Mandatory BOS Pre-Proposal Meeting

October 24, 2017 10:00 am – 12:00 pm

Welcome & Introductions
Beau Memory
NCTA Executive Director

Staff Introductions

NCTA Staff and Roles

- Marvin Butler – Deputy Executive Director
- Andy Lelewski, P.E. – Director of Toll Operations
- Kristen Pearce – Back Office System Manager
- John Stansberry – Roadside Toll Collection System Manager
- Wendy Griffin – Toll Revenue Manager
- Luke Harris – NCDOT Finance
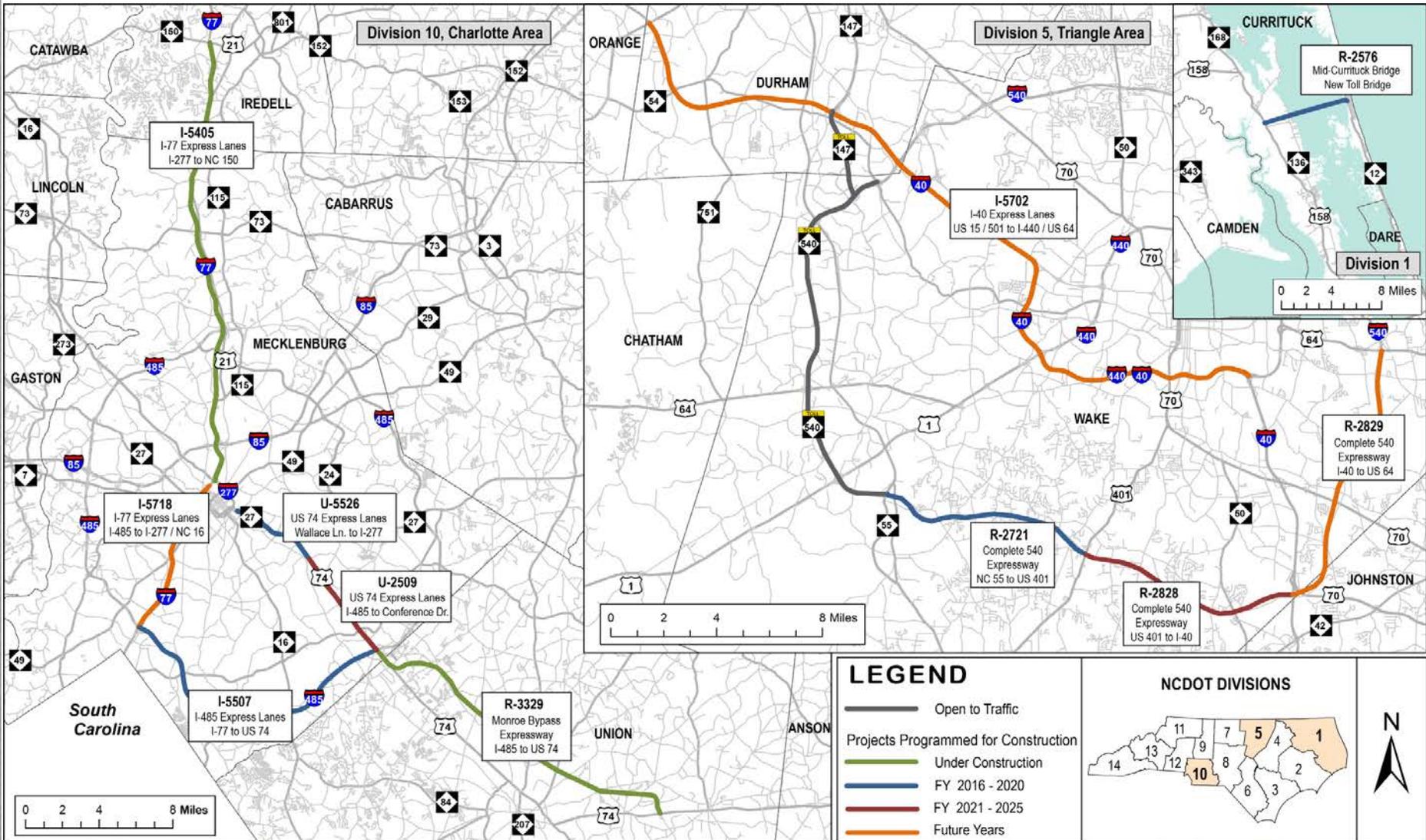
Staff Introductions

Consultant Support

- Kevin Palmer, P.E.
- Helen Wong
- Seth Fisher, P.E.
- Jerry Eakes
- Daniel Robicheaux
- Greg Vari

NCTA Program Overview

- Agency History
- Staffing Approach
    - Consultant staff augmentation
- Outsourcing Approach
    - BOS and RTCS Systems
    - CSC Operations and Staffing
- NCTA Toll Program Expansion Projects

North Carolina Turnpike Authority

Agenda

- Project Introduction / Goals of Procurement
- Purpose of Meeting
- Procurement and Contract Overview
- Scope of Work and Requirements Overview
- Questions and Answers
- Closing Remarks

Project Introduction & Goals of Procurement

Andy Lelewski, P.E.
Director of Toll Operations

Purpose of Pre-Proposal Meeting

- Provide an overview of the solicitation
  - Solicitation goals
  - Structure and organization of the RFP
  - Highlight key elements of the RFP and Scope of Work and Requirements
  - Highlight key Proposal Requirements
  - Review Schedule of Procurement Events
- Respond to Proposers' questions

Pre-Proposal Meeting Requirements

- All attendees must sign in
- Proposers may submit questions to be answered during the Q&A period (Use notecards and box provided)
- All verbal comments, questions and responses are non-binding
- Official responses will be made in writing and posted to the website
- Copies of this presentation and sign-in sheets will be posted on the website
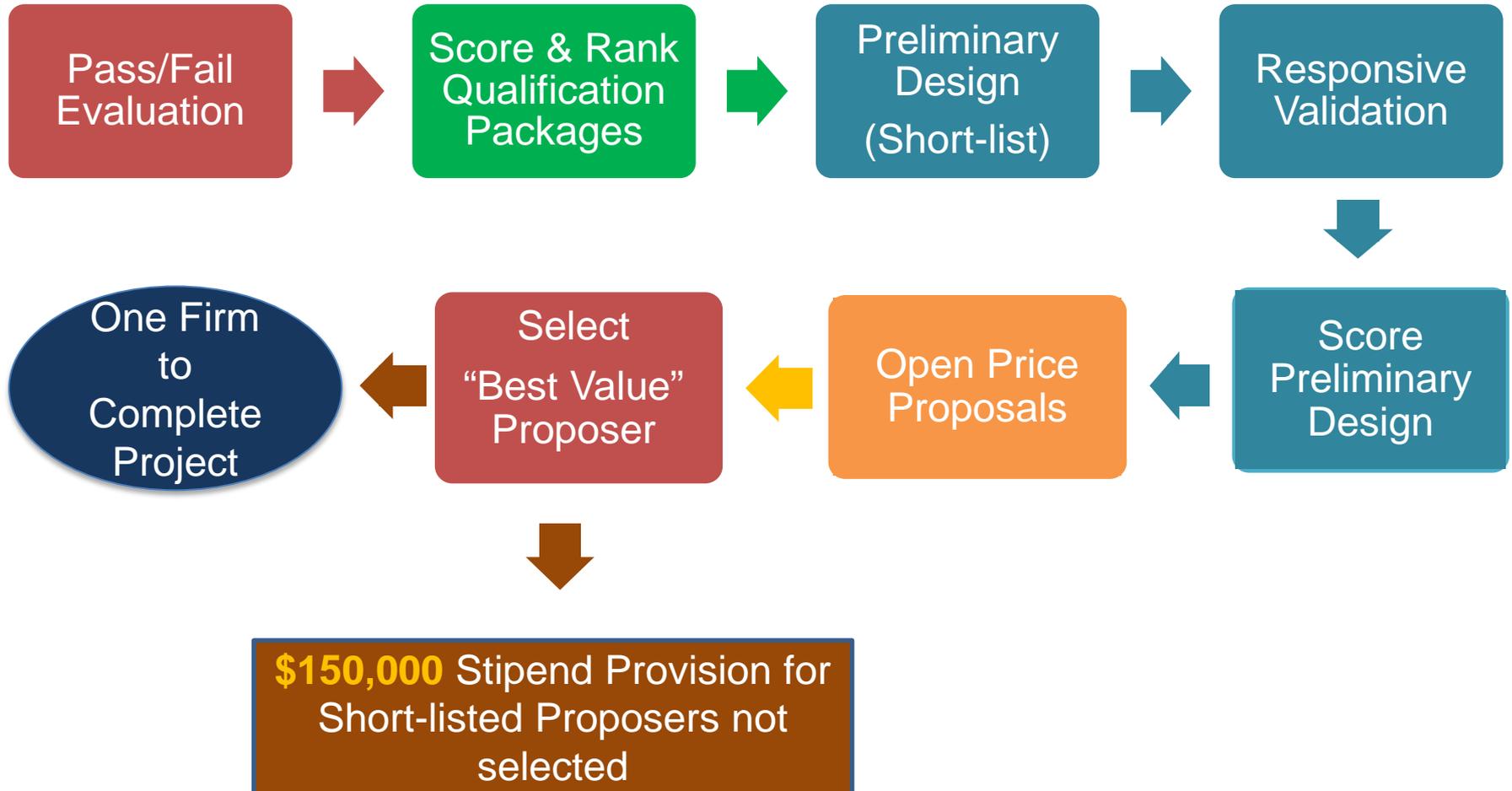
NCTA Toll Operations Program Goals

	Tri-Protocol AVI Equipment / Transponders	Completed Transactions from Roadside System	HOV Declaration APP
Triangle Expressway	✓		
Monroe Expressway	✓	✓	
US-74 Express Lanes	✓	✓	✓
I-77 Express Lanes	✓	✓	✓

Back Office System

Procurement & Contract Overview

Kevin Palmer, P.E.
NCTA Consultant Support

Procurement Process

Pass/Fail Evaluation → Score & Rank Qualification Packages → Preliminary Design (Short-list) → Responsive Validation

One Firm to Complete Project ← Select "Best Value" Proposer ← Open Price Proposals ← Score Preliminary Design

$150,000 Stipend Provision for Short-listed Proposers not selected

RFP Content

- Section I Administrative
- Section II Definitions and Acronyms
- Section III Scope of Work and Requirements
- Section IV Qualification Package Response and Submission Instructions
- Section V Terms and Conditions

Procurement Schedule

SCHEDULE (The NCTA reserves the right to modify the schedule at any time and for any reason.)	
RFP Issue Date	**October 10, 2017**
Mandatory Pre-Proposal Conference	**October 24, 2017 (10:00 a.m. to 12:00 p.m. EDT)**
RFP Questions and Proposer Industry Comment Due	**November 7, 2017**
NCTA Question Responses and Addendum (if required) Due	**November 27, 2017**
Response to RFP (Proposer's Qualification Package) Due Date/Time	**December 21, 2017 (4:00 p.m. EST)**
Short-list Notification	**February 12, 2018**
Final Contractor Selection	**June 21, 2018**

Question and Feedback Process

- Proposer Questions

- Industry Comment

- All questions and industry comment to be submitted using forms provided

- NCTA will provide responses and publish addenda as required

- Input due November 7; NCTA will publish responses November 27

Embedded Forms

- Some files are embedded within BOS_RFP_Exhibits.pdf
- Embedded files are fillable .pdf files or native Word / Excel files for Proposer use

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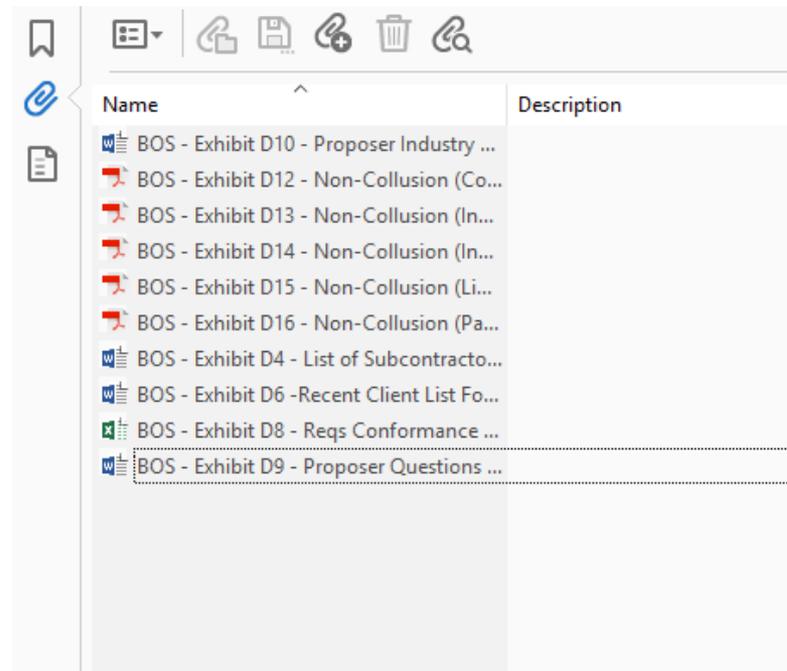
Submittal Requirements

- Refer to Section IV for Detailed Requirements
- Pay close attention to Forms
- All submittals shall be delivered to:

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

Proposer Minimum Requirements

- Refer to Section IV, 1.2 Qualification Requirements
- Highlights:
  - Experience designing and integrating back office solutions in support of tolling operations, or similar business models supporting account quantities and annual transaction volumes similar to, or in excess of, NCTA's current transaction volumes listed in Attachment 1
  - Experience delivering and operating a similar solution for at least one year within the past five years
  - Experience successfully migrating legacy data from an existing system to the Proposer's system
  - Relevant key personnel experience and availability
  - Experience designing, developing, deploying and maintaining website and mobile applications on multiple web browsers 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

Qualification Package Submittal and Evaluation

- **Due December 21, 2017 NLT 4:00 PM**
- Response limited to 60 pages – refer to Section IV
- NCTA may schedule interviews
- NCTA will short-list two or three firms based on Qualification Package and Interviews

Qualification Package Evaluation

Qualification Package Elements	Maximum Possible Points
Qualification Package Section 1: Proposer Qualifications	**15**
Qualification Package Section 2: Key Team Qualifications	**25**
Qualification Package Section 3: Approach to Scope of Work and Requirements	**25**
Qualification Package Section 4: Approach to Project Plan and Implementation	**20**
Qualification Package Section 5: Approach to Maintenance	**15**
Maximum Possible Technical Points	**100**

Preliminary System Design Phase

- Short-Listed Firms provided Schedule of Events
- Consistent, structured treatment of Short-listed Firms
- Stipend paid to firms not selected
- Four month evolution including:
  - Kick off meeting to confirm expectations
  - Q&A opportunities
  - Short-listed Firms submittal of Preliminary System Design artifacts
  - NCTA evaluation of submitted artifacts
  - Short-listed Firm system demonstration and extended interview
  - Pricing submittal
  - Best value selection

Preliminary System Design Process

Technical Review Committee

Start

60 calendar days after Project Kick-off

30 calendar days after Project Kick-off

End

1. Conduct Preliminary Design Kick-off with Short-listed Proposers

3. Respond to questions, and issue RFP Addendum as needed

6. Respond to questions, publish answers, and issue RFP Addendum as needed

8. Evaluate Preliminary System Design (60 calendar days)

Within 10 calendar days

Vendors

2. Submit questions

4. Initial submittals

Within 5 calendar days

5. Final questions due

7. Final submitals

Preliminary System Design Submittals

- Draft Programmatic Documents
  - Project Management Plan
  - Quality Management Plan
  - Communications Plan
  - Document Deliverable and Management Plan
  - Change Management Plan
  - Software Development Plan
  - Risk Management Plan
- Requirements Traceability Matrix
- Preliminary System Design
- Implementation Schedule
- **System Demonstration / Interview after Submittal**

Preliminary System Design Evaluation

Preliminary Design Package Elements	Maximum Possible Points
Preliminary System Design Document	25
Approach to Legacy Data Migration	15
Approach to BOS design, communications infrastructure design, and system hosting mechanism (e.g. cloud-based or other) proposal of hardware and software components	15
Quality of Preliminary System Design Phase documentation and Schedule	15
Customer Service Functionality Offered, and Configurability	15
Quality of User Interface Design and Usability	15
Maximum Possible Technical Points	100

Price Proposals

- Short-listed Firms will be provided pricing forms
- Majority of third party items will be pass through
- Price Proposals will be due approximately 110 days after Preliminary System Design Phase commences
- Milestone payment approach

Contract Term

- Implementation – From NTP through System Acceptance

- Maintenance – Five year period from System Acceptance

- Options to Extend – Two 3-year optional Maintenance extensions

On Time Completion Bonus

- Refer to Section V, 1.3.1 Bonus Payments
- $75,000 bonus for achieving Go-Live date established in Section III
- $175,000 bonus for successfully completing the Operations Observation Period within the period established in Section III

Non-Solicitation Provision

- Refer to Section I, Paragraph 2.4
- ONLY contact NCTA in the manner identified in Section I
- Violation may be grounds for rejection of proposal

Scope of Work & Requirements Overview

Kristen Pearce
Back Office System Manager

Scope of Work

- Complete Project Management Services
  - Documentation, Reporting, **Communications & Collaboration**
- Preliminary and Final System Design
- System Integration Including External Interfaces
- Infrastructure Procurement and Integration
- System Testing
- Migration from Legacy System
- Training
  - Operations Staff Training
  - Agency Staff Training
- Maintenance

Key Implementation Dates

Milestone	Start Date	End Date
Receipt of Qualification Packages		December 21, 2017
Qualification Package Scoring and Short-listing	December 22, 2017	February 11, 2018
Authority Notifies Short-listed Proposers and Holds Kick-off Meeting	February 12, 2018	February 28, 2018
Preliminary System Design Procurement Phase	March 1, 2018	June 20, 2018
Final Selection and Contract Negotiations	June 21, 2018	July 31, 2018
Notice to Proceed (Final System Design and Development Phase Commences)	August 1, 2018	January 31, 2019
System Testing and Installation Phase	February 1, 2019	May 20, 2019
Training Phase	May 21, 2019	August 1, 2019
Cutover from Legacy System	July 1, 2019	July 31, 2019
Back Office Go Live		August 1, 2019
Maintenance and Project Closeout Phases	August 2019	October 2024

Scope of Work

Key Personnel Requirements

- Refer to Section III, 2.1.4 Key Personnel
    - Project Principal
    - Contract Project Manager**
    - Lead Business Analyst**
    - Software Development Manager**
    - Implementation Manager
    - Quality Assurance Manager
    - Maintenance Manager*

* Shall reside in Raleigh area

** 100% dedicated to project; shall reside in Raleigh area

Testing Overview

- Incremental Approach to Testing Leading to Successful Go Live

- Testing Phases:
  - Usability and User Interface Testing
  - User Acceptance Test
  - Concept Validation Test
  - Site Acceptance Test
  - Disaster Recovery Test (as applicable based on cloud approach)
  - Google Play and Application Store Certification Testing
  - Security Scans and Related Tests
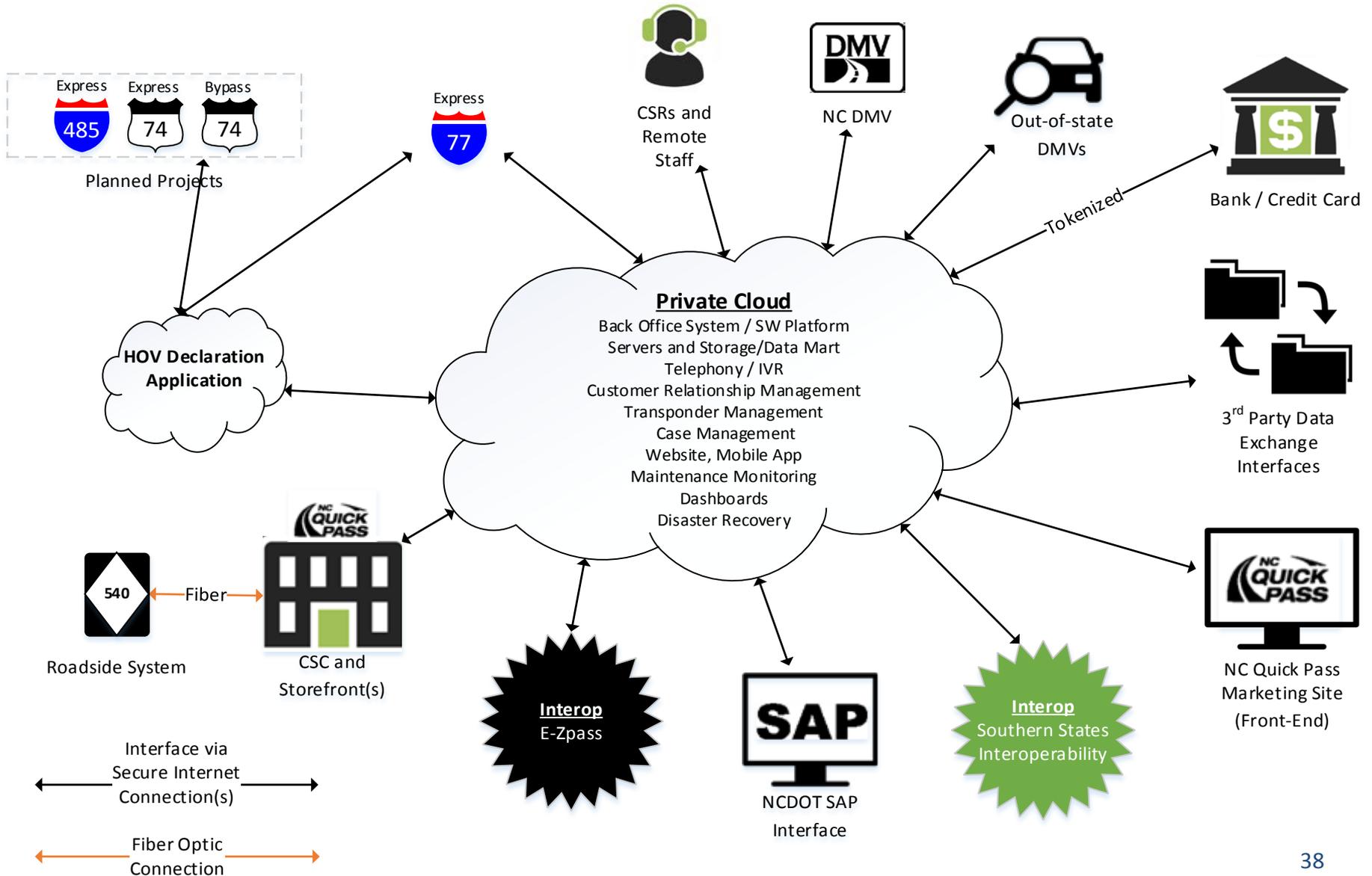 - Operations Observation Period

Documentation

- SharePoint Project Site Provided by NCTA
- Collaboration is Key
- Submittal Review Process
  - Initial Submittal Reviewed by NCTA; Comments Provided
  - Contractor Addresses All Comments, Schedules Comment Resolution Meeting
  - **Decision Makers** and SMEs Meet and **Resolve** All Open Comments
  - Final Document Published

Functional Requirements

- **High Level Goals**
  - Modular Approach to Solution Provision
  - Limited On Premise Infrastructure
  - Private Cloud with Emphasis on Resiliency and Scalability
  - Flexible Software Architecture – Built to Change
  - Extensive Reporting and Data Analytics

- **Customer Service Focus**
  - Full Featured Mobile App
  - Enhanced Self Service Capabilities
  - Seamless Account Conversion

- **Operational Efficiency**
  - Focus on User Interface and Streamlined Work Flow

Conceptual Back Office Solution

Express **485** Express **74** Bypass **74**

Planned Projects

Express **77**

CSRs and Remote Staff

DMV NC DMV

Out-of-state DMVs

Bank / Credit Card

Tokenized

HOV Declaration Application

Private Cloud
Back Office System / SW Platform
Servers and Storage/Data Mart
Telephony / IVR
Customer Relationship Management
Transponder Management
Case Management
Website, Mobile App
Maintenance Monitoring
Dashboards
Disaster Recovery

3rd Party Data Exchange Interfaces

NC QUICK PASS

540 Roadside System

Fiber

CSC and Storefront(s)

Interop E-Zpass

SAP NCDOT SAP Interface

Interop Southern States Interoperability

NC Quick Pass Marketing Site (Front-End)

Interface via Secure Internet Connection(s)

Fiber Optic Connection

Major System Interfaces

- Roadside Toll Collection Systems
  - Fully Formed Transaction Model
- NCDOT Finance
- Tokenized Credit Card Processing
- Interoperable Partners
  - E-ZPass Interagency Group
  - Southern States Interoperability Group
- DMV / License Plate Lookup Service(s)

Performance Standards

- Focus on system availability and timely processing
- Intent is to provide performance requirements that are not overly prescriptive
- Contractor required to provide monthly compliance reporting

Performance Standards

- Refer to Section III; 4 Performance Requirements
- Defined as follows
  - Objective
  - Required Service
  - Performance Standard
  - Method of Measurement
  - Damages

4.1. Performance Requirement Details

Performance Objective	Required Service	Performance Standard	Method of Measurement	Damages*
4.1.1. Back Office System Requirements				
Back Office System availability	The system needs to operate continuously throughout the year and cannot be down more than two (2) hours in a given year (or 8 minutes and 45 seconds a month) as a result of Contractor failure.	≥99.98%	System Reports Help Desk Tickets	$200 for each .01% below standard measured monthly
Telephony / IVR System availability	The collective telephony and IVR system needs to operate continuously throughout the year and cannot be down more than 4.22 hours in a given year (or 21 minutes and 54 seconds a month) as a result of Contractor failure.	≥99.95%	System Reports Help Desk Tickets	$200 for each .01% below standard measured monthly

Maintenance

- Proactive System Monitoring with **Total Transparency**

- Respond / Repair Based on Priority

- Maintenance Includes

  – Corrective Maintenance

  – Preventive Maintenance

  – Planned Maintenance; System Updates

  – Mobile App Support and Updates

  – Provision of Maintenance Documentation and Ongoing Updates

Maintenance

- Routine, configurable updates that result in improvements in operational efficiency
- Modifications to the website to ensure content is current or accurate
- Changes to NCTA financial system interface information
- Adjustments to standard reports
- Modifications to IVR call flow to correct routing and call flow problems identified during normal operations
- Modification to CSR scripts
- Modifications of existing interfaces
- Modifications to the wording of toll bills, statements and other standardized communications with customers
- Predictive maintenance and replacement of limited-life and consumable components
- Periodic database and system tuning and checks for processing performance
- 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
- Modifications required to address end user satisfaction when ratings fall below three stars out of five for the respective mobile device applications (Apple and Google / Android)
- Regular monitoring and daily backups of the Back Office System and other host level servers

Refer to Section III, 2.5.1 Maintenance Services

Q&A
and
Closing Remarks

Andy Lelewski, P.E.
Director of Toll Operations