AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

2. AMENDMENT/MODIFICATION NO. 0001
3. EFFECTIVE DATE 08/11/2014
4. REQUISITION/PURCHASE REQ. NO. 
5. PROJECT NO. (IF applicable) 
6. ISSUED BY U.S. DOT/Volpe Center
   CODE RVP-30
7. ADMINISTERED BY (IF OTHER THAN ITEM 6) CODE

<table>
<thead>
<tr>
<th>8. NAME AND ADDRESS OF CONTRACTOR (NO., STREET, COUNTY, STATE AND ZIP CODE)</th>
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<td>DTRT57-14-R-SBIR2 FY14.2</td>
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<td>9A. AMENDMENT OF SOLICITATION NO.</td>
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<td>9B. DATED (SEE ITEM 11) 07/14/2014</td>
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<tr>
<td>10A. MODIFICATION OF CONTRACT/ORDER NO.</td>
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<td>10B. DATED (SEE ITEM 13)</td>
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11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in item 14. The hour and date specified for receipt of offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:
(a) By completing items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment your desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (IF REQUIRED)

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS.
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE
☐ A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
☐ B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (SUCH AS CHANGES IN PAYING OFFICE, APPROPRIATION DATE, ETC.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
☐ C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
☐ D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (ORGANIZED BY UCF SECTION HEADINGS, INCLUDING SOLICITATION/CONTRACT SUBJECT MATTER WHERE FEASIBLE.)

This amendment changes the wording in Topic No. 14.2-FH1, Page 51, Paragraph 3 of the solicitation.

The following sentences are deleted from the above in its entirety.

"It will be important to link the new public crowdsourcing application to the automation Public Right-of-Way Assessment Process (PROWAP), which was developed through support from the SBIR program (DTFH61-57-10-C-10081)."

and; (Continued on Page 2)

Except as provided herein, all terms and conditions of the document referenced in item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (TYPE OR PRINT)
15B. CONTRACTOR/OFFEROR
15C. DATE SIGNED
15D. UNITED STATES OF AMERICA

Jeanne M. Rossetsky

(Signature of person authorized to sign)(Signature of Contracting Officer)

STANDARD FORM 30 (REV. 10-83)
Prescribed by GSA FAR (48 CFR) 53.243

NSN 7540-01-152-8070
Previous edition unusable
“There are likely many other synergies between an application that enables decentralized public crowdsourcing of pedestrian data and the PROWAP and Exploratory Advanced Research project, which should be explored in the research and development process.”

For convenience of prospective offerors, attached for information purposes, is an updated page 51 and 52 of the solicitation incorporating the above referenced changes.

All other terms and conditions of the solicitation remain in effect.
B. Federal Highway Administration (FHWA)

14.2-FH1: Decentralized, Public, and Mobile-Based Sidewalk Inventory Tool

Communities throughout the U.S. are increasingly encouraging walking for transportation and recreation in order to meet a range of safety, health, equity, sustainability, and other goals. One way to accomplish this is by actively working to fill gaps in the pedestrian network and to improve sidewalks or other pedestrian pathways that have fallen into disrepair. A significant challenge to working methodically and strategically toward pedestrian network connectivity is a lack of comprehensive GIS-based data on the presence (or lack) of sidewalks or other pedestrian connectors communitywide. In fact, many communities do not have a baseline inventory of their sidewalks because collecting this data can be expensive and difficult to maintain. However, recent advances in mobile technology and cloud-based computing, as well as increasingly sophisticated crowdsourcing applications, have the potential to address this issue.

A prototype is needed to facilitate decentralized public collection of a baseline sidewalk inventory, which can then be compiled into a central dataset to inform decision-making and public policy. Given their broad availability, GPS and database capabilities, and the fact that they are always “in our pocket,” it may make sense for the prototype to be built as a mobile phone application; however, there may be other approaches. The prototype should enable an individual user to simply and efficiently document the presence or lack of a sidewalk. In addition to the inventory, it may be possible to add data features such as an assessment of sidewalk conditions. It may be possible to incorporate information from FHWA’s Road Safety Audit process and build off of and/or incorporate data from existing resources such as Google’s “walking route” application. This prototype will focus on the creation of a baseline sidewalk inventory, and would ideally be integrated with existing services such as SeeClickFix, which focus more on the identification of spot-specific issues.

It will be important to build the functionality so that the new application links seamlessly to other existing datasets. For example, the State of Maryland has been a leader in the government-led collection of ADA-related data along State roads. The new application could add a public functionality and interface by displaying this type of information (if it is publicly available) as part of a strategy to “flag issues” with the data and thus keep it updated over time. The new application would also begin to fill in preliminary data on non-State owned roads. FHWA is also supporting Exploratory Advanced Research to develop technology to allow people who are blind or who have low vision to navigate in the public right-of-way and the proposed new sidewalk inventory application could provide an important locally-verified input to this technology once it is available.
A public mobile-based sidewalk inventory application will leverage and maximize the return on investment in recent and ongoing pedestrian data initiatives. It will assist in the creation of more complete sidewalk datasets, which is especially important given the emphasis on performance measures in Federal surface transportation legislation, and the fact that more and more communities are developing communitywide GIS-based prioritization methodologies that will impact, for example, where they choose to build new sidewalks or other pedestrian routes.

By facilitating the creation of connected pedestrian networks, the application will improve safety because research shows that having sidewalks on both sides of the road can contribute to a significant reduction in "walking along the road" pedestrian crashes. By tracking the condition of pedestrian networks, the application will contribute to asset management processes and encourage a state of good repair. By facilitating nonmotorized transportation, it will contribute to climate change and other environmental sustainability-related goals. Finally, it will create an affordable tool that would allow students to engage in primary data collection that is of immediate practical value to local, regional, and State government staff and that also leads directly to important planning, policy, and budgetary decision-making processes central to citizen science, a core element of the STEM Initiative.

A small business that develops this product could sell it to municipalities, Metropolitan Planning Organizations, or State Departments of Transportation. Non-governmental organizations such as community associations also might purchase the end product. An application that contributes to the development of a sidewalk inventory will create value that could be captured by a small business; however, it will only continue to be relevant and valuable if it is maintained and kept up to date. A small business could provide this ongoing service to clients for a fee. A small business could also generate revenue through the sale of advertisements displayed while the application is being used and/or it could offer an ad free version that a user or client could choose to purchase.