - All geospatial data web services must be made available in Open Geospatial Consortium (OGC) standards. Often the data services listed below are available in conjunction with a proprietary type of service. The use of a proprietary service type is acceptable as long as it offers the required standard service type inherently as part of the service. Both services occur from a single point and read the same data. The three most common standards are referenced below.

Reference:

<http://www.opengeospatial.org/standards>

- Web Map Service (WMS) - This OGC standard is for accessing map images from a spatial dataset(s). The images can be returned as JPG, PNG, etc. and displayed in a browser. This is basically a static picture of dynamic data. This type of service great for a visual reference layer, but it cannot be used for analysis or editing.
 - Web Map Tile Service (WMTS) - This OGC standard is for accessing cached tile images from spatial datasets. Unlike WMS, images retrieved from the service are from a static cache. This service type generally has better performance than WMS.
 - Web Feature Service (WFS) - This is an Open Geospatial Consortium (OGC) standard for accessing the data records from a spatial dataset(s). This service allows for access to features for query, creation, update and deletion. This service is capable of be utilized for spatial analysis.
- Geospatial Basemaps - All applications containing a mapping element developed or purchased for use by TDOT will be compatible with the following formats: Web Map Tile Service (WMTS) and ESRI ArcGIS Tiled Map Service.
 - Geospatial Data Formats - Enterprise Geodatabase (Oracle SDO_GEOMETRY) - All spatial data stored in the Enterprise Geodatabase will be stored in Oracle SDO (Spatial Data Object) Geometry. This enables the use of Oracle Spatial tools and utilities at the database level. The format is also vendor neutral allowing it to be utilized by various GIS and data manipulation software.

Reference:

<https://docs.oracle.com/database/121/SPATL/toc.htm>

- Data Deliverables - ESRI File Geodatabase is a single user proprietary geodatabase format created by ESRI. Data in this format is normally imported into the Oracle Enterprise Geodatabase. Any data that is not able to be imported for some reason is made available in this format on a shared file server.

Reference:

<http://desktop.arcgis.com/en/arcmap/10.3/manage-data/geodatabases/what-is-a-geodatabase.htm>

Security Guidelines

Transportation Equity Act 1998 (TEA-21)

Congress passed the Transportation Equity Act for the 21st Century (TEA-21) to address the need to begin to work toward regionally integrated transportation systems. In January 2001, FHWA published a rule (ITS Architecture and Standards) and FTA published a companion policy to implement section 5206(e) of TEA-21. This Rule/Policy seeks to foster regional integration by requiring that all ITS projects funded from the Highway Trust Fund be in conformance with the National ITS Architecture and appropriate standards. "Conformance with the National ITS Architecture" is defined in the final Rule/Policy as using the National ITS Architecture to develop a "regional ITS architecture" that would be tailored to address the local situation and ITS investment needs, and the subsequent adherence of ITS projects to the regional ITS architecture. See Appendix A.

Federal Highway Administration (FHWA) ITS Architecture Guidance

This document is a guide for transportation professionals who are involved in the development, use, or maintenance of regional ITS architectures. The document describes a process for creating a regional ITS architecture with supporting examples of each architecture product. In its discussion of the uses of the regional ITS architecture, the document presents an approach for mainstreaming ITS into the transportation planning and project development processes.

Federal Automated Vehicle Policy ITS

United States Department of Transportation, National Highway Traffic Safety Administration (NHTSA) has placed a Federal policy concerning automated Vehicles and Intelligent Traffic Systems. For the last 50 years, the U.S. Department of Transportation (DOT) has been committed to saving lives and improving safety and efficiency in every way Americans move—by planes, trains, automobiles, bicycles, foot, and more. DOT, through the National Highway Traffic Safety Administration (NHTSA), has carried out that mission on U.S. roadways in part by consistently embracing new technologies that make driving, riding, biking, and walking safer. Twentieth century automobile technologies (such as seat belts, air bags, child seats, and antilock brakes)—developed in the private sector and brought to the nation's driving public through NHTSA's safety programs and regulatory authority—are responsible for saving hundreds of thousands of lives. Today, the automobile industry is on the cusp of a technological transformation that holds promise to catalyze an unprecedented advance in safety on U.S. roads and highways. The development of advanced automated vehicle safety technologies, including fully self-driving cars, may prove to be the greatest personal transportation revolution since the popularization of the personal automobile nearly a century ago.

SSL Secured Socket Layer

The SSL VPN feature (also known as WebVPN) provides support, in Cisco IOS software, for remote user access to enterprise networks from anywhere on the Internet. Remote access is provided through a Secure Socket Layer- (SSL-) enabled SSL VPN gateway. The SSL VPN gateway allows remote users to establish a secure Virtual Private Network (VPN) tunnel using a web browser. This feature provides a

comprehensive solution that allows easy access to a broad range of web resources and web-enabled applications using native HTTP over SSL (HTTPS) browser support. SSL VPN delivers three modes of SSL VPN access: clientless, thin-client, and full-tunnel client support. Note The Cisco AnyConnect VPN Client is introduced in Cisco IOS Release 12.4(15)T. This feature is the next-generation SSL VPN Client. If you are using Cisco software before Cisco IOS Release 12.4(15)T, you should be using SSL VPN Client and see GUI for the SSL VPN Client when you are web browsing. However, if you are using Cisco software Release 12.4(15)T or later, you should be using Cisco AnyConnect VPN Client and see GUI for Cisco AnyConnect VPN Client when you are web browsing.

Strong authentication, message privacy, and integrity

TLS/SSL can help to secure transmitted data using encryption. TLS/SSL also authenticates servers and, optionally, authenticates clients to prove the identities of parties engaged in secure communication. It also provides data integrity through an integrity check value. In addition to protecting against data disclosure, the TLS/SSL security protocol can be used to help protect against masquerade attacks, man-in-the-middle or bucket brigade attacks, rollback attacks, and replay attacks.

FISMA Compliance

The Federal Information Security Management Act of 2002, known as FISMA, is typically thought to apply only to government organizations. However, contractors and vendors that provide services to, manage systems on behalf of, or maintain close relationships with a government agency may be held to similar standards. This includes States that receive Federal funding. Staying on the right side of FISMA auditors is a matter of common sense and solid security best practices.

Commonsense steps TDOT will take to prepare for a FISMA audit.

1. FISMA's original purpose is to provide a comprehensive framework for ensuring the effectiveness of information security controls.
2. Must complete annual risk assessments.
3. Appoint computer and data security managers, technicians, and officers.
4. Implement a written plan and a budget.
5. Embrace reporting. FISMA requires annual reporting for government agencies.
6. System and data monitoring is mandatory.
8. Establish vulnerability and penetration test controls and be able to prove TDOT did so.
 - Thoroughly evaluate the controls;
 - Retain evidence of evaluation and findings; and
 - Implement a process to remediate findings.
9. Establish a product approval list (Certificate of Networthiness (CoN)) for hardware and software security compliance of Computer Systems. TDOT Active ITS Standards and Guidelines for FISMA Compliance:
 - FIPS -Federal Information Processing Standards
 - FIPS 199 –Standards for Security Categorization
 - FIPS 200 –Minimum Security Requirements
 - NITS 800 Special Publications
 - SP 800-18 –Guide for System Security Plan development
 - SP 800-30–Guide for Conducting Risk Assessments
 - SP 800-34 –Guide for Contingency Plan development
 - SP 800-37–Guide for Applying the Risk Management Framework
 - SP 800-39–Managing Information Security Risk
 - SP 800-53/53A–Security controls catalog/assessment procedures
 - SP 800-60 –Mapping Information Types to Security Categories
 - SP 800-128 –Security-focused Configuration Management
 - SP 800-137 –Information Security Continuous Monitoring

AntiVirus Policy

TDOT Cyber Security recognizes that every endpoint is a launch pad for a cyber-attack. TDOT security recommends Symantec Endpoint Protection version 12.1 or higher (STS State Approved). Symantec multi-layered endpoint protection provides everything from file reputation and behavioral analysis to advanced machine learning. All computers connected to the Tennessee Active ITS network and TDOT domain must have anti-virus to ensure effective virus detection and prevention. All computers must have standard, supported anti-virus software installed and scheduled to run at regular intervals. In addition, the anti-virus software and the virus pattern files must be kept up-to-date (files not updated that are 5 days old will be ISE-ed if plugged in to the network). Virus-infected computers must be removed from the network and placed in a quarantined VLAN until they are verified as virus-free.

Approved anti-virus Software:

- McAfee – Industry Rated 4.9 out of 5.0
- Symantec – Industry Rating 4.7 out of 5.0
- Bitdefender – Industry Rated 4.6 out of 5.0
- AVG – Industry Rated 4.5 out of 5.0
- Kaspersky – Industry Rated 4.5 out of 5.0

Cellular Communication via Verizon Network

The networks run by cellular providers are not being used just for cell phones anymore. Today's 3G and 4G networks also provide wireless connections for laptops and even desktop systems via GSM or CDMA modems, cards and built-in chips, or by connecting to a mobile hotspot device such as the MiFi. Included in these capabilities is tethering. End users tether their computer to a cell phone to use its Internet connection, either via a USB cable or "mobile hotspot" capabilities built into the phone. Cellular users access the network via radio signals between their devices and the cellular towers. This wireless network is also connected to the core network, which is a wired network. The wired core network connects to the Public Switched Telephone Network (PSTN) for making voice calls to landlines. The core network also connects to the Internet, using protocol gateways and multiprotocol mobility managers, for sending data to and receiving data from other data networks. The core network uses service nodes, which are servers, to store data such as subscriber information. Wireless communications are inherently more difficult to secure than wired transmissions. When signals go through the airwaves, it's easier to intercept wireless connections because one does not have to physically tap into a line. Anyone with a transmitter/receiver can capture the signals. Since it's difficult or impossible to prevent the interception of the signals, the key to securing a wireless network is encrypting those signals so that they will be useless to any unauthorized party who does intercept them. Attacks can travel from the Internet through the gateways and infiltrate the core network. These include DoS attacks and SMS (text) spam. Because it is connected to the Internet through the core network, the PSTN's security cannot be assured, either. The PSTN was designed as a closed network and so did not include security mechanisms designed to protect from the types of threats that can come in from the Internet.

TDOT Active ITS Security best practices on a cellular networks:

- Each provider has its own security policies regarding physical security of the servers and remote access to those servers. When selecting a service provider, ask and review provider security policies with qualified security personnel.
- use strong cipher keys to encrypt the signals. Two way authentication is used to prevent the use of cloned cellular devices. 3G networks are still vulnerable to Denial of Service (DoS) attacks. Before selecting product, determine if strong encryption is provided.
- MAPSec (Mobile Application Part Security) protocol provides security for the application layer protocol that is used for exchanging information that is specific to a subscriber and authentication information.

- IPsec is also used on the core network to protect communications in transit between service nodes. However, use of MAPsec and IPsec is optional and up to the service provider.
- Make sure the SS7 protocols are not used. SS7 uses plaintext and excludes authentication.
- Does the cellular device provide event and security logging to include reports.

Here are some standard precautions to take with cellular devices:

- Ensure that your 3G/4G device – whether a USB modem, a MiFi device, a card or a smart phone – has all available updates installed to address vulnerabilities in the firmware or software.
- Have a firewall installed and properly configured on the host device to include anti-virus and antimalware software installed and turned on.
- Always use strong passwords or multi factor authentication .
- Must enable logging and alerting.
- For the wi-fi part of the connection, enable WPA2 encryption.
- On a mobile hotspot device such as the MiFi or Sprint's Overdrive, disable SSID broadcasting and disable the DHCP server.
- When using a mobile hotspot device or the mobile hotspot function your phone, which allows for multiple computers to use the 3G or 4G connection, monitor the hotspot software to be sure only devices you know about are connected.
- If the device allows you to set a maximum number of users, set this to 1 if you are going to be the only one connecting to the device.
- Change the default administrative passwords on your 3G/4G devices.
- If your 3G/4G device supports MAC filtering, enable it and create a whitelist of the physical addresses of devices (such as your laptop) that you want to be able to use the 3G/4G network, and block all others.

Not surprisingly, the steps that an end-user needs to take when connected to a cellular network are much the same as best practices on any other network. The key here is that when you use a cellular Internet connection, you're subject to the same threats – malware, viruses, DoS attacks, intrusions – as with any other Internet connection. There are also vulnerabilities specific to the devices; for example, there were reports that the GPS on the 3G MiFi mobile hotspot could be enabled without the user's knowledge if you happen to visit the wrong malicious web site. The latest version of the MiFi, made for Verizon's LTE network, comes with the GPS chip deactivated.

It's also important for network admins to recognize the possibility that corporate users can pop a 3G or 4G card or modem into their laptops and access the Internet through a cellular network, bypassing corporate gateways, while also connected to the internal network over Ethernet. This can pose a threat to the internal network, since the user can visit web sites or run protocols or applications that would be blocked by the corporate firewalls.

Appendix A to TDOT Architecture Guidelines

**SEC. 5206. Public Law 105-178
NATIONAL ARCHITECTURE AND STANDARDS**

(a) IN GENERAL.—

(1) DEVELOPMENT, IMPLEMENTATION, AND MAINTENANCE.—Consistent with section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note; 110 Stat. 783), the Secretary shall develop, implement, and maintain a national architecture and supporting standards and protocols to promote the widespread use and evaluation of intelligent transportation system technology as a component of the surface transportation systems of the United States.

(2) INTEROPERABILITY AND EFFICIENCY.—To the maximum extent practicable, the national architecture shall promote interoperability among, and efficiency of, intelligent transportation system technologies implemented throughout the United States.

(3) USE OF STANDARDS DEVELOPMENT ORGANIZATIONS.—In carrying out this section, the Secretary may use the services of such standards development organizations as the Secretary determines to be appropriate.

(b) REPORT ON CRITICAL STANDARDS.—Not later than June 1, 1999, the Secretary shall submit a report to the Committee on Environment and Public Works of the Senate and the Committee on Transportation and Infrastructure and the Committee on Science of the House of Representatives identifying which standards are critical to ensuring national interoperability or critical to the development of other standards and specifying the status of the development of each standard identified.

(c) PROVISIONAL STANDARDS.—

(1) IN GENERAL.—If the Secretary finds that the development or balloting of an intelligent transportation system standard jeopardizes the timely achievement of the objectives identified in subsection (a), the Secretary may establish a provisional standard after consultation with affected parties, and using, to the extent practicable, the work product of appropriate standards development organizations.

(2) CRITICAL STANDARDS.—If a standard identified as critical in the report under subsection (b) is not adopted and published by the appropriate standards development organization by January 1, 2001, the Secretary shall establish a provisional standard after consultation with affected parties, and using, to the extent practicable, the work product of appropriate standards development organizations.

(3) PERIOD OF EFFECTIVENESS.—A provisional standard established under paragraph (1) or (2) shall be published in the Federal Register and remain in effect until the appropriate standards development organization adopts and publishes a standard.

(d) WAIVER OF REQUIREMENT TO ESTABLISH PROVISIONAL STANDARD.—

(1) IN GENERAL.—The Secretary may waive the requirement under subsection (c)(2) to establish a provisional standard if the Secretary determines that additional time would be productive or that establishment of a provisional standard would be counterproductive to achieving the timely achievement of the objectives identified in subsection (a).

(2) NOTICE.—The Secretary shall publish in the Federal Register a notice describing each standard for which a waiver of the provisional standard requirement has been granted, the reasons for and effects of granting the waiver, and an estimate as to when the standard is

expected to be adopted through a process consistent with section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note; 110 Stat. 783).

(3) WITHDRAWAL OF WAIVER.—At any time the Secretary may withdraw a waiver granted under paragraph (1). Upon such withdrawal, the Secretary shall publish in the Federal Register a notice describing each standard for which a waiver has been withdrawn and the reasons for withdrawing the waiver.

(e) CONFORMITY WITH NATIONAL ARCHITECTURE.—

(1) IN GENERAL.—Except as provided in paragraphs (2) and (3), the Secretary shall ensure that intelligent transportation system projects carried out using funds made available from the Highway Trust Fund, including funds made available under this subtitle to deploy Intelligent transportation system technologies, conform to the national architecture, applicable standards or provisional standards, and protocols developed under subsection (a).

(2) SECRETARY'S DISCRETION.—The Secretary may authorize exceptions to paragraph (1) for—

(A) projects designed to achieve specific research objectives outlined in the National ITS Program Plan under section 5205 or the Surface Transportation Research and Development Strategic Plan developed under section 508 of title 23, United States Code; or

(B) the upgrade or expansion of an intelligent transportation system in existence on the date of enactment of this subtitle, if the Secretary determines that the upgrade or expansion—

(i) would not adversely affect the goals or purposes of this subtitle;

(ii) is carried out before the end of the useful life of such system; and

(iii) is cost-effective as compared to alternatives that would meet the

conformity requirement of paragraph(1).

(3) EXCEPTIONS.—Paragraph (1) shall not apply to funds used for operation or maintenance of an intelligent transportation system in existence on the date of enactment of this subtitle.

(f) SPECTRUM.—The Federal Communications Commission shall consider, in consultation with the Secretary, spectrum needs for the operation of intelligent transportation systems, including spectrum for the dedicated short-range vehicle-to-wayside wireless standard. Not later than January 1, 2000, the Federal Communications Commission shall have completed a rulemaking considering the allocation of spectrum for intelligent transportation systems.