

## Statewide Transponder Project Synopsis

### **Project Description and Purpose:**

- The Design, Build, Operate, and Maintain *TransExpresSystem* Project extends across the entire state of North Carolina. The project will install transponder readers and associated hardware and software at a minimum of eight existing interstate weigh station sites and any additional sites proposed by the Design-Build Team.
- After successful implementation of the transponder readers, the Design-Build Team shall operate and maintain the transponder system, as well as all associated field devices, for a minimum of eight years. Operation of the system includes administration of the enrollment program and associated databases.
- The transponder readers shall allow motor carrier enforcement personnel to electronically screen the credentials, safety record, violation history and fuel tax information of the transponder equipped trucks. This electronic screening process will allow transponder equipped trucks that meet the screening criteria (based on acceptable carrier performance) to bypass the weigh station, improving safety in the vicinity of the weigh station and reducing delay to the motor carrier.

### **Intelligent Transportation Systems Scope of Work:**

- The Design-Build Team shall make recommendations for a minimum of eight transponder reader locations and any additional locations the Design-Build Team feels would enhance interstate weigh station operations and the marketing of transponders.
- The Design-Build Team shall design, furnish and install all hardware and software required to implement a fully operational transponder system and all related sub-systems.
- The Design-Build Team shall ensure that all transponder system equipment communicates and interfaces with the North Carolina's CVISN project, *TransExpresSystem*, and any other state or federal databases utilized for successful credentials screening. The Department shall have access to all data collected by the *TransExpresSystem*.
- The Design-Build Team shall provide a schedule of training.
- The Design-Build Team shall own, and lease to the Department for a minimum of eight years, the hardware and software required to implement a fully operational transponder system and all related sub-systems. The Design-Build Team shall provide a cost breakdown for operating and maintaining the transponder systems for the minimum eight-year lease period, including milestones that reduce or eliminate payment by the Department.
- The Design-Build Team shall develop, implement, and administer a transponder enrollment program that markets the *TransExpresSystem* transponder devices to those motor carriers

that wish to bypass weigh stations based on their past carrier performance within North Carolina, as well as nationally.

**Infrastructure Scope of Work:**

- The Design-Build Team shall design, install and maintain the infrastructure required by the transponder system. The Design-Build Team shall determine the specific infrastructure elements required at the individual transponder reader locations. The infrastructure designs shall adhere to the Department's design criteria and polices, and be signed and sealed by a professional engineer registered in the state of North Carolina. The infrastructure elements include, but are not limited to, the following disciplines that may be impacted by the installation of the transponder system and related sub-systems:
  - Geotechnical
  - Roadway
  - Hydraulics
  - Permits
  - Erosion Control
  - Traffic Control
  - Signing
  - Pavement – installation and maintenance only
  - Structures
  - Utility Coordination / Relocation / Installation
  - Location and Surveys
  - Public Involvement