

# High Occupancy Vehicle (HOV) Declaration Application REQUEST FOR PROPOSALS

#### **Proposal Due Date**

August 714, 2017 | 4:00 PM Local Time

## **Physical Delivery Address:**

North Carolina Turnpike Authority
Transportation Building
I South Wilmington Street
Raleigh, NC 27601
Attn: Kristen Pearce

#### **Mailing Address:**

North Carolina Turnpike Authority 1578 Mail Service Center Raleigh, NC 27699-1578

Issue Date: June 16, 2017

## **Addendum Revisions Table**

Description	Date
Addendum I Updated	July 12, 2017
<u>Forms</u>	
Addendum 2 Key	July 31, 2017
Milestone Revisions	

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# I. Notice of Request for Proposals

TITLE: High Occupancy Vehicle (HOV) Declaration Phone Application

Request for Proposals (RFP)

**ISSUING DATE:** June 16, 2017

**ISSUING AGENCY:** North Carolina Turnpike Authority

**CONTACT PERSON:** Ms. Kristen Pearce

# I.I. Background and Purpose

The North Carolina Turnpike Authority (NCTA), a business unit of the North Carolina Department of Transportation (NCDOT), was formed in 2002 by the North Carolina General Assembly. Due to concerns about rapid growth, heavy congestion and dwindling resources in the State, NCTA was created with the mission to supplement the traditional non-toll transportation system by accelerating the delivery of roadway projects using alternative financing options and facilitating the development, delivery and operation of toll roads.

NCTA's work is performed by professional teams comprised of NCTA staff, NCDOT staff and consultants. This arrangement provides management oversight while assuring that necessary expertise is available when needed to advance projects in an efficient and timely manner. Organized into four (4) core departments (Engineering, Finance, Government and Public Relations, and Operations), NCTA is authorized to study, plan, develop, and undertake preliminary design work on Turnpike Projects.

The NCTA is soliciting Proposals from application developers that can provide NCTA with an HOV Declaration Application (Application) that is available to customers via a web-based browser and mobile device application for an assortment of web browsers and mobile devices, including iPhone©, iPad©, iPod Touch© and Android© devices. With this procurement, NCTA desires to develop a web and mobile device Application that will enable travelers on North Carolina Express Lane facilities to register their NC Quick Pass transponder and declare an HOV occupancy status prior to their trip on an Express Lanes facility.

NCTA is requesting written Proposals from qualified Application Developers ("Proposers") interested in providing an Application. While this solicitation is open to all qualified Proposers, preference will be given to qualified Proposers that have experience integrating website and mobile applications with other transaction-based systems.

Note: Refer to Section III, Scope of Work and Requirements below for more information on the Project schedule; however, it is NCTA's intent to have the Application (both the website and mobile versions) deployed and available for customer use by March +8, 2018. Because this Application will be a necessity to support the operation of the I-77 Express Lane facility, it is critical that proposers are capable of meeting the schedule as documented in Section III, Scope of Work and Requirements, Section I.I.I. Key Project Milestones.

The Toll Systems Manager has primary responsibility for this RFP process, the Application systems, services, scope of work and requirements addressed in this RFP, the evaluation of the Proposals submitted by Proposers, and the oversight of the contract.

#### 1.2. Existing NCTA Toll Program

The Triangle Expressway is the NCTA's first toll facility, and it is located in the Raleigh-Durham area. The Triangle Expressway is a roadway extending from the NC 55 Bypass near Holly Springs to I-40 at NC-147. This toll road system is approximately 18.8 miles in length with 11 interchanges and 80 tolled lanes (4 mainline toll zones and 12 ramp toll zones).

The Triangle Expressway is an all-electronic toll (AET) facility with no cash toll collection. Tolls are collected electronically through a pre-paid transponder program (NC Quick Pass®), or a post-paid video program Bill by Mail (BBM). Motorists who pay their tolls using properly mounted transponders on their vehicles pay a discounted rate compared to video toll customers.

**Note**: The Triangle Expressway is not an Express Lane facility. The Application will only be available for NC Quick Pass customers traveling on North Carolina Express Lane facilities.

Quarterly NCTA Operations Statistics reports are located on the NCTA website: <a href="http://www.ncdot.gov/projects/triangleexpressway">http://www.ncdot.gov/projects/triangleexpressway</a>. The reports include data related to traffic volumes, toll system, and roadway operations and maintenance.

#### I.2.1. Planned Toll Projects

Several new NCTA toll projects are under development as listed below. These are currently funded and scheduled for construction within the next five years. Four of the five projects are in the greater Charlotte area, an area that does not yet have an operating toll road. It is anticipated that all future toll projects, with the possible exception of the Mid-Currituck Bridge, will be integrated into the NCTA Back Office System (BOS) and will use the NC Quick Pass® program.

- The <u>Monroe Expressway</u> is a 20-mile long Expressway facility in Mecklenburg and Union Counties.
   Tolls will be collected at seven mainline toll zone locations. This project is under construction, and expected to open to traffic in 2018.
- <u>I-77 Express Lanes</u> is an NCDOT Public Private Partnership project that will construct 26 miles of Express Lanes on I-77 in Mecklenburg and Iredell Counties. The NCTA is responsible for the management of the transponder program and Back Office processing of the Express Lanes transactions. This project is under construction and is expected to be complete in 2018.
- <u>US 74 Express Lanes</u> will be constructed through two projects totaling 12 miles in Mecklenburg County. Construction is expected to begin in 2017.
- I-485 Express Lanes is a 17-mile long project in Mecklenburg County. Construction is expected to begin in 2017.
- <u>Complete 540</u> is a 20+ mile long expressway facility in Wake and Johnston Counties. This project is an extension of the Triangle Expressway, and tolls will be collected electronically at mainline toll zone locations. This project is expected to begin construction in 2018.
- The <u>Mid-Currituck Bridge</u> is a 7-mile long project to construct a new-location toll bridge in Currituck County. Construction is programmed to begin in NCDOT Fiscal Year 2019.

Current information and project descriptions can be found on the NCTA website:

http://www.ncdot.gov/turnpike/projects/.

#### 1.2.2. Current BOS Technology and Toll Operations

#### **Back Office Technology**

NCTA currently operates a BOS provided and maintained via contract by Conduent State and Local Solutions (Conduent). The majority of the BOS infrastructure, inclusive of hardware and software, is located in the Customer Service Center (CSC) with standby failover functionality located in Tarry Town, NY. The service center is anticipated to expand its footprint to include one or more storefront locations in the greater Charlotte, NC area.

The existing BOS was developed to manage all the North Carolina toll collection system functionality, and potentially serve as an Electronic Toll Collection (ETC) clearing house for all toll transactions produced in the State. The current system provides functionality for:

- Processing of all lane transactions (ETC, image-based and interoperable (IOP))
- Updating lane files, including ETC account status files
- Customer service and customer interaction (website, Interactive Voice Recognition (IVR), e-mail, text message, etc.)
- Financial transactions and account replenishment
- Financial and lane transaction reconciliations
- Image review
- · Revenue management
- Reporting

The existing BOS maintains accounts for tolls collected electronically through NC Quick Pass® and Bill by Mail (BBM). Numerous interfaces supporting interoperability, license plate lookup, document mailing, banking, credit card processing, collections, etc. are in place providing ongoing business processes. By year 2020, NCTA is projected to be servicing approximately 300,000 accounts with their BOS. The NC Quick Pass® participation rate is roughly 60%.

#### Toll Operations

Staffing of the CSC located in Morrisville, NC is provided via contract by AECOM, which provides full-scale back office staffing and operations for NCTA's toll program, including:

- Operations staffing and staff management
- Call center operations support
- Walk in center staffing and operations including payment processing
- Account management support
- Bill by Mail invoicing
- NC Quick Pass® transponder distribution
- Image review
- Financial management and reconciliation services

#### 1.3. Scope of Services

Proposers are to provide NCTA with an Application that is available to customers via both a web-based browser and mobile device application. With this procurement, NCTA desires to develop a web and mobile Application that will enable travelers to register their NC Quick Pass transponder and declare their HOV occupancy status prior to their trip on a North Carolina Express Lane facility.

The Application will interface with the BOS to validate customer NC Quick Pass accounts, and with the existing and future Express Lane Roadside Toll Collection Systems (RTCS) to allow the roadside systems to apply the correct toll rate and to illuminate RTCS beacons per each customer's HOV declaration status for roadside enforcement purposes.

This Scope of Work under this agreement is for the design, development, testing, integration, operation and maintenance of an Application that conforms to the requirements defined within **Section III**, **Scope or Work and Requirements** of this RFP.

#### I.4. Contact Person

Ms. Kristen Pearce is NCTA's Project Manager for this Project, and the contact person on this RFP. Any questions in regard to this Notice or requests for an RFP package shall be directed in writing to Ms. Pearce by e-mail at <a href="mailto:nctabosrfp@ncdot.gov">nctabosrfp@ncdot.gov</a>.

#### 1.5. Information Posting

It is the responsibility of all prospective Proposers interested in responding to this RFP to routinely check the NCTA website at <a href="https://connect.ncdot.gov/business/turnpike">https://connect.ncdot.gov/business/turnpike</a> for any revisions, question responses, addenda, changes to the Project schedule and announcements related to this RFP. NCTA and NCDOT grant permission to use their logos on Proposal Submittals.

# 2. General Information for Proposers

NCTA is requesting written Proposals from qualified Proposers interested in providing and maintaining a web and mobile device based Application. Qualified Proposers may submit a Proposal either solely or in partnership with other firms.

Interested parties may provide and submit responses to this RFP in accordance with the guidelines and schedule set forth herein.

#### 2.1. Schedule

Table I-I provides a planned schedule for this RFP process, listed in the order of occurrence. The NCTA reserves the right to change any or all of these dates as it deems necessary or convenient in its discretion. In the event of such a date change, Proposers will be notified in accordance with **Section I**, **Administrative**, Section I.5 Information Posting.

SCHEDULE		
(The NCTA reserves the right to modify the schedule at any time and for any reason.)		
RFP Issue Date	June 16, 2017	
RFP Questions Due	July 3, 2017	
NCTA Question Responses and Addendum (if required) Due	July 11, 2017	
RFP Proposals (Technical and Price) Due	August 7 <u>14</u> , 2017	
Date/Time	(4:00 p.m. EDT)	
Contractor Selection	September <u>5</u> 12, 2017	
GENERAL INFORMATION		
	Kristen Pearce	
Contact Person Contact Information	Toll Systems Manager	
Contact Person Contact Information	E-Mail: nctabosrfp@ncdot.gov	
	Phone: (919) 707-2700	
	NCDOT-North Carolina Turnpike Authority	
Response Delivery	1578 Mail Service Center	
	Raleigh, NC 27699-1578	
Posting Locations	www.ncdot.gov	
Posting Locations	www.tollroadsnews.com	

**Table I-I HOV Declaration Application RFP Procurement Schedule** 

#### 2.1.1. Proposal Due Date

Separate Technical and Price Proposals will be received by NCTA until the due date and time provided in Table I-I HOV Declaration Application RFP Procurement Schedule above.

# 2.2. Policy Statement

This procurement shall be conducted in accordance with all applicable Federal and State laws and regulations, and the policies and procedures of the NCTA, as those may be amended. All future amendments to any such laws, regulations and applicable NCTA policies and procedures shall be applicable to this procurement.

#### 2.3. RFP Inquiries and Notices

Any questions in regard to this RFP shall be directed in writing to the contact person identified in **Section I, Administrative**, Section I.4. Only inquiries in writing will be accepted by NCTA, and only written responses will be binding upon NCTA. Any inquiries received after the deadline referenced in Table I-I may or may not be answered by NCTA at NCTA's sole determination. All answers to inquiries will be posted on the NCTA web site at <a href="https://connect.ncdot.gov/business/turnpike">https://connect.ncdot.gov/business/turnpike</a>. Proposers shall use the form provided in **Exhibit B-8, Proposer Questions Form** when submitting questions to be addressed by NCTA.

#### 2.4. Non-Solicitation Provision

From the date that this RFP is issued until the award of a Contract is announced, Proposers shall only contact the contact person identified in **Section I**, **Administrative**, Section I.4 with respect to any facet of this procurement. Proposers shall not be permitted to contact any NCTA or NCDOT employee, Agent or Selection Committee member with respect to this procurement. Violation of this provision shall result in the disqualification of the Proposer's Proposal.

## 2.5. Cost Incurred Responsibility

All costs incurred by any interested party in responding to this RFP shall be borne by such interested party; NCTA shall have no responsibility whatsoever for any associated direct or indirect costs.

#### 2.6. Right to Reject

NCTA retains the right and option to reject any and all Proposals.

### 2.7. Responsiveness of Proposals

NCTA reserves the right to reject any Proposal as non-responsive if the Proposal fails to include any of the required information in the specified order, including as further detailed in **Section IV**, **Proposal Contents and Submission**.

# 2.8. Right to Cancel

The NCTA reserves the right to cancel this RFP if it is determined to be in the best interest of the NCTA to do so.

# 2.9. Right to Amend and Addenda

NCTA reserves the right to amend, insert, or delete any item in this RFP if it is determined to be in the best interest of NCTA. If it becomes necessary to revise any part of this RFP, a written addendum to the solicitation will be posted to NCTA's website in accordance with **Section I, Administrative**, Section I.5 Information Posting. NCTA expects to issue the last addendum no later than the date for NCTA Question Responses and Addendum Due, provided in Table I-I HOV Declaration Application RFP Procurement Schedule. NCTA will not be bound by, and the Proposer shall not rely on, any oral or written communication or representation regarding the RFP Documents, except to the extent that it is contained in an addendum to these RFP Documents or in the Questions and Answers as posted on the NCTA web site. In the case of a conflict between addenda, the latest addenda shall apply.

Proposers are required to confirm the receipt of all addenda issued to this RFP by completing **Exhibit B-II**, **Acknowledgment of Receipt of Addenda Form**, and including the completed form in the Technical Proposal Section 7.

#### 2.10. Written Clarifications

NCTA may request written clarifications to Proposals. NCTA will identify in its request for clarification a due date for the response. If the requested information is not received by the requested due date, the Proposer's scores may be adversely affected.

#### 2.11. Oral or Referenced Explanations

NCTA will not be bound by oral explanations or instructions given by anyone at any time during the Proposal process or after Contract award. NCTA will not consider Proposer referenced information not included in the Proposal; however, NCTA may consider other sources in the evaluation of Proposals, such as reference reviews, financial ratings, Proposer oral presentations and product demonstrations (if any), for example.

#### 2.12. Oral Presentations and Interviews

NCTA reserves the right to request oral presentations and interviews with Proposers if NCTA decides that oral presentation and interviews are in its best interests. If oral presentations and interviews are used, NCTA may develop a short list for the oral presentations and interviews based on the scores of the Technical Proposals. See **Section 1, Administrative**, Section 3 Proposal Evaluation for more details.

In advance of any oral presentations and interviews, Proposers will be given detailed instructions on what the format and content of the presentation and interview will be, including potential requests for product demonstrations. Proposers should be prepared to demonstrate key elements of their proposed solution, their history developing websites and mobile applications, their Project approach and to respond to specific questions regarding their Technical Proposals.

# 2.13. Proposal Submittal Deadline

Complete and separate Technical and Price Proposals shall be delivered to the front desk of the North Carolina Department of Transportation (NCDOT) building location presented on the cover page of this RFP before the due date and time provided in Table I-I HOV Declaration Application Procurement Schedule, where they will be logged in as received. NCTA will not accept Proposals delivered after the due date and time as documented in Table I-I HOV Declaration Application RFP Procurement Schedule.

# 2.14. Submittal Responsibility

The responsibility for submitting a Proposal to NCTA on or before the stated time and date will be solely and strictly the responsibility of the Proposer. NCTA will in no way be responsible for delays caused by the United States mail delivery, common carrier or caused by any other occurrence.

#### 2.15. Waivers

NCTA may waive minor informalities or irregularities in Proposals received where such is merely a matter of form and not substance, and the correction or waiver of which is not prejudicial to other Proposers. Minor irregularities are defined as those that will not have an adverse effect on NCTA's interest and will not affect the price of the Proposals by giving a Proposer an advantage or benefit not enjoyed by other Proposers.

# 2.16. Proposal Disposition

Proposers shall identify trade secret or proprietary information as instructed in **Section IV**, **Proposal Contents and Submission**, Section 2.1 Submission of Proposal, (Item 6). NCTA will: I) make a best effort to maintain confidentiality; 2) dispose of all unsuccessful print and electronic Proposals upon

successful award of Contract; and 3) have no ownership rights to print or electronic data from unsuccessful Proposals. All other Technical and Price Proposal materials shall become property of NCTA.

### 2.17. Modification or Withdrawal of Proposals

NCTA will permit modifications to a Proposal after a Proposal has been submitted until the specified due date and time for accepting Proposals provided in Table I-I HOV Declaration Application RFP Procurement Schedule. The Proposal may be picked up by a representative of the Proposer, provided that the request to modify is submitted in writing to the contact listed in this **Section I**, **Administrative**, Section I.4 Contact Person, is executed by the Proposer or the Proposer's duly authorized representative, and is filed with NCTA. It is the Proposer's responsibility to resubmit a Proposal before the deadline in accordance with the instructions and requirements for Proposal submission detailed in this RFP.

A Proposer may withdraw a Proposal without prejudice prior to the Submittal deadline provided in Table I-I, provided that the request is submitted in writing to the NCTA contact noted in this **Section I, Administrative**, Section I.4 Contact Person, is executed by the Proposer or the Proposer's duly authorized representative, and is filed with NCTA.

#### 2.18. Confidentiality and RFP Ownership

Trade secrets or similar proprietary data which the Proposer does not wish disclosed to persons other than personnel involved with this RFP will be kept confidential to the extent permitted by N.C.G.S. § 132-1.2 if identified as follows: Each page shall be identified in boldface at the top and bottom as "CONFIDENTIAL." Any section of the RFP that is to remain confidential shall also be so marked in boldface on the title page of that section. Cost information may not be deemed confidential. In spite of what is labeled as confidential, the determination as to whether or not it is shall be determined by North Carolina law.

In addition to the above, the State intends to keep every Proposal received confidential as a whole until such time as an RFP has been awarded or canceled (aka the "Confidentiality Period"). After the expiration of the Confidentiality Period, all Proposal information will be subject to the normal confidentiality provisions of the State as set out above.

Exception: Respondents expressly acknowledge that the concepts, methods, equipment and procedures presented in a response may be wholly or partially incorporated into an RFP.

# 2.19. Contractual Obligations

NCTA will not be required to evaluate or consider any additional terms and conditions submitted with a Proposal. This applies to any language appearing in or attached to the document as part of the Proposer's Proposal. By execution and delivery of this RFP and Proposal, the Proposer agrees that any additional terms and conditions or changes to the terms and conditions, whether submitted purposely or inadvertently, shall have no force or effect unless they are specifically accepted by NCTA. Further, all exceptions must be taken in accordance with the instructions set forth in in **Section IV, Proposal Contents and Submission**, Section I.3.I Content of Technical Proposal (H. Technical Proposal Section 6: Adherence to the Scope of Work, Requirements and Terms and Conditions).

# 2.20. Proposer's Bid

By submitting a Proposal to NCTA, the Proposer agrees that the Contractor's Proposal shall remain effective two hundred and forty (240) Days after the deadline for submitting the Proposal.

#### 2.21. Registration to Conduct Business in North Carolina

Proposers and Subcontractors wishing to be considered will be properly registered and licensed to conduct business in the State of North Carolina with the Office of the Secretary of State at the time their Proposal is submitted. It is the responsibility of the Proposers to verify the registration of any corporate subsidiary or Subcontractor prior to submitting a Proposal.

# 2.22. Disadvantaged, Minority, Women Business Enterprises (Race and Gender Neutral)

#### 2.22.1. Policy

It is the policy of the NCTA to comply with NCDOT's Disadvantaged Business Enterprises (DBE) Program and ensure that small businesses have an equal opportunity to compete fairly for and to participate in the performance of contracts financed in whole or in part by federal and state funds. NCDOT sets DBE, Minority Business Enterprises (MBE) and Women Business Enterprises (WBE) utilization goals for all construction projects. This Contract for goods and services specific to developing and maintaining an Application is not a construction contract and does not contain utilization goals. However, the Contractor is encouraged to give every opportunity to allow DBE/MBE/WBE Subconsultant participation on all contracts and supplemental agreements.

#### 2.22.2. Obligation

In compliance with Title VI, 23 CRF 200, 230, 635, 117(d) and (e) and 49 CFR Parts 21 and 26, the Proposer and Subconsultant shall not discriminate on the basis of race, religion, color, creed, national origin, age, disability or sex in the performance of this Contract. Failure by the Contractor to comply with these requirements is a material breach of this Contract, which will result in the termination of this Contract or such other remedy, as NCTA deems necessary.

#### 2.22.3. Participation

Due to the Scope of Work and Requirements for this Contract, specific Project goals are not established. However, NCTA encourages the utilization of Small Professional Services Firms (SPSF) Subconsultants and/or suppliers on professional services contracts let by NCDOT. All DBE/MBE and WBE firms currently certified by the NCDOT Unified Certification Program (UCP) automatically qualify as a SPSF.

#### 2.22.4. Listing of Subconsultants

The Proposer, at the time of Proposal Submittal, shall submit a list of all known SPSFs that will participate in the performance of the identified Work. The participation of each SPSF shall be submitted on a separate Form RS-2. In the event the Proposer has no SPSF/Subconsultant participation, the Proposer shall indicate this on the Form RS-2 by entering the word 'none' or the number 'zero' and the form shall be signed and submitted with the Technical Proposal. Form RS-2 is provided in **Exhibit B-4**, **Forms** behind the List of Subcontractors. The form may also be accessed on the website at: https://connect.ncdot.gov/business/Turnpike/Documents/Form%20RS-2%20Subcontract.pdf.

See form instructions for each requirement. For TIP, enter the "Type of Work"; for "Submitted by" enter Subcontractor name and name of person responsible for Subcontractor performance; for "Recommended by" enter name of prime Proposer and person responsible for delivery of Services. See instruction no. 7 on form. A RS-2 is required for all Subcontractors whether or not they are considered a SPSF entity.

Note that each Proposer must complete the List of Subcontractors provided in **Exhibit B-4, Forms** in addition to having each Subcontractor complete the RS-2. A completed list of subcontractors and RS-2

Form shall be included in the Technical Proposal Section 7 Forms as instructed below in **Section IV**, **Proposal Contents and Submission**.

#### 2.22.5. Directory of Approved Transportation Firms

For Subconsultants to be considered for SPSF utilization, a firm must be certified as SPSF and prequalified through North Carolina's Prequalification Unit. Real-time information about firms that are prequalified and approved through North Carolina's Prequalification Unit, is available in the Directory of Firms. The Directory can be accessed at https://www.ebs.nc.gov/VendorDirectory/default.html.

#### 2.22.6. Reporting Participation

When payments are made to Subconsultants, including material suppliers, Proposers at all levels (Proposer, Subconsultant or subfirm) shall provide NCTA's contract administrator (the addressee for invoices under this Contract) with an accounting of said payments. The accounting shall be listed on NCTA's Subcontractor Payment Information Form (Form DBE-IS). In the event the Proposer has no Subconsultant participation, the Proposer shall indicate this on the Form DBE-IS by entering the word 'none' or the number 'zero' and the form shall be signed. Form DBE-IS may be accessed on the website at <a href="https://connect.ncdot.gov/business/Turnpike/Documents/Form%20DBE-IS%20Subcontractor%20Payment%20Information.pdf">https://connect.ncdot.gov/business/Turnpike/Documents/Form%20DBE-IS%20Subcontractor%20Payment%20Information.pdf</a>.

A responsible fiscal officer of the payee Proposer, or Subconsultant, who can attest to the date and amount of the payments shall certify that the accounting is correct on the Form DBE-IS by affixing his/ her signature. This information shall be submitted as part of the requests for payments made to NCTA.

#### 2.23. Federal Aid Requirements

Due to the potential of Federal Aid in development of the Application, NCTA has provided related instructions and information in Appendix A, Standard Special Provision- Required Contract Provisions Federal-Aid Construction Contracts and Appendix B, Standard Special Provision- Award of Contract. The following Federal-Aid Requirements set forth in Appendix A are applicable to this Contract for services: Section II, Nondiscrimination; Section X, Debarment and Suspension; and Section XI, Anti-Lobbying Amendment. Proposers shall also include the appropriate completed Non-Collusion Forms provided in **Exhibit B-9, Form** in Technical Proposal Section 7.

# 3. Proposal Evaluation

An evaluation and negotiation process will be conducted as set forth in this Section 3 using a Best Value procurement process. This will allow NCTA to award the Contract to the Proposer providing the Best Value, recognizing that Best Value may result in award to other than the lowest price or highest technically qualified Proposal. By using this method, the overall ranking may be adjusted up or down by the Evaluation Committee when considered with, or traded-off against, other non-price factors. "Best Value" procurement methods are authorized by G.S. §143-135.9, and in accordance with NCTA Policies and Procedures adopted by the NCTA Board February 18, 2009.

# 3.1. Technical Proposal Pass / Fail Screening

Packages will be opened upon receipt and checked for completeness. Technical Proposals which
are incomplete will not be evaluated further. Completeness includes all Technical Proposal
sections, correctly completed forms and required information.

- 2. Each Technical Proposal will subsequently be reviewed to ensure that the Proposer meets the minimum Proposer Project experience qualifications. See **Section IV**, **Proposal Contents and Submission**, Section 1.3) for additional instructions.
- 3. Proposers who did not meet the Pass / Fail Screening will be notified immediately after the screening is complete. Proposers are advised that NCTA is not obligated to ask for, or accept, data that is essential for a complete and thorough evaluation of the Technical Proposal after the Proposal due date.

# 3.2. Technical Proposal Evaluation

- 1. The evaluation process will consist of a quantitative scoring and ranking of the Technical Proposals in order to ascertain which Proposer best meets NCTA's needs for the Application. The Technical Proposals will be evaluated on their material content, their responsiveness and the degree of adherence to Section III, Scope of Work and Requirements set forth in this document. The Evaluation Committee will review and evaluate the Technical Proposals and the other related Contract information submitted to ensure that the Proposer understands the Scope of Work and Requirements, and has clearly expressed its intent to meet the requirements of the Contract.
- 2. **Preliminary Technical Scoring.** Following the review of Technical Proposals, the Evaluation Committee will score the Technical Proposals with maximum potential technical score points for each Technical Proposal as shown in Table I-2 below.
- 3. **Non-Compliant.** Any Technical Proposals scored below 55 out of 80 possible total points on the preliminary evaluation will be considered non-compliant and will not be considered further. Only Proposers that meet the minimum score of 55 will be considered compliant and asked to participate in the oral presentations and interviews, and/or to move forward with Best and Final Offers (BAFO) and price negotiations.
- 4. **Oral Presentations and Interviews.** NCTA may invite compliant Proposers to participate in oral presentations and interviews. The oral presentations and interviews, and any required demonstrations conducted therein, will provide an opportunity for the Evaluation Committee to further its understanding of the Technical Proposals.
- 5. **Updated Technical Scoring.** After the oral presentations and interviews, the Evaluation Committee will update its preliminary technical scoring. The updated scoring will consider the Technical Proposal, the results of the oral presentations and interviews and the demonstrations, if conducted, with maximum potential technical score points for each Technical Proposal.

# 3.3. Price Proposal Evaluation

- After compilation of the updated scores for Technical Proposals following the oral presentations
  and interviews, the Evaluation Committee will open the sealed Price Proposals only for those
  Technical Proposals with a technical score that meets the minimum requirement of 55 points
  or more.
- 2. The Evaluation Committee will review the Price Proposals for completeness of the Price Proposal packages.
- 3. The Evaluation Committee will then apply the formula provided below in this **Section I, Administrative**, Section 3.4 to the total price provided in each Proposal to calculate the price score.

#### 3.4. Consolidated Technical Proposal and Price Evaluations

- 1. The Technical Proposals will be weighted at 80 percent of the total score on a 100 point scale. Price Proposals will be weighted at 20 percent of the total score.
- 2. Price scores are calculated using the following formula: (lowest price / proposed price) x maximum possible Price Proposal points (20) = Proposer's awarded points.
- 3. The overall Technical Proposals are scored as shown in Table I-2 below:

Technical Proposal Elements	Maximum Possible Points
Technical Proposal Section 1: Proposer Qualifications	15
Technical Proposal Section 2: Key Team Qualifications	15
Technical Proposal Section 3: Approach to Scope of Work and Requirements	20
Technical Proposal Section 4: Approach to Project Plan and Implementation	15
Technical Proposal Section 5: Approach to Operations and Maintenance	15
Maximum Possible Technical Points	80
Maximum Possible Price Proposal Points	20
Maximum Possible Total Consolidated Score	100

Table I-2 Technical Proposal Elements and Maximum Possible Points Breakdown

4. After the initial, consolidated Technical and Price evaluation has been completed and initial scores ranked, the Evaluation Committee will make a determination regarding Best Value for NCTA, considering the numerical (technical plus price) scoring as well as other factors and a Finalist Proposer(s) will be selected.

# 3.5. Negotiations and Best and Final Offers (BAFOs)

NCTA may elect to negotiate with one or more Finalist Proposers determined to be in a competitive range based upon the evaluation process described above. Finalist Proposers may be requested to provide a BAFO in response. If BAFOs are requested, NCTA will evaluate the BAFOs and adjust its evaluation of the Proposer's respective Proposal accordingly.

Further, should negotiations with one Proposer not be successful, NCTA reserves the right to negotiate with the next ranked Proposer or Proposers at NCTA's sole determination.

# 4. Award and Execution of Contract

#### 4.1. Notification of Award

Following evaluation and negotiations, NCTA may execute a Contract with the successful Proposer. NCTA will notify the successful Proposer of the award by telephone. NCTA will also deliver a notification of award letter via e-mail.

The successful Proposer will have fourteen (14) Calendar Days after receipt of the notification of award to furnish the performance and payment bonds and insurance required in the notification of award letter. If the successful Proposer defaults or otherwise is unable to enter into a Contract with NCTA, then NCTA may begin negotiations with the next highest ranked Proposer or Proposers as further set forth in **Section 1, Administrative**, Section 3.5, Negotiations and Best and Final Offers (BAFOs).

The NCTA award of, or continuation of any Contract for or related to its Application, is subject to the availability of funding.

NCTA will issue an original Contract for execution by the successful Proposer. After the Contract is executed by NCTA, a duplicate copy will be mailed back to the Contractor.

**Originals.** The original copy will be retained in the NCTA Office. On Federal-Aid projects, a true copy will be sent to the Federal Highway Administration.

**Bonding Requirements.** All bid and performance bonds will be handled using the following procedures. The NCTA Bid Bond form is available online at: <a href="https://connect.ncdot.gov/resources/Specifications/2006ResurfacingProjects/Bid Bond.pdf">https://connect.ncdot.gov/resources/Specifications/2006ResurfacingProjects/Bid Bond.pdf</a>

#### I. Payment and Performance Bonds:

- a. Proposer shall submit evidence that it is capable of obtaining Contract payment and performance bonds in an amount equal to 100 percent of the Contract value. A surety letter submitted with the Technical Proposal is acceptable evidence of meeting this bond requirement. The form for this letter is included as **Exhibit B-10**, **Form**. The completed letter shall be included with the Price Proposal.
- b. The initial bonds shall be in the amount of 100 percent of the total Contract value as set forth in the Proposer's Price Proposal Sheet I Summary Tab (cell C12). This bond amount will be decreased after Final Acceptance of each of the Project Phases, described herein, in the value of the completed Work. The Project Bonds may be annually renewable, to be renewed each year at the anniversary date of Final Acceptance through the end of the Contract.

#### 2. Bid Bonds

- a. Proposer shall submit with its Price Proposal a bid bond or bid deposit in the amount of at least five (5) percent of the Contract value as provided on Proposer's Price Proposal Sheet I Summary Tab (cell C12). Contractor may submit certified and cashiers' checks in lieu of bid bonds.
- b. All bid bonds will be retained by the NCTA until the payment and performance bonds are furnished by the successful Proposer and Contract is executed. After such time, all bid bonds will be destroyed, unless the individual bid bond forms contains a note indicating that the bonds be returned to the Contractor or Surety and all certified and cashiers' checks will be refunded.

# 4.2. Insurance Requirements

The Contractor at all times during the Term of this Agreement shall maintain insurance in such form as is satisfactory to the NCTA, and will furnish the NCTA with continuing evidence of insurance as provided

below. With respect to any insurance policy required pursuant to this Agreement, all such polices shall be issued by companies licensed to do business in the State of North Carolina and all such insurance shall meet all laws of the State of North Carolina. The Proposer shall at all times comply with the terms of such insurance policies, and all requirements of the insurer under any such insurance policies, except as they may conflict with existing North Carolina laws or this Contract.

Contractor shall provide to the NCTA an endorsement showing the amount of coverage that is reserved specific to this Project. The NCTA shall be named as an "additional insured" on all applicable coverage. The Contractor shall provide NCTA with certificates showing the required coverage to be in effect and showing NCTA to be an additional insured. Such policies shall provide that the insurance is not cancelable except upon thirty (30) Days prior written Notice to the NCTA. The certificates and policies shall provide that in the event of any material change in or cancellation of the policies reflecting the required coverage, thirty (30) Days advance Notice shall be given to the NCTA or as provided in accordance with North Carolina law. Copies of all insurance policies and endorsements shall be provided to the NCTA upon request.

The NCTA reserves the right to review all insurance coverage and amounts of insurance coverage on an annual basis and to require the Contractor to adjust the insurance coverage and amounts of insurance coverage based on industry standards for contracts of this size and type. Contractor shall timely pay all premiums and deductibles when due for all insurance coverage required herein. The NCTA will not accept Self-Insurance Retention (SIR).

The Contractor shall not commence any Work until it has obtained the following types of insurance, and a certificate of such insurance has been received and Approved by the NCTA. Nor shall the Contractor allow any Subcontractor to commence Work on this Project until all insurance required of the Subcontractor has been obtained. The Proposers who is the intended award shall submit the required Certificates of Insurance to the NCTA within fourteen (14) Days of Notice of award.

During the term of the Contract, the Contractor at its sole cost and expense shall provide commercial insurance of such type and with such terms and limits as may be reasonably associated with the Contract. As a minimum, the Contractor shall provide and maintain the following coverage and limits:

- I. Worker's Compensation The Contractor shall provide and maintain Worker's Compensation Insurance, as required by the laws of North Carolina, as well as employer's liability coverage with minimum limits of \$100,000.00, covering all of Contractor's employees who are engaged in any Work under the Contract. If any Work is sublet, the Contractor shall require the Subcontractor to provide the same coverage for any of his employees engaged in any Work under the Contract; and
- 2. Commercial General Liability Policy Combined Single Limits: \$1,000,000.00 per person, \$3,000,000.00 per occurrence The Commercial General Liability Policy shall include contractual liability coverage and must be on an "occurrence" basis. A Comprehensive General Liability Policy may be substituted for the Commercial General Liability Policy if the Comprehensive General Liability Policy has been endorsed to insure contractual liability, broad form property damage, and personal injury liability.
- 3. Business Automobile Liability Policy To include liability coverage covering all owned, hired and non-owned vehicles used in connection with the Contract. Combined Single Limits: \$1,000,000.00 per person \$3,000,000.00 per occurrence; and

- 4. Professional Liability Policy- Any other provision herein to the contrary notwithstanding, the Professional Liability Policy must be with a company authorized to do business in the State of North Carolina, affording professional liability coverage for the professional services to be rendered in accordance with this Contract in the amount of at least one million dollars (\$1,000,000). The Contractor shall maintain professional liability coverage for a minimum of three (3) years after completion of the Services rendered under this Contract.
- 5. Technology Errors & Omissions- The Contractor shall maintain technology errors & omissions liability (or technology professional liability coverage) insurance, covering liability for all professional products and services performed, including liabilities arising from acts, errors or omissions in rendering computer or information technology services including (I) systems analysis (2) systems programming (3) data processing (4) systems integration (5) outsourcing development and design (6) systems design, consulting, development and modification (7) training services relating to computer Software or Hardware (8) management, repair and Maintenance of computer products, networks and systems (9) marketing, selling, servicing, distributing, installing and maintaining computer Hardware or Software (10) data entry, modification, verification, Maintenance, storage, retrieval or preparation of data output with a limit not less than five million dollars (\$5,000,000) per occurrence. This insurance shall provide coverage for Software copyright liability and contractual liability. Such Technology E&O insurance coverage may be met through or combined with the Professional Liability Insurance referenced in paragraph d; however, if combined then the coverage requirement for Technology E & O insurance shall be equal or greater than the combined aggregate.
- 6. Cyber Liability Insurance. The Contractor shall maintain Privacy and Network Security (Cyber Liability) insurance covering liability arising from (1) hostile action, or a threat of hostile action, with the intent to affect, alter, copy, corrupt, destroy, disrupt, damage, or provide unauthorized access/unauthorized use of a computer system including exposing or publicizing confidential electronic data or causing electronic data to be inaccessible (2) computer viruses, Trojan horses, disabling codes, trap doors, back doors, time bombs drop-dead devices, worms and any other type of malicious or damaging code (3) dishonest, fraudulent, malicious, or criminal use of a computer system by a person, whether identified or not, and whether acting alone or in collusion with other persons, to affect, alter, copy, corrupt, delete, disrupt, or destroy a computer system or obtain financial benefit for any party or to steal or take electronic data (4) denial of service for which the insured is responsible that results in the degradation of or loss of access to internet or network activities or normal use of a computer system (5) loss of service for which the insured is responsible that results in the inability of a third-party, who is authorized to do so, to gain access to a computer system and conduct normal internet or network activities (6) access to a computer system or computer system resources by an unauthorized person or persons or an authorized person in an unauthorized manner with a limit not less than one million dollars (\$1,000,000) per occurrence. This insurance shall provide coverage for personal injury (including emotional distress and mental anguish). Such Cyber Liability insurance coverage may be met through or combined with the Professional Liability Insurance referenced in the above paragraph 4; however, if combined then the coverage requirement for Cyber Liability insurance shall be equal or greater than the combined aggregate.

Pertaining to the above paragraphs 4, 5, 6, if coverage is written on a claims made basis, such insurance shall be maintained in force at all times during the term of this Agreement and for a period of three (3) years thereafter for Services completed during the term of this Agreement. Additionally, if a sub-limit

applies to any elements of coverage, the policy endorsement evidencing the coverage above must specify the coverage section and the amount of the sub-limit.

Providing and maintaining adequate insurance coverage described herein is a material obligation of the Contractor and is of the essence of this Contract. The limits of coverage under each insurance policy maintained by the Contractor shall not be interpreted as limiting the Contractor's liability and obligations under the Contract.

**Subcontractors Insurance.** The Contractor shall either require each Subcontractor to obtain and maintain Workers' Compensation Insurance, Commercial General Liability, Business Automobile Liability and Professional Liability coverage similar to those required above in this section for the Contractor, or any other coverage deemed necessary to the successful performance of the Contract, or cover Subcontractors under the Contractor's policies. Such coverage shall be in effect at all times that a Subcontractor is performing Work under the Contract. The Contractor shall have responsibility to enforce Subcontractor compliance with these or similar insurance requirements; however, the Contractor shall upon request provide NCTA acceptable evidenced of insurance for any Subcontractor. The Contractor shall assume all reasonability for risks or casualties of every description, for any and all damage, loss or injury, to persons or property arising out of the nature of the Work, including but not limited to the negligence or failure of its Subcontractors (as well as Contractor's employees) to comply with Contract Documents.

#### 5. Protest Procedure

Each Proposer, by submitting its Proposal, expressly recognizes the limitation on its rights to protest contained herein, expressly waives all other rights and remedies, and agrees that the decision on any protest, as provided herein, shall be final and conclusive. These provisions are included in these RFP documents expressly in consideration for such waiver and agreement by the Proposers. If a Proposer disregards, disputes, or does not follow the exclusive protest remedies set forth in these RFP documents, it shall indemnify, defend, and hold NCTA and NCDOT, and their respective Board members, directors, officials, employees, Agents, representative, and consultants, harmless from and against all liabilities, expenses, costs, fees, and damages incurred or suffered as a result of such Proposer actions. The submission of a Proposal shall be deemed the Proposer's irrevocable and unconditional agreement with such indemnification obligation.

I. Any request for a protest meeting shall be in writing and filed with the NCTA Executive Director at the address specified below and shall be received within thirty (30) consecutive Calendar Days from the date of the Contract award. Any protest not set forth in writing, including oral objections, is not a protest and shall be null and void.

NCTA Executive Director 1578 Mail Service Center Raleigh, NC 27699-1578

- 2. All protests shall include the following: 1) Name and Address of Protestor; 2) RFP Name and date of issuance; 3) Reasons for protest; and 4) Supporting exhibits, evidence or documents to support the protest.
- 3. If the protest does not contain this information or if the Executive Director determines that a meeting would serve no purpose, the Executive Director may, within ten (10) consecutive

- Calendar Days from the date of receipt of the letter, respond in writing to the Proposer and refuse the protest meeting request.
- 4. If the protest meeting is granted, the Executive Director shall attempt to schedule the meeting within thirty (30) consecutive Calendar Days after receipt of the letter, or as soon as possible thereafter. Within ten (10) consecutive Calendar Days from the date of the protest meeting, the Executive Director shall respond to the Proposer in writing with the Executive Director's decision.
- 5. Protest Submittal Requirements See Appendix C, North Carolina Turnpike Authority Policies and Procedures for the Procurement of Commodities and Services (February 2009).
- 6. All Proposals shall be irrevocable until final administrative and judicial disposition of a protest.

# Section II Defined Terms and Acronyms

# **Section II - Table of Contents**

1.	DEFINED TERMS
2.	ACRONYMS8

# I. Defined Terms

Term	Definition
Acceptance	Approval of a Phase or a test by the NCTA, based on meeting certain conditions and test requirements, including Approvals, set forth in <b>Section III, Scope of Work and Requirements</b> and the Agreement.
Agreement	Also referred to as the contract, is the written contract between NCTA and the respective contractor covering the Scope of Work and other contract documents attached to the agreement and made a part thereof.
All-Electronic Tolling (AET)	A system that enables motorists to drive through toll zones and pay their tolls without stopping. As customers drive through the toll zones, tolls will be deducted from customer accounts using a transponder mounted in the vehicle or by identifying the license plate number of the vehicle.
Amendment	Change in the Agreement executed in writing made by adding, altering, or omitting a certain part or term.
Application	The term "Application," when capitalized in this Agreement refers to the HOV Declaration Application in whole, including both the website and mobile variants, for all browser types, mobile devices or mobile operating systems as required by NCTA.
Application Program Interface (API)	A set of routines, protocols and tools used for building software applications, also specifying how software components should interact.  Also used when programming graphical user interface (GUI) requirements.
Approve	The term "Approve" and its variations (e.g., "Approval" or "Approved"), when capitalized in this Agreement refer to Acceptance of a process, vendor, document, condition, action or Deliverable in writing by NCTA. Approval by NCTA shall not be construed to mean endorsement or assumption of liability by the NCTA nor shall it relieve the Contractor of its responsibilities under the Agreement.
Approved Baseline Project Implementation Schedule	The Project Schedule Approved pursuant to the Agreement.

As-Built Drawings	Documents and other items set forth in <b>Section III, Scope of Work</b> and <b>Requirements</b> that constitute a complete and accurate record of the HOV Declaration Application as Designed, delivered, installed, Accepted and Approved.
Authority	The North Carolina Turnpike Authority (NCTA).
Authorized User	Using a role-based login, a user with specific authority to perform a function(s) in the System. An Authorized User could be the Contractor, NCTA user, or a third-party service provider designated by the NCTA.
Back Office System (BOS)	Hardware and software provided under the Back Office System Contractor to support toll collection and customer service operations.
Bug Fixes	Software development performed to resolve defects and deliver the required functions to the system that should have been included in the system at acceptance, per the system requirements.
Business Policies	A set of policies and procedures established by NCTA that defines how the business processes will be carried out during the course of toll operation.
Change Order	Change to quantities of Work within the scope pursuant to the <b>Section V, Terms and Conditions</b> .
Configurable	Functionality provided such that changes to the related thresholds, values, methods, parameters and/or settings shall not require additional Software development and Software testing effort. Verification of the change for this purpose is not considered testing.
	This same meaning applies to all variations, e.g. Configured.
Concessionaire	For the purpose of this RFP, a concessionaire is a private person, group, or company with the exclusive right to manage the construction, maintenance, and operation of a tolled Express Lane, and to collect toll revenue from the Express Lane during the term of the Concession Agreement.
Contract	See "Agreement."
Contract Documents	All of the documents that make up the Contract for the HOV  Declaration Application, including but not limited to:  • Executed Agreement, including the RFP, all executed RFP addenda, BAFO (if applicable), and Amendments
	Scope of Work and Requirements, as conformed

	Terms and Conditions
	Contractor's Proposal and system design documentation
	Approved, baselined Project schedule and approved updates
	Change order documentation
Contract Project Manager	The Contractor's duly authorized representative designated to manage the Contractor's performance of the Work in accordance with the Agreement.
Contractor	The person, firm, corporation or entity undertaking the execution of the Work with whom NCTA has entered into an Agreement.
Customer Service Center (CSC)	The facility that houses the equipment, software, and personnel required to establish, manage, and maintain customer accounts; provide customer service; process video transactions and license plate images; and prepare customer notifications for Toll invoices and violation enforcement in accordance with NCTA's Business Policies and Procedures.
Deliverable(s)	All Documentation and any items of any nature submitted by the Contractor to the NCTA's Project Manager for review and Approval pursuant to the terms of this Agreement. See "Submittal."
Design	All aspects of design relating to the system, as set forth in the requirements.
Design Documentation	System design documentation required under of this Scope of Work to adequately document how the Application is designed.
Disaster Recovery	The process of re-establishing and making available the Application after an event which renders the Application inoperable.
Electronic Toll Collection (ETC)	A system of integrated devices and components that perform the automatic recording and reporting of vehicle transactions through electronic media in a toll revenue collection system.
Enhancements	Software development on the system that takes place, other than bug fixes or maintenance after Application acceptance.
Express Lane	A limited access expressway lanes or roadways separated from adjacent general purpose lanes and employing payment of tolls to manage demand.
Final Acceptance	Final Acceptance of the Application will be considered by NCTA to have occurred when NCTA has received and Approved all Project

	documents, drawings, Software, interface data, test data, manuals and other Deliverables for the Application.
Force Majeure	The circumstances as defined in this Agreement whereby either party is excused from meeting a performance requirement specified in this Agreement.
Graphical User Interface (GUI)	A software screen and menu representation that allows users to read, input and retrieve data.
High Occupancy Toll (HOT) lane	A lane(s) of traffic available to high-occupancy vehicles (HOV) and other exempt vehicles to use without incurring a toll charge. Non-exempt vehicles and vehicles that do not meet HOV requirements are required to pay a toll based on NCTA's business policies.
Holiday(s)	Days that are designated by NCTA as Holidays for purposes of this Agreement.
Interface	A point of interaction between two systems.
Interface Control Document (ICD)	The document that defines the file formats and related business policies for processing data or transactions between the Contractor's Application and third party systems.
Interoperable (Interoperability)	A relationship between tolling agencies or entities where their systems are capable of capturing and transmitting transactions generated on an agency's roads by customers of the other agency or entity. Generally requires that reciprocity agreements between agencies and entities are in place to govern payments and reconciliation.
Invalid Transponder	Transactions from an invalid transponder (lost, stolen, or damaged etc.) at the time of usage at the toll facility will be invoiced through the Bill by Mail process.
Key Personnel	Staff designated as "key" in the NCTA HOV Declaration Application RFP and <b>Section III, Scope of Work and Requirements</b> , subject to the Approvals and conditions set forth therein and in the Agreement. Also referred to as "Key Team Personnel" or "Key Team Member."
Liquidated Damages	Damages, whose amount the parties designate during the formation of a contract, for the injured party to collect as compensation upon a specific breach.
Maintenance	Services performed by the Contractor pursuant to <b>Section III, Scope of Work and Requirements</b> . May also be referred to as "Maintenance Services or Maintenance and Software Support Services."

Maintenance Phase	The Project phase which begins upon Application Acceptance. Also known as Maintenance, Operations, and Support Services Phase.
Maintenance Services	The maintenance and related services required to be furnished by the Application Contractor, pursuant to the contract documents. See Maintenance Phase.
Mobile Application	A software application developed specifically for use on small, wireless computing devices, such as smartphones and tablets, rather than desktop or laptop computer.
NCTA Designated Representatives	Person or persons authorized by the NCTA to represent NCTA in all dealings with the Contractor.
NCTA Operations Center	Synonymous with the Customer Service Center (CSC).
NC Quick Pass Account	Pre-paid toll accounts collected through electronic toll collection.  These accounts require the purchase and installation of a transponder that is detectable when a vehicle travels through a toll zone. The appropriate toll amount due for the transaction is automatically deducted from the customer's account.
North Carolina Department of Transportation (NCDOT)	A governmental agency in North Carolina responsible for building, repairing, and operating highways, bridges, and other modes of transportation, including ferries in the U.S. state of North Carolina.
North Carolina Turnpike Authority (NCTA)	A Division of NCDOT, responsible for supplementing the traditional non-toll transportation system serving the citizens of North Carolina by accelerating the delivery of roadway projects using alternative financing options and facilitating the development, delivery and operation of an integrated, creative system of toll roads.
Notice to Proceed (NTP)	The written authorization by the NCTA designating the date and time for the Contractor to commence Work.
Order of Precedence	The order in which Agreement documents control in the event of a conflict or ambiguity in such documents.
Performance Requirements	The required level of performance standards for this Contract as set forth in the Terms and Conditions and Section III, Scope of Work and Requirements.
Priority	Ranking and assignment of importance used in the identification, monitoring, correction and reporting of Application problems, bugs, and failures in accordance with Section III, Scope of Work and Requirements.

Project	The total Work set forth in <b>Section III, Scope of Work and Requirements</b> and as further set forth and detailed in the Agreement Documents.
Project Manager (PM)	The duly authorized representative designated to manage this Work and Agreement.
Proposer	An entity that has submitted a Proposal on this RFP.
Quality Assurance (QA)	A process which occurs after the final Work product is complete, to ensure the Work was completed as expected and required.
Quality Control (QC)	A process which occurs before a final product is produced or presented, to ensure the Work product is accurate.
System	A system is defined as software that is designed for an end user and provides a platform for running application software. For the purposes of this RFP, a system refers to the software necessary to operate the HOV Declaration Application. See also "Application," "Mobile Application," or "Website Application."
Technical Proposal	Response to the RFP put forward to NCTA for consideration detailing the Proposer's technical approach to the Project.
Requirements	Each of the required Work activities in numbered form as set forth in <b>Section III, Scope of Work and Requirements</b> that the Contractor shall perform, including but not limited to implementation, functional, and performance.
Requirements Traceability Matrix (RTM)	The structured collection of information, submitted by the Contractor, that summarizes the requirements of the Application for Approval by NCTA, and that serves to track completion of Design, development and testing as further described in <b>Section III</b> , <b>Scope of Work and Requirements</b> .
Software	All computer programs, media, procedures, rules and associated Documentation pertaining to the control and operation of the data processing and data storage for the Application, as further set forth in Section III, Scope of Work and Requirements. Software includes all associated features and functions described in Section III, Scope of Work and Requirements, including all updates, derivative works, enhancements, modifications or Upgrades thereto, and all error corrections, patches and bug fixes provided by the Contractor and which is made part of the Application, as well as all related or ancillary data files, modules, libraries, tutorial and demonstration programs, and other

	components thereof, all source and object code, firmware and all Documentation.		
Subcontractor	Any person, firm or corporation, other than the Contractor's employees, who contracts to furnish labor, or labor and materials, at the Site(s) or in connection with the Services, whether directly or indirectly, on the Contractor's behalf and whether or not in privity with the Contractor. Also referred to as "Subconsultant".		
Submittal	See "Deliverables."		
Transponder	Vehicle-mounted radio frequency device, supported by NCTA (e.g. NC Quick Pass) and those of NCTA's interoperability partners, read by the RTCS toll system RF antenna(s) and reader Equipment in in a toll lane.		
Updates	Generally refers to a patch released for existing Software to fix any identified bugs, errors or security issues; may also include providing support for new Hardware, as well as performance tuning.		
Upgrade	Generally refers to transforming existing Software to a new version; provides new features and functionalities rather than fixing existing bugs, errors or security issues but does not include significant new functionality.		
Website Application	A web application, or web app, is a client-server software application in which the client (or user interface) runs in a web browser.		
Wireframe	Generally an image or set of images that displays the functional elements of an application that is used for planning the application's structure.		

# 2. Acronyms

Acronym	Meaning
AET	All-Electronic Tolling
API	Application Program Interface
BAFO	Best and Final Offer
ввм	Bill by Mail
BOS	Back Office System
CSC	Customer Service Center
DBE	Disadvantaged Business Enterprise
DR	Disaster Recovery
EDT	Eastern Daylight Time
ETC	Electronic Toll Collection
GUI	Graphical User Interface
HOV	High Occupancy Vehicle
ICD	Interface Control Document
IOP	Interoperability
IVR	Interactive Voice Response
MBE	Minority Business Enterprise
NCDOT	North Carolina Department of Transportation
NCTA	North Carolina Turnpike Authority
NTP	Notice to Proceed
NTP	Network Time Protocol
ООР	Operations Observation Period

PDF	Portable Document Format
PM	Project Manager
PMP	Project Management Plan
QA	Quality Assurance
QC	Quality Control
RFP	Request for Proposal
RTCS	Roadside Toll Collection System
RTM	Requirements Traceability Matrix
SIR	Self-Insurance Retention
SPSF	Small Professional Services Firms
SQA	Software Quality Assurance
UAT	User Acceptance Testing
UCP	Unified Certification Program
WBE	Women Based Enterprise

# Section III Scope of Work and Requirements

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## 1. Scope of Work

NCTA's goal with this procurement is to develop an Application that is available to NCTA customers via both a web-based browser and a mobile device Application. With this procurement, NCTA desires to develop an Application that will enable travelers on North Carolina Express Lane facilities to register their NC Quick Pass transponder and declare their HOV occupancy status prior to their trip on an Express Lane facility.

The Application will interface with the BOS to validate customer NC Quick Pass accounts, as well as the existing and future Express Lane RTCS to allow the roadside systems to apply the correct toll rate and to illuminate RTCS beacons according to each customer's HOV declaration status for roadside enforcement purposes. Refer to Figure 3-I below for diagram of the concept solution for the Application.

Transparency into all Application design, development, testing, integration and maintenance efforts will be required. All software developed for this Contract shall be the property of NCTA.

**Note**: NCTA will retain all rights for unlimited use of any, and all, software developed and deployed with this Project by the Contractor.

This section of the RFP, along with the requirements documented in Sections 2, 3 and 4 of this **Section III**, collectively comprise the Scope of Work.

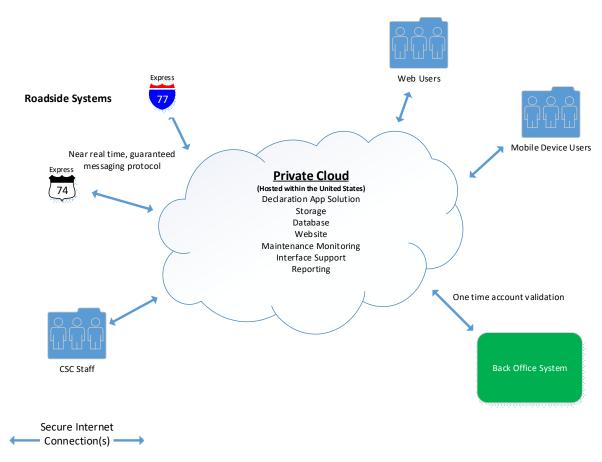


Figure 3-1: Application Solution Concept Diagram

## **1.1. Contractor Service Requirements**

### I.I.I. Key Project Milestones

The following schedule milestones shall be met by the Contractor:

Milestone	Date
Notice to Proceed	October 4 <u>12</u> , 2017
Design Phase Complete	November 8 <u>16</u> , 2017
Development Phase Complete	January 9 <u>17</u> , 2018
Application Testing and Implementation Complete	February 28March 7, 2018
Go-Live/Application Launch	March <u>+8</u> , 2018

**Table I-I Key Project Milestones** 

## 1.2. Project Development: Phases, Milestones, Tasks

The Contractor selected under this procurement makes a binding commitment to coordinate activities, and cooperate reasonably, with NCTA, other active contractors, sub-contractors, consultants and representatives retained by NCTA for this Project. Cooperation and coordination is required to avoid claims by NCTA or ultimate dismissal from the Project.

The scope of this Project includes the phases shown below, including but not limited to the following phase activities.

### I.2.1. Design Phase

This phase of work commences after the issuance of a Notice to Proceed (NTP) by NCTA. This phase includes the design of the Application, including but not limited to:

- **1.2.1.1.** Clarification of the Application requirements, as necessary, to fully develop the HOV Declaration Application.
- **1.2.1.2.** Identification of any differences necessary between the website and mobile device based Application.
- **1.2.1.3.** Identification/clarification of the type of the required browser types, mobile devices and mobile device operating systems/versions to develop to and support.
- **1.2.1.4.** Design of the interfaces to NCTA and Concessionaire Express Lane RTCS for the provision of HOV declaration information.
- **1.2.1.5.** Design of the interface to the NCTA BOS for the provision of customer account validation data.
- **1.2.1.6.** Creation of Application wireframes for all supported platforms and functions.
- **1.2.1.7.** Coordination with NCTA on the look and organization and review of the website and Application Graphical User Interface (GUI), as well as development of Application user interface mockups for review and approval by NCTA.
- **1.2.1.8.** Coordination with NCTA and their designees on focus groups related to the Application GUI design, as requested.
- **1.2.1.9.** Development of the Contractor's approach to training and user documentation for the Application.

- **1.2.1.10.** Developing a Project schedule, and attending Project update meetings as requested/required by NCTA.
- **1.2.1.11.** Development of the Design Phase documentation for NCTA's review and approval, including but not limited to:
  - Project Management Plan
  - Test Plan
  - Application Design Document
  - User Interface Design and Wireframes
  - Express Lane RTCS Interface Control Document (ICD)
  - BOS ICD
  - Application schedule
  - Training and User Documentation Plan
  - Requirements Traceability Matrix (RTM)

### 1.2.2. Development Phase

This phase of work commences after the Design Phase, and includes the development of the HOV Declaration Application according to the final requirements, including but not limited to:

- **1.2.2.1.** Development of the website and mobile device Application for the required web browsers, mobile devices and mobile device operating systems.
- **1.2.2.2.** Development and integration of the interface to NCTA and Concessionaire Express Lane RTCS.
- **1.2.2.3.** Development and integration of the interface to the NCTA BOS.
- **1.2.2.4.** Completion of all required internal testing (e.g. unit testing, regression testing, etc.), and development of testing and defect tracking reports to be submitted every two (2) weeks for NCTA review.
- **1.2.2.5.** Development of training materials, help systems, "how-to" and user manuals per the approved Training Plan.
- **1.2.2.6.** Providing regular updates to the Project schedule, and attending Project update meetings as requested/required by NCTA.
- **1.2.2.7.** Demonstrating system functionalities to NCTA every two to three weeks and before each release.

### 1.2.3. Application Testing, Implementation and Training Phase

This phase of work includes testing and integration of the Application. The Contractor shall also provide comprehensive training for all aspects of the Application on all platforms. NCTA Operations staff will be fully trained to understand the Application's functionality and be able to assist customers with its use. This includes, but is not limited to:

**1.2.3.1.** Provision of Contractor internal testing defect reports for NCTA review every two (2) weeks.

- **1.2.3.2.** Testing of all Application functionality on all required platforms and operating systems, including internal testing (e.g. unit, regression and Quality Assurance (QA) testing) and formal Application testing, including:
  - Usability and User Interface Testing (may be two different tests) Enable NCTA to test
    available functionalities before each release, conduct focus group testing, as requested by
    NCTA, and provide feedback on the usability, function and look of the mobile Application
    and website to improve usability and function.
  - User Acceptance Testing (UAT) including NCTA testing of available functionalities before each release and final UAT.
  - Operational Observation Period (OOP)
  - Google Play and Apple Application Store Certification Testing
  - Vulnerability Scan Reports
- **1.2.3.3.** Finalization of training materials, help systems, "how-to" and user manuals per the approved Training Plan.
- **1.2.3.4.** Coordination with NCTA to develop a training schedule and list of CSC operations and NCTA staff who will require training on the Application.
- **1.2.3.5.** Provision of training for all NCTA-required staff members.
- **1.2.3.6.** Development of test documentation for NCTA's review and approval, including but not limited to:
  - Detailed test scripts for each formal system and integration test
  - Updated RTM
  - Test report results documentation

### 1.2.4. Application Maintenance Phase

This phase of work includes the maintenance of the Application, including but not limited to:

- **1.2.4.1.** Responding to system issues in the appropriate amount of time, determined by priority.
- **1.2.4.2.** Providing Application updates as required to maintain compliance with ongoing mobile device operating system upgrades during the life of the Contract.
- **1.2.4.3.** Performance of corrective and preventive/planned maintenance of the Application, including the implementation of Application updates, fixes, enhancements, etc. as directed or approved by NCTA or required to maintain compliance with Contract requirements.
- **1.2.4.4.** Providing System Penetration Testing Report quarterly starting on the first week of going live.

### 1.2.5. Project Closeout Phase

This phase of work includes the Project closeout activities, including, but not limited to the following:

- **1.2.5.1.** Upon completion of the Project and during the initial warranty period, the Contractor shall provide for NCTA's review and approval, including but not limited to:
  - All source code associated with Application software developed for the Contract

- Final, as-built software documentation to provide Application Program Interface (API)
  developers the necessary information to create functions required to pass data to and
  from the Application.
- Final as-built design documentation, manuals, help systems, "how-to" guides, etc.
- Final website templates and formatting style sheets

# 2. Project Implementation Requirements

## 2.1. Project Management

## **2.1.1.** Project Management General Requirements

1.	Under direction of NCTA, the Contractor shall be responsible for the planning, implementation, and management of all aspects of the Project. The Contractor shall be responsible for coordinating its activities with NCTA and other Project stakeholders, which are directly or indirectly impacted by the Contractor's work, and other entities as directed by NCTA. The Contractor shall also be responsible for documenting and reporting on all aspects of the Project.
2.	The Contractor shall be responsible for monitoring progress of the Project throughout the duration of the contract, and also be prepared to show Project progress to NCTA on demand. The same management procedures, protocol and requirements shall apply to all work in this Contract.
3.	All work related to this Contract shall be performed within the United States.

## **2.1.2.** Project Implementation Requirements

The Contractor shall:

4.	Execute the Project in accordance with the Project Management Plan (PMP) approved by NCTA and other plans developed pursuant to the Contract.
5.	Prosecute all work activities required to meet the Project requirements are within the scope of the overall contract.
6.	Manage the design, development and implementation of the Project by assuring that all phases of the Project plan and schedule are accomplished without any delays, problems or re-work due to poor quality assurance. Delays due to changes both within and outside the Contractor's control shall require the prior approval of NCTA.
7.	Use structured software development methodologies and standards. Agile is NCTA's preference.
8.	Provide best practices for system development, testing and implementation.
9.	Administer the Project by establishing and maintaining effective communication with all groups related to the Project.
10.	Communicate Project requirements to the Contractor's staff and subcontractors.

11.	Direct and coordinate Project activities to ensure that the Project progresses efficiently, and is completed on schedule and within budget at the level of quality expected by NCTA.
12.	Provide transition plans including key resources, timelines, and regular coordination touch points for the following key areas: end of contract transition, Application implementation, and website(s) management.
13.	Ensure against loss of data while communicating, recording, or storing data sent or received via external interfaces.
14.	Cooperate with other NCTA-selected contractors to test and integrate the HOV Declaration Application into the Express Lane RTCS (new and existing) and establish an account validation interface with the BOS.
	<b>Note</b> : Contractors must be cooperative with the other contractors on the job during work activities in development, design, provision, installation, testing and warranty services for the Application.
15.	Utilize standard, proven components and designs to the maximum extent possible. However, the Contractor shall still provide design effort and documentation to carefully prepare for a successful implementation.

## **2.1.3.** Project Initiation Conference

16.	The Contractor shall participate in a Project Initiation Conference by the date required in the Schedule. NCTA shall coordinate and moderate the conference. The conference should last no more than one (I) Day. Agenda items for this conference shall include, but not be limited to:
17.	Introduction of key Contractor staff to NCTA and NCTA's Project partners.
18.	Collaboration on core elements of the system design and development process, and coordination with other Project stakeholders.
19.	Review of key aspects of the initial Project Management Plan (e.g. the Subcontractor Management Plan, Quality Management Plan, Project Communications Plan, etc.), the initial Project Schedule, and any other early Project coordination as required by NCTA.

## **2.1.4.** Project Management Plan

The Contractor shall develop and submit a PMP to NCTA for review and approval per the Project schedule. The Contractor shall be required to submit a draft of the PMP to NCTA for review prior to the Project Initiation Conference.

The Contractor shall be responsible for keeping the PMP up to date after significant changes to internal processes and/or procedures, the departure of key staff members or as requested by NCTA. Unless directed otherwise by NCTA, the Contractor shall update the PMP annually.

The Contractor's Project Management Plan shall describe the Contractor's approach to management, including but not limited to:

- Change control: Describing the Contractor's procedures for tracking contract change orders (draft and approved change orders for system modifications or enhancements), interactions with NCTA's change control procedures, and documentation management to reflect changes approved by NCTA.
- Change management: Describing the Contractor's management, and issue mitigation strategy.
- Deliverable management: Describing the Contractor's procedures to ensure deliverables are produced on time per the Project schedule with a high level of quality.
- Configuration control: Describing the Contractor's procedures for tracking changes to the Application software, third-party component software, Application configurations and documentation processes to reflect any changes made.
- Risk management: Describing the Contractor's approach to identifying, reporting, tracking and mitigating Project risks.
  - Coordination planning: Describing the Contractor's coordination techniques with NCTA and other Project stakeholders, and how the Contractor will coordinate with Project entities to ensure Project deliverable dates are met.
  - Personnel management: Describing the Contractor's approach to personnel management, key personnel (including sub-contractors), and provide a team organization chart organized by Project function, Project role and reporting hierarchy noting which staff are local or onsite with NCTA.
  - Subcontractor Management: Describing the Contractor's approach to subcontractor management throughout the term of the contract.
  - Quality Management: Describing the Contractor's approach to quality assurance, and the quality control procedures the Contractor shall utilize in all phases of the Project in order to ensure the Application is designed, developed, tested and implemented with quality.

- Project Communications: Describing the Contractor's approach to Project communications to keep NCTA aware of Project status and fulfill other Project communication needs, including with NCTA, their contractors and other designated Project stakeholders.
- Software Development: Describing the Contractor's approach to software
  development, including the software lifecycle approach detailing the necessary
  interactions between various system development disciplines, (e.g. software
  development; testing; Software Quality Assurance (SQA); configuration management;
  documentation; project management; and software maintenance), the proposed
  technical approach, problem reporting, system testing and tracking process.

### **2.1.5.** Project Schedule

- Project Master Schedule and Progress Schedules The Contractor(s) shall coordinate with NCTA on the development of a comprehensive, baselined Project schedule, using Microsoft Project, in adequate detail to coordinate and control Project activities. The schedule shall also be used to notify NCTA of all Contractor(s) activities, including external activities (e.g. dates for certification testing with Google Play and the Apple Application Store), but also able to be rolled up into a summary version for weekly status updates without unnecessary detail. The summary schedules are to be used in the progress meetings to show work progress and plan work necessary to meet the next major milestones.
- The Project schedule shall be resource loaded, displaying the critical path, and shall be used as a basis for progress tracking throughout the Project. The schedule shall identify each Project milestone separately, and shall utilize "finish no later than" constraints. Unless approved by NCTA, the schedule shall not contain hidden lag durations, and schedules must display available Project slack.

Each Project schedule submitted for NCTA's review and approval shall clearly demonstrate the progression of the Project by using separate Project activities, including but not limited to:

- Milestones and contract milestone completion dates
- Application design, development and testing activities
- 25. Application integration activities
  - Dependencies on critical activities performed by other Project partners and contractors
  - All Work components, including management, NCTA documentation reviews and approvals, impacts from other Project schedules, quality assurance activities, etc.
  - Go-live/Application Launch preparation

	Training and documentation preparation (e.g. training materials, etc.) and training dates
26.	Within ten (10) Calendar Days of receiving NTP from NCTA, the Contractor shall update the schedule they submitted with their proposal and submit an updated schedule to NCTA for approval.
27.	The Contractor shall coordinate with NCTA to agree on the contents and the logic of the schedule in order to baseline the schedule within fifteen (15) Calendar Days of receiving NTP on the Project.
28.	Once the Project schedule has been baselined and approved by NCTA, the schedule shall become part of the Contract, and the Contractor shall report all schedule and Project progress against the baseline schedule.
29.	The contractor shall be responsible for monitoring and updating the Project schedule, and reporting progress of the Project throughout the duration of the contract.
30.	The contractor shall be responsible for updating and submitting the Project schedule biweekly for NCTA's review and approval. Once approved by NCTA, the newly approved schedule shall become part of the Contract, superseding the previously approved schedule.
31.	Submission of the bi-weekly revisions to the Project schedule shall not release or relieve the Contractor from full responsibility for completing the work within the time set forth in the previously approved schedule.
32.	NCTA's approval of the Project schedule does not relieve the Contractor from any liability for Liquidated Damages.
33.	Changes to go-live milestones require a contract change order, approved by NCTA. NCTA's approval of the Project schedule does not relieve the Contractor from any Liquidated Damages.
34.	To accommodate NCTA's review of the Project schedule, the Contractor shall submit all files in native and Portable Document Format (PDF) format.
35.	The planning, design, installation, and completion of the Project shall be undertaken and completed in accordance with the most recent Project schedule accepted by NCTA.
36.	The Contractor shall use all practical means to conform fully to the activities and dates shown on the approved Progress Schedule. If the Contractor fails to continue to meet the Progress Schedule, the Contractor will take whatever steps necessary to bring the Project back into the schedule at no additional cost to NCTA, including but not limited to:
	Perform overtime work
	Increase the number of personnel assigned to the Project
-	

37.	The Contractor shall promptly report to NCTA all schedule and progress-related delays during the implementation of the Project.
38.	The Contractor shall have a minimum of ten (10) Calendar Days to alert NCTA of the possibility of a missed Project milestone. If the Contractor is aware or should have been aware of a possible delay, they must notify NCTA in writing and propose a mitigation strategy to bring the Project timeline back on track.
39.	In the event of any schedule delay, the Contractor shall develop a revised schedule for NCTA's review and approval. The Contractor must submit the revised schedule to NCTA immediately for review and approval following the identification of a Project delay.
40.	If a Project schedule slip occurs due to circumstances beyond the Contractor's control, the Contractor shall notify NCTA and submit a revised Project schedule within five (5) Calendar Days of being made aware of the schedule slip. Any failure or delinquency in submission of the schedule shall be treated as default on the part of the Contractor.

### **2.1.6.** General Documentation Requirements

**Note**: This section is intended to be general in nature and applies to all Project documentation. For more specific requirements for specific documents, refer to the appropriate sections below.

41.	All documentation the Contractor submits shall be in English, unless otherwise dictated by NCTA, and ensure NCTA's ability to understand the system solution.
42.	Document Updates - The Contractor shall update Project documents in accordance to the PMP.
43.	Document Retention - The Contractor shall maintain current versions of all Project documentation electronically. The Contractor shall keep the documentation per the NCTA retention requirements, in a secure location, backed up nightly and provide electronic/online access to NCTA.
44.	All documentation shall be maintained utilizing Microsoft Office tools.
45.	All manuals, standard operating procedures and supporting information shall be delivered electronically but formatted to print 8.5 x 11 and / or 11 x17 as required. Documentation shall be formatted such that printed material can be placed into a manageable three ring binder for end user reference as required. All documents shall be submitted in native form and PDF.
46.	All documentation shall be maintained on the Project's secure SharePoint site, to be provided by NCTA, for the duration of the Contract. The Contractor shall be responsible for coordinating with NCTA to obtain user logins for all required staff (e.g. filling out any required forms, providing names, etc.) for use of the NCTA's SharePoint site. The

	Contractor shall also be responsible for coordinating with NCTA to maintain the Contractor's staff list, providing updates to modifications in staff, staff permissions, etc.
47.	Each document produced for the Application shall contain a title sheet, table of contents, list of illustrations (if applicable), revision log, and list of reference drawings (if applicable).
48.	Should any documents reference other documents, the Contractor shall ensure all cross references are kept up to date and accurate throughout the term of the Contract.
	System technical documentation is to include, but not be limited to:
	Development processes, including logical data design, physical data design and interface development
49.	API documentation that outlines all functional aspects and web-service endpoints within which data will flow to and from the RTCS and BOS
	Data integrity safeguards to ensure data quality
	Reporting documentation
	Implementation approach
50.	All drawings, graphs, plans, charts, illustrations, etc. shall be produced using computer aided drafting software (e.g. Microsoft Visio). Hand-written drawings shall not be acceptable.
51.	The Contractor shall keep accurate records of as-built drawings, diagrams and documents, including any deviations from original.
52.	The Contractor shall be responsible for producing a master record index of all documentation, utilizing current version numbers of all documentation, and keeping the index up to date throughout the Contract and readily available on the NCTA provided SharePoint site. All Project documentation shall be stored and maintained on the SharePoint site provided by NCTA.
53.	The content of all documentation shall become the property of NCTA who shall have the right to reproduce any portion of the documentation in part or in whole.

## **2.1.7.** Deliverable Management

The Contractor shall include a description of their deliverable management processes and procedures in the PMP. The Contractor's deliverable management processes and procedures must reflect the following provisions:

55.	The Contractor shall develop and provide a schedule, subject to NCTA approval, for all deliverables.
56.	The Contractor shall be responsible for submitting all deliverables required by NCTA for NCTA's review, comment and approval.
57.	The Contractor must have NCTA's approval on all deliverables tied to milestone payments before payment is released by NCTA. NCTA shall have the ultimate determination as to whether or not a deliverable is approved and final.
58.	Once the Contractor submits a deliverable for NCTA's review, NCTA may perform a cursory review of the deliverable to determine if the deliverable meets NCTA's requirements. NCTA may reject any deliverable if content is missing, the deliverable is incomplete, or NCTA determines the deliverable is unsatisfactory. Should NCTA reject a deliverable, NCTA will notify the Contractor in writing. Rejection of an incomplete deliverable shall be considered a Contractor-generated delay.
59.	The Contractor shall account for enough time in their development schedule to allow NCTA one (I) five (5) Business Day review cycle, as well as allowing time for the Contractor's revision, on every deliverable. Multiple, simultaneous submittals by the Contractor to NCTA may extend NCTA's review times.
60.	To organize NCTA comments back to the Contractor, the Contractor shall provide NCTA with an empty comment matrix with each submittal. The comment matrix shall be used to track all open comments, as well as document final resolutions to comments until the deliverable is approved.
61.	Once comments are received by NCTA, the Contractor shall be responsible for updating the deliverable to address any unresolved comments submitted by NCTA.
62.	When the Contractor has addressed all NCTA comments and produced a new version of the document, the Contractor shall then be responsible for coordinating with NCTA to schedule a final document review and comment resolution meeting. The Contractor shall ensure all key decision makers and subject matter experts for their system are available during the meeting so that all remaining open comments can be resolved. The Contractor shall then be responsible for producing and submitting a final document for NCTA's review and approval.
63.	The Contractor must receive NCTA's written approval of any document prior to the Contractor proceeding with any work related to the document, unless NCTA provides prior written authorization.
64.	If NCTA requests corrections or improvements to submitted deliverables, the Contractor shall resubmit the documentation and deliverables until such time as NCTA accepts the deliverable. Time required to resubmit and approve any deliverable shall be considered a delay caused by the Contractor.

65.	Deviations from the requirements set forth in the Contract that may be contained within the Contractor's submitted deliverables, even if approved by NCTA, shall not modify any requirement set forth in the Contract. Only formal requests to NCTA, from the Contractor, for changes that are formally approved by NCTA shall modify the requirements set forth in the Contract.
66.	NCTA is not obligated to approve any request of milestone payment if the associated document(s) or deliverable(s) do not reflect the requirements of the RFP, design documents or the Contract requirements. The Contractor shall request written approval from NCTA for deliverables and activities related to payment milestones.

## **2.1.8.** Quality Management

67.	The Contractor shall include a description of their quality management processes and procedures in the PMP. The Quality Management processes outlined in the PMP shall include the Contractor's internal quality control and quality assurance (QC and QA) procedures during all phases of the Project. The Contractor shall be responsible for the quality of all services and performance related to the design of the Application throughout the duration of the Project.
	The Contractor shall publish all internal documentation and processes related to its quality management procedures and processes on the NCTA's Project SharePoint site. This shall include, but not be limited to:
68.	Defect reporting
	Internal audits
	Internal testing results (e.g. regression testing, load testing, etc.)
69.	The Contractor shall acknowledge that all deliverables and design documents shall be prepared in accordance with generally accepted practices for these types of services and the Contract.

## **2.1.9.** Project Communications

70.	The Contractor shall include a description of their communication processes and procedures in the PMP. The plan shall address all Project communications, including formal and informal communications.
71.	The PMP shall address all aspects of Project coordination with NCTA, its consultants, and other third parties as directed by NCTA.
72.	The Contractor, and its representatives, shall ensure an approved NCTA representative is copied on, or apprised of, all communications with third parties regarding the Project.

73. The PMP shall detail the Contractor's contact information and communication escalation plans in the event that the main contact is unavailable or unresponsive.

### 2.1.10. Weekly Project Status Meetings

	The Contractor shall be responsible for coordinating with NCTA to arrange weekly (or another a frequency as dictated by NCTA) Project status meetings. The Contractor and NCTA shall coordinate on day of the week for the meeting to occur, length of the meeting, meeting attendees and structure of the meeting.
74.	<b>Note:</b> If the Contractor's PM is located within the Raleigh, NC area, they will be required to attend progress meetings, and other meetings assigned by NCTA, in person. If the Contractor's PM is <u>not</u> located in the Raleigh, NC area, they are not required to attend all weekly status meetings in person. However, the Contractor's non-local PM shall be required to attend one (I) progress meeting, in person, once per month.
75.	The Contractor PM shall utilize web-based meeting software enabling all meeting attendees to share and view documents in real time during meetings.
76.	These status meetings shall run from NTP through Project completion or until NCTA decides to cease these meetings.
77.	The Contractor shall develop all meeting agendas for recurring Project meetings, and meetings called by the Contractor. The Contractor shall distribute meeting invitees full meeting agendas a minimum of one (I) Working Day in advance of all meetings.
	The Contractor shall be responsible for documenting meeting notes, and distributing a draft copy to all meeting attendees within one (I) Working Days for review. Should any meeting attendee submit comments and/or modifications to the Contractor, the Contractor shall have one (I) Working Day to update the meeting notes and distribute them to other meeting attendees. Meeting notes captured during every meeting shall capture, at a minimum:
	List of meeting attendees
78.	Summary notes for each agenda topic
	Summary notes for additional non-agenda items discussed
	Action items, including responsible party and any associated due dates
	Decisions made during the meeting
	NCTA direction provided during the meeting

### 2.1.11. Monthly Progress Reports

79. The Contractor shall be required to submit a progress report monthly after receiving NTP from NCTA.

80.	Monthly progress reports shall by submitted to NCTA no later than the 10th Business Day of every month.
81.	Monthly progress reports shall detail activity performed by the Contractor during the preceding month.
	The Contractor shall coordinate with NCTA, within the first thirty (30) Calendar Days after receiving NTP, on the structure, content and level of detail to be included in each monthly progress report. At a minimum, monthly progress reports shall include:
	Progress achieved on all Project activities during the prior month
82.	Notice of any potential delays or issues, steps the Contractor is recommending or taking to mitigate the issues and any potential impact to the Project schedule
	Critical issues that may impact the Project schedule that need an NCTA decision including risk analysis as required
	Deliverables scheduled for submittal in the next reporting period
	One (I) month look ahead

### **2.1.12.** Subcontractor Management Plan (if applicable)

The Contractor shall include details in their PMP regarding their approach to subcontractor management (if applicable). This plan shall describe the Contractor's approach to managing subcontractors they propose utilizing to deliver the Scope of Work detailed in this RFP. At a minimum, the plan should include:

• Percentage of work covered by each proposed subcontractor, and the number of staff proposed

• List the key personnel and/or project manager for each subcontractor, as well as their contact information

• Indication of each area each subcontractor shall be responsible for reporting/delivering

• Dispute resolution process between the Contractor and its subcontractors

• Description of how the Contractor will ensure subcontractor deliverables are produced on time with quality

### **2.1.13.** Project Closeout

Upon completion of the Project, the Contractor shall coordinate with NCTA to ensure all contract items have been closed out and are complete, resolve any open issues and ensure NCTA has all of the final documents in their possession.

85. Upon NCTA's request, the Contractor shall coordinate with NCTA to conduct a lessons learned meeting.

## 2.2. Application Design, Development, Testing and Integration

### **2.2.1.** Requirements Traceability Matrix

86.	The Contractor shall be responsible for developing and maintaining a RTM throughout the design, development and testing phases of the Project. The RTM shall list all requirements and their associated user stories, and cross reference those items to the design document developed during this phase. As the Project progresses, the Contractor shall be responsible for updating the RTM to identify where each requirement will be tested (e.g. test or test phase), how the requirement will be validated during each test and cross reference the test script where the requirement is tested.
87.	Contractors shall develop the RTM using Microsoft Excel or approved alternative, and coordinate with NCTA on the design, layout and overall format of the RTM.
88.	The Contractor shall continuously maintain and update the RTM throughout the life of the Project.
89.	Contractors shall only include requirements that NCTA has directed or agreed to, and the RTM shall track the original requirements, any modifications made to requirements, and contain notes on any changes made to requirements as agreed to by NCTA.
90.	The Contractor shall submit an updated RTM within fifteen (15) Calendar Days of Notice of contract award from NCTA.
91.	The Contractor shall not incorporate any changes into the RTM without written approval from NCTA.
92.	The Contractor shall update the RTM to cross reference specific test plans and test scripts fifteen (15) Business Days prior to the start of any Application test for NCTA's review and approval.

## 2.2.2. HOV Declaration Application Design Phase

	During the Application Design Phase, the Contractor shall be required to collaborate with NCTA and its designees on the design of the Application, including but not limited to:
93.	The Application GUI(s) via wireframes and user interface prototypes
	<ul> <li>Identification/clarification of the required Apple and Android devices, web browsers,</li> <li>OS versions to develop to and support (latest and two prior versions)</li> </ul>

	RTCS and BOS ICDs
	Core Application functionality
94.	During the Design Phase, the Contractor shall design a HOV Declaration Application to meet or exceed all implementation, functional and performance requirements set forth in this RFP. The Contractors shall coordinate with NCTA throughout the design process.
95.	The Contractor shall be responsible for assisting NCTA open a developer account with both Apple and Google. While NCTA shall own the accounts, the Contractor shall be responsible for maintaining them throughout the duration of the contract.
96.	The Contractor shall coordinate with NCTA on design meetings to facilitate the design of the Application, answer questions and clarify issues necessary to develop the Design Document.
97.	The Contractor shall coordinate with NCTA to implement design review meetings and focus groups, if desired and directed by NCTA, for the Application GUI and functionality.
98.	During the Design Phase, the Contractor shall coordinate with NCTA to develop a process to receive, review, accept and incorporate any feedback from NCTA and/or its designees into the design of the Application usability and/or user interface to improve the usability of the Application.
	The Design Document shall address all areas of the Application design, including, but not limited to:
	Application overview
	Application architecture
99.	Data security and integrity
	Reports
	Compliance with functional and performance requirements
	<b>Note:</b> The above description is not complete and the Contractor shall be responsible for including all aspects of the system in the Design Document, whether or not that aspect has been included on the above list.
100.	The Contractor shall submit an updated RTM and Project schedule with their Design Document.
101.	During this phase of the Project, the Contractor shall be responsible for developing and completing the followings documents for NCTA's review and approval:
	Project Management Plan

	Application Design Document
	Express Lane RTCS ICD
	BOS ICD
	• RTM
	Training and User Documentation Plan
	Test Plan
	Project Schedule
102.	The Test Plan shall detail test strategies and processes of all tests and aspects of the testing to be fulfilled with each test.
	The Test Plan shall contain at a minimum the following items:
	Description of all the different test scenarios and events
	Methodology of testing (including coordination with external entities (e.g. the BOS and RTCS integrators))
	<b>Note</b> : Unless otherwise directed and approved by NCTA in advance of communications, NCTA and/or its designee shall be responsible for communicating with external entities on Application interface testing. If NCTA authorizes direct communication with one of its external entities, the Contractor shall copy the NCTA Project Manager on every written correspondence.
103.	Proposed duration of test events
	Number and types of other Contractor assistance needed to support testing
	Sample test cases and procedures
	How test failures will be handled
	Any special tools, equipment, or personnel required for testing
	Proposed schedule in Days for all tests the Contractor is expected to perform
	Tests necessary for mobile Application certification with Google Play and the Apple Application Store
104.	A Draft Test Plan shall be submitted to NCTA no later than thirty (30) Calendar Days after notice of award is provided by NCTA.
105.	No formal testing can proceed without a NCTA approved Test Plan.
·	

# Detailed Test Cases and Test Procedures: The Contractor shall develop formal test cases and procedures (i.e. test scripts) that emulate various conditions and scenarios that occur in the normal operations of the systems to verify the systems' functionality and the systems' ability to handle such conditions and scenarios. All customer-facing elements of the Application shall be fully tested. 106. The Contractor shall develop separate test cases and detail procedures shall be developed for each formal test phase (e.g., Usability, User Interface, UAT and OOP). Contractor's test cases and procedures shall be submitted and approved by NCTA prior to any testing for record. The test procedures shall contain a step-by-step logical testing process with the purpose to demonstrate a level of acceptance for the item being tested. Test Reports: The Contractor shall be responsible for developing test reports for every formal test performed during the course of the Project. The Contractor shall submit a test report within five (5) Business Days following the completion of each individual test. Test reports shall document the outcome of every test, including but not limited to: the success or failure of script/procedure, any issues noted during the test, modifications made to test scripts during the test, items need to be completed to formally pass the test, recommendations for addressing issues discovered during testing, etc. 107. The Contractor shall coordinate with NCTA to dictate a priority level for each issue / punch list item identified during each test. The Contractor shall be responsible for fixing and retesting high-priority items for NCTA's approval before an individual test can be completed and approved by NCTA. The Contractor shall coordinate with NCTA to develop a retesting schedule for lower priority items. If approved by NCTA, items of lower priority may be retested or rolled into a future test phase. When NCTA has received all relevant documentation and deems that all punch list items have passed testing, the Contractor completes that test phase. 108. Updated Test Observation Log:

- The Contractor shall be responsible for producing a test observation log after every formal test. The observation log shall document all corrective actions that need to be taken to complete a formal test.
- The Contractor shall be responsible for completing all corrective actions identified during a formal test.
- Acceptance of any phase or aspect of testing shall not relieve the Contractor from their responsibility in meeting the complete functional and performance requirements.
- NCTA reserves the right to withhold approval of the test, pending completion of the required corrective actions.

### **2.2.3.** HOV Declaration Application Development Phase

Throughout Application development efforts, the Contractor shall be required to submit development and internal test reports for NCTA review every two (2) weeks. Development 109. and test reports shall include: the status of Application development progress made, results of internal testing efforts, a list of defects discovered through internal Application testing, and the status/priority of each defect at the time of the report's creation. As the Contractor develops the Application, and during various development and testing touchpoints throughout the Project, the Contractor shall make versions of both the mobile Application and website releases available to NCTA and its designees to sample and test 110. website and mobile Application usability, design and function. Note: The Contractor and NCTA shall coordinate to ensure a suitable and stable version of the Application and website are made available to NCTA. During the development phase, the Contractor shall coordinate with NCTA to develop a process to receive, review, accept and incorporate any feedback from NCTA and/or its HI. designees into the design of the website or mobile Application usability and/or user interface during Application development to improve the usability of the Application.

#### **2.2.4.** HOV Declaration Application Testing, Implementation and Training Phase

113	2.	The Contractor is responsible for all aspects of internal testing and formal testing.
11	3.	The Contractor shall conduct formal testing in various phases and stages to validate the Application's integrity, reliability and functionality.
11	4.	The Contractor shall be required to coordinate with NCTA and its BOS and RTCS TSIs in order to develop and agree upon a schedule to test external interfaces.

115.	The Contractor shall provide required support personnel, test equipment and test environment(s) as approved in the Test Plan.
	The Contractor's Application shall undergo testing prior to acceptance and go-live, including:
	Usability and User Interface Testing (may be two different tests)
116.	• UAT
116.	OOP to demonstrate the reliability and stability of the Application
	<b>Note</b> : This observation period shall be conducted after Application go-live, but shall be required prior to NCTA's acceptance of the Application.
	Mobile Applications shall be required to undergo any testing required by the Apple Application Store and Google Play certification processes.
	During formal Application testing, the Contractor and NCTA shall verify the Application's compliance to the:
	Functional Requirements herein
117.	Application Requirements Document
	Application Design Documents
	Data and reporting accuracy requirements
	Detailed test procedures/scripts
118.	Should any issues or defects be discovered after the Application has been placed into service, the Contractor shall go through the processes described in their PMP with regard to configuration management, code update and release. The Contractor shall never change the Application without prior authorization from NCTA.

## **2.2.5.** Formal Testing Phases

119.	The Contractor shall be responsible for completing all of the formal tests in coordination with NCTA and its designees. All formal testing shall be structured, organized events which are sufficiently scheduled to accommodate participation and observation by NCTA and its designees. It is the Contractor's responsibility to coordinate and schedule formal testing with NCTA at least thirty (30) Business Days in advance of any formal test.
	Usability and User Interface Testing (may be two different tests)
120.	
	<b>Note</b> : Depending on the Contractor's approach to Application development and testing, these tests may be two independent tests with individual testing dates on the Project

schedule. The UAT shall demonstrate Application functionality and interface(s) to NCTA RTCS networks.

- Usability Testing shall ensure that the Application is easy to use and provide a satisfactory user experience to the customer.
- User Interface Testing shall test and demonstrate Application menu options, buttons, bookmarks, history, settings, report functionality and navigation flow of the Application.
- All user-facing aspects of the Application shall be tested as part of the Usability and
  User Interface testing. Load testing of the web and mobile Applications shall be
  conducted simulating the projected user volume.
- The Contractor shall provide hardware and software test tools for NCTA to use and test the Application, both mobile and website versions, and to simulate data transfers, as necessary, as defined by the ICDs.
- During Usability and User Interface Testing the Contractor shall make versions of both
  the mobile Application and website releases available to NCTA and its designees to
  sample and test Application usability, design and function.
- The Contractor shall coordinate with NCTA to develop a process to receive, review, accept and incorporate any feedback from NCTA and/or its designees for the website or mobile Application captured during usability and/or user interface during Application test to improve the usability of the website and/or mobile Application.
- Upon completion of Usability and User Interface Testing, the Contractor shall submit a
  test report that details the results of each test (if separate) to NCTA for review and
  approval.
- Successful completion of each test and approval by NCTA is required before the Contractor will be given the authorization to proceed with formal tests.

#### User Acceptance Testing:

- The UAT shall demonstrate Application functionality and interface(s) to NCTA and Concessionaire RTCS networks.
- All functionality and functional requirements of the Application shall be tested as part of the UAT. It is the Contractor's responsibility to ensure that each requirement is certified and/or tested for compliance during the UAT.
  - The UAT shall include review of Application reports, and validation of the accuracy of data captured within each report.
  - The Contractor shall conduct a dry run of all UAT procedures, record the results and submit them to NCTA for review at least five (5) Business Days prior to UAT.

The Contractor shall conduct UAT using NCTA approved test cases and procedures. NCTA or its designees will participate in and/or observe the UAT as described in the accepted Test Plan. The Contractor shall provide hardware and software test tools for simulating data transfers, as necessary, as defined by the ICDs. Upon completion of the UAT, the Contractor shall submit a test report that details the results of the test to NCTA for review and approval. Successful completion of the UAT and approval by NCTA is required before the Contractor will be given the authorization to move forward to proceeding formal tests. Android and Apple Operating Systems Certification Testing: The contractor shall conduct all necessary certification testing with the institutions necessary to obtain certifications for the mobile device application to be made available on both Google Play and the Apple Application Store. The mobile device Application shall be compatible with all Apple devices and associated operating systems spanning the most recent four generations (e.g. iPhone 4,5,6,7) and Android software spanning the most recent

three generations (e.g. version 5,6, 7). The final list of required devices and operating systems to support shall be identified by NCTA and the Contractor, and approved by

### **2.2.6.** OOP and Acceptance Criteria

NCTA during the Design Phase.

122.

123.	The purpose of the OOP is to demonstrate the Application and website(s), utilizing "live" operational data, is operating in a capacity to provide sufficient confidence to NCTA that the Application and website(s) is ready for Project acceptance.
124.	The Operations Observation Period shall be conducted for a continuous period of no less than thirty (30) Days commencing upon successful go-live of the HOV Declaration website and the mobile Applications being available on Google Play and the Apple Application Store for download.
125.	Upon completion of the OOP, the Contractor shall submit a production defect report that details the results of the observation period to NCTA for review and approval.
126.	The OOP Test Report shall include a fault report detailing any problems, issues or concerns raised/discovered (either by Contractor staff, NCTA, CSC staff or customers).
127.	The production defect report shall also contain the Contractor's recommendation for addressing any problem, issue or concern raised/discovered during the observation period.

128.	At the end of the Operations Observation Period, NCTA will assess the performance of the Application and measure their stability and reliability against contract performance requirements.
129.	Successful completion of the OOP and approval by NCTA shall be required before NCTA issues the Contractor the acceptance certificate for the Project deliverable.
130.	NCTA shall, at its sole discretion, determine whether the Contractor's Application meets the acceptance criteria of each phase.
	To meet the Application Acceptance criteria, the Application shall pass all stages of testing, as required by the phase, and the Contractor shall have met the following conditions:
	All deliverables required for each Project phase have been provided to and approved by NCTA.
	The Application is fully operational for all required browsers, and mobile applications are available for download from both the Google Play and the Apple Application Store for all required devices.
131.	All system interfaces with external systems are functioning as designed.
	All Application data conforms to expected output, and data integrity is verified.
	The system must meet the security, stability, availability, performance and functional requirements as defined within this RFP.
	Training/knowledge transfer to NCTA personnel has been completed.
	The Application has been in production ("live") without malfunction, and is free of defects lower than priority 2 for a period of thirty (30) Days.

## **2.2.7.** Training Program

The Contractor shall provide comprehensive training for all aspects of the HOV Declaration Application on all platforms. NCTA Operations staff will be fully trained to understand the Application's functionality and be able to assist customers with its use.

132.	The Contractor shall develop a Training Plan and submit it for NCTA's review and approval.
133.	NCTA shall have the right to require additional interim drafts at no additional cost should draft training materials submitted not be of adequate quality or have missing or incorrect information.

134.	Prior to the beginning of any training, the Contractor shall be responsible for developing all training materials, help systems and user manuals, and submitting them for NCTA's review and approval.
135.	The Contractor shall ensure NCTA or their representatives have the right to attend any training sessions and to make recordings and copies of all training program materials for their use in training new employees.
136.	The Contractor shall coordinate with NCTA to develop a list of CSC operations and NCTA staff who will require training on the Application.
137.	It shall be the Contractor's responsibility to provide sufficient notice to NCTA on the types of training it will provide and the timing for each training session.
138.	The Contractor shall perform all scheduling activities and shall make every attempt necessary to accommodate the maximum number of persons for each training session given scheduling conflicts. Contractor shall provide sufficient notice to allow participants a reasonable lead time.
139.	The Contractor shall notify NCTA of the dates or range of dates it would like to hold a training session at the NCTA offices and shall coordinate with the NCDOT IT office to arrange the proper classroom setting and computer Hardware and Software are installed and the space configured for each training session, as necessary.
140.	All training shall be conducted in the Raleigh-Durham, North Carolina area, as approved by NCTA.
141.	The Contractor shall be responsible for providing all training material, computers, mobile devices, projectors, projector screens, video players, meals, and supplies required for the training class. All dates and durations required for training material development and conducting all training classes shall be identified in the Project Schedule.
142.	Upon NCTA's request, the Contractor shall provide both electronic and hard copies of the training materials for each person being trained.
143.	The Contractor shall revise the training program, Training Plan and training documentation and classroom materials, as necessary, throughout the contract term based on feedback from NCTA, Application changes, additional functionality, etc.
144.	The Contractor shall provide a Training manuals, help systems and/or "how to" guides for the Application. All materials are to be kept up to date by the Contractor to account for all Application upgrades or any modifications to the Application. Manuals shall be made available on the NCTA provided SharePoint site and on line if available:
145.	Operations/User Manual – This manual will serve to assist in the training of CSC operations personnel and to provide documentation of the proper operation of the Applications.

The Contractor is responsible for providing regular updates to all training materials to keep them up to date throughout the life of the contract.

## 2.3. Application Maintenance

### **2.3.1.** Maintenance Services

This phase of work includes the maintenance of the Application, including but not limited to:

147.	All Application maintenance activities are included in this service (backups, updates, security, etc).
148.	A strict version control methodology shall be maintained and utilized by the Contractor.
149.	Software modifications that are required to expand, maintain and support the Application, including any interfaces to support the RTCS host(s) and BOS, as a part of the normal course of business shall not be considered upgrades, modifications or enhancements, and shall be performed during Project maintenance activities.
150.	Subsequent to Application implementation and acceptance, the Contractor shall be responsible for performing administrative activities, corrective action and routine maintenance services to the Contractor's Application.
151.	Ongoing, routine Maintenance Services are a component of the price offer.
152.	Software upgrades shall be coordinated with NCTA to ensure that version incompatibilities are not created.
153.	Planned maintenance and upgrades shall be scheduled and approved by NCTA prior to their implementation.
154.	The Contractor performing Application maintenance shall be required to provide its own maintenance facilities.
155.	The Contractor performing Application maintenance shall notify NCTA in advance of making any configuration changes during planned maintenance operations, and shall notify NCTA within 24 hours of any configuration changes required by corrective maintenance.
156.	Routine software repairs and service modifications that are required to maintain and support tolling operations as a part of the normal course of business (e.g. version changes, configuration or parameter changes or minor changes to software or code, or changes that improve the Contractor's ability to maintain and support the Application) shall not be considered negotiable modifications or enhancements. Routine modifications shall be part of the maintenance price and shall include, but not limited to:

	Routine, configurable updates that result in improvements in the Application's operational efficiency
	Modifications to the Application to ensure content is current or accurate
	<ul> <li>Periodic mobile device updates to maintain compliance with the Apple Application Store and Google Play, as well as all operating systems and devices as required by NCTA.</li> </ul>
	Ongoing Application certification with the Apple Application Store and Google Play as required
	Periodic database and Application tuning and checks for processing performance
	Regular monitoring and backups of the Application's servers
	Modifications of existing interfaces
	<ul> <li>Modifications required to address end user satisfaction when ratings fall below three stars out of five for the respective mobile device Applications (e.g. the Apple Application Store and Google Play).</li> </ul>
157.	The Contract shall develop a software release schedule for NCTA's review and approval before each software release.
158.	The Contractor shall test each new software release, provide a written rest report, and submit the report for NCTA's review and approval before the changes can be implemented in a live, production environment. Should a software release have an impact to the Application user interface, the Contractor shall be required to develop test scripts for NCTA's review and approval prior to conducting the test.
159.	The Contractor shall be required to develop and provide detailed release notes for NCTA's review and approval after every new software release prior to releasing any new software into production.

## **2.3.2.** *Maintenance Priorities, Response and Repair Times*

160.	Response and Repair time is defined as the combined time from when failure occurred or problem was reported to when the repair or correction of the failure occurred; the period of time beginning when the failure occurred (failure time) and ending when the fault condition is corrected and returned to normal Operations.
161.	Response and repair times for every Maintenance event shall be recorded and reported by the Contractor, and such reports shall be provided to NCTA every two (2) weeks.

162.	The Contractor shall provide NCTA with contact information (e.g. phone number and email address) for the Contractor's on-call technical support staff. The Contractor shall also be responsible for updating NCTA should any contact information change during the course of the Contract.
163.	Response to calls and repair times shall be determined by Priority as described below. Contractor failure to meet the response and repair time criteria described below shall result in monthly fee adjustments.
164.	Acknowledgement of receipt of notification of a Maintenance issue or human acknowledgment of a failure shall not exceed thirty (30) minutes after the failure notification was recorded or problem was reported.
165.	The Priority of failures shall be defined and/or modified from what is documented below during the Design phase. Time to respond and complete repair are determined by Priority and is defined as below.
166.	Priority I: Defined as any malfunction or fault that results in the loss of revenue due to the interface with the RTCS or BOS; security breach; loss of audit data; loss of redundancy in any redundant System components; loss of functionality that impacts the availability or operation of the Application.
	For this Priority, the Contractor shall have a two (2) hour time to respond and complete repair.
167.	Priority 2: Defined as any malfunction or fault that degrades the System performance but not the operational ability of the Application. It includes, but is not limited to inaccurate reporting, or loss of functionality that impacts access to data.
	For this Priority, the Contractor shall have a four (4) hour time to respond and complete repair.
168.	Priority 3: Defined as any action or event that has the potential to result in a malfunction or degrading of the System performance but has not impacted performance and is not anticipated to immediately impact performance.
	For this Priority, the Contractor shall have a twenty four (24) hour time to respond and complete repair.
169.	Outages and tasks performed under an Approved Preventive Maintenance schedule shall be defined as Priority 4. The Application shall be available and fully operational within the Approved time schedule for such activities and upon completion of the Preventive Maintenance period. Delays and problems associated with not completing scheduled Preventive Maintenance within the window specified may be included in the Performance Requirement Calculations. Any failures generated or resulting from Preventive Maintenance activities shall be accounted for as Priorities I, 2 or 3 and be addressed in accordance with these Requirements.

# **2.3.3.** Acknowledgement of All Priority Events

170.	The Contractor shall acknowledge receipt of all Priority events within thirty (30) minutes of failure/event notification.
171.	The Contractor shall be required to utilize software to track software bugs, defects issues or system enhancements throughout the term of the Contract. The Contractor shall coordinate with NCTA on the selection of tracking software prior to the Contractor's purchase of any software (if necessary) to ensure it meets NCTA needs. At a minimum, the software shall:
	Provide complete tracking of software bugs, defects issues or system enhancements from the identification/entry of an item until it is fixed/closed in the tracking software
	Utilize NCTA defect priority assignment as described in this RFP or defined further during the Design Phase of the Project
	Provide access to NCTA staff as directed and requested.
	Tie defect fixes or software enhancements to specific software releases.
172.	For the purposes of assessing monthly fee adjustments, 95% of failure or Priority events shall be acknowledged within thirty (30) minutes of receipt.

## **2.3.4.** Application Modifications and Enhancements

173.	After the Application is launched in a live operating environment, NCTA may request the Contractor to modify or enhance the Application in response to changes in their tolling program. For example, NCTA may request modifications to the Application to support:
	The addition of new toll facilities
	The addition of new Application functionality
	Changes in toll system technology
	Changes in legal, regulatory, or policy concerning tolling operations
174.	Either NCTA or the Contractor may initiate a change request for Application enhancements or modifications.
	Note: Once initiated, change requests will follow NCTA's change request process.
175.	Regardless of who initiates a change request, the Contractor shall be responsible for fully documenting and submitting the following for NCTA's review and approval prior to the initiation of any work:

	Impacts of the change on the Application, including Application function, maintenance and operation
	Level of effort to make the change
	Testing needs and impacts
	Implementation schedule
	<ul> <li>Proposed fixed price for the development, testing and implementation of the modification or enhancement</li> </ul>
176.	Application software enhancements shall be negotiated, and be based upon a mutually agreed upon change order.
177.	Change orders are payable upon achievement of milestones and deliverables stipulated in the change order.
178.	Any proposed pricing for software modifications / enhancements shall be developed using the same estimating, cost, schedule, risk assessment, overhead and profit principles used to develop the original Pricing Schedule.

## 2.4. Project Closeout

### **2.4.1.** Final Submittals

The Contractor shall provide all custom software code, soft copy as-built Application design documentation, including but not limited to: drawings / sketches, design documents, training materials, and other information associated with the design, development, testing, certification and operation of the Application.

## 3. Functional Requirements

The functional requirements contained within this section serve to describe NCTA's required functionality for the Application. The requirements are not all inclusive as NCTA expects to refine, expand, validate and finalize the functional requirements during the Design Phase of the Project. This includes any proposed user interface or other customer-facing messages, text and/or content provided by the Application. The user interface or other customer-facing messages, text and content provided herein are examples and may or may not reflect final language to be develop during the Design Phase and approved by NCTA prior to the Project Development Phase.

Additionally, requirements for the website and mobile device variants of the Application may differ slightly from one another, and those differences shall be identified and documented during the Design Phase. The final agreed requirements will be incorporated into an updated document as required during the Design Phase, and serve as the basis for the executed Contract.

### 3.1. General Requirements

The Contractor's proposed Application shall meet the following requirements:

180.	The Contractor's Application shall be available via a website Application (via both traditional and mobile device web browser formats) and a mobile device Application.
181.	The Application and the Application database shall be structured such that growth is accommodated, access is easy, and reports are configurable and accurate.
182.	The Application must be auditable, and provide for reconciliation processes associated with all Application activity.
183.	The Application must be user friendly, accurate, dependable, and easily configurable to accommodate NCTA Business Policies and changes.
184.	In order to maximize the Application's performance, any hosted services or private cloud based services shall be hosted within the United States in a region close to or within North Carolina.
185.	All data hosted in a private cloud environment shall be readily accessible by NCTA staff for the duration of the agreement. All data and custom software shall be owned by NCTA in its entirety.
186.	The Application shall be designed to easily accommodate future, North Carolina Express Lanes, modifications and enhancements.
187.	The Contractor and their Application must comply with the State's information system security compliance requirements as described in the Statewide Information Security Manual. http://it.nc.gov/statewide-resources/policies
188.	The Application shall support no fewer than two (2) RTCS interfaces.

# 3.2. Functional Requirements

## **3.2.1.** Website and Mobile Application Requirements

	The Application landing page (presented when the website Application is accessed or the mobile Application is enabled) shall present the following, or similar options:
	Links/icons to the Google Play and Apple Application Store (website only)
	A sign-in area for registered users, including:
	A field titled: "Username/e-mail."
	A field titled: "Password."
	o An option for "Remember my Username."
	<ul> <li>An option for "Sign in with Touch ID" (only for mobile Application)</li> </ul>
	<ul> <li>A button or hyperlink titled: "Forgot my password."</li> </ul>
	A registration area for new users, including:
189.	A button or hyperlink titled: "Register a new account."
	A link to a an "FAQ" page, and "Help" or "How-To" guide that explains how to use the Application
	• Links to phone number(s) for the NC Quick Pass Customer Service Center(s), which will provide users with the ability to dial a phone number when selected on a phone.
	A link to the NC Quick Pass website address (as well as any other website as directed by NCTA during design)
	A link to "Invite a Friend" to use the Application button/link.
	A warning message about using the Application / texting while driving.
	<b>Note</b> : Refer to section 3.4 below for more information regarding requirements for website and mobile Application branding, and user interface development and content development.
190.	Prior to use of the Application, the Application shall require first-time users to register/open an account.
191.	When a user selects the "Register a new account" button or hyperlink, the Application shall provide an account registration page, requiring the following information from first-time users:
	First Name
	Last Name
	E-mail address
	Phone Number
	A button, or other mechanism, to select a preference for method of contact.

	NC Quick Pass Transponder Number(s) and zip code associated with the NC Quick Pass account
	Note: The Application shall accept up to 5 transponders on the account.
	Username
	Password
	Password Reminder Question(s)
	Four (4)-digit Personal Identification Number (PIN)
	Vehicle Information to include the ability to define a label for each vehicle
	A link to the Application terms and conditions with an area for a digital signature or check box for agreement with the terms and conditions.
192.	The Application shall interface to the BOS to validate the user provided zip code associated with their NC Quick Pass account when the customer initially establishes their account. The zip code data will be sourced from the BOS via a secure near real time interface. The Application shall only allow users with a NC Quick Pass account in an "active" status (i.e. not closed or suspended) to successfully register with the Application.
193.	Should the BOS be unable to validate the user provided zip code and be unable to find a matching NC Quick Pass account, the Application shall prevent the user from completing registration and present a note on the Application screen similar to the following:
	"Unable to validate the associated NC Quick Pass account. Please verify the zip code used matches the zip code listed on your NC Quick Pass account. Please call the NC Quick Pass Customer Service Center (#-####-##############################
194.	After the user successfully registers with the Application, the Application database shall store the required information for each user on an Application host database.
195.	Once a user has successfully registered with the Application, the Application shall automatically send the user a notification via their preferred method of communication (e.g. phone/text or e-mail) welcoming them to the Application, providing them links to the NC Quick Pass Customer Service Center, a high-level overview of the Application and links to an Application "how to" and/or help system.
196.	Once a user has registered with the Application, the Application shall require users to enter their username and password to access the Application.
197.	The Application shall prevent unauthorized access to accounts without proper security credentials.
198.	The Application shall provide warning messages when incorrect login information is provided.

199.	After five (5) incorrect login attempts, the Application shall lock the user's account and force the user to reset their password. The Application shall prevent access to the Application until the user resets their password.
200.	Should a user select the "Forgot my password" button or hyperlink, the Application shall present the following, or similar options:
	A button or hyperlink titled: "Send me a reset password code"
	Password reminder question(s)
	A button or hyperlink titled: "Submit"
201.	Should the user provide answers for their password reminder(s) and select the "Submit" button, the Application shall validate the answers provided.
	• If the password reminder answer(s) are not validated by the Application, the Application shall provide a message that the answer(s) were incorrect. The user shall be able to submit password reminder answer(s) a total of five (5) times. If the Application is unable to validate the password reminder(s) after five (5) attempts, the Application shall lock the account and require the user to reset their password.
	• If the user's username and password reminder(s) are validated by the Application, the Application shall log the user into the Application and present the "logged in" landing page.
202.	The Application shall be designed to support the reset of customer passwords by sending reset codes via e-mail or text message.
203.	Once a user selects the "Send me a reset password code," the Application shall present the following, or similar options:
	The option to send a temporary reset code via e-mail or the phone number (text message) they have on their profile.
	A button or hyperlink titled: "Submit"
	A button or hyperlink titled: "Cancel"
	A button or hyperlink titled: "Logout"
204.	Once the user selects the delivery method and selects the "Submit," the Application shall send the user with a temporary code, and present a page to enter the reset code. The reset code shall contain a message that the code is only viable for 10 minutes; and if not entered within the allotted time frame, they will have to repeat the process.
	• If the user enters the correct code within the allotted time frame, the Application shall present a page enabling the user to reset their password. Once the password is successfully reset, the Application shall login the user and present the "logged in" page.
	• If the user fails to enter the code correctly or the Application is unable to validate the code, the Application shall present a message notifying the user to enter the reset code again.

	If the Application is unable to validate the code within the allotted time frame or the user selects the "Cancel" button or hyperlink, the Application shall display the Application login page.
205.	If a user's password is modified, an attempt to modify the password is made or an unsuccessful attempt to access a user's account is made, the Application shall send an email to the e-mail on the user's profile notifying the user of the activity.
	Once logged into the Application, the Application shall display a page presenting the following, or similar options:
	The user's current HOV Declaration for each transponder number (or transponder nickname) and time remaining on the declaration.
	A button or hyperlink titled: "Cancel Declaration(s)"
206.	A button or hyperlink titled: "Set New HOV Declaration"
	A button or hyperlink titled: "Edit My Profile"
	A button or hyperlink titled: "Submit"
	A button or hyperlink titled: "Cancel"
	A button or hyperlink titled: "Logout"
	The Application shall allow users to select on any active HOV declaration and be presented with the following:
	Time remaining for the HOV declaration
	Anticipated expiration date
	"Extend time"
	<ul> <li>Should the user select "Extend Time," the user shall be able to extend their time in I hour increments, not to exceed 4 hours. The system shall calculate and display the deactivation date and time, and shall present the user with a message similar to the following:</li> </ul>
207.	"Your HOV declaration will end at XX:XX on MM:DD:YYYY. Your HOV Declaration must be submitted at least 15 minutes prior to your travel on NCTA Express Lanes in order to receive the benefit of your HOV Declaration. In order to prevent receiving a fine on the Express Lanes if you do not meet occupancy requirements, you must revise or remove your occupancy selection 15 minutes prior to your travel on NCTA Express Lanes."
	"Cancel Declaration"
	<ul> <li>When a user selects the "Cancel Declaration," the Application shall present the user with the following options: "Confirm" and "Cancel."</li> </ul>
	<ul> <li>Should the user select the "Confirm" button or hyperlink, the Application shall update the associated transponder(s) as "HOV Off," and update the Application page to reflect the selection. The Application shall also present a message similar to the following:</li> </ul>

"In order to prevent receiving a fine on the Express Lanes if you do not meet occupancy requirements, you must revise or remove your occupancy selection 15 minutes prior to your travel on NCTA Express Lanes." **Note**: By selecting this option, the user shall be required to reselect an HOV declaration(s) to benefit from HOV declarations in the future. o Should the user select the "Cancel" button or hyperlink, the Application shall not make any changes to the user's current HOV declarations. When a user selects the "Cancel Declaration(s)," button/hyperlink, the Application shall present the user with the following. A list of all active HOV declarations. • When a user selects one of the active HOV Declarations and selects "Cancel Declaration," the Application shall present the user with the following options: "Confirm" and "Cancel." Should the user select the "Confirm" button or hyperlink, the Application shall update the associated transponder(s) as "HOV Off," and update the Application 208. page to reflect the selection. The Application shall also present a message similar to the following: "In order to prevent receiving a fine on the Express Lanes if you do not meet occupancy requirements, you must revise or remove your occupancy selection 15 minutes prior to your travel on NCTA Express Lanes." **Note**: By selecting this option, the user shall be required to reselect an HOV declaration(s) to benefit from HOV declarations in the future. Should the user select the "Cancel" button or hyperlink, the Application shall not make any changes to the user's current HOV declarations. When a user selects the "Set New HOV Declaration" button/hyperlink, the user shall be presented with a page enabling them to select their HOV Declaration Status by transponder number. This page shall present the following, or similar, information: A drop-down box (or other easy to use selector tool) showing each transponder registered on the account allowing the user to select one transponder number. 209. HOV Declaration Schedule selector with activation duration and calendar selector user interfaces. A button or hyperlink titled: "Submit" A button or hyperlink titled: "Cancel" A button or hyperlink titled: "Logout" The Application shall allow users to declare HOV status for the current day or for a date in the future using the following configuration options: "Start Now" activates HOV status for all transponders on the account immediately. 210. **Note**: Once selected, the Application s shall present users with the following, or similar, message: "Your HOV Declaration must be submitted at least 15 minutes prior to your travel on NCTA Express Lanes in order to receive the benefit of your HOV Declaration.

	<ul> <li>In order to prevent receiving a fine on the Express Lanes if you do not meet occupancy requirements, you must revise or remove your occupancy selection 15 minutes prior to your travel on NCTA Express Lanes."</li> <li>"Date in the Future" (e.g. single day or timeframe 3/13/17 – 3/20/17) enables users to select a declaration status for a date in in the future.</li> </ul>
	The Application shall allow users to set the duration for their HOV declaration using the following, or similar, configuration options:
	<ul> <li>"4 hours" A user's HOV declaration shall deactivate 4 hours after the user's HOV declaration became active. The system shall calculate and display the deactivation date and time, and shall present the user with a message similar to the following:</li> </ul>
	"Your HOV declaration will end at XX:XX on MM:DD:YYYY." (time and date.)
211.	• "I Day" A user's HOV declaration shall deactivate at I2AM the day after the date the user selected hours to begin their HOV declaration to be active. The system shall calculate and display the deactivation date and time, and shall present the user with a message similar to the following:
	"Your HOV declaration will end at 12AM on MM:DD:YYYY." (time and date.)
	"Weekdays" would enable users to automatically declare for all weekdays. A user's HOV declaration shall deactivate at 12AM on the Saturday following the week the HOV declaration was active. The system shall calculate and display the deactivation date and time, and shall present the user with a message similar to the following:
	"Your HOV declaration will end at 12AM on MM:DD:YYYY." (time and date.)
	<b>Note</b> : The system shall prevent a user from completing their declaration without selecting a duration.
	The Application shall support the follow declaration status:
	HOV Off
212.	• HOV3+
	<b>Note</b> : The Application shall be designed so that modification of HOV declaration status are easily modifiable based on NCTA business or policy decisions/changes.
213.	The Application shall provide the following, or similar, message on the "Set New HOV Declaration" page:
	"Your HOV Declaration must be submitted at least 15 minutes prior to your travel on NCTA Express Lanes in order to receive the benefit of your HOV Declaration. In order to prevent receiving a fine on the Express Lanes if you do not meet occupancy requirements, you must revise or remove your occupancy selection 10 minutes prior to your travel on NCTA Express Lanes."
214.	Once the user has made their HOV Declaration(s), they will have the following, or similar, options:
	• Should the user select "Submit," the Application will present the user with a "Confirm" and "Cancel" buttons. If the user selects "Confirm," the Application will update the

	<ul> <li>Application with the user's selections and show the updated selections on the Application page. Should the user select, "Cancel," the Application shall not make any modifications and display the user's previous selections prior to selecting the "Submit" button or hyperlink.</li> <li>Should the user select, "Cancel," the Application shall not make any modifications and display the user's previous selections prior to selecting the "Submit" button or hyperlink.</li> <li>Should the user select, "Logout" the Application shall not make any modifications, logout the user from the Application and display the login page.</li> </ul>
215.	Once any modification to the user's HOV declarations are made, the Application shall send the user an e-mail notifying them of the changes made.
216.	Once any modifications to the user's HOV declaration are made, the declaration status for all transponders associated with customer accounts shall be made available in near real time to the RTCS via a secure interface.
217.	The Application shall present users with a real-time, running "activation clock" displaying how much time is remaining (e.g. down to the second) for each transponder set to an active declaration status.
218.	The Application shall support sending text message or e-mail alerts (based on the user's selection), and screen notification popups for:  Once a user's activation becomes active  5 minute alerts prior to a declaration deactivating  Upon HOV declaration deactivation
219.	The Application shall provide users with the ability to view their HOV Declaration history.
220.	<ul> <li>When a user selects the "Edit My Profile" button or hyperlink, the Application shall present the user with a page enabling them to edit the following, or similar, information:</li> <li>E-mail address</li> <li>Phone Number</li> <li>NC Quick Pass Transponder Number(s), allowing for the removal or addition of transponders up to the account limit.</li> <li>A button or hyperlink titled: "Create NC Quick Pass Transponder Nicknames."</li> <li>Password</li> </ul>

Password Reminder Question(s) Four (4)-digit PIN
• Four (4)-digit PIN
( )
Vehicle Information
A button or hyperlink titled: "Save"
A button or hyperlink titled: "Cancel"
A button or hyperlink titled: "Logout"
A button or hyperlink titled: "Close My Account"
should the user select "Create NC Quick Pass Transponder Nicknames," the Application shall present the user with the following:
A list of NC Quick Pass Transponders registered to the account and the associated vehicle license plate number.
Beside each NC Quick Pass Transponder Number, the system shall present a text field enabling users to provide each NC Quick Pass Transponder with a nickname so that they lo not have to have to remember the NC Quick Pass Transponder number or their scense plate when using the Application in the future.
his page of the Application shall present a message similar to the following:
The HOV Declaration Application will use these nicknames on the Application display pages hould you decide to save your provided nicknames. So, when looking for your active HOV leclarations for a particular NC Quick Pass Transponder number or when trying to setup a new HOV declaration for a specific NC Quick Pass Transponder number, refer to the nickname(s) you provided above."
At the bottom of this page, the user shall be presented with "Save" and "Cancel" buttons.
Should the user select the "Save" button or hyperlink, the Application shall save the nicknames provided by the user and use the nicknames throughout the Application.
Should the user select the "Cancel" button or hyperlink, Application shall make no changes, present the page the user was last on.
should the user select "Save" after any of their modifications to their profile, the Application hall update the information in the Application database and display the updated information.
should the user select "Cancel" after any of their modifications to their profile, the Application shall not update the information in the Application database and display the inedited profile information.
hould the user select "Close My Account," the Application shall present the user with an account closer confirmation button, and a message similar to the following:
Should you confirm that you want to close your account, all of the information in your account will be removed from the system, and you will be required to re-register or obtain a switchable NC Quick Pass Transponder to take advantage of HOV discounts on North Carolina Express Lane accilities in the future. Additionally, all of your active HOV declarations will become inactive within 5 minutes of your account closure confirmation."

	Should the user select the "Confirm" button or hyperlink, the Application shall logout the user and close the user's account.
	Should the user select the "Cancel" button or hyperlink, Application shall make no changes, present the page the user was last on and not logout the user.
225.	Once any modification to the user's profile are made, the Application shall send the user an e-mail notifying them of the changes made.
	Should a user select "Logout" at any time, the Application shall present the user with both "Confirm" and "Cancel" buttons or hyperlinks.
226.	• Should the user select the "Confirm" button or hyperlink, the Application shall logout the user and present the login page.
	Should the user select the "Cancel" button or hyperlink, Application shall make no changes, present the page the user was last on and not logout the user.
227.	The Application shall support functionality that allows registered users of the HOV Declaration Application to invite friends to use the Application by providing the invitee's email address or phone number. The Application shall contain a disclaimer stating that message and data rates may apply and any fee or charge resulting from messaging services is the responsibility of the consumer, not NCTA or NCDOT.
228.	Once the information is submitted, the Application shall support transmission of an e-mail or text message providing basic information about the Application, and an invitation to register (e.g. a link to the website and/or link to download the Application from the Google Play or the Apple Application Store).

# 3.3. NCTA Data Exchange Interface(s)

## **3.3.1.** Interface Requirements

229.	The Contractor shall develop and present, for NCTA's approval, an approach to interface design, development, test and deployment of data interfaces to NCTA Express Lane RTCS networks and the NCTA BOS. The Contractor shall develop data exchange interfaces between all necessary NCTA Express Lane RTCS networks and the BOS.
230.	The Contractor shall be responsible for developing data exchange interfaces per existing ICD, or coordinating with NCTA on the modification or creation of ICDs to existing or new entities as required.
231.	The data exchange interface to NCTA Express Lane RTCS and the BOS shall be in near real time via a secure interface.

# 3.4. Website Hosting and Development Requirements

### **3.4.1.** General Website Requirements

**Note**: The NCTA/NCDOT shall be responsible for procuring and providing the website domain for the Contractor's development and maintenance throughout the term of the contract.

The Contractor shall be responsible for developing and maintaining the HOV Declaration Website, including the browser-based website for handheld mobile devices (herein referred to as "the website") throughout the term of the contract.
The Contractor shall develop and/or maintain the website and mobile Application user interface in coordination with the NCTA/NCDOT marketing team.
The Contractor shall supply private cloud based dedicated, high-availability servers with redundancy and failover mechanisms to host Application functionality, interfaces, data and websites as directed by NCTA.
The Contractor shall brand all website and mobile pages as directed by NCTA/NCDOT, and all pages shall utilize a consistent look and feel.
The Contractor shall create a website and mobile Application designs, draft all website and mobile Application content, and submit it for NCTA's review and approval prior to developing the website or mobile Application and posting to a live environment.
The website and mobile Application shall only include content that has been reviewed and approved by NCTA.
The Contractor shall design and construct the Application using current usability and web design standards.
The Contractor shall develop the Application website to be 100% functional on the latest version of the web browsers approved by NCTA.  Note: The final list of required web browsers to support shall be identified by NCTA and the Contractor, and approved by NCTA during the Design Phase.
For all supported web browsers, the Contractor's system shall support at least two (2) major versions back from the latest version.
The Contractor shall also fully test and validate the functionality of the websites on these various platforms and web browsers during system testing.
The Application shall support multiple languages and international addresses without making software changes, as specified by NCTA during system design.
The website Application shall be fully compliant with screen-reader accessibility devices.
The website Application shall be designed to auto-detect user-based browser settings and optimize display of the website to individual settings.
The website Application shall be compatible with mobile devices and smart phone Applications.

246.	The Contractor shall utilize space on the website home page to notify customers, in advance, of planned outages and post messages that will appear during website downtime for scheduled maintenance or unexpected website unavailability.
247.	The Contractor shall track and coordinate domain registrations, security updates, or other web specific needs with NCTA in advance to ensure the website Application are available at all times.
248.	The Contractor shall utilize tools that support the ability to regularly audit the site for internal or external broken links, and provide scan results to NCTA.
249.	The Contractor shall design NCTA websites to report on website metrics and be capable of providing analytics on a monthly basis, and as requested by NCTA, on usage for all pages and summary-level metrics sorted by content and by month.
250.	The Contractor shall design the website and mobile Application to include links to NCTA/NCDOT information (e.g. NC Quick Pass site, disclaimers, privacy & security policy, accessibility policy, etc.) on all pages.
251.	The website Application shall provide comprehensive site search functionality.
252.	The website and mobile Application shall be designed to secure customer data (e.g. include coding that overrides functionality to cache and/or auto-populates data) and prevent security breaches.
253.	Access to the website and mobile Application shall be restricted by a secure login, with validation, for all Application users.
254.	The website and mobile Application shall contain functionality that validates all login credentials and information upon user login attempt.
255.	The website and mobile Application shall lock out customers after a configurable number of unsuccessful attempts to login for a configurable period of time.
256.	The website and mobile Application shall be internationalized to allow for properly formatted input of non-US addresses and license plates, especially those from Mexico and Canada.
257.	The website and mobile Application shall provide clear and specific error messages, for example when form data cannot be validated or when an action is not allowed.
258.	The website and mobile Application shall validate data at the field level, preventing spaces and special characters from being provided in fields where they are not allowed.
259.	A separate, secure website shall be made available that allows NCTA staff to research declaration status history. The site shall allow authenticated users to query transponder declaration event history in support of customer calls disputing tolls. Declaration event history shall be maintained for no less than one year.

## 3.5. Report Development

### **3.5.1.** Report Development Requirements

	The Contractor shall design and develop ten (10) reports as directed by NCTA during the design phase of the Project. Reports to be developed may include:
	Daily HOV declaration volume by NCTA Express Lane
260.	Number of registered Application users by location (e.g. registered zip code)
	Daily declaration volume by facility, and declaration duration
	HOV Declaration activation history by user by method (e.g. web or mobile),including activation/deactivation time
261.	The Contractor shall be responsible for maintaining and storing all report data, making it available for reporting, throughout the term of the contract.
262.	The Application website shall provide a self-service menu wherein non-technical users with minimal training can run and generate professional and accurate pre-defined reports via a user-friendly interface.
263.	The Application website shall allow users to print, save, share, and export reports to PDF and XLSX.

## 3.6. Date and Time System Requirements

#### **3.6.1.** Date and Time Synchronization

264.	The Application shall have the functionality to synchronize to all RTCS systems and subsystems based upon date/time synchronization from a master clock set for US Eastern Time Zone.
265.	The master clock shall be a part of the Contractor's Application and shall utilize an industry standard timing source Network Time Protocol (NTP).

# 3.7. Database Design

## **3.7.1.** General Database Design Requirements

266.	The Application database(s) shall utilize the latest, fully stable release of the proposed database software at all times. NCTA may grant a temporary exception to this requirement at its sole discretion. Periodic updates to maintain compliance shall be considered part of routine maintenance and no additional compensation will be provided.
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267.	The Contractor shall be responsible for maintenance of the database(s) and for providing all upgrades, security patches and updates as required and approved by NCTA.
	The Contractor shall be responsible for:
268.	Database Interfaces – The Application database(s) shall interface with the internal and external systems associated with the RTCS(s) and BOS.
	Database growth - The database shall allow for expansion to accommodate NCTA's planned projects and growth of the system in general, accounting for changes in technologies and operational policies.

## **3.7.2.** Database Security

269.	The Contractor shall propose state-of-the-art security measures to protect Application data and personal user data against corruption, loss, intrusion and theft.
270.	Access to Application database(s) shall be tightly controlled, and access shall be provided via strict user authentication.
271.	The Application database(s) shall support version control and record traceability at the field level for auditing database functions.

## **3.7.3.** Application Security

272.	The Application shall incorporate a configurable intrusion detection Application.
273.	The Application shall incorporate the "single sign on" enabling users to perform tasks and access resources consistent with their specified user permissions.

#### **3.7.4.** Application Data Backup and Archive

274.	The Contractor shall ensure that the software and data back-ups are maintained, are current, and are available to NCTA to facilitate the transition of production processing from the primary host facility to another host in the event of contract termination or other reason.
275.	The Application shall provide an automatic archive capability.

# 3.8. Disaster Recovery

## **3.8.1.** Disaster Recovery Requirements

	The Contractor shall be responsible for developing and submitting a detailed,
276.	comprehensive Disaster Recovery Plan, including Disaster Recovery Procedures, for review
	and approval by NCTA.

277.	All private cloud hosting facilities shall be located within the continental United States.
278.	The private cloud service provider shall configure the collective private cloud environment in such a manner that disruption of service at a single location shall not interrupt private cloud service provision in any way.
279.	The Contractor shall incorporate disaster recovery procedures and tests into a formal test to be determined by NCTA.

# 3.9. System Support, Serviceability and Reliability Requirements

## **3.9.1.** Technical Support Functions

280.	As directed and approved by NCTA, the Contractor shall:		
281.	Provide the following services in support of the Application:  Application data back up support  Warranty tracking  Maintenance records management and tracking		
	Provide technical support, monitoring and other services 24 hours a day / 7 days a week for the critical functions of the website and mobile Application, including but not limited to:		
282.	Private cloud monitoring, issue resolution and troubleshooting		
	Help desk support		
	Database monitoring, maintenance and optimization		

# 4. Performance Requirements

The Contractor shall be required to meet all Performance Requirements detailed herein; and as part of their Monthly Invoice, provide reports that show compliance to the defined Performance Requirements including details of failures that resulted in the non-compliance.

## 4.1. Performance Requirement Details

Requirement Number	Performance Objective	Required Service	Performance Standard	Method of Measurement	Damages
<b>4.1.1.</b> Applicat	ion Requirements				
283.	Mobile Application availability	The Application, inclusive of all private cloud hosted infrastructure and services, needs to operate continuously throughout the year and cannot be down more than 43 minutes in a given month (excluding approved maintenance intervals) as a result of vendor failure.	≥99.9%	System Reports Help Desk Tickets	\$500 for each .1% below 99.9%
284.	Web Application Portal availability	Website Application portal needs to operate continuously throughout the year and cannot be down more than 43 minutes in a given month (excluding approved maintenance intervals) as a result of vendor failure.	≥99.9%	System Reports Help Desk Tickets	\$500 for each .1% below 99.9%

Requirement Number	Performance Objective	Required Service	Performance Standard	Method of Measurement	Damages
285.	Mobile and Web Application Responsiveness	Both the Mobile and Web Application shall respond (e.g. render web and mobile Application pages, submit data, cancel request, etc.) to user requests/actions within a sufficiently immediate timeframe.	≤I Second (1,000 ms)	Periodic response checks and validated customer complaints.	\$500 per day

**Note**: The Application shall be considered down if any portion of the Application cannot be cannot be accessed. The Contractor shall ensure that the Application does not demonstrate degraded performance. The Application will be considered degraded where any performance requirements are not met. Examples of degraded Application performance include, but are not limited to the following:

- System runs slow;
- System causes loss of functionality;
- System causes Application errors for multiple users and customers; and
- System prevents access to NCTA staff or customers.

Requirement Number	Performance Objective	Required Service	Performance Standard	Method of Measurement	Damages
287.	Mobile Device End User Rating	End user ratings for the respective mobile download sites (e.g. the Apple Application Store and Google Play) shall always be three out of five stars or better.	100%	Apple Application Store and Google Play store ratings	\$500 per month out of compliance
<b>4.1.2.</b> Mainter	nance Requirements				
288.	Priority I Failure/Event Response	For this Priority, the Contractor shall have a two (2) hour time to respond and complete repair.	≤ 2 hours	Maintenance event log	\$100 per occurrence for every additional delay of one (1) hour to respond and complete repair of Priority I failures/events.
289.	Priority 2 Failure/Event Response	For this Priority, the Contractor shall have a four (4) hour time to respond and complete repair.	≤ 4 hours	Maintenance event log	\$100 per occurrence for every additional delay of two (2) hours to respond and complete repair of Priority 2 failures/events.
290.	Priority 3 Failure/Event Response	For this Priority, the Contractor shall have a twenty four (24) hour time to respond and complete repair.	≤ 24 hours	Maintenance event log	\$100 per occurrence for every additional delay of two (2) hours to respond and complete repair of

Requirement Number	Performance Objective	Required Service	Performance Standard	Method of Measurement	Damages
					Priority 3 failures/events.
291.	Acknowledgement of Events	95% of all failure or Priority events shall be acknowledged and logged in issue tracking software within thirty (30) minutes of receipt.	≤ 30 Minutes	Maintenance event log	\$250 for every Priority event if the monthly acknowledgment and logging percent is below the 95%
292.	Preventative maintenance	The Contractor shall be responsible for fully resolving 90%, or more, of the maintenance events generated each month.	≥90%	Maintenance event log	\$250 per day out of compliance, \$500 for every maintenance event that remains open for longer than 30 Calendar Days

**Note**: All unscheduled maintenance events (e.g. corrective maintenance) shall be considered as downtime. Scheduled events (e.g. preventive maintenance) shall not be used to correct system issues unless NCTA provides prior approval in writing. Scheduled maintenance shall be communicated to NCTA a minimum of seven (7) Days in advance for approval, and will be scheduled for times when the customer service center is not operating.

## 4.2. Non-Chargeable and Chargeable Failures

For purposes of calculating Performance Requirements, chargeable and non-chargeable failures are defined as follows:

- Non-Chargeable Failures are those failures are identified in the following section.
- Chargeable Failures are any failures not specifically identified as non-chargeable.

#### **4.2.1.** Non-Chargeable Failures

	No	Non-chargeable failures shall include:			
	•	Force Majeure, as defined in the Contract Documents			
	•	Failure of a test facility or test instrumentation			
293.	•	System component failures caused by environmental or operating conditions outside of the Requirements of this Scope of Work and Requirements;			
	•	Normal operating adjustments as allowed in the Test Procedure or Maintenance Plan, as applicable;			
	•	Failures where the NCTA have Approved to waive a chargeable failure in advance			
	•	Failures that are customer or NCTA user induced, or are caused by a Third-Party Service Provider not under the Contractor's control as determined by the NCTA.			

#### **4.2.2.** Chargeable Failures

294. Chargeable failures shall include any failures not specifically identified as non-chargeable.

# Section IV Proposal Contents and Submission

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## I. Content of Proposal

#### I.I. General

Proposals must be submitted in the format, including sections and heading descriptions, as instructed in this Section IV. To be considered, the Proposal must respond as instructed to all requirements in this part of the RFP. Proposers must provide complete separate Technical and Price Proposals, including all Proposal sections, in accordance with the instructions. Instructions on the content and form of the Technical and Price Proposals are included in this Section I, Content of Proposal. Instructions on how to submit the Technical and Price Proposals are provided in Section 2, Submission of Proposals.

All cost data relating to this Proposal should be kept separate from and not included in the Technical Submittal. Each Proposal shall consist of two (2) separately sealed Submittals.

NCTA maintains the right to modify this approach via addendum as they deem necessary.

#### 1.2. Qualification Requirements

Proposers shall demonstrate significant experience in those areas for which they are submitting a Technical Proposal based on the qualification requirements outlined in this RFP. These areas shall include:

- Relevant successful firm experience
- Experience designing, developing, deploying and maintaining websites and mobile applications on multiple web browsers, mobile devices and operating systems
- Experience integrating website and mobile applications with other transaction-based systems
- Experience developing and managing near real-time data exchange interfaces to external entities
- Experience with the mobile application certification process for both Google Play and the Apple Application Store
- Relevant key personnel experience and availability
- Financial stability and resources
- Registration to do business with the North Carolina Office of the Secretary of State

**Note**: Proposers who do not meet the minimal qualification requirements above will not be considered and their proposal will be rejected.

## 1.3. Response Instructions

Refer to this section for response instructions and requirements. Omission of any section will render a Proposal nonresponsive and it will not be evaluated.

#### 1.3.1. Content of Technical Proposals

Technical Proposals shall be prepared simply and economically, providing a straightforward, concise description of the Proposer's qualifications and ability to meet the requirements of the RFP. To that end, the Technical Proposal shall be limited to a combined total of 40 pages. Portions of the Technical Proposal

that are excluded from these page limitations are shown below in Table 4-1: Technical Proposal Page Limitations below.

Technical Proposal Sections to be Completed by a Proposer	Page Count Limitations	
Cover Letter	I to 2 pages (not included in page limit)	
Executive Summary	3 to 5 pages	
Section 1: Proposer Qualifications		
Section 2: Key Team Qualifications		
Section 3: Approach to Scope of Work and Requirements	Limited to a combined total of 35 printed pages (excluding all table of contents, table of tables, or table of figures)	
Section 4: Approach to Project Plan and Implementation		
Section 5: Approach to Operations and Maintenance		
Section 6: Adherence to the Scope of Work, Requirements and Terms and Conditions	No limitations	
Section 7: Forms and Submittals	No limitations	
Appendix I: Audited Financial Statements	No limitations	
Appendix 2: Sample Reports	No limitations	
Price Proposal (provided separately)	No limitations	

Table 4-1: Technical Proposal Page Limitations

The Technical Proposal shall be submitted in the format shown below. The cover sheet for the completed Technical Proposal shall be included at the front of the package submitted to NCTA, as directed below. The cover sheet is not subject to the page limitations.

Each lettered item designates a specific and separate section to be included in the Technical Proposal:

#### A. Cover Letter

The Technical Proposal shall include a cover letter signed by an officer of the Proposer with signature authority to enter into the proposed Contract with NCTA. This letter should be very brief, and provide the corporate commitment that the Technical Proposal meets the scope, schedule and requirements of the RFP. The letter shall also include the name of the Project Principal and Project Manager.

#### **B.** Executive Summary

The executive summary shall be a brief overview summarizing the Technical Proposal, and explaining how the Technical Proposal being offered best addresses the evaluation criteria listed in this RFP. The summary shall describe the Proposer's understanding of NCTA's needs, the Proposer's qualifications, the Proposer's approach in developing the overall solution, the coordination with NCTA and other contractors, and specify how the Application's data will be protected and functionality enhanced over the life of the Contract. The proposer shall describe their approach to Application integration and testing, and propose an approach to obtaining certifications from both Google Play and the Apple Application Store to make the Application available for download for Apple OS and Google Android phone owners. The summary should also identify any Subcontractors the Proposer anticipates utilizing on the Project, and discuss their proposed roles.

#### C. Technical Proposal Section 1: Proposer Qualifications

Provide the following information regarding the Proposer's qualifications, including Subcontractors. Number and provide the information in the specific format provided below:

- 1. A brief history and description of the Proposer's organizational structure, including size, number of employees, capability and area(s) of specialization.
- A detailed discussion of the Proposer's qualifications and experience related to Section III,
   Scope of Work and Requirements as required by this RFP, including:
  - Designing, developing, testing, implementing and maintaining websites and mobile applications on multiple web browsers, mobile devices and mobile device operating systems;
  - b. Developing and managing near real-time data exchange interfaces to external entities;
  - c. Meeting schedule milestone delivery dates for design, development, testing and implementation of websites and mobile applications;
  - d. Application enhancement and change order management;
  - e. Certifying mobile Application with both Google Play and the Apple Application Store
  - f. Meeting system performance metrics and key performance indicators
- 3. Annual revenues for the Proposer and for the subsidiary, division or group responsible for this Project.
- 4. A copy of the Proposer's audited financial statements for the past two years as Appendix I to the Technical Proposal. If a Proposer does not produce audited financial statements, the Proposer shall submit any financial statements that it does have (e.g. lines of credit, statements compiled by an outside accounting firm, etc.) and any other information Proposer feels is pertinent in establishing the financial stability of its business/organization. NCTA reserves the right to review other publicly available information with regard to the Proposer's financial stability as part of the evaluation. If a Proposer has questions about what evidence of the

Proposer's financial stability will be acceptable to NCTA, the Proposer should communicate with NCTA as set forth in **Section I, Administrative**, section 2.10 Written Clarifications.

5. A recent Client List including a detailed description of the size, total dollar value and specific services provided for each client to which the Proposer provided similar services within the past five (5) years. Specify the name, address and telephone number of the individual responsible at the client organization for the supervision of such services.

**Note**: Proposers are encouraged to provide examples of and/or links to prior websites and/or mobile devices developed on previous projects to provide NCTA with an idea of the proposer's design capability. These examples shall not count against the page count limitations of the Technical Proposal.

- 6. The Proposer Company Reference Form using **Exhibit B-2, Forms**. The completed forms must include at least two (2) references to demonstrate that the Proposer meets the following minimum requirements:
  - a. The Proposer shall have successfully designed, developed, tested, integrated, deployed and be currently maintaining website and mobile applications for other clients within the United States. The website and mobile application must enable users to make modifications to information within the application, process and exchange data with an interfacing system in near real-time. The Proposer shall have maintained the system for at least one (1) year as of June 16, 2017.

**Note**: While this solicitation is open to all qualified Proposers, preference will be given to qualified Proposers that have experience integrating website and mobile applications with other transaction-based systems.

- b. The proposer shall have successfully designed, developed, tested, deployed and obtained certification for mobile applications within the last two (2) years for both Google Play and the Apple Application Store.
- 7. The Proposer shall notify NCTA in its Response, and promptly thereafter as otherwise applicable, of any civil litigation, arbitration, proceeding, or judgments against it or its subcontractors during the three (3) years preceding its offer, or which may occur during the term of any award to the Proposer pursuant to this solicitation, that involve (1) Services or related goods similar to those provided pursuant to any contract and that involve a claim that may affect the viability or financial stability of the Proposer, or (2) a claim or written allegation of fraud by the Vendor or any subcontractor hereunder, arising out of their business activities, or (3) a claim or written allegation that the Proposer or any subcontractor hereunder violated any federal, state or local statute, regulation or ordinance. Multiple lawsuits and or judgments against the Proposer or subcontractor shall be disclosed to NCTA to the extent they affect the financial solvency and integrity of the Proposer or subcontractor.

All notices under this section shall be provided in writing to NCTA within thirty (30) calendar Days after the Proposer learns about any such criminal or civil matters. Details of settlements which are prevented from disclosure by the terms of the settlement shall be annotated as such. The Proposer may rely on good faith certifications of its subcontractors addressing the foregoing, which certifications shall be available for inspection at the option NCTA.

#### D. Technical Proposal Section 2: Key Team Qualifications

Provide the following information regarding the Proposer's Key Team qualifications, including Subcontractors.

- Identify the following Key Personnel on this Project, including their percentage of time on site (NCTA Project office), and overall percentage time commitment to this Project. A tabular approach to presenting this information is suggested.
  - Project Principal: Responsible for the overall conduct and performance of the Project; oversight of the Project; the performance of the Contractor Project Manager and a point of contact for any escalated Project issues that cannot be resolved by the Contractor Project Manager.
  - Contract Project Manager: Responsible for all day-to-day work; the overall execution
    and delivery of the Project and the day-to-day contact person on the Project for the
    Contractor. The Contract Project Manager shall have at least five (5) years of relevant
    experience. Information provided within the Contract Project Manager's resume shall
    demonstrate the manager's background, knowledge, competence and experience in
    all Project areas.
  - Lead Business Analyst: Responsible for all requirements gathering, interaction with NCTA business stakeholders, interfaces with software development team to communicate business requirements into development requirements.
  - Software Development Manager: Responsible for design and development of the Application (including data exchange interfaces), supervision of software development resources, and administration of system testing.
  - Implementation Manager: Responsible for the overall planning and implementation of the Application testing program. Also responsible for integration and mobile Application certification process.
  - Quality Assurance Manager: Responsible for consistent quality throughout the design, development, testing and implementation of the Application through good Quality Assurance (QA) and Quality Control (QC) practices.

**Note**: Proposers are permitted, but not required to, name up to two additional Key Personnel to reflect their commitment to work they believe to be key to the Project's success. All named additional Key Personnel shall have resumes and references supplied as instructed below.

- 2. Describe the experience of each person identified as Key Personnel and how it relates specifically to this Project.
- 3. Provide resumes (not to exceed two (2) pages per team member), for each person identified as Key Personnel to include the following information: education, professional registrations [type, number, and state(s) where registered], years of experience, years with firm and actual work performed by the individual.

- 4. Proposers must complete at least one (I) Key Team References form provided in **Exhibit B- 3** Form for each Key Team member.
- 5. The Contract Project Manager shall be required to be on site to attend monthly Project meetings in Raleigh, at the request of NCTA, and be available as requested or needed to support the advancement of the Project.
- 6. In cases where a person identified as Key Personnel leaves the Contractor's team, becomes incapacitated or perishes, or fails to meet expectations, the Contractor shall gain approval and permission from NCTA for any proposed changes in personnel.
- 7. NCTA has the right to request a replacement of Key Personnel.
- 8. Complete the List of Subcontractors Form from **Exhibit B-4 Forms** which includes Subcontractor name; address; work to be performed, and estimated percentage of total work value to be performed. Also complete the RS-2 Form for each Subcontractor. Subcontractor substitutions after Proposal submittal shall require NCTA prior approval.

#### E. Technical Proposal Section 3: Approach to Scope of Work and Requirements

Provide responses to the items below regarding the Proposer's approach to the Scope of Work and Requirements. Please number responses and provide the information in the specific format provided below.

- I. Describe how the Proposer will approach the Application design process in coordination with NCTA and NCTA contractors to obtain a list of required mobile devices and operating systems to develop and support, and a final design for the Application. Describe the Proposer's approach to project management, the method the Proposer utilizes to meet NCTA goals for the Application while preventing scope creep and meeting established project schedules.
- 2. Discuss Proposer's technical approach to satisfy all of the requirements for the HOV Declaration Application.
- Describe the Proposer's security design that prevents virus attacks and unauthorized access, and identify detection and alerting mechanisms in place in the event of attempted or successful intrusions.
- 4. Describe the Proposer's solution for near real-time integration with the NCTA Express Lane RTCS(s) and the BOS.
- 5. Discuss Proposer's adherence to the Performance Requirements and explain how the Proposer will meet or exceed specific Performance Requirements set forth in Section III, Scope of Work and Requirements. Provide actual examples, if available and where applicable, of how each of the Performance Requirements was met or exceeded on other similar projects, and how the performance was measured.
- 6. Discuss the Proposer's approach to satisfying the specific reporting requirements of the Project, highlighting any unique features of the Proposer's reporting system relating to performance reporting and other types of reports.

- 7. Discuss Proposer's approach to Application and interface testing, as well as mobile Application certification, to support the Project. Please address:
  - a. Proposer's overall test plan approach, including internal (e.g. modular/unit testing, regression testing, etc.) as well as external, milestone/user acceptance testing.
  - b. Describe the Proposer's test script generation and review process, incorporating use of a requirements traceability matrix.
  - c. Describe the Proposer's quality assurance approach with regard to testing.
  - d. Describe the process undertaken as enhancements are made to the system to ensure the stability of system as new business processes, components or roadways are added to the existing system.
  - e. Describe the process necessary to obtain certification to make the mobile Application available for download on both Google Play and the Apple Application Store.

#### F. Technical Proposal Section 4: Approach to Project Plan and Implementation

Provide responses to the items below regarding the Proposer's approach to the Project Plan and Implementation. Please number and provide the information in the specific format provided below.

NCTA has established milestone dates for the Project that are subject to change at the sole determination of NCTA. These milestones are provided in **Section III Scope of Work and Requirements,** Table I-I Key Project Milestones. This list of milestones is not intended to include all milestones of the Project, but to present planned major milestones to allow the Proposer sufficient detail to develop a meaningful Project Schedule as a part of its Technical Proposal. Proposers may identify certain interim milestones on their Project schedule; however, it is critical that the milestone dates are achieved on the dates shown in Table I-I Key Project Milestones.

With these points in mind, Proposers shall provide the following information:

- I. Discuss the approach for delivering the Application in the timeframe specified, highlighting the major challenges and issues to meeting the Project milestones established in Section III Scope of Work and Requirements, Table I-I Key Project Milestones. Identify key elements of the approach. Identify and describe any anticipated potential problems or issues associated with the current schedule; the Proposer's approach to resolving these problems and any special assistance that will be requested from NCTA to meet the schedule.
- 2. Provide a Project Schedule that has been developed using MS Project (submitted in both MS Project and PDF file formats) that meets the schedule guidelines set forth above and is based on the Section III Scope of Work and Requirements, Table I-I Key Project Milestones. All major elements of the Project requirements shall be addressed in the Project Schedule, including draft submissions, review cycles and final approvals.
- Discuss the Proposer's approach to project management for the design, development, testing (including mobile Application certification), implementation and maintenance of the Application, addressing the PMP requirements of Section III, Scope of Work and

**Requirements.** Specifically discuss the approach to the following project management elements:

- a. Project Schedule;
- b. Design, software development, implementation and testing, training and maintenance;
- c. Resources and availability of resources;
- d. Project correspondence and report delivery, tracking, reviews, approvals, etc.;
- e. Quality Control Plan a plan that describes the Proposer's procedures and techniques for Quality Control and Quality Assurance in all areas including development of the system requirements to reflect functional requirements, business policies and design documentation; hardware procurement; software development; implementation and testing; and trouble tracking. Each Proposer shall specifically address Quality Control (how quality is being ensured) and Quality Assurance (assurance that Quality Control is effectively being performed).
- 4. Specifically address what elements, such as processes, procedures, communications, meetings, issues tracking, and quality control will be in place during the design, development, testing, implementation, operation and maintenance phases of the Project to ensure timely communication and resolution of problems with NCTA, their consultants and other contractors without the intervention of NCTA.
- 5. Discuss how the Project will be staffed and the intended level of effort. Include location of staff. Provide details on staffing at least one level below the Key Team Personnel.
- 6. Provide an organizational chart that details how the Proposer will maintain the Application throughout the duration of the contract.

#### G. Technical Proposal Section 5: Approach to Operations and Maintenance

Provide responses to the items below regarding the Proposer's approach to Operations and Maintenance of the Application. Please number and provide the information in the specific format provided below.

- Discuss the Proposer's approach to Maintenance that will meet or exceed all Maintenance Services and warranty requirements as specified in Section III, Scope of Work and Requirements.
- 2. Discuss the Proposer's Plan to coordinate the delivery of Maintenance Services with the interfacing third parties of the Application. Specifically address the Application and tools that facilitate identification of problems and the ability to communicate effectively with NCTA.
- 3. Discuss the Plan for coordination of NCTA and Proposer's Maintenance responsibilities.
- 4. Provide an organizational chart that details how the Proposer will maintain the Application throughout the duration of the contract.

- 5. Discuss Proposer's staffing model, how the Proposer will respond to Application issues, and how the Proposer will be staffed to respond to Application issues in order to meet performance requirements.
- 6. Discuss the Proposer's training approach for the Proposer's Maintenance staff and for NCTA staff. .

# H. Technical Proposal Section 6: Adherence to the Scope of Work, Requirements and Terms and Conditions:

- The Proposer must submit its Proposal, including a separate Price Proposal, on the basis of the terms and conditions set out in **Section V, Terms and Conditions**. The NCTA may reject any Proposal that is conditioned on the negotiation of Terms and Conditions set out in **Section V, Terms and Conditions**, or to other provisions of the RFP.
- 2. In Technical Proposal Section 6, Proposers may identify and describe any key assumptions made related only to Section III, Scope of Work and Requirements. Scope of Work and Requirements assumptions may be considered during the Technical Proposal evaluation process at the sole discretion of NCTA. No assumptions regarding the terms and conditions of the Contract shall be included in the Technical Proposal. An "assumption" is a Proposer's stated expectation or supposition that would require a change to an RFP term and condition, or the addition or deletion of an RFP term and condition.
- 3. The Proposer must clearly identify any proposed exceptions to the Terms and Conditions in this section of their response, which will be considered in accordance with Section 1, Administrative, Section 2.19 Contractual Obligations. The Proposer waives the right to raise new exceptions and alternatives during negotiations, however, any details not yet defined in the documents by NCTA may still be negotiated.

#### I. Technical Proposal Section 7: Forms and Submittals

Proposers shall provide all Proposal forms required to be submitted as part of the RFP, unless otherwise specifically directed.

Proposers shall submit properly completed forms that have been provided in **Exhibit B, Forms**. Please refer to Table I-2 below for a Forms and Submittals Checklist. The checklist identifies the location of the form or the Submittal requirement in the RFP, and also where the form or Submittal is to be included in the Proposal.

Proposers shall not modify any of the forms unless specifically instructed by NCTA to do so. Completion of forms will be checked during the initial Pass/Fail screening of the submitted Proposals. Proposals not adhering to this requirement may be considered as non-compliant.

Form #	Form/Submittal Name	Location in RFP	Location of Form/Submittal in Proposal
Forms to be Submitted			

B-I	Proposal Cover Sheet and Form	Exhibit B-I	Technical Proposal Envelope with Original of the Technical Proposal	
B-2	Reference Forms	Exhibit B-2	Technical Proposal Section 7	
B-3	Key Team Member Qualifications	Exhibit B-3	Technical Proposal Section 7	
B-4	List of Subcontractors and RS-2 Form	Exhibit B-4	Technical Proposal Section 7	
B-5	Recent Client List	Exhibit B-5	Technical Proposal Section 7	
B-6	Proposer Qualifications and Financial Stability	Exhibit B-6	Technical Proposal Section 7	
B-7	Price Proposal Instructions and Form	Exhibit B-7	Price Proposal Envelope	
B-8	Proposer Questions Form	Exhibit B-8	N/A: To be used for submission of Proposer questions to NCTA	
B-9	Non-Collusion Forms Cover	Exhibit B-9	Technical Proposal Section 7	
B-10	Surety Commitment Letter	Exhibit B-10	Price Proposal Envelope	
B-II	Acknowledgment of Receipt of Addenda	Exhibit B-11	Technical Proposal Section 7	
	Other Proposa	al Submittals		
N/A	Resumes	See Section IV- 1.3.1	Technical Proposal Section 7	
N/A	Project Implementation Schedule	See Section IV- 1.3.1	Technical Proposal Section 7	
N/A	Implementation Phase Organization Chart	See Section IV-	Technical Proposal Section 4	
N/A	Maintenance Phase Organization Chart	See Section IV- 1.3.1	Technical Proposal Section 5	
N/A	Bid Bond	See Section I- 4.1	Price Proposal Envelope	

Table 4-2: Forms and Submittal Checklist

- **J. Technical Proposal Appendices -** The Proposer shall submit the following materials in the form of Technical Proposal Appendices:
  - Appendix I. Audited Financial Statements (Two Years)
  - Appendix 2. Sample Reports

#### K. Price Proposal (Provided Separately)

Proposers shall submit their price proposal separately from the items described in Sections A through J, above, per the instructions documented in Section 2.2, Price Proposal Content and Format below.

## 2. Submission of Proposals

All Technical and Price Proposals shall be submitted in sealed envelopes or boxes, bearing on the outside the following information, and delivered to the address provided on the front page of this RFP:

#### **Technical Proposal or Price Proposal:**

HOV DECLARATION APPLICATION

#### **Submitted By:**

PROPOSER'S NAME
PROPOSER'S ADDRESS
CITY, STATE, ZIP CODE

#### PROPOSER'S PHONE NUMBER

## 2.1. Submission of Technical Proposal

- 1. **Form of Technical Proposal.** Submit Technical Proposals in printed form and on USB flash drive.
  - a. The hard copy of the Technical Proposal shall be included in one (1) volume only so that only one (1) three ring binder is required for the Technical Proposal.
  - b. The electronic copy shall be provided in .pdf format. Any Technical Proposal exhibits or information prepared either as graphics or with other programs (e.g. scheduling programs) shall be viewable in a PDF file without any other software required for Technical Proposal review, with the exception of the Project Schedule and the Price Proposal, which shall also be provided in Microsoft Project and Excel respectively.
- 2. **Page Presentation.** Technical Proposal text shall be single-space, a minimum of 10- point Arial or 12-point Times New Roman font, printed on both sides of the page. Each page header and/or footer should include the Proposer's name and Technical Proposal section, along with page numbers and date of the Technical Proposal.
  - Supplemental information other than the Technical Proposal Cover Letter, Executive Summary and Technical Proposal response Sections I through 7 may be in a different font from that specified; however, in no case should the font be smaller than 9- point and Proposers

should consider the overall readability of the document when submitting. NCTA will not be responsible for reviewing portions of Technical Proposals with illegible text.

Headers and footers may be in different size font from that specified, subject to the same caveats identified in the paragraph above.

- 3. **Number of Copies.** Provide seven (7) printed copies and one (1) USB flash drive of all portions of the Technical Proposal. The copy with the original cover letter and cover sheet should be marked "Original". Each copy shall be numbered (e.g., 2 of 7, 3 of 7).
- 4. **Easy to Read and Cross-Reference.** The Proposers need not duplicate or quote in detail from attached reference materials as long as a summary is included in the technical section, and a clear and easy means to locate references to the information is provided. The reference shall include the document name, page number(s) in the document, and paragraph numbers(s) or line number(s) where the referenced information is located. Underlining, boxing, highlighting, etc. that calls attention to referenced information in a manner that will assist in locating it is recommended.
- 5. **Writing Style.** Technical Proposal documentation should provide an example of what Project Design Documentation will look like. NCTA prefers economy of words, direct writing, active voice, and limited marketing superlatives.
- 6. Trade Secrets and Confidential Information. The NCTA is a public agency of the State of North Carolina, subject to the North Carolina Public Records Act, Chapter 132 of the North Carolina General Statutes. The NCTA may maintain confidential information, including any designated as trade secrets or otherwise proprietary, only in accordance with applicable Federal and State laws or regulations. The NCTA, therefore, expects that Proposers will keep confidential information designations to a minimum.

A Proposer, having formed a good faith opinion, upon consultation with legal or other knowledgeable advisors, that information submitted may contain a trade secret as defined in G.S. § 66-152 or other information exempted from the North Carolina Public Records Act pursuant to G.S. § 132-1.2, may so designate appropriate portions of its Technical Proposal by marking the top and bottom of pages containing confidential information in boldface type "CONFIDENTIAL." NCTA, however, may serve only as a custodian of information a Proposer deems confidential. NCTA shall not act as an arbiter or defender of any claims related to assertions of confidential information. If a request is made for disclosure of information submitted, or an action is brought to compel NCTA to disclose information marked confidential pursuant to G.S. § 132-1 et seq. NCTA will notify the affected Proposer of such request or action.

In submitting a Technical Proposal in response to this RFP, a Proposer agrees to: (i) defend its assertions of confidentiality by instituting appropriate legal proceedings, at its own expense and through its counsel, or intervening in an action brought against NCTA to compel disclosure, to defend its assertions of confidentiality; and (ii) hold the State and NCTA, and any officials or employees thereof harmless from any and all damages, costs, and attorney's fees awarded against the State and NCTA arising out of any such actions. Nothing in this section shall preclude the State or NCTA from participating in the defense of such actions, at

its option and expense through its counsel. NCTA shall have no liability to a Proposer with respect to the disclosure of any information, including confidential information, subject to an order by a court of competent jurisdiction pursuant to G.S. § 132-9 or any other applicable law.

NCTA does not intend to divulge the contents of any of the Technical Proposals. NCTA will retain all Technical Proposals until final successful Contract execution, after which NCTA intends to destroy Technical Proposals submitted by unsuccessful Proposers as allowed by law.

#### 2.2. Price Proposal Content and Format

- 1. Separate and Sealed. The copies of the Price Proposal shall be submitted in a sealed envelope, separate from the Technical Proposal.
- 2. Price Proposals shall be submitted using the **Exhibit B-7**, Price Proposal Instructions and Form.
- 3. Proposers shall complete the Form/Workbook in accordance with the Instructions Tab of **Exhibit B-7**, Price Proposal Instructions and Form.
- 4. One (I) original hard copy of the Price Proposal shall be submitted by the Proposer.
- 5. The original Price Proposal envelope shall be marked "Original."
- 6. An original of the bid bond shall be included in the Price Proposal package. Amount and instructions for the bonds is included in **Section 1. Administrative**, Section 4.1 Notification of Award.
- 7. One copy of a USB flash drive containing the Price Proposal in electronic format shall be provided. The file format for the electronic copy of the Price Proposal shall be Microsoft Excel 2013. The USB flash drive containing the Price Proposal shall be clearly labeled with the same nomenclature identified for the outside of the sealed Price Proposal envelope.
- 8. Proposers shall not include any assumptions in their Price Proposals. If the Proposer includes assumptions in its Price Proposal, NCTA may reject the Proposal. Assumptions should be provided in the manner set forth in **Section IV**, **Proposal Contents and Submission**.

**Note**: Any costs for work that is not provided in the Price Proposal will be assumed as no charge to NCTA.

# Section V Terms and Conditions

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#### I. Contract Terms and Conditions

#### I.I. Payment Terms and Conditions

- 1. Payment terms are net thirty (30) Days after receipt of a correct invoice. NCTA is responsible for all payments under the Contract. A "correct" invoice is one that contains an accurate description of the amounts due, is in the Approved format, has no errors, includes all required supporting information including payment Approvals, and meets all other Requirements for invoicing set forth in Section III, Scope of Work and Requirements.
- The Contractor shall invoice NCTA based on milestone payments set forth in Exhibit A, Payment Schedule.
- 3. The Contractor shall invoice NCTA for monthly maintenance payments in accordance with the amounts set forth in **Exhibit B-7**, **Price Proposal Instructions and Form**.
- 4. NCTA may exercise any and all rights of Set Off as permitted in Chapter 105A-1 et. seq. of the N.C. General Statutes and applicable Administrative Rules. Upon Contractor's written request of not less than thirty (30) Days and Approval by NCTA, NCTA may:
  - a. Forward the Contractor's payment check(s) or other mutually acceptable means directly to any person or entity designated by the Contractor, or
  - b. Include any person or entity designated in writing by Contractor as a joint payee on the Contractor's payment check(s), however
  - c. In no event shall such Approval and action obligate NCTA to anyone other than the Contractor and the Contractor shall remain responsible for fulfillment of all Contract obligations.

#### 1.2. Term of Contract

The term of the Contract will commence on the Effective Date with a base term of five (5) years. The phases are further described as follows:

- Project Implementation Phase The Project Implementation Phase (including, design, development, testing, certification and implementation) shall begin on the Effective Date and shall continue until Acceptance of the Application by NCTA.
- Operations and Maintenance Phase The Operations and Maintenance Phase shall begin upon Acceptance of the Application by NCTA, and shall continue through the end of the base Contract Term.

NCTA shall fix the Effective Date after the Contract has been fully executed by the Contractor and by NCTA, and all Approvals required by NCTA contracting procedures have been obtained.

## 1.3. Bonus and Damages

## 1.3.1. Bonus Payments for Substantial Completion

Because this Application will be a necessity to support the operation of the I-77 Express Lane facility, it is critical that the Contractor is capable of meeting the schedule as documented in **Section III Scope of Work and Requirements**, Section 1.1.1. Key Project Milestones.

Coordination and cooperation among the Application Contractor, NCTA, the BOS vendor and the I-77 Toll System Integrator (TSI) is critical in order to meet the Go-Live Date for the Application to coincide with the opening of the I-77 Storefront. As such the NCTA desires that the Contractor works to ensure that the Go-Live Date will be met without regard to the time extensions and time reliefs provided for in this Contract. Therefore, as full compensation for all extra cost involved and subject to the conditions outlined herein, the NCTA agrees to pay as a bonus to the Contractor as noted below.

In the event that Go-Live date for the Application is achieved by the Go-Live Date set forth in **Section III Scope of Work and Requirements**, Section 1.1.1. Key Project Milestones, \$50,000 will be paid to the Contractor.

For purposes of the bonus, the Go-Live Date for the Application Contractor shall mean the following has occurred:

- Both the website and mobile versions of the Application are complete and have passed all required testing.
- Interfaces to both the BOS and the RTCS are complete and functioning.
- The mobile Application is available for download on both the Apple Application Store and Google Play.

If the Contractor does not Go-Live by the Go-Live Date, the Contractor shall not be entitled to any portion of the bonus, regardless of the cause or responsible party. No partial bonus payments for partial completion of any Work will be made.

#### 1.3.2. Liquidated Damages

- I. Liquidated damages per Calendar Day shall be assessed for the Contractor's failure to implement the Application and make it available to customers via the website and via download (on both the Apple Application Store and Google Play) by the agreed upon Project schedule. The Contractor shall be assessed damages in the amount of \$1,000 for missing the Application's "go-live" date. The Contractor shall be assessed damages in the amount of \$1,000 per day for each subsequent Calendar Day of delay up to a maximum of 10% of the total contract price.
- 2. Payment adjustments will be assessed not as a penalty, but as liquidated damages for not meeting the Operations and Maintenance Performance Standard Requirements set forth in Section III Scope of Work and Requirements, Section 4 Performance Requirements. If in the performance of the Services the Contractor does not meet or exceed the Performance Requirements identified therein, NCTA shall reduce the amount it would otherwise pay to the Contractor for such Services subject to the reduction amounts and limits set forth in therein.
- 3. NCTA may recover any and all liquidated damages by deducting the amount thereof from any monies due or that may become due the Contractor(s), notwithstanding any liens, Notices of liens or actions of Subcontractors, and if said monies are insufficient to cover said damages, then the Contractor or the Surety shall promptly pay any remaining amounts due on demand.

- 4. In the event that liquidated damages are disallowed for any reason whatsoever, NCTA shall be entitled its actual damages including any and all consequential or incidental damages.
- 5. Nothing herein contained shall be construed as limiting NCTA's rights to recover from the Contractor any and all other amounts due or that may become due to NCTA, or any and all costs and expenses sustained by NCTA for improper performance hereunder, or for breach or breaches in any other respect including, but not limited to, defective workmanship or materials.

# 1.3.3. Actual Damages

- 1. The Contractor acknowledges that its performance after Acceptance of the Application is important to the operation of NCTA in so much as the Services to be provided pursuant to this Agreement may directly involve NCTA's revenue, the quality of customer service it provides and its public reputation. The Contractor agrees that the actual damages set forth below are fair and reasonable and shall be incurred by the Contractor in the event of unsatisfactory performance.
- 2. The Contractor shall reimburse NCTA for any revenue, which NCTA identifies as having been lost due to the fault of the Contractor's Application or interface to the North Carolina Express Lanes RTCS(s) or NCTA's BOS.

# 1.4. Audits and Financial Reporting

#### 1.4.1. Annual Audited Financial Statements

The Contractor shall submit on an annual basis its current audited financial report, financial statements, and any associated notes for the term of the Contract.

#### 1.4.2. Audit and Examination of Records

- I. Definition of Records
  - a. Contract Records shall include, but not be limited to, all information, communications and data, whether in writing or stored on a computer, external hard drive, computer disks, microfilm, writings, working papers, drafts, computer printouts, charts or any other data compilations, books of account, photographs, videotapes and audiotapes supporting documents, any other papers or preserved data in whatever form, related to the Contract or the Contractor's performance of the Contract determined necessary or desirable by the NCTA for any purpose.
  - b. Proposal Records shall include, but not be limited to, any material relating to the determination or Application of Equipment rates, related time schedules, labor rates, efficiency or productivity factors, quotations from Subcontractors, profit contingencies and any manuals standard in the industry that may be used by the Contractor in determining a price.
- 2. Pursuant to G.S. 147-64.7, NCTA, the State Auditor, appropriate Federal officials, and their respective authorized employees or Agents are authorized to examine all books, records, and accounts of the Contractor insofar as they relate to transactions with any department, board, officer, commission, institution, or other authority of the State of North Carolina pursuant to the performance of this Contract or to costs charged to this Contract. Additional audit or reporting Requirements may be required by any authority, if in NCTA's opinion, such

- requirement is imposed by Federal or State law or regulation. The State Auditor and internal auditors of NCTA may audit the records of the Contractor during and after the term of the Contract to verify accounts and data affecting fees and performance.
- 3. NCTA reserves and is granted the right (at any time and from time to time, for any reason whatsoever) to review, audit, copy, examine and investigate in any manner, any Contract Records (as herein defined) or Proposal Records (as hereinafter defined) of the Contractor or any Subcontractor. By submitting a response to the RFP, Contractor or any Subcontractor submits to and agrees to comply with the provisions of this section.
- 4. If NCTA requests access to or review of any Contract Documents or Proposal Records and Contractor refuses such access or review, Contractor shall be in default under its Contract with NCTA, and such refusal shall, without any other or additional actions or omissions, constitute grounds for suspension, termination or disqualification of Contractor. These provisions shall not be limited in any manner by the existence of any Contractor claims or pending litigation relating to the Contract. Disqualification or suspension of the Contractor for failure to comply with this section shall also preclude the Contractor from acting in the future as a subcontractor of another contractor doing work for NCTA during the period of disqualification or suspension. Disqualification shall mean the Contractor is not eligible for and shall be precluded from doing future work for NCTA until reinstated by NCTA.
- 5. Final Audit for Project Closeout: The Contractor shall permit NCTA, at NCTA'S option, to perform or have performed an audit of the records of the Contractor and any or all Subcontractors to support the compensation paid the Contractor. The audit will be performed as soon as practical after completion and Acceptance of the contracted Services. In the event funds paid to the Contractor under the Contract are subsequently determined to have been inadvertently paid by NCTA because of accounting errors or charges not in conformity with the Contract, the Contractor agrees that such amounts are due to NCTA upon demand. Final payment to the Contractor shall be adjusted for audit results
- 6. Contractor shall preserve all Proposal Records and Contract Records for the entire term of the Contract and for a period of three (3) years after the later of: (i) Final Acceptance of the Project by NCTA, (ii) until all claims (if any) regarding the Contract are resolved, or (iii) expiration of the Proposal Records and Contract Records' status as public records.

# **1.5.** Contractor Cooperation

- I. During the course of this Agreement, NCTA may undertake or award other agreements for additional work, including but not limited to separate agreements with different contractors, vendors and or internal/external agencies, including external interfaces related to Section III, Scope of Work and Requirements. It is critical that close coordination with interfacing contractors, vendors and/or other agencies as directed by NCTA occurs throughout the term of this Agreement. Contractor shall fully cooperate with NCTA and the parties to all other contracts and carefully integrate and schedule its own work with said parties.
- 2. NCTA will expect all contractors to comply with all technical specifications, special provisions and other terms and conditions applicable to the Contract(s) at all times during the performance of the Contract(s). In the event of a dispute between contractors, clarifications may be sought from NCTA; provided Contract Terms, conditions or

obligations shall remain in effect, excepting in instances wherein a Change Order or other Contract modification is duly executed in writing in accordance with this **Section V**, **Terms and Conditions**; however contractors shall engage in all efforts to resolve disputes prior to participation of NCTA and further, such participation by NCTA does not imply or represent a NCTA responsibility for resolution or payment of claims that arise out of a dispute between two contractors.

- 3. Should problems in coordination with other contractors occur, the Contractor shall make NCTA aware of these problems immediately and shall take steps to address the problems and mitigate any delays or additional costs. Contractor shall not commit or permit any act that will interfere with the performance of Work by any other contractor or by NCTA.
- 4. Interface Control Document Development and Ongoing Cooperation Requirements
  - a. The Contractor shall fully cooperate with NCTA and its designated contractor(s) and vendors as necessary to develop ICDs as set forth in **Section III**, **Scope of Work and Requirements**. The ICDs shall specify all specifications, parameters, data types, formatting, to effectively and completely interface into the NCTA Express Lane RTCS(s) and NCTA BOS. The Contractor shall be responsible for its respective roles and responsibilities as set forth in **Section III**, **Scope of Work and Requirements**.
  - b. In the event that the interfaces do not properly exchange data with each other as designed, and the Contractor's and the interfacing contractors' collective efforts to correct the issue(s) are untimely or unsuccessful, or the interfacing contractors fail to cooperate with the other NCTA designated and/or interfacing contractor(s) to the satisfaction of the NCTA and as determined at NCTA's sole discretion, then in addition to NCTA's other available remedies, NCTA shall have the right to, in whole or in part, withhold and/or require a refund of payments to the Contractor and/or the interfacing contractors involved in developing the ICD.
- Additional Coordination and Cooperation Requirements
  - a. The Contractor shall work closely with NCTA and any other contractors who will be working for NCTA for the purpose of coordinating any activity which may affect both contractors.
  - b. Should problems in coordination with other contractors occur, the Contractor shall make NCTA aware of these problems immediately and shall take steps to address the problems and mitigate any delays or additional costs. Contractor shall not commit or permit any act that will interfere with the performance of Work by any other contractor or by NCTA.
  - c. The Contractor shall cooperate with all other contractors to avoid any delay or hindrance to the other contractors or forces. NTCA reserves the right to perform other or additional Work (including material sources) at any time, by the use of other forces.

d. Each contractor shall be responsible to the other for all damage to Work, to persons or property caused to the other by their Operations, and for loss caused the other due to unnecessary delays or failure to finish the Work within the time specified for completion.

#### 6. Contractor Responsibility for Design

Upon Approval of the Application Design by the Contractor, Contractor shall assume responsibility for the Design to the extent that if the Application is implemented as designed and the Application does not meet the Performance Requirements of this Contract, the Contractor shall be responsible for the costs of Application's redesign, reconfiguration, additional Equipment costs, if necessary, and any other costs associated with the sub-standard performance.

#### 1.6. Warranties

# 1.6.1. Warranty during Maintenance Phase

A full warranty shall be provided by the Contractor on all Application Software for the term of the Operations and Maintenance Phase and any extensions thereof. As a result, during the Operations and Maintenance Phase, NCTA shall not pay any additional charges above the prices set forth in the Contractor's agreed-to Price Proposal for Operations and Maintenance Phase Work, other than Work related to agreed-to Force Majeure events or agreed-to out of scope work requested by NCTA, pursuant to these **Section V, Terms and Conditions**. Notwithstanding the foregoing, in the period after installation and prior to Acceptance, all system Maintenance and Support Work shall also be at Contractor's sole expense. Such Work shall be at no charge to NCTA and shall include replacement or update, whether pre-or post-Acceptance, on any Software, or part or component thereof, which NCTA deems defective or insufficient, or which NCTA deems to have failed to comply with **Section III, Scope of Work and Requirements**.

The provisions of this Section I.6.1 shall survive the expiration, cancellation, or termination of this Agreement.

#### 1.6.2. Software Warranties

- I. The Software needed to operate the HOV Declaration Application shall be as set forth in Section III, Scope of Work and Requirements. NCTA's Acceptance of the Software shall occur in accordance with the provisions of Section III, Scope of Work and Requirements. The Contractor warrants that, upon NCTA's Acceptance of and for the Contract Term, including any extensions thereof, the Application shall:
  - a. Be free from defects in materials and workmanship under normal use;
  - b. Remain in good working order, be free from viruses; trap doors; disabling devices; Trojan horses; disabling codes; back doors; time bombs; drop-dead devices; worms, and any other type of malicious or damaging code or other technology or means which has the ability to interfere with the use of the Application by NCTA or its designees, or permit access to NCTA's computing systems without its knowledge or contrary to its system connectivity policies or procedures;
  - c. Not interfere with the collection of toll revenue;

- d. Operate and function fully, properly and in conformity with the warranties in this Agreement, and
- e. Meet the Requirements set forth in this RFP.
- 2. The Contractor represents and warrants that upon NCTA's Acceptance of and for the Contract Term, including any extensions, the Software will:
  - a. Operate fully and correctly in the operating environment identified in **Section III**, **Scope of Work and Requirements**, including by means of the full and correct performance of the Software, and all Updates, Enhancements, or new releases of the Software, on or in connection with any Updates, Enhancements, or new releases to such and any other Software used by or in connection with any such Equipment;
  - b. Be fully compatible and interface completely and effectively with the Equipment, including other Software programs provided to NCTA hereunder, such that the other Software and Equipment combined will perform and continuously attain the standards identified in Section III, Scope of Work and Requirements, and
  - c. Accurately direct the operation of the Application, as required by Section III, Scope of Work and Requirements, and the descriptions, specifications and Documentation set forth therein and herein.
- 3. During the term of the Contract, including any extensions, the Contractor shall provide Services to maintain the Software provided hereunder in good working order, keeping it free from defects such that the System shall perform in accordance with this Agreement, the Scope of Work and Requirements, and the warranties set forth herein.
- 4. The Contractor shall provide technical support and shall remedy any failure, malfunction, defect or non-conformity in Software, in accordance with Section III, Scope of Work and Requirements, but in any event not later than the deadline(s) in Section III, Scope of Work and Requirements, Section 4 Performance Requirements.
- 5. The Contractor shall provide NCTA the most current release of all Software available on the date of delivery to maintain optimum performance pursuant to this Agreement.
- 6. The Contractor shall promptly provide Notice to NCTA in writing of any defects or malfunctions in the Software provided hereunder, regardless of the source of information. The Contractor shall promptly correct all defects or malfunctions in the Software or Documentation discovered and shall promptly provide NCTA with corrected copies of same, without additional charge. If the Software can only be corrected in conjunction with additional or revised Hardware, the Contractor shall provide such Hardware to NCTA, and the cost of such Hardware shall be borne solely by the Contractor.
- 7. Unless necessary to address a priority level I defect or malfunction, or to prevent revenue loss, the Contractor shall make no enhancements to the Application without NCTA's prior, written authorization. Should the Contractor need to make a modification or enhancement to the Application or software to address a priority level I defect or malfunction, or to prevent revenue loss, the Contractor shall provide NCTA with a written explanation of all changes made immediately after the change is made.

- 8. No Updates or enhancements shall adversely affect the performance of the Application, in whole or in part, or result in any failure to meet any Requirements of **Section III**, **Scope of Work and Requirements**.
- 9. With regard to Software, the Contractor shall provide Software Services in accordance with **Section III, Scope of Work and Requirements**.
- 10. The Contractor shall obtain Maintenance agreements for third-party Software, as necessary, in accordance with Section V, Terms and Conditions, Section 1.6.3 Third-Party Warranties. The Contractor shall secure such Maintenance agreements for the same duration and upon the same terms and conditions as the Operations and Maintenance provisions between the Contractor and NCTA. All third-party contracts and licenses shall be assignable to NCTA.
- II. In the event that the Application does not satisfy the conditions of performance set forth in Section III, Scope of Work and Requirements, the Contractor is obligated to promptly repair or replace such Software at the Contractor's sole cost and expense or, if expressly agreed to in writing by NCTA, provide different Equipment or Software, and perform Services required to attain the Performance Requirements set forth in Section III, Scope of Work and Requirements.
- 12. In the event of any defect in the media upon which any tangible portions of the Software is provided, the Contractor shall provide NCTA with a new copy of the Software.
- 13. Without releasing the Contractor from its obligations for warranty (during an applicable warranty period), support or Maintenance of the Software, NCTA shall have the right to use and maintain versions of the Software provided by the Contractor which are one or more levels behind the most current version of such Software and to refuse to install any Updates or enhancements if, in NCTA's discretion, installation of such Updates or enhancements would interfere with its Operations. The Contractor shall not, however, be responsible or liable for the effect of any error or defect in the version of the Software then in use by NCTA that occurs after the Contractor has both (i) offered, by written Notice to NCTA, a suitable correction (by way of Update, enhancement or otherwise) of such error or defect and (ii) provided NCTA a reasonable opportunity to implement such existing correction, provided that the Contractor establishes that neither the implementation nor the use of such correction would limit, interfere with, adversely affect, or materially alter the Interoperability, functionality or quality of the Application.
- 14. All provisions of this Section **1.6 Warranties** referring or relating to obligations to be performed pursuant to an applicable warranty period that extends beyond the term hereof, shall survive the expiration, cancellation, or termination of this Agreement.

#### 1.6.3. Third-Party Warranties

In addition to the foregoing warranties, the Contractor shall assign to NCTA, and NCTA shall have the benefit of, any and all Subcontractors' and suppliers' warranties and representations with respect to the System and Services provided hereunder. The Contractor's agreements with Subcontractors, suppliers and any other third parties shall require that such parties (a) consent to the assignment of such warranties and representations to NCTA, (b) agree to the enforcement of such warranties and representations by NCTA in its own name, and (c) furnish to NCTA, the warranties set forth herein. At NCTA's request,

the Contractor shall provide supporting Documentation which confirms that these warranties are enforceable in NCTA's name.

#### 1.6.4. Services Warranties

The Contractor warrants that all Services shall be performed in a high-quality, professional manner by qualified and skilled personnel in compliance with NCTA's Requirements as set forth in **Section III**, **Scope of Work and Requirements**. In the event NCTA determines that any Services do not conform to the foregoing warranty, NCTA shall be entitled to elect one of the following remedies: (i) revision of the Services by the Contractor until NCTA deems them to be in conformity with the warranty in this section, at no charge to NCTA; (ii) refund from the Contractor for all fees paid in connection with the Services, which NCTA deems were not as warranted, subject to the provisions of **Section V**, **Terms and Conditions**, such that the Contractor is not required to refund fees for non-provision of Services for which Liquidated Damages have been assessed, (iii) reimbursement by the Contractor for NCTA's costs and expenses incurred in having the Services re-performed by NCTA or someone other than the Contractor. Notwithstanding the foregoing, nothing in this Section shall be construed to limit NCTA's rights pursuant to **Section V**, **Terms and Conditions**, Section 2.6.2 Termination for Cause.

# 1.6.5. Data Accuracy

The Contractor acknowledges and understands that the data and/or information it collects, processes and/or provides to NCTA will be relied upon by to NCTA and other persons or entities that are now or will in the future be under Agreement with NCTA. Should information derived and provided by Contractor be inaccurate and cause NCTA to incur damages or additional expenses, NCTA shall notify Contractor and the Contractor shall immediately place any applicable insurance carrier on Notice of a potential claim. This provision shall survive termination of this Agreement, and the Contractor agrees to waive any applicable limitation periods consistent with enforcement of this provision.

#### 1.6.6. Additional Warranties

The Contractor warrants the following:

- 1. All guarantees and warranties made herein are fully enforceable by NCTA acting in its own name.
- 2. The Equipment and Systems the Contractor installs and places into operation will not result in any damage to existing facilities, walls or other parts of adjacent, abutting or overhead buildings, structures, surfaces, or any physical/mental damage to any individual utilizing any units(s) of Equipment.
- 3. All provided Equipment is new and unused.
- 4. Warranties provided in this Section 1.6 are in addition to warranties set forth in the General Conditions.

#### 1.6.7. Pervasive Defects

The Contractor agrees to promptly remedy, at no cost to NCTA, any defects determined by NCTA to be Pervasive, such that if NCTA determines that any Equipment, component, sub-component or Software is experiencing continued or repetitive failure that requires constant replacement or repair, the Contractor agrees that a "Pervasive Defect" shall be deemed to be present in such affected types of

Equipment or Software. The Contractor shall perform an investigation of the issues and prepare a report that includes a reason for the failure and their Plan for remedy. Such correction shall be in a manner satisfactory to NCTA and that permanently addresses the problem and corrects the defect so that such defect does not continue to occur.

The obligations set forth in this section shall be in addition to any warranty obligations set forth in this Agreement. The provisions of this section shall survive the expiration or earlier termination of this Agreement.

# 1.6.8. General Guaranty

Neither Acceptance of the Project, Application and/or Services or payment therefor, nor any provision in this Agreement, nor partial or entire use of the System and Services by NCTA shall constitute an Acceptance of System and Services not performed in accordance with this Agreement or relieve the Contractor of liability for any express or implied warranties or responsibility for faulty materials or workmanship.

#### 1.7. Software and License

All data and custom software shall be owned by NCTA in its entirety.

For the avoidance of doubt, nothing in this Agreement shall restrict or preclude NCTA from providing to any other person or entity, or any such other person or entity from using, any of the Software or other materials provided to NCTA hereunder by the Contractor, in connection with the provision of any products or Services to or on behalf of NCTA, or to any person or entity providing Services to or on behalf of NCTA.

# 1.8. Authority of the Project Manager

- 1. The Contractor hereby authorizes the NCTA Project Manager ("the Toll System Manager") to determine in the first instance all questions of any nature whatsoever arising out of, under, or in connection with, or in any way related to or on account of, this Agreement including, without limitation: questions as to the value, acceptability and of the Services; questions as to either party's fulfillment of its obligations under this Agreement; negligence, fraud or misrepresentation before or subsequent to execution of this Agreement; questions as to the interpretation of Section III, Scope of Work and Requirements; and claims for damages, compensation and losses.
- 2. The Project Manager shall act as the designated representative of NCTA in all matters relating to the Project.
- 3. The Project Manager may give orders to the Contractor to do Work that they determine to be necessary for the Contractor to fulfill the Contractor's obligations under this Agreement.
- 4. If requested by the Contractor, the Project Manager will promptly provide appropriate explanations and reasons for his determinations and orders hereunder.
- 5. The Contractor shall be bound by all determinations or orders and shall promptly obey and follow every order of the Project Manager, including the withdrawal or modification of any previous order and regardless of whether the Contractor agrees with the Project Manager's determination or order. Orders shall be in writing, unless not practicable, in which event any

oral order must be confirmed in writing by the Project Manager as soon thereafter as practicable.

# 1.9. Key Team Personnel

The Contractor has designated an individual Project Principal, who is an officer authorized to sign the Agreement and any Amendments to the Agreement and to speak for and make commitments on behalf of the Contractor. The Contractor shall designate a project manager ("Contractor Project Manager"), identified in the Technical Proposal, who shall act as the primary point of contact in all matters on behalf of Contractor. The Contractor Project Manager shall assign other individuals as contacts with regard to specific functional areas of the Work, subject to the Approval of NCTA. NCTA shall have input into determining who shall be assigned as Project Manager for Contractor and the Contractor may not change the Contractor Project Manager without consulting with NCTA and obtaining Approval from NCTA as set forth in the following paragraph.

The Contractor's Technical Proposal identifies certain job categories as "Key Team Personnel" for the Agreement. Key Team Personnel for this Project are identified in the Contractor's Technical Proposal and shall be Approved as part of the Project Management Plan as set forth in **Section III, Scope of Work and Requirements**. Key Team Personnel shall be required to work in the position indicated in the Technical Proposal and Approved Project Management Plan, unless Approval is obtained from NCTA. The Contractor shall obtain NCTA's prior Approval to any desired changes in Key Team Personnel or any significant reduction in the level of effort for such Key Team Personnel, which consent shall not be unreasonably withheld. Should NCTA determine during the term of the Agreement that the list of Key Team Personnel does not include personnel essential to the successful performance of the Work, NCTA may require the Contractor to add any existing job category to such list.

If NCTA becomes dissatisfied with the performance of any person designated as Key Team Personnel performing under this Agreement, NCTA shall notify Contractor in writing. Within ten (10) Business Days of receipt of such Notice, the Contractor shall either propose a replacement person for evaluation and Approval by NCTA or present to NCTA a Plan for correcting the incumbent's performance deficiencies within a period of thirty (30) Calendar Days thereafter. If either NCTA rejects the Plan presented by Contractor or the incumbent's performance deficiencies are not corrected to NCTA's satisfaction within the thirty (30) Calendar Day plan period Approved by NCTA, then the Contractor shall, within ten (10) Business Days after rejection of the Plan or expiration of the thirty (30) Business Day plan period, propose to NCTA a replacement person for evaluation and Approval by NCTA.

# 1.10. Phases of the Project and Acceptance

#### 1.10.1. Phases of the Project

The Contractor shall proceed with the Design Phase upon receiving the Notice to Proceed, and progress through all of the Project phases as defined and required in the Section III, Scope of Work and Requirements, and Exhibit A - Payment Schedule.

The Contractor's Operations and Maintenance responsibilities shall begin upon Final System Acceptance, and shall continue until the expiration of the Initial Contract Term, and also shall include any Contract renewals or extensions thereof. Commencement of this Phase shall not relieve the Contractor of any of its responsibilities to complete all Requirements set forth in Section III, Scope of Work and Requirements, and does not waive any of the rights of NCTA in this regard.

**Note**: NCTA's beneficial use of the Project Deliverables during any phase prior to Project Acceptance shall not constitute Acceptance of any Deliverable, nor shall such use give rise to equitable claim for adjustment.

## 1.10.2. Final Acceptance of Project Phases

Final Acceptance of each Project phase shall be deemed to have occurred, and payment shall be provided, when all of the following conditions have been met:

- The Contractor shall provide a Final Acceptance letter Certification to close out each Phase.
   The Certifications shall include, but not be limited to: total costs associated with each Phase, date of Work completion and any-phase associated deliverables as required in Section III,

   Scope of Work and Requirements, and Exhibit A Payment Schedule;
- All Contractor claims for the Phases are deemed to be resolved by NCTA, and the Contractor has submitted a statement that no such requests or protests will be applied for; any and all claims under this Agreement are resolved, and that no such claims will be made;
- 3. All of Contractor's other obligations for each Project phase under the Agreement shall have been satisfied in full or waived in writing by NCTA; and
- 4. NCTA shall have delivered to the Contractor a Notice of Final Acceptance for each Project phase before payment can be issued.

## 1.10.3. Project Acceptance of All Phases

Project Acceptance shall mean the Final Acceptance for all Project Phases, and shall be deemed to have occurred when all of the following conditions have been met:

- I. The Contractor shall provide a Project Acceptance letter Certification to close out the Agreement. The Certification shall include but not be limited to: total costs associated with the Agreement, date of Work completion and any additional required information contained in item 2 through 8 below, if applicable;
- 2. The Acceptance of each Project phase has been Accepted and closed out in accordance with this agreement as documented in **Section V, Terms and Conditions**;
- The Contractor has met all End of Contract and transition Requirements pursuant to Section V, Terms and Conditions, Section 2.7 End of Contract and Transition and Section III, Scope of Work and Requirements;
- 4. The Contractor has provided NCTA with all final (e.g. as-built), required materials, software; documentation and manuals, owned by NCTA, pursuant to this Agreement. All such materials have been verified by NCTA to be in good, working order;
- 5. An Affidavit has been delivered to NCTA, signed by the Contractor, stating all debts and claims of suppliers and Subcontractors have been paid and/or settled;
- 6. All Contractor claims for the phase are deemed to be resolved by NCTA, and the Contractor has submitted a statement that no such requests or protests will be applied for; any and all claims under this Agreement are resolved, and that no such claims will be made;
- 7. All Requirements identified in **Section III, Scope of Work and Requirements** shall be verified and Certified by the Contractor to be successfully delivered, and shall be Approved by NCTA; and

8. All the Contractor's other obligations under the Agreement shall have been satisfied in full or waived by NCTA.

# 1.10.4. Project Completion

Project Completion shall be deemed to have occurred when all obligations under this Agreement have been successfully performed by the Contractor, including but not limited to all retentions owed to the Contractor have been released by NCTA and, when NCTA has delivered a Notice of Project completion to the effect of the foregoing.

## I.II. Order of Precedence

The Contract is subject to the terms and conditions of this solicitation, which, in case of conflict, shall have the following Order of Precedence:

- I. Executed Agreement, including RFP, all executed RFP addenda, BAFO (if applicable), and Amendments.
- 2. Section III, Scope of Work and Requirements, as conformed
- 3. Section V, Terms and Conditions, Section 3 General Terms and Conditions
- 4. Contractor's Technical Proposal.

# 2. Contract Changes and Termination

#### 2.1. General

The following Contract changes are allowable within the scope of this Contract:

- Change Orders The NCTA anticipates issuing Change Orders for Work required to enhance the Application Software, Upgrade Equipment, enhance or otherwise improve the Application.
- 2. Extra Work Orders The NCTA anticipates issuing Extra Work Orders to address variances in the specifications or Section III, Scope of Work and Requirements beyond that of the Approved Design Document and for which there is no appropriate pay item or category. Extra Work Orders will be issued within the sole discretion of the NCTA, and such additional Work may be subject to a new competitive procurement as deemed to be in the best interest of the NCTA.
- Task Orders The NCTA anticipates issuing Task Orders for Work required to enhance Operations and Maintenance Services for the system in accordance with labor rates proposed and set forth in the Price Proposal.
- 4. Time Extensions The NCTA anticipates issuing Time Extensions, as necessary, to modify Project milestones for reasons out of the control of the Contractor. Unless otherwise agreed to by the NCTA in writing, the Contractor's Payment Schedule and Price Proposal, including labor rates identified in the Price Proposal, shall apply to all of the above Contract changes. If cost for additional Work and/or Services cannot be established on the basis of the Price Proposal or the Payment Schedule, a catalog or market price of a commercial product sold in substantial quantities, or on the basis of prices set by law or regulation, the Contractor is

required to submit to the NCTA detailed cost breakdowns, including information on labor and materials costs, overhead and other indirect costs.

# 2.2. Change Orders

- NCTA may elect to have the Contractor perform the Change Order Work. In this case, the Contractor shall provide a detailed Technical and Price Proposal for the order, and await Approval and Notice to Proceed from NCTA before incurring any expenses for which the Contractor expects reimbursement.
- 2. If NCTA advertises the Change Order Work, NCTA may elect to use the Contractor to assist NCTA in the procurement of additional Hardware, Software or Services, and/or integrate the Change Order Work into the Application. In this case, NCTA would obtain these Services through a negotiated and Approved Task Order.

#### 2.3. Extra Work Orders

An Extra Work Order will ONLY be a change in the Scope of Work and Requirements requiring different functionality, or Software than that covered by the existing Contract or a change to a Contract Term and condition with an impact. Some examples include:

- Large scale changes in operating Systems beyond changes covered in Upgrades or Maintenance Task Orders;
- 2. Changes to insurance or legal requirements

#### 2.4. Maintenance Task Orders

- A Task Order will be a change in design or work needed to maintain operation of the Application after Acceptance of the original Application design by the NCTA. Examples of this type of work include:
  - a. Software modifications and upgrades to improve reliability, diagnostics, data exchange interfaces, or other tasks directly related to HOV declaration.
  - b. Hardware upgrades to provide better data storage and handling, such as replaced, improved or expanded hard drives, routers, etc., or prototype new equipment to test system modifications. This does not include updates or upgrades required to meet required system or transaction growth or modifications currently included in the scope of work and requirements.

# 2.5. Time Extensions, Schedule Changes and Submittals

#### 2.5.1. Time Extensions and Schedule Changes

- Within ten (10) Calendar Days of receiving NTP from NCTA, the Contractor shall update
  the schedule they submitted with their proposal and submit the updated schedule to NCTA
  for approval an updated project schedule.
- 2. The Contractor shall clearly label each update against the Approved Project Schedule, pursuant to the Requirements of the Approved Project Management Plan. Submission of an updated schedule against the Approved Schedule shall not release or relieve the Contractor

from full responsibility for completing the Work within the time set forth in the Approved Schedule. If the Contractor causes delays and fails or refuses to implement measures sufficient to bring its Work back into conformity with the current Approved Schedule, its right to proceed with any or all portions of the associated Work may be terminated under the provisions of the Contract. However, in the event that NCTA, in its sole determination, should permit the Contractor to proceed, the NCTA's permission shall in no way operate as a waiver of its rights nor shall it deprive NCTA of its rights under any other provisions of the Contract.

- 3. NCTA will Approve Time Extensions ONLY for Force Majeure causes or acts by NCTA which have been documented to have impeded the Contractor's Project progress.
- 4. Any changes to the Approved Schedule require Approval and an Amendment to the Contract.
- 5. Unless otherwise expressly agreed to by NCTA, the Contractor shall not receive extra compensation or damages for any time extension Approved by NCTA for completion of additional and/or altered Work. However, the Contractor shall be fully compensated for such Work as agreed upon by NCTA and the Contractor in the Change Order or the supplemental agreements.

#### 2.5.2. Submittals

Contractor's Submittal requirements and Submittal schedule shall be as set out in Contractor's Approved Program Management Plan, as required in **Section III, Scope of Work and Requirements**. The baseline schedule Approved after Notice to Proceed shall establish accepted dates by which Contractor shall submit required documents and other items necessary for the complete design, development, testing, implementation, training and maintenance of the Application. NCTA's written Approval will be required for these Submittals. NCTA will Approve or reject such Submittals, providing an explanation of any reasons for rejection in a form agreed to in the Project Management Plan. In any instance where NCTA does not provide Approval, rejection or written notification of an extended review period by the due date specified in the Approved Baseline Schedule, the Contractor shall notify NCTA in writing that the NCTA response is due. NCTA's right to extend the review period is intended to allow flexibility in special circumstances where the nature of the Submittal requires more involved review, and not as a diminution of NCTA's obligation to promptly review Submittals. NCTA reserves the right to reject Submittals that are not complete or correct and to extend the review period accordingly.

Contractor shall not be held responsible for delays in schedule due to delays in Approvals and permits completely beyond the control of the Contractor. Notwithstanding the foregoing, Contractor shall make every effort to work around and mitigate the impact of delay.

# 2.6. Contract Termination

#### 2.6.1. Termination General Requirements

- The Contract issued for the Project will terminate at the end of the Contract Term(s) set forth above, inclusive of any Operations and Maintenance and or extension periods as noted in Section V, Terms and Conditions, Section 1.2 Term of Contract.
- 2. The NCTA may terminate the Contract(s), in whole or in part, for default subject to the default provisions set forth below.

- 3. Any required Notices of termination made under this Contract shall be transmitted via U.S. Mail, Certified Return Receipt Requested, or personal delivery to the Contractor's contract administrator. The period of Notice for termination shall begin on the day the return receipt is signed and dated or upon personal delivery to the Contractor(s) contract administrator.
- 4. The parties may mutually terminate this Contract by written agreement at any time.
- 5. NCTA may terminate this Contract, in whole or in part, pursuant to the Terms and Conditions in the Solicitation Documents.
- 6. NCTA will notify the Contractor(s) at least ninety (90) Days prior to the termination of the Contract in the absence of cause. This notification will require the Contractor(s) to initiate actions in preparation for leaving the NCTA Project site and handing off system operations to replacement entities. These actions shall include:
  - a. Acknowledgement of receipt of End of Contract notification, and
  - b. Act in accordance with **Section V, Terms and Conditions**, Section 2.7 End of Contract and Transition.

#### 2.6.2. Termination for Cause

- I. In the event any Application Software, Hardware Software, or Services furnished by the Contractor during performance of any Contract Term fails to conform to any material requirement of the Contract, and the failure is not cured within the specified time after providing written Notice thereof to Contractor, the NCTA may cancel and procure the Work or Services from other sources; holding Contractor liable for any excess costs occasioned thereby. The rights and remedies of NCTA provided above shall not be exclusive and are in addition to any other rights and remedies provided by law or under the Contract. The Contractor shall not be relieved of liability to NCTA for damages sustained by NCTA arising from Contractor's breach of this Contract; and the NCTA may, in its discretion, withhold any payment due as a setoff until such time as the damages are finally determined or as agreed by the parties. Voluntary or involuntary Bankruptcy or receivership by Contractor shall be cause for termination.
- 2. Cause shall mean a material breach of this Agreement by the Contractor. Without limiting the generality of the foregoing and in addition to those instances referred to elsewhere in this Agreement as a breach, a material breach shall include the following:
  - a. The Contractor failed to process data, secure data and/or function in accordance with this Agreement;
  - b. The Contractor materially inhibited NCTA's collection of toll revenue;
  - c. The Contractor has not submitted acceptable Deliverables to NCTA on a timely basis;
  - d. The Application proves incapable of meeting the functional and/or Performance Requirements set forth in **Section III**, **Scope of Work and Requirements**;

- e. The Contractor refused or failed, except in cases for which an extension of time is provided, to supply enough properly skilled workers or proper materials to properly perform the Services required under this Agreement;
- f. The Contractor failed to make prompt payment to Subcontractors or suppliers for materials or labor;
- g. The Contractor has become insolvent (other than as interdicted by the bankruptcy laws), or has assigned the proceeds received from this Agreement for the benefit of its creditors, or it has taken advantage of any insolvency statute or debtor/creditor law or if the Contractor's property or affairs have been put in the hands of a receiver;
- h. Any case, proceeding or other action against the Contractor is commenced in bankruptcy, or seeking reorganization, liquidation or any relief under any bankruptcy, insolvency, reorganization, liquidation, dissolution or other similar act or law of any jurisdiction, which case, proceeding or other action remains undismissed, undischarged or unbonded for a period of thirty (30) Calendar Days;
- i. The Contractor fails to maintain insurance policies and coverages or fails to provide proof of insurance or copies of insurance policies as required by this Agreement;
- j. Any warranty, representation, certification, financial statement or other information made or furnished to induce NCTA to enter into this Agreement, or made or furnished, at any time, in or pursuant to the terms of this Agreement or otherwise by the Contractor, or by any person who guarantees or who is liable for any obligation of the Contractor under this Agreement, shall prove to have been false or misleading in any material respect when made;
- k. Any intentional violation by the Contractor of the ethics provisions, or applicable laws, rules or regulations;
- I. The Contractor has failed to obtain the Approval of NCTA where required by this Agreement;
- m. The Contractor's Audited Financial Statements or those of its parent company submitted to NCTA do not fairly represent the Contractor or its parent's true financial position;
- n. The Contractor has failed in the representation of any warranties stated herein;
- The Contractor makes a statement to any representative of NCTA indicating that the Contractor cannot or will not perform any one or more of its obligations under this Agreement;
- p. The Contractor fails to remedy Pervasive Defects;
- q. Any act or omission of the Contractor or any other occurrence which makes it improbable at the time that the Contractor will be able to perform any one or more of its obligations under this Agreement;

- r. Any suspension of or failure to proceed with any part of the Services by the Contractor which makes it improbable that the Contractor will be able to perform any one or more of its obligations under this Agreement;
- s. A pattern of repeated failures to meet the performance metric or metrics as defined in **Section III, Scope of Work and Requirements**;
- t. The suspension or revocation of any license, permit, or registration necessary for the performance of the Contractor's obligations under this Agreement, or
- u. The default in the performance or observance of any of the Contractor's other obligations under this Agreement and the continuance thereof for a period of thirty (30) Calendar Days after Notice given to the Contractor by NCTA.
- 3. Cure/Warning Period. Prior to terminating the Contract(s) for cause, the NCTA will issue a Notice of cure/warning to the Contractor(s) thirty (30) Days prior to the termination date. The Notice will be transmitted via U.S. Mail Certified Return Receipt Requested or personal delivery to the Contractor(s) contract administrator, and the period of Notice for termination shall begin on the date the Return Receipt is signed and dated or upon personal delivery to the Contractor contract administrator. The Notice will specify the corrective actions/work required to be taken by the Contractor to come into compliance with the terms and conditions of the Contract(s). If the corrective actions/work is performed within the cure/warning period, in a manner acceptable to the NCTA, the Contract will remain in effect in accordance with the terms and conditions thereof.
- 4. Termination Without Notice of Cure/Warning. If the NCTA has issued two Notices of cure/warning to the Contractor, upon the issuance of the third or subsequent Notice the NCTA reserves the right to terminate the Contract without further Notice. The failure of the NCTA to exercise this right on any occasion shall not be deemed a waiver of any future right.

#### 2.6.3. Termination for Convenience Without Cause

1. The NCTA may terminate the Contract(s) without cause, in whole or in part by giving ninety (90) Days prior Notice in writing to the Contractor. The Contractor shall be entitled to sums due as compensation for Deliverables provided and Services performed in conformance with the Contract. In the event the Contract is terminated for the convenience of the NCTA, the NCTA will pay for all Work performed and products delivered in conformance with the Contract up to the date of termination. This is an incidental item within Section III, Scope of Work and Requirements, but without separate compensation.

#### 2.7. End of Contract and Transition

In the event that this Agreement is terminated for convenience or default or upon the Agreement completion date or expiration of the Agreement Term or any extensions thereof, the Contractor shall cooperate with NCTA to facilitate a smooth succession to the NCTA's selected successor for the Services, whether the successor is NCTA or a third-party. The Requirements for this End of Contract Transition are contained in **Section III**, **Scope of Work and Requirements**. Costs for such End of Contract Transition are included are included in the current Contract and the Contractor shall perform such Work without additional compensation.

# 3. General Terms and Conditions

#### 3.1. Standards

- I. Any Deliverables shall meet all applicable State and Federal requirements, such as State or Federal Regulation, and NC Chief Information Officer's (CIO) policy or regulation. The Contractor will provide and maintain a Quality Assurance system or program that includes any Deliverables and will tender or provide to the State only those Deliverables that have been inspected and found to conform to the requirements of this Contract. All Deliverables are subject to operation, certification, testing and inspection, and any accessibility requirements as required.
  - a. Site Preparation: The Contractor shall provide NCTA complete site requirement specifications for the Deliverables, if any. These specifications shall ensure that the Deliverables to be installed shall operate properly and efficiently within the site environment. The Contractor shall advise NCTA of any site requirements for any Deliverables required by NCTA's specifications. Any alterations or modification in site preparation which are directly attributable to incomplete or erroneous specifications provided by the Contractor and which would involve additional expenses to NCTA, shall be made at the expense of the Contractor.
  - b. Specifications: The apparent silence of the specifications as to any detail, or the apparent omission of detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and only material and workmanship of the first quality may be used. Upon any Notice of noncompliance issued by NCTA, Contractor shall supply proof of compliance with the specifications within ten (10) Calendar Days. Contractor shall provide written Notice of its intent to deliver alternate or substitute products, goods or Deliverables. Alternate or substitute products, goods or Deliverables may be accepted or rejected at the sole discretion of NCTA; and any such alternates or substitutes shall be accompanied by Contractor's Certification and evidence satisfactory to NCTA that the function, characteristics, performance and endurance will be equal or superior to the original Deliverables specified. All alternates or substitutes are subject to Approval by NCTA.

# 3.2. Acceptance Criteria

I. NCTA shall have the obligation to notify Contractor, in writing ten (10) Calendar Days following provision, performance (under a provided milestone or otherwise as agreed) or delivery of any Services or other Deliverables described in the Contract are not acceptable. The Notice shall specify in reasonable detail the reason(s) a given Deliverable is unacceptable. Acceptance by NCTA shall not be unreasonably withheld; but may be conditioned or delayed as required for installation and/or testing of Deliverables. Final Acceptance is expressly conditioned upon completion of any applicable inspection and testing procedures. Should a Deliverable fail to meet any specifications or Acceptance criteria, NCTA may exercise any and all rights hereunder. Deliverables discovered to be defective or failing to conform to the specifications may be rejected upon initial inspection or at any later time if the defects or errors contained in the Deliverables or non-compliance with the specifications were not reasonably ascertainable upon initial inspection. If Contractor fails to promptly cure or correct the defect or replace or re-perform the Deliverables, NCTA reserves the right to

cancel the Contract, contract with a different contractor, and to invoice the original Contractor for any differential in price over the original Contract price.

#### 3.3. Personnel

1. Contractor shall not substitute Key Personnel assigned to this Contract without prior written Approval by NCTA. Any desired substitution shall be noticed to NCTA, accompanied by the names and references of Contractor's recommended substitute personnel. NCTA will approve or disapprove the requested substitution in a timely manner. NCTA may, in its sole discretion, terminate the services of any person providing Services under this Contract. Upon such termination, NCTA may request acceptable substitute personnel or terminate the Contract Services provided by such personnel.

# 3.4. Subcontracting

1. The Contractor may subcontract the performance of required Services with other contractors or third parties, or change Subcontractors, only with the prior written consent of NCTA. Contractor shall provide NCTA with complete copies of any agreements made by and between Contractor and all Subcontractors. The Contractor remains solely responsible for the performance of its Subcontractors. Subcontractors, if any, shall adhere to the same standards required of the Contractor. Any contracts made by the Contractor with a Subcontractor shall include an affirmative statement that NCTA is an intended third-party beneficiary of the contract; that the Subcontractor has no agreement with NCTA; and that NCTA shall be indemnified by the Contractor for any claim presented by the Subcontractor. Notwithstanding any other term herein, Contractor shall timely exercise its contractual remedies against any non-performing Subcontractor and, when appropriate, substitute another Subcontractor.

# 3.5. Contractor's Representation

- 1. Contractor warrants that qualified personnel shall provide Services in a professional manner. "Professional manner" means that the personnel performing the Services will possess the skill and competence consistent with the prevailing business standards in the information technology industry. Contractor agrees that it will not enter into any agreement with a third-party that might abridge any rights of NCTA under this Contract. Contractor will serve as the prime Contractor under this Contract. Should NCTA approve any Subcontractor(s), the Contractor shall be legally responsible for the performance and payment of the Subcontractor(s). Names of any third-party contractors or subcontractors of Contractor may appear for purposes of convenience in Contract Documents; and shall not limit Contractor's obligations hereunder. Third-party subcontractors, if approved, may serve as Subcontractors to Contractor. Contractor will retain executive representation for functional and technical expertise as needed in order to incorporate any work by third-party subcontractor(s).
- 2. Intellectual Property. Contractor represents that it has the right to provide the Services and other Deliverables without violating or infringing any law, rule, regulation, copyright, patent, trade secret or other proprietary right of any third-party. Contractor also represents that its Services and other Deliverables are not the subject of any actual or threatened actions arising from, or alleged under, any intellectual property rights of any third-party.

- 3. Inherent Services. If any Services or other Deliverables, functions, or responsibilities not specifically described in this Contract are required for Contractor's proper performance, provision and delivery of the Services and other Deliverables pursuant to this Contract, or are an inherent part of or necessary sub-task included within the Services, they will be deemed to be implied by and included within the scope of the Contract to the same extent and in the same manner as if specifically described in the Contract.
- 4. Contractor warrants that it has the financial capacity to perform and to continue to perform its obligations under the Contract; that Contractor has no constructive or actual knowledge of an actual or potential legal proceeding being brought against Contractor that could materially adversely affect performance of this Contract; and that entering into this Contract is not prohibited by any Contract, or order by any court of competent jurisdiction.

# 3.6. Software and Intellectual Property

Contractor represents that custom Software (developed or modified) may be necessary under this Contract. If Contractor develops or modifies the Software to meet the Deliverables under this Contract, it will provide to NCTA all firmware upgrades, service releases, and patch releases as part of this Contract subject to Contractor's commercial terms for software/firmware license rights to embedded intellectual property. In the event NCTA and Contractor mutually agree that development of custom Software for NCTA would be of unique benefit to NCTA, separate and apart from the embedded intellectual property rights Contractor has licensed to NCTA, the following provisions of 3.6.1 shall apply.

#### 3.6.1. Internal/Embedded Software License and Escrow

- This section on software licenses applies to any source code developed or modified specifically for NCTA, Application customizations and configuration settings, internal embedded software, firmware and unless otherwise provided in this NCTA RFP, or in an attachment hereto.
- 2. Deliverables, as used herein, shall comprise all project materials, including goods, software licenses, data, and documentation created during the performance or provision of services hereunder. Deliverables are the property of the State of North Carolina. Proprietary Contractor materials licensed to NCTA shall be identified to NCTA by Contractor prior to use or provision of services hereunder and shall remain the property of the Contractor. Embedded software or firmware shall not be a severable Deliverable. Deliverables include 'Work Product" and means any expression of Licensor's findings, analyses, conclusions, opinions, recommendations, ideas, techniques, know-how, designs, programs, enhancements, and other technical information; but not source and object code or software. All Software source and object code is the property of Licensor and is licensed nonexclusively to NCTA, at no additional license fee, pursuant to the terms of the software license contained herein, and in the Supplemental Terms and Conditions for Software and Services or the License Agreement if incorporated in the Solicitation Documents.
- 3. Work Product Deliverables shall be considered works for hire provided by Contractor for the NCTA and shall belong exclusively to NCTA and its designees, unless specifically provided otherwise by mutual agreement of the Contractor and NCTA. If by operation of law any of the Work Product, including all related intellectual property rights, is not owned in its entirety by NCTA automatically upon creation thereof, the Contractor agrees to assign, and hereby assigns to NCTA and its designees the ownership of such Work Product, including all related

intellectual property rights. The Contractor agrees to provide, at no additional charge, any assistance and to execute any action reasonably required for NCTA to perfect its intellectual property rights with respect to the aforementioned Work Product.

Notwithstanding any provision of this Contract to the contrary, any preexisting work or materials including, but not limited to, any routines, libraries, tools, methodologies, processes or technologies (collectively, the "Development Tools") created, adapted or used by the Contractor in its business generally, including any or all associated intellectual property rights, shall be and remain the sole property of the Contractor, and NCTA shall have no interest in or claim to such preexisting work, materials or Development Tools, except as necessary to exercise its rights in the Work Product. Such rights belonging to NCTA shall include, but not be limited to, the right to use, execute, reproduce, display, perform and distribute copies of and prepare derivative works based upon the Work Product, and the right to authorize others to do any of the foregoing, irrespective of the existence therein of preexisting work, materials and Development Tools, except as specifically limited in the solicitation documents or any attachment or exhibit to this Contract.

The Contractor and its subcontractors shall be free to use and employ their general skills, knowledge and expertise, and to use, disclose, and employ any generalized ideas, concepts, knowledge, methods, techniques or skills gained or learned during the course of performing the services under this Contract, so long as the Contractor or its subcontractors acquire and apply such information without disclosure of any confidential or proprietary information of the State and NCTA, and without any unauthorized use or disclosure of any Work Product resulting from this Contract.

4. Deliverables comprising goods, equipment or products (hardware) may contain software for internal operation, or as embedded software or firmware that is generally not sold or licensed as a severable software product. Software may be provided on separate media or may be included within the hardware at or prior to delivery. Such software is proprietary, copyrighted, and may also contain valuable trade secrets and may be protected by patents. Contractor grants the State and NCTA a license to use the Code (or any replacement provided) on, or in conjunction with, only the Deliverables purchased, or with any system identified in the solicitation documents. The State and NCTA shall have a worldwide, nonexclusive, non-sub licensable license to use such software and/or documentation for its internal use. NCTA may make and install copies of the software to support the authorized level of use. Provided, however that if the hardware is inoperable, the software may be copied for temporary use on other hardware. NCTA shall promptly affix to any such copy the same proprietary and copyright notices affixed to the original. NCTA may make one copy of the software for archival, back-up or disaster recovery purposes. The license set forth in this Section shall terminate immediately upon NCTA's discontinuance of the use of the equipment on which the software is installed. The software may be transferred to another party only with the transfer of the hardware. If the hardware is transferred, NCTA shall (i) destroy all software copies made by NCTA, ii) deliver the original or any replacement copies of the software to the transferee, and iii) notify the transferee that title and ownership of the software and the applicable patent, trademark, copyright, and other intellectual property rights shall remain with Vendor, or Vendor's licensors. NCTA shall not disassemble, decompile, reverse engineer, modify, or prepare derivative works of the embedded software, unless permitted under the solicitation documents,

- 5. Outsourcers, facilities management or service bureaus retained by NCTA shall have the right to use the Deliverables thereof to maintain the NCTA's business operations, including data processing, for the time period that they are engaged in such activities, provided that: I) NCTA gives notice to Contractor of such party, site of intended use of the Deliverables, and means of access; and 2) such patty has executed, or agrees to execute, the Contractor's standard nondisclosure or restricted use agreement which executed agreement shall be accepted by the Contractor ("Non-Disclosure Agreement"); and 3) if such party is engaged in the business of facility management, outsourcing, service bureau or other services, such third party will maintain a logical or physical partition within its computer system so as to restrict use and access to the program to that portion solely dedicated to beneficial use for the NCTA. In no event shall the State or NCTA assume any liability for third party's compliance with the terms of the Non-Disclosure Agreement, nor shall the Non-Disclosure Agreement create or impose any liabilities on the State or NCTA.
  - Any third party with whom NCTA has a relationship to perform a NCTA function or business operation, shall have the temporary right to use Deliverables, provided that such use shall be limited to the time period during which the third party is using the Deliverables for the function or business activity.
- 6. The parties acknowledge and agree that the State and NCTA shall own all right, title and interest in and to the copyright in any and all software, technical information, specifications, drawings, records, documentation, data and other work products first originated and prepared by the Contractor for delivery to NCTA ("Deliverables"). To the extent that any Contractor Technology is contained in any of the Deliverable, the Contractor hereby grants the State and NCTA a royalty-free, fully paid worldwide, perpetual, non-exclusive license to use such Contractor Technology in connection with the Deliverable for NCTA's business purposes. Contractor shall not acquire any right, title and interest in the and to the copyrights for goods, any and all software, technical information, specification, drawings, records, documentation, data or derivative works thereof, or other work products provided by the State or NCTA to Contractor.
- 7. As NCTA's business operations may be altered, expanded or, diminished, licenses granted hereunder may be transferred or combined for use at an alternative or consolidated site not originally specified in the license, including transfers between Agencies ("permitted license transfers"). NCTA will not have to obtain the approval of Contractor for permitted license transfers, but must give thirty (30) Days prior written notice to Contractor. There shall be no additional license or other transfer fees due Contractor.
- 8. The Contractor shall provide to NCTA an executable copy of all Software developed for NCTA, to include source code documentation and Application information. included with the provision of source code, the Contractor shall demonstrate to NCTA that the provided executables are the correct software for the systems as delivered.

# 3.6.2. Software Maintenance/Support Services

- I. This general requirement applies unless otherwise provided in NCTA's solicitation document or in an attachment hereto.
- For the first year and all subsequent Contract years, Contractor agrees to provide the following Services for the current version and one previous version of any Software provided with the Deliverables, commencing upon installation of the Deliverables or delivery of the Software:

- a. **Error Correction.** Upon NCTA verification of an error or defect Software, the Contractor shall use reasonable efforts to correct or provide a working solution for the error or defect Contractor's expense. NCTA shall comply with all reasonable instructions or requests of Contractor in attempts to correct an error or defect in the Program. Contractor and the State shall act promptly and in a reasonably timely manner in communicating error or defect logs, other related information, proposed solutions or workarounds, and any action as may be necessary or proper to obtain or effect Maintenance Services under this paragraph.
- b. Contractor shall notify NCTA of any material errors or defects in the Deliverables known, or made known to Contractor from any source during the Contract Term that could cause the production of inaccurate or otherwise materially incorrect, results. Contractor shall initiate actions as may be commercially necessary or proper to effect corrections of any such errors or defects.
- c. **Updates.** Contractor shall provide to NCTA, at no additional charge, all new releases and bug fixes (collectively referred to as "Changes") for any Software Deliverable developed or published by Contractor and made generally available to its other customers at no additional charge. All such Updates shall be a part of the Program and Documentation and, as such, shall be governed by the provisions of this Contract.
- d. **Telephone Assistance.** Contractor shall provide NCTA with telephone access to technical support engineers for assistance in the proper installation and use of the Software, and to report and resolve Software errors and defects in accordance with Requirements of this RFP.

# 3.6.3. Patent, Copyright and Trade Secret Protection

- 1. Contractor has created, acquired or otherwise has rights in, and may, in connection with the performance of Services for NCTA, employ, provide, create, acquire or otherwise obtain rights in various concepts, ideas, methods, methodologies, procedures, processes, know-how, techniques, models, templates and general purpose consulting and Software tools, utilities and routines (collectively, the "Contractor Technology"). To the extent that any Contractor Technology is contained in any of the Deliverables including any derivative works, the Contractor hereby grants NCTA a royalty-free, fully paid, worldwide, perpetual, non-exclusive license to use such Contractor Technology in connection with the Deliverables for NCTA's purposes.
- 2. Contractor shall not acquire any right, title and interest in and to the copyrights for goods, any and all Software, technical information, specifications, drawings, records, Documentation, data or derivative works thereof, or other work products provided by NCTA to Contractor. NCTA hereby grants Contractor a royalty-free, fully paid, worldwide, perpetual, non-exclusive license for Contractor's internal use to non-confidential Deliverables originated and prepared by the Contractor for delivery to NCTA.
- 3. The Contractor, at its own expense, shall defend any action brought against the State to the extent that such action is based upon a claim that the services or deliverables supplied by the Contractor, or the operation of such deliverables pursuant to a current version of Contractor-supplied Software, infringes a patent, or copyright or violates a trade secret in

the United States. The Contractor shall pay those costs and damages finally awarded against the State in any such action. Such defense and payment shall be conditioned on the following:

- a. That the Contractor shall be notified within a reasonable time in writing by NCTA of any such claim; and,
- b. That the Contractor shall have the sole control of the defense of any action on such claim and all negotiations for its settlement or compromise provided, however, that NCTA shall have the option to participate in such action at its own expense.
- 4. Should any services or software supplied by Contractor, or the operation thereof become, or in the Contractor's opinion are likely to become, the subject of a claim of infringement of a patent, copyright, or a trade secret in the United States, NCTA shall permit the Contractor, at its option and expense, either to procure for NCTA the right to continue using the goods/Hardware or Software, or to replace or modify the same to become non- infringing and continue to meet procurement specifications in all material respects. If neither of these options can reasonably be taken, or if the use of such goods/Hardware or Software by NCTA shall be prevented by injunction, the Contractor agrees to take back such goods/Hardware or Software, and refund any sums NCTA has paid Contractor less any reasonable amount for use or damage and make every reasonable effort to assist NCTA in procuring substitute Deliverables. If, in the sole opinion of NCTA, the return of such infringing Deliverables makes the retention of other items of Deliverables acquired from the Contractor under this Contract impractical, NCTA shall then have the option of terminating the Contract, or applicable portions thereof, without penalty or termination charge. The Contractor agrees to take back such Deliverables and refund any sums NCTA has paid Contractor less any reasonable amount for use or damage.
- 5. Contractor will not be required to defend or indemnify NCTA if any claim by a third-party against NCTA for infringement or misappropriation (i) results from the State's alteration of any Contractor-branded product or Deliverable, or (ii) results from the continued use of the good(s) or Services and Deliverables after receiving Notice they infringe a trade secret of a third-party.
- 6. Nothing stated herein, however, shall affect Contractor's ownership in or rights to its preexisting intellectual property and proprietary rights.

#### 3.6.4. Tolls Data Ownership and Security

- I. All data, records, and operations history information shall remain property of the NCTA at all times during the life of the Contract and after Contract termination.
- 2. The Contractor(s) shall ensure that no unauthorized personnel will have access to individual facilities, cabinets, data and records, payment histories, any personal information of existing or potential NCTA toll customers. Paper records shall be locked when not in use; Systems shall have secure password and ID controls for any data access. Contractor shall comply with the North Carolina Statewide Information Security Manual. Currently found at <a href="http://it.nc.gov/document/statewide-information-security-manual">http://it.nc.gov/document/statewide-information-security-manual</a>, as may be amended from time to time throughout the term of the Contract.

#### 3.7. Other General Provisions

#### 3.7.1. Governmental Restrictions

I. In the event any restrictions are imposed by governmental requirements that necessitate alteration of the material, quality, workmanship, or performance of the Deliverables offered prior to delivery thereof, the Contractor shall provide written notification of the necessary alteration(s) to NCTA. NCTA reserves the right to accept any such alterations, including any price adjustments occasioned thereby, or to cancel the Contract. NCTA may advise Contractor of any restrictions or changes in specifications required by North Carolina legislation, rule or regulatory authority that require compliance by the State. In such event, Contractor shall use its best efforts to comply with the required restrictions or changes. If compliance cannot be achieved by the date specified in the Contract, NCTA may terminate this Contract and compensate Contractor for sums due under the Contract.

## 3.7.2. Prohibition Against Contingent Fees and Gratuities:

- 1. Contractor warrants that it has not paid, and agrees not to pay, any bonus, commission, fee, or gratuity to any employee or official of the State for the purpose of obtaining any contract or award issued by the State. Contractor further warrants that no commission or other payment was or will be received from or paid to any third-party contingent on the award of any contract by the State, except as shall be expressly communicated to NCTA in writing prior to Acceptance of the Contract or award in question. Each individual signing below warrants that he or she is duly authorized by their respective Party to sign this Contract and bind the Party to the terms and conditions of this Contract. Contractor and their authorized signatory further warrant that no officer or employee of the State has any direct or indirect financial or personal beneficial interest, in the subject matter of this Contract; obligation or contract for future award of compensation as an inducement or consideration for making this Contract. Subsequent discovery by the State of non-compliance with these provisions shall constitute sufficient cause for immediate termination of all outstanding contracts. Violations of this provision may result in debarment of the bidder(s) or Contractor(s) as permitted by State or Federal law.
- 2. Gift Ban By Executive Order 24, issued by Governor Perdue, and G.S. § 133-32, it is unlawful for any vendor or contractor (i.e., architect, bidder, contractor, construction manager, design professional, engineer, landlord, offeror, seller, subcontractor, supplier, or vendor), to make gifts or to give favors to any State employee of the Governor's cabinet agencies (i.e., Administration, Commerce, Correction, Crime Control and Public Safety, Cultural Resources, Environment and Natural Resources, Health and Human Services, Juvenile Justice and Delinquency Prevention, Revenue, Transportation, and the Office of the Governor). This prohibition covers those vendors and contractors who: (a) have a contract with a governmental agency; or (b) have performed under such a contract within the past year; or (c) anticipate bidding on such a contract in the future. For additional information regarding the specific requirements and exemptions, vendors and contractors are encouraged to review Executive Order 24 and G.S. § 133-32.

#### 3.7.3. Equal Employment Opportunity

I. Contractor shall comply with all Federal and State requirements concerning fair employment and employment of the disabled, and concerning the treatment of all employees without

regard to discrimination by reason of race, color, religion, sex, national origin or physical disability.

#### 3.7.4. Inspection at Contractor's Site

1. NCTA reserves the right to inspect, during Contractor's regular business hours at a reasonable time, upon Notice of not less than two (2) weeks, and at its own expense, the prospective Deliverables comprising Equipment or other tangible goods, or the plant or other physical facilities of a prospective Contractor prior to Contract award, and during the Contract Term as necessary or proper to ensure conformance with the specifications/Requirements and their adequacy and suitability for the proper and effective performance of the Contract.

# 3.7.5. Advertising / Press Release

 The Contractor absolutely shall not publicly disseminate any information concerning the Contract without prior written Approval from the State or its Agent. For the purpose of this provision of the Contract, the Agent is the NCTA Contract Administrator unless otherwise named in the solicitation documents.

## 3.7.6. Confidentiality

- 1. To promote maximum competition in the State competitive bidding process, the State may maintain the confidentiality of certain types of information described in G.S. §132-1 et. seq. Such information may include trade secrets defined by G.S. §66-152 and other information exempted from the Public Records Act pursuant to G.S. §132-1.2. Contractor may designate appropriate portions of its response as confidential, consistent with and to the extent permitted under the Statutes and Rules set forth above, by marking the top and bottom of pages containing confidential information with a legend in boldface type "CONFIDENTIAL". By so marking any page, the Contractor warrants that it has formed a good faith opinion, having received such necessary or proper review by counsel and other knowledgeable advisors that the portions marked confidential meet the requirements of the Rules and Statutes set forth above. However, under no circumstances shall price information be designated as confidential. The State may serve as custodian of Contractor's confidential information and not as an arbiter of claims against Contractor's assertion of confidentiality. If an action is brought pursuant to G.S. §132-9 to compel the State to disclose information marked confidential, the Contractor agrees that it will intervene in the action through its counsel and participate in defending the State, including any public official(s) or public employee(s). The Contractor agrees that it shall hold the State and any official(s) and individual(s) harmless from any and all damages, costs, and attorneys' fees awarded against the State in the action. The State agrees to promptly notify the Contractor in writing of any action seeking to compel the disclosure of Contractor's confidential information. The State shall have the right, at its option and expense, to participate in the defense of the action through its counsel. The State shall have no liability to Contractor with respect to the disclosure of Contractor's confidential information ordered by a court of competent jurisdiction pursuant to G.S. §132-9 or other applicable law.
  - a. Care of Information: Contractor agrees to use commercial best efforts to safeguard and protect any data, documents, files, and other materials received from the State or NCTA during performance of any contractual obligation from loss, destruction or erasure.

- b. Contractor warrants that all its employees and any approved third-party contractors or subcontractors are subject to a non-disclosure and confidentiality agreement enforceable in North Carolina. Contractor will, upon request of the State, verify and produce true copies of any such agreements. Production of such agreements by Contractor may be made subject to applicable confidentiality, non-disclosure or privacy laws; provided that Contractor produces satisfactory evidence supporting exclusion of such agreements from disclosure under the N.C. Public Records laws in G.S. §132-1 et. seq. The State may, in its sole discretion, provide a non-disclosure and confidentiality agreement satisfactory to the State for Contractor's execution. The State may exercise its rights under this subparagraph as necessary or proper, in its discretion, to comply with applicable security regulations or statutes including, but not limited to 26 USC 6103 and IRS Publication 1075, (Tax Information Security Guidelines for Federal, State, and Local Agencies), HIPAA, 42 USC 1320(d) (Health Insurance Portability and Accountability Act), any implementing regulations in the Code of Federal Regulations, and any future regulations imposed upon the Office of Information Technology Services or the N.C. Department of Revenue pursuant to future statutory or regulatory requirements.
- c. Nondisclosure: Contractor agrees and specifically warrants that it, its officers, directors, principals and employees, and any Subcontractors, shall hold all information received during performance of this Contract in the strictest confidence and shall not disclose the same to any third-party without the express written approval of the State.
- d. Contractor shall protect the confidentiality of all information, data, instruments, studies, reports, records and other materials provided to it by NCTA or maintained or created in accordance with this Contract. No such information, data, instruments, studies, reports, records and other materials in the possession of Contractor shall be disclosed in any form without the prior written consent of the NCTA. Contractor will have written policies governing access to and duplication and dissemination of all such information, data, instruments, studies, reports, records and other materials.
- e. All Project materials, including Software, data, and Documentation created during the performance or provision of Services hereunder that are not licensed to the State or are not proprietary to the Contractor are the property of the State of North Carolina and must be kept confidential or returned to the State, or destroyed. Proprietary Contractor materials shall be identified to the State by Contractor prior to use or provision of Services hereunder and shall remain the property of the Contractor. Derivative works of any Contractor proprietary materials prepared or created during the performance of provision of Services hereunder shall be subject to a perpetual, royalty free, nonexclusive license to the State.

#### 3.7.7. Deliverables

I. Deliverables, as used herein, shall comprise all Hardware, Contractor Services, professional services, Software and provided modifications to the Software, and incidental materials, including any goods, Software or Services access license, data, reports and Documentation provided or created during the performance or provision of Services hereunder. Hardware, Custom Software first requested and developed for the State and other Deliverables not subject to owner licensing or leasing are the property of the State of North Carolina.

Proprietary Contractor materials licensed to the State shall be identified to the State by Contractor prior to use or provision of Services hereunder and shall remain the property of the Contractor. Deliverables include "Work Product" and means any expression of Licensor's findings, analyses, conclusions, opinions, recommendations, ideas, techniques, know-how, Designs, programs, enhancements, and other technical information; but not source and object code or Software.

## 3.7.8. Late Delivery, Back Order

 Contractor shall advise NCTA immediately upon determining that any Deliverable will not, or may not, be delivered at the time or place specified. Together with such Notice, Contractor shall state the projected delivery time and date. In the event the delay projected by Contractor is unsatisfactory, NCTA shall so advise Contractor and may proceed to procure substitute Deliverables or Services.

## 3.7.9. Assignment

1. Contractor may not assign this Contract or its obligations hereunder except as permitted by 09 NCAC 06B.1003 and this paragraph. Contractor shall provide reasonable Notice of not less than thirty (30) Days prior to any consolidation, acquisition, or merger. Any assignee shall affirm this Contract atoning to the terms and conditions agreed, and that Contractor shall affirm that the assignee is fully capable of performing all obligations of Contractor under this Contract. An assignment may be made, if at all, in writing by the Contractor, Assignee and the State setting forth the foregoing obligation of Contractor and Assignee.

## 3.7.10. Insurance Coverage

I. During the term of the Contract, the Contractor at its sole cost and expense shall provide commercial insurance of such type and with such terms and limits as may be reasonably associated with the Contract. As a minimum, the Contractor shall provide and maintain the coverage and limits, as set forth in **Section I, Administrative**, Section 4.2, Insurance Requirements.

#### 3.7.11. Dispute Resolution

In the event of any dispute whatsoever arising out of or relating to the Contract Documents, the Work or the Project, the disputing party must furnish a written Notice to the other party, setting forth in detail the dispute. Such Notice must be addressed to the other party's Project Manager. Within five (5) Days after the receipt of the Notice by the receiving Project Manager, the two Project Managers shall meet in NCTA's offices to attempt to resolve the dispute. If the Project Managers cannot resolve the dispute then, within fourteen (14) Days after the date of written Notice by either Project Manager to the Executive Director of NCTA and the Project Principal, the Executive Director of NCTA and the Project Principal cannot resolve the dispute. If the Executive Director of NCTA and the Project Principal cannot resolve the dispute or otherwise agree to extend the time within which to attempt to resolve the dispute, then either Party may pursue those remedies as allowed under this Contract.

#### 3.7.12. Default

I. In the event any Deliverable furnished by the Contractor during performance of any Contract Term fails to conform to any material requirement of the Contract specifications, Notice of the failure is provided by NCTA and the failure is not cured within ten (10) Days, or Contractor fails to meet the requirements of paragraph 3. 2 herein, NCTA may cancel and procure the articles or Services from other sources; holding Contractor liable for any excess costs occasioned thereby, subject only to the limitations provided in paragraphs 3.7.14 and 3.7.16 and the obligation to informally resolve disputes as provided in these Terms and Conditions. Default may be cause for debarment as provided in 09 NCAC 06B.1206. NCTA reserves the right to require performance guaranties pursuant to 09 NCAC 06B.1207 from the Contractor without expense to the State. The rights and remedies of NCTA provided above shall not be exclusive and are in addition to any other rights and remedies provided by law or under the Contract. NCTA allows for ten (10) Days to rectify a problem and thirty (30) Days to cure a termination.

- If Contractor fails to deliver Deliverables within the time required by this Contract, NCTA
  may provide written Notice of said failure to Contractor, and by such Notice require payment
  of a penalty.
- Contractor will use reasonable efforts to mitigate delays, costs or expenses arising from assumptions in the Contractor's bid documents that prove erroneous or are otherwise invalid.
- 4. Should NCTA fail to perform any of its obligations upon which Contractor's performance is conditioned, Contractor shall not be in default for any delay, cost increase or other consequences due to NCTA's failure. Any deadline that is affected by any such failure in assumptions or performance by NCTA shall be extended by an amount of time reasonably necessary to compensate for the effect of such failure.
- 5. Contractor shall provide a Plan to cure any default if requested by NCTA. The Plan shall state the nature of the default, the time required for cure, any mitigating factors causing or tending to cause the default, and such other information as the Contractor may deem necessary or proper to provide.

#### 3.7.13. Waiver of Default

I. Waiver by either party of any default or breach by the other Party shall not be deemed a waiver or any subsequent default or breach and shall not be construed to be a modification or novation of the terms of this Contract, unless so stated in a writing and signed by authorized representatives of NCTA and the Contractor, and made as an Amendment in accordance with the terms of this Contract.

# 3.7.14. Limitation of Contractor's Liability

- I. Where Deliverables are under NCTA's exclusive management and control, the Contractor shall not be liable for direct damages caused by NCTA's failure to fulfill any responsibilities of assuring the proper use, management and supervision of the Deliverables and programs, audit controls, operating methods, office procedures, or for establishing all proper checkpoints necessary for NCTA's intended use of the Deliverables.
- 2. The Contractor's liability for damages to NCTA for any cause whatsoever, and regardless of the form of action, whether in contract or in tort, shall be limited to two times the value of the Contract.

3. The foregoing limitation of liability shall not apply to the payment of costs and damage awards referred to in the paragraph entitled "Patent, Copyright, and Trade Secret Protection", to claims covered by other specific provisions calling for liquidated damages or specifying a different limit of liability, to claims for injury to persons or damage to property caused by Contractor's negligence or willful or wanton conduct or for claims for losses relating to the loss of, unauthorized access to, or unauthorized disclosure of data. This limitation of liability does not apply to the receipt of court costs or attorney's fees that might be awarded by a court in addition to damages after litigation based on this Contract.

## 3.7.15. Contractor's Liability for Injury to Persons or Damage to Property

- 1. The Contractor shall be liable for damages arising out of personal injuries and/or damage to real or tangible personal property of NCTA, employees of NCTA, persons designated by NCTA for training, or person(s) other than Agents or employees of the Contractor, designated by NCTA for any purpose, prior to, during, or subsequent to delivery, installation, Acceptance, and use of the Deliverables either at the Contractor's site or at NCTA's place of business, provided that the injury or damage was caused by the fault or negligence of the Contractor.
- 2. The Contractor agrees to indemnify, defend and hold NCTA and the State and its Officers, employees, Agents and assigns harmless from any liability relating to personal injury or injury to real or personal property of any kind, accruing or resulting to any other person, firm or corporation furnishing or supplying Work, Services, materials or supplies in connection with the performance of this Contract, whether tangible or intangible, arising out of the ordinary negligence, willful or wanton negligence, or intentional acts of the Contractor, its officers, employees, agents, assigns or Subcontractors, in the performance of this Contract.
- Contractor shall not be liable for damages arising out of or caused by an alteration or an
  attachment not made or installed by the Contractor, or for damage to alterations or
  attachments that may result from the normal operation and maintenance of the Contractor's
  goods.

# 3.7.16. General Indemnity

- 1. The Contractor shall hold and save NCTA, its officers, Agents and employees, harmless from liability of any kind, including all claims and losses, with the exception of consequential damages, as normally construed, accruing or resulting to any other person, firm or corporation furnishing or supplying Work, Services, materials or supplies in connection with the performance of this Contract. The foregoing indemnification and defense by the Contractor shall be conditioned upon the following:
  - a. NCTA shall give Contractor written Notice within thirty (30) Days after it has actual knowledge of any such claim(s) or action(s) filed; and
  - b. The Contractor shall have the sole control of the defense of any such claim(s) or action(s) filed and of all negotiations relating to settlement or compromise thereof, provided, however, that NCTA shall have the option to participate at their own expense in the defense of such claim(s) or action(s) filed.

#### 3.7.17. Changes

1. This Contract is awarded subject to shipment of quantities, qualities, and prices indicated in the Contract, and all conditions and instructions of the Contract or Proposal on which it is based. Any changes made to this Contract or purchase order proposed by the Contractor are hereby rejected unless accepted in writing by NCTA. NCTA shall not be responsible for Deliverables or Services delivered other than those specified in the Contract or the Proposal on which it is based.

#### 3.7.18. Time is of the Essence

Time is of the essence in the performance of this Contract. Contractor and NCTA will
mutually develop and agree to a schedule of design, development, testing, implementation,
maintenance, etc. Contractor and Subcontractors will be required to adhere to the Approved
schedule.

## 3.7.19. Date and Time Warranty

1. The Contractor warrants that any Deliverable, whether Hardware, firmware, middleware, custom or commercial Software, or internal components, subroutines, and interface therein which performs any date and/or time data recognition function, calculation, or sequencing, will provide accurate date/time data and leap year calculations. This warranty shall survive termination or expiration of the Contract.

# 3.7.20. Independent Contractors

I. Contractor and its employees, officers and executives, and Subcontractors, if any, shall be independent Contractors and not employees or Agents of the State. This Contract shall not operate as a joint venture, partnership, trust, authority or any other business relationship.

# 3.7.21. Transportation

I. Transportation of Deliverables shall be FOB Destination unless otherwise specified in this RFP. Freight, handling, hazardous material charges, and distribution and installation charges shall be included in the total price of each item. Any additional charges shall not be honored for payment unless authorized in writing by NCTA. In cases where parties, other than the Contractor ship materials against this Contract, the shipper shall be instructed to show the purchase order number on all packages and shipping manifests to ensure proper identification and payment of invoices. A complete packing list shall accompany each shipment.

#### 3.7.22. Notices

Any Notices required under this Contract should be delivered to the Contractor or NCTA.
 Unless otherwise specified in the Solicitation Documents, any Notices shall be delivered in writing by U.S. Mail, Commercial Courier or by hand.

#### 3.7.23. Titles and Headings

1. Titles and Headings in this Contract are used for convenience only and do not define, limit or proscribe the language of terms identified by such Titles and Headings.

#### 3.7.24. Amendment

 This Contract may not be amended orally or by performance. Any Amendment must be made in written form and signed by duly authorized representatives of NCTA and Contractor in conformance with Contract requirements.

#### 3.7.25. Taxes

1. The State of North Carolina is exempt from Federal excise taxes and no payment will be made for any personal property taxes levied on the Contractor or for any taxes levied on employee wages. Agencies of the State may have additional exemptions or exclusions for Federal or State taxes. Evidence of such additional exemptions or exclusions may be provided to Contractor by Agencies, as applicable, during the term of this Contract. Applicable State or local sales taxes shall be invoiced as a separate item and not included in the Price Proposal.

## 3.7.26. Governing Laws, Jurisdiction, and Venue

- 1. This Contract is made under and shall be governed and construed in accordance with the laws of the State of North Carolina. The place of this Contract or purchase order, its situs and forum, shall be Wake County, North Carolina, where all matters, whether sounding in contract or in tort, relating to its validity, construction, interpretation and enforcement shall be determined. Contractor agrees and submits, solely for matters relating to this Contract, to the jurisdiction of the courts of the State of North Carolina, and stipulates that Wake County shall be the proper venue for all matters.
- 2. Except to the extent the provisions of the Contract are clearly inconsistent therewith, the applicable provisions of the Uniform Commercial Code as modified and adopted in North Carolina shall govern this Contract. To the extent the Contract entails both the supply of "goods" and "Services," such shall be deemed "goods" within the meaning of the Uniform Commercial Code, except when deeming such Services as "goods" would result in a clearly unreasonable interpretation.

# 3.7.27. Force Majeure

I. Neither party shall be deemed to be in default of its obligations hereunder if and so long as it is prevented from performing such obligations as a result of events beyond its reasonable control, including without limitation, fire, power failures, any act of war, hostile foreign action, nuclear explosion, riot, strikes or failures or refusals to perform under subcontracts, civil insurrection, earthquake, hurricane, tornado, or other catastrophic natural event or act of God. Force Majeure events shall not otherwise limit NCTA's rights to enforce contracts.

#### 3.7.28. Compliance with Laws

1. The Contractor shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements that are applicable to the conduct of its business, including those of Federal, State, and local agencies having jurisdiction and/or authority.

## 3.7.29. Severability

In the event that a court of competent jurisdiction holds that a provision or requirement of this Contract violates any applicable law, each such provision or requirement shall be enforced only to the extent it is not in violation of law or is not otherwise unenforceable and all other provisions and Requirements of this Contract shall remain in full force and effect. All promises, requirement, terms, conditions, provisions, representations, guarantees and warranties contained herein shall survive the expiration or termination date unless specifically provided otherwise herein, or unless superseded by applicable Federal or State statute, including statutes of repose or limitation.

## 3.7.30. Federal Intellectual Property Bankruptcy Protection Act

1. The Parties agree that NCTA shall be entitled to all rights and benefits of the Federal Intellectual Property Bankruptcy Protection Act, Public Law 100-506, codified at 11 U.S.C. 365(n) and any amendments thereto.

#### 3.7.31. Iran Divestment Act Certification

I. The Contractor certifies that, as of the date listed below, it is not on the Final Divestment List as created by the State Treasurer pursuant to G.S. § 147-86.58 et seq. In compliance with the requirements of the Iran Divestment Act and G.S. §147-86.60 et seq, Contractor shall not utilize in the performance of the Contract any Subcontractor that is identified on the Final Divestment List. The Final Divestment List can be found on the State Treasurer's website at the address <a href="www.nctreasurer.com/lran">www.nctreasurer.com/lran</a> and should be updated every one hundred and eighty (180) Days.

## 3.7.32. Availability of Funds

I. Any and all payments to Contractor are expressly contingent upon and subject to the appropriation, allocation and availability of funds to NCTA for the purposes set forth in this Contract. If this Contract is funded in whole or in part by Federal funds, the Agency's performance and payment shall be subject to and contingent upon the continuing availability of said Federal funds for the purposes of the Contract. If the term of this Contract extends into fiscal years subsequent to that in which it is approved, such continuation of the Contract is expressly contingent upon the appropriation, allocation and availability of funds by the N.C. Legislature for the purposes set forth in the Contract. If funds to effect payment are not available, the Agency will provide written notification to Contractor. If the Contract is terminated under this paragraph, Contractor agrees to take back any affected Deliverables and Software not yet delivered under this Contract, terminate any Services supplied to the Agency under this Contract, and relieve NCTA of any further obligation thereof. The State shall remit payment for Deliverables and Services accepted prior to the date of the aforesaid Notice in conformance with the payment terms.