

Request for Proposals (RFP)

Autonomous Vehicle Testbed Network Implementation Services

Issue Date: June 19th 2020

PART ONE: OVERVIEW

US Ignite is seeking a wireless network installation business to assist with the installation, support and documenting of a wireless communications network for its Fort Carson Transportation Autonomous Vehicle Testbed project. The network will be used to collect sensor and autonomous vehicle data created by the smart base pilot project that US Ignite is launching at Fort Carson (located near Colorado Springs, Colorado) this year

The RFP process will proceed according to the following schedule. The target dates are subject to change.

Target Date	Description
6/19/2020	RFP made available to select organizations and posted on US Ignite's website.
7/2/2020	Responses are due to nancy.jemison@us-ignite.org by Noon, Eastern Standard Time.
7/10/2020	Responses to be evaluated by the US Ignite team. Follow-up interviews and negotiations, as necessary.
7/24/2020	Vendor selected.
7/31/2020	Master Services Agreement and Task Order(s) finalized.
7/31/2020	Period of Performance begins (or sooner).
7/31/2021	Period of Performance ends.

PART TWO: US IGNITE OVERVIEW

US Ignite Overview

US Ignite is a national nonprofit, a 501(c)(3), that is accelerating the smart city movement – and creating value for an entire ecosystem – by guiding communities into the connected future, creating a path for private sector growth, and advancing technology research that's at the heart of smart city development. Why is this important? Because local governments need to improve quality of life and ensure economic development in their communities, particularly during a time of rapid technological change. Businesses recognize the importance of the emerging market around smart communities and need to find commercial strategies that are repeatable, scalable, and sustainable. And foundations and federal agencies need to channel their institutional aims into efforts ranging from cutting-edge research to practical economic development initiatives that deliver measurable benefits.

As a trusted partner, US Ignite brings this entire smart city ecosystem together, successfully pairing financial

investment with technical and organizational expertise. Through the public-private partnership programs we run, US Ignite is a catalyst for communications network advancement, and for innovation in smart city services that are powered by a new generation of technologies. To learn more about US Ignite, please visit their [website](#).

Other US Ignite Programs include:

- Smart Cities Data Exchange
- Smart Gigabit Communities
- Platforms for Advanced Wireless Research
- US Ignite Forum

PART THREE: DESCRIPTION OF THE PROJECT

Description of the Fort Carson Transportation Testbed Project

US Ignite recently launched a new program in its portfolio. Earlier this month, US Ignite kicked off a smart transportation testbed and autonomous vehicle (AV) pilot program in coordination with Fort Carson, neighboring Colorado Springs, and the University of Colorado's Research and Engineering Center for Unmanned Vehicles (RECUV).

This endeavor is funded by the U.S. Army Engineer Research and Development Center (ERDC), and is designed to use research with AVs and sensor-based technologies to help the Department of Defense reduce transportation costs, improve public safety, and deliver faster services on military installation sites. You can read more about the program on US Ignite's website, as well as here. This RFP solicits wireless engineering services specifically for the Fort Carson Transportation Testbed Project.

PART FOUR: SCOPE OF SERVICES

US Ignite is seeking a wireless network engineering firm or other wireless network engineering professional to assist with purchasing, installing, and managing a wireless communications network for its Fort Carson smart base project. The network should follow the recommendations and details of the existing network design specifications for the Radwin 5.8GHz Transportation/Mobility solution only as specified in section 6.1 of Appendix A - Ft. Carson Wireless Testbed Design. The network will be used to collect sensor and autonomous vehicle data created by the smart base pilot project that US Ignite is launching at Fort Carson this year.

Additionally, the proposer should include an estimate and plan for an optional JMA 4G Private LTE network design with 5G network upgrade to be built in the Wireless Testbed. The original JMA LTE network design is specified in section 6.2 of Appendix A - Ft. Carson Wireless Testbed Design, with modifications for an upgrade to 5G detailed in Appendix B - Ft. Carson Wireless 5G Addendum.

Specifically, the proposer selected will assist US Ignite by:

1. Understanding and clarifying the goals of the project as it relates to the provided wireless network design necessary to achieve those goals;
2. Adapting the network design to create an achievable and sustainable wireless network for the testbed.
3. Purchasing and configuring hardware and software in alignment with the network design (see Appendices).
4. Conducting a proper cybersecurity review and make any necessary adjustments to provide secure network operations.
5. Working with installation staff to install poles, towers, antenna, power connections, network connections and other hardware to establish a reliable and sustainable testbed network.

6. Purchasing, installing, and configuring a set of IP based traffic cameras along the defined testbed route to support data collection.
7. Providing a support plan for maintenance of the wireless network over the period of performance.
8. Providing documentation on installation and management of the wireless network.

PART FIVE: TERM OF CONTRACT

US Ignite intends to enter into a contract with the winning proposer(s) for a 12-month term beginning 7/31/2020 and ending 7/31/2021.

PART SIX: QUESTIONS AND REQUESTS FOR CLARIFICATIONS

Proposers may submit written questions and requests for clarification regarding the RFP. The questions or requests for clarification must be submitted via e-mail prior to 8:00 p.m. Eastern Standard Time June 26, 2020. Please direct any questions or clarifications to nancy.jemison@us-ignite.org.

PART SEVEN: QUALIFICATIONS AND INSTRUCTIONS FOR SUBMISSION

Please send your RFP response to nancy.jemison@us-ignite.org with a subject line of "RFP: AV Testbed Network Implementation Services – Your Organization". Please include the following in your response:

- 1. Proposer Information and References**
 - a. Primary contact information, including name, phone number, email, and main point of contact for the engineer proposed for the project
 - b. Description of your organization.
 - c. List of three professional references that US Ignite can contact. Please include a summary of the work provided, the name of organization, the main point of contact, phone number, and email address.
 - d. A summary of the qualifications of the key engineering team members that are promised for the project, including their resumes
- 2. Qualifications and Response to Scope of Services:** Please detail how the proposer will perform the services and meet the requirements outlined in "*Part 4: Scope of Services*".
- 3. Small Business Category:** Please provide proposal costs, including any subcontracts that can be categorized in one or more for each small business categories including
 - a. Small Business (including ANCs and Indian Tribes)
 - b. Veteran Owned Small Business (VOSB)
 - c. Service-Disabled Veteran-Owned Small Businesses (SDVOSB)
 - d. HUBZone Small Businesses (HUBZone)
 - e. Small Disadvantaged Businesses (SBD) including ANCs and Indian Tribes
 - f. Women-Owned Small Businesses (WOSB)

If applicable, please provide evidence for the selected business categories.

- 4. Cost Proposal:** US Ignite intends to issue a time and materials contract to an organization/engineer who demonstrates the capacity to deliver quality scope of services and is the most responsive to the requirements of the RFP.
- 5. Contract Ceiling:** US Ignite anticipates that the contract ceiling for the 8-month contract will not exceed \$189,000 for Radwin solution, plus \$121,000 for network deployment, for a total of \$310,000. For the optional JMA solution, we estimate \$219,000 for the JMA 4G Private LTE network, with \$121,000 for

network deployment, for a 4G Private LTE total of \$340,000. The optional JMA 5G upgrade is estimated at \$251,000, plus an additional \$43,000 in deployment costs, for a 5G upgrade total of \$294,000. The ceiling for the JMA 4G Private LTE solution with the 5G upgrade should have a grand total of \$634,000. US Ignite intends to procure one vendor for this RFP. Please provide the following:

- a. Provide detailed estimated costs showing the cost to deliver the services outlined in “Part 4: Scope of Services ” for the 8-month period. You should include the position, position qualifications, rate per hour for the position, and estimate the hours for the work you have proposed. This should be broken into two separate estimates as follows:
 - i. An estimate to complete the build of a mobile wireless network as detailed in the Radwin 5.8GHz Transportation/Mobility solution section 6.1 of Appendix A - Ft. Carson Wireless Testbed Design.
 - ii. An estimate to complete an optional build for a JMA 4G private LTE with 5G wireless network as the primary mobile wireless network above as detailed in section 6.2 of Appendix A, with further upgrade details in Appendix B - Ft. Carson Wireless 5G Addendum.

Closing Date and Time:

US Ignite must receive proposals by email (please email to nancy.jemison@us-ignite.org) no later than **July 2rd, 2020 at Noon, Eastern Standard Time.**

Proposal Preparation Guidelines:

1. All proposals must be submitted in writing.
2. All proposals must be emailed exclusively to the US Ignite point of contact.
3. Organizations may modify or withdraw proposals prior to the submission deadline.
4. Proposals may not be changed after the submission deadline.

Other Considerations:

1. After a contract is signed, US Ignite will pay engineers for travel and other costs associated with serving US Ignite as a client. Travel to Fort Carson, located in Colorado Springs, may be necessary. US Ignite will reimburse these costs in accordance with Federal and US Ignite travel policies.
2. US Ignite may reject any or all proposals in whole or in part, waive a technicality in any proposal, make awards in a manner deemed in the best interest of US Ignite and, unless otherwise specified by the organization, accept any item in the proposal. US Ignite reserves the right to award one or more contracts, if necessary.
3. US Ignite anticipates an initial 4-month contract, with the option for renewal.
4. US Ignite will pay fees supported by evidence of bona fide services rendered. US Ignite will not enter into a retainer agreement which pays fees in advance to an organization or individual to secure or keep services when required.
5. The US Ignite Disadvantaged Business Opportunity Policy states that US Ignite will make efforts to use disadvantaged businesses, including small businesses, minority-owned firms, women’s business enterprises, and firms in labor surplus areas, whenever possible and in accordance with 2 CFR 200.321 (US

Ignite Federal Contracts and Grants Management Policies and Procedures , Rev November 1, 2018). It is also US Ignite policy to comply with PL 99-661, Section 1207 which sets for the 5 percent goal for awards to small and disadvantaged businesses, and PL 100-180 to increase DOD awards to small disadvantaged businesses.

PART EIGHT: TIMELINE FOR EVALUATION AND SELECTION

US Ignite will review all proposals submitted. If an organization is invited to make a presentation to the US Ignite, the costs for such a presentation will be the responsibility of the organization. US Ignite plans to select the organization within 30 business days after the submission deadline and reserves the right not to select any organization if conditions change between the time of the RFP release and completion of the review process.

No contractual obligation on behalf of US Ignite whatsoever shall arise from the RFP process. Additionally, this RFP does not commit the US Ignite to pay any cost incurred in the preparation or submission of any response to the RFP.

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The proposals will be evaluated based on the following criteria:

1. Knowledge of project requirements as demonstrated under *“Part 4: Scope of Services”*
2. Capabilities of the team to install and maintain the wireless network as described in *“Part 3: Description of Project”*
3. Qualifications and range of experience of the proposed vendor
4. Small business participation by VOSB, SDVOSB, HUBZone, SDB, and/or WOSB
5. Project costs and overall value

After review of the submissions the US Ignite team may request to meet with organizations prior to selecting a vendor.

Please direct any questions to nancy.jemison@us-ignite.org

