Connected Vehicle Ecosystem Project
Oregon Department of Transportation
11/19/2021

Below are answers to the questions about this solicitation that were submitted to the Office of Innovative Funding during the live conference and afterwards, within the submission window (10/26 -11/5/2021). Answers are paraphrased for brevity and clarity.

Questions from live conference:

1. **In how many weeks approximately do you anticipate publishing the procurement?**
    a. We are in the final stages of assembling procurement documents for DOJ (Oregon Department of Justice) final review; we do not anticipate issues or a long time delay. We expect to publish in 4-6 weeks at the latest.
2. **Have you identified a set of applications that you plan on placing in the RFP?**
    a. The one definite application to demonstrate is the RUC. The RFP will likely list a set of applications we are interested in. As stated earlier, these are concepts identified in the first planning phase; we realize it takes a partner on the vehicle end to implement any applications that we come up with, so we see it as part of the planning phase to define those applications that have mutual interest, to pursue in the later implementation phases of the project.
3. **Will you be able to include in the RFP, a definition of "done", or given the R&D nature, is this going to be impractical?**
    a. The nature of this contract is a price agreement; the one certain phase in the contract is the planning phase, where we will plan out the succeeding phases and what "done" for those phases will look like. Over the duration of the contract, we will do multiple phases of deployment, demonstration, etc. Part of the planning phase is a layout the Phased Implementation Plan and what each phase will accomplish; the overall architecture of the system; and how each phase will build out that architecture.
4. **What is the role of Emovis and Azuga in this project?**

a. Emovis and Azuga are currently our partners on the RUC system. One or both of them may want to be partners in doing the demonstration project for the RUC part of the CVE. At scale, those two partners and potentially others might want to ingest data from the ecosystem to support running the RUC.

5. **Would you be able to expand on the Financial Responsibility Criteria--sustainable business model and the sufficient resources? What does that mean?**

    a. Financial responsibility covers a number of different areas. One, we are looking for a company or set of companies that are well-established. We don't want to preclude anyone from proposing, but when we are looking at entering a Purchase Agreement Contract that will run 10 plus years, the financial stability and responsibility of the company(s) will be considered. We have funding for building out the system, but we don't want to just build it, we want to support it from a mandatory RUC standpoint. So the business model must provide what is required to sustain the ecosystem over the long term, beyond building and demonstrating.

6. **Would you have criteria or to reference public available criteria for sustainable business model?**

    a. Sustainable meaning financial stability over the long term; with the meaning of "stable and steady" as opposed to "three legs of the stool" (e.g., people-planet-profit) when applied to a business. This project is has a long term perspective; we are designing for the future of transportation. This term will be defined more clearly in the RFP.

<u>Questions submitted after conference and before November 5th deadline:</u>

7. **How will ODOT share the contact information for all of the bidders, vendors, and interested parties to afford them the opportunity to form partnerships?**

a. Tuesday's webinar was a public meeting and an attendance list is online in accordance to ORS 192.018. Attendees wishing to share their contact information with other attendees may email Roberto Coto at **Roberto.coto@odot.state.or.us** to have their full information added to the list of participants. Attendance list is online on our Connected Vehicles page, under Attendees.

   Link: https://www.oregon.gov/odot/Programs/Pages/Connected-Vehicles.aspx

8. **Beyond the RUC integration, what are the highest priority safety, mobility, and efficiency benefits that Oregon DOT is looking to achieve with the Connected Vehicle Ecosystem?**

   a. Some applications of interest are identified in ODOT's Statewide ITS Plan. However this is not a prescriptive list. We recognize that any applications will require interest and cooperation from industry to implement, so we expect identification of applications to be part of the planning phase for this project. In addition to these cooperative applications, ODOT is also interested in the potential use of connected vehicle data in existing agency transportation system operations applications.

9. **Will this project involve the procurement and installation of Connected Vehicle Roadside Equipment (edge systems and RSUs) and On-board Equipment?**

   a. Vehicle-to- infrastructure applications are within the scope of the RFP; however we anticipate they will be in the later phases of the project. The structure of the contract will be a price agreement contract with separate work order contracts for future phases of the project. The future project phases will be defined in the planning phase of the project, and the specific scope of each phase will be defined in the work order for that phase of work. There is a possibility that a future phase could include procurement but not installation of roadside equipment. ODOT has other options for RSU procurement. Some OBU equipment may be necessary for testing or demonstration of an application,

but the emphasis of this project will be on applications that can leverage OEM equipment and not require OBU installation.

10. **Are there any limitations on the cloud-hosting environment that can be utilized for the data exchange platform?**
    a. There are not limitation *per se*, but ODOT strongly prefers U.S.-based data hosting.
11. **Will there be any licensing requirements for the prime contractor?**
    a. To conduct business in Oregon, a contractor must register the business name with the Oregon Secretary of State (State of Oregon: Business - Register a Business) and obtain the appropriate license(s) from the Oregon Construction Contractor's Board, (Building Codes Division : Contractor and business licenses : Licensing : State of Oregon). The State of Oregon does not currently require licensing for Software Engineering. ODOT does not anticipate that the scope of this RFP (Phase 0) will include engineering work for installation of equipment at the roadside, so professional engineering licensing should not be required. At this time there are no other licensing agreements by the state, but is subject to change as the project progresses.
12. **What is the role of the Connected Vehicle Ecosystem?**
    a. **Will the RFP contain anything related to V2X – 5.9 GHz?**
        i. Yes. The RFP scope includes planning for V2X/5.9 GHz applications. How and when this work fits into the implementation plan would be determined during the planning phase of the project.
    b. **Will hardware be in scope of this tender? Which?**
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c. Is a direct communicate with the infrastructure in scope for the RFP?

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13. How do you see pricing?

a. RUC can either be revenue sharing or fixed price

i. Development of a long-term business model for operation of the CVE platform is within the scope of the initial planning phase of the project. We're interested

in industry input on the most effective and cost efficient approach to sustaining the system. This may include strategies for broadening use of the system by other jurisdictions.

b. How would this be for CITS?

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14. How do you plan to manage traffic flow? Are you interested in a TMAAS solution?

a. At this point, ODOT expects to continue to utilize its existing traffic management software systems. Traffic Management as a Service is not expected to be part of this solution. However, the Connected Vehicle Ecosystem is expected to aggregate data from multiple sources, perform analysis, and make the processed information available through an API for use in ODOT traffic management systems.