ITS-Connected Vehicle Technology research initiative

March 13, 2015
Connected Vehicles BAA

- DTFH6115R00003  (Due date 03/16/2015 by 15:00 EST)

https://www.fbo.gov/index?s=opportunity&mode=form&id=4bb6693ac3021c178595d83fab3b5d73&tab=core&cview=1

Phase 1 – Concept Development – award up to 12 months

Phase 2 – Design/Build/Test – up to 20 months

Phase 3 – Operate and Maintain – 18 months
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- DTFH6115R00003 – Phase 1 – **Concept Development** Tasks

- Task 1  Program Management  Per PMBOK guidance
- Task 2  Pilot Deployment Concept of Operations (ConOps)  Per IEEE Std 1362-1998
- Task 3  Security Management Operating Concept  SCMS, PKI, CVRIA, SET-IT
- Task 4  Safety Management Plan  Eg, ISO26262 ASIL
- Task 5  Performance Measurement and Evaluation Support Plan
- Task 6  Pilot Deployment System Requirements
- Task 7  Application Deployment Plan
- Task 8  Human Use Approval
- Task 9  Participant Training and Stakeholder Education Plan
- Task 10  Partnership Coordination and Finalization
- Task 11  Outreach Plan
- Task 12  Comprehensive Pilot Deployment Plan
- Task 13  Deployment Readiness Summary

Etc, etc, etc
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**DTFH6115R00003 – Phase 1 – Concept Development – Proposal Format**

### Deployment Vision

In this sub-section, at a minimum, the Offeror shall:

- Describe the proposed Pilot Deployment site, including geographic boundaries, topography, and transportation system features.
- Describe the general transportation-related issues and mobility, safety and environmental needs of the site.
- Contain an *Annotated Preliminary Pilot Deployment Site Map*. The map shall identify the specific geographic location being proposed for the Pilot Deployment and shall indicate locations related to key safety, mobility and environmental issues, possible roadside technology locations, and other explanatory features. The map shall be no larger than one page (up to 11 inches by 17 inches is acceptable for this item only) when printed.
- Outline performance measures relevant to identified needs.
- Describe the set of applications proposed, and how they relate to needs and performance goals.
- Illustrate how the proposed concept can synergistically combine to create measurable impact while reducing costs associated with both deployment and operations.
- Outline team partners, key stakeholders, and pilot deployment governance processes expected over all three phases. Note any anticipated change in teaming or team leadership throughout the three-phase deployment life cycle.
- Identify and rate key technical and organizational risks associated with the deployment vision.

### Volume I – Technical

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Provide a full three-phase schedule with proposed key milestones, and provide an initial cost estimate that covers all three phases individually and collectively.
Connected Vehicles Applications

http://www.its.dot.gov/pilots/cv_pilot_apps.htm
Connected Vehicles Applications

Applications selected by UT & of interest to TDOT

- **EnableATIS (Advanced Traveler Information System 2.0)**
  - Enhanced traveler information services that record or infer user decisions and other contextual trip data that, when suitably processed can improve or transform system management functions

- **Incident Scene Pre-Arrival Staging Guidance for Emergency Responders (RESP-STG)**
  - An application that provides input to responder vehicle routing, staging and secondary dispatch decisions

- **Incident Scene Work Zone Alerts for Drivers and Workers (INC-ZONE)**
  - An application that warns on-scene workers of vehicles with trajectories or speeds that pose a high risk to their safety. It also warns drivers passing an incident zone if they need to slow down, stop, or change lanes.

Response, Emergency Staging, Communications, Uniform Management, and Evacuation (R.E.S.C.U.M.E.)
Connected Vehicles Applications

Potential applications of interest to TDOT – Additional Information

Incident Scene Pre-Arrival Staging Guidance for Emergency Responders (RESP-STG) and Incident Scene Work Zone Alerts for Drivers and Workers (INC-ZONE)


Also:


Advanced Traveler Information System (ATIS) - not as specific info available at (look for the first item): http://www.its.dot.gov/pilots/pilots_mobility.htm

ATIS example...