

REVISE the text of the Cooperative Agreement in the sections cited below. If a Section or paragraph is not listed below, no text changes apply because of this modification.

✓ Deleted text is shown in **strikethrough**.

✓ Added text is **underlined**.

Award Information

Total Amount:	Federal Share:	\$40,000,000	\$40,000,000	<u>\$37,873,000</u>
	Recipient Cost Share:	\$19,000,000	\$19,000,000	<u>\$17,989,675</u>
	Total Value:	\$59,000,000*	\$59,000,000*	<u>\$55,862,675</u>
*See also Leveraged Partner Resources clause, Section B				

SECTION A – PROGRAM DESCRIPTION

5. STATEMENT OF WORK

The Recipient shall conduct the Smart City Demonstration in accordance with the approved Attachment 2, subject to the terms of the award.

The Truck Platooning project is deleted from the scope of the agreement by Amendment 4. Accordingly, references to the Truck Platooning project included in Attachment 2 are hereby deleted as of the effective date of Amendment 4.

Delineation of Tasks and Deliverables

TASK G: COMMUNICATIONS AND OUTREACH

Task Goal: The goal of this Task G is dissemination of *technical* information and exchange regarding the demonstration activities, implementation and results. The Recipient shall not, under the Federal or non-Federal share of the agreement, perform excessive branding, marketing and over-promotion of the demonstration and the City of Columbus in general. The Recipient shall engage in communications and outreach at a reasonable and necessary level to: (1) provide an adequate level of awareness of the research activities to the public; and (2) provide technical information and lessons learned to industry and the target audience of cities and relevant local public agencies across the United States. Communications and outreach shall be predominantly focused on completed activities, technical implementation accomplishments, and communication of technical information and lessons learned to other

cities and relevant local public agencies across the United States. The Recipient shall not perform communications and outreach activities under the Federal share or Non-Federal share of this agreement beyond an appropriate and reasonable level necessary for the conduct of a Federally-funded research project. The Recipient shall not engage in unnecessary marketing, advertising, branding, promotion, memorabilia, and outreach activities that go beyond a reasonable level to accomplish the goal of this Task as described above.

For Recipient consideration, levels of outreach are expected to include:

Appropriate and necessary levels of outreach and communications are limited to the following:

- ~~Two local press conferences each year;~~
- ~~Three articles a year to be published in industry trade journals;~~
- A promotional video (3-5 minutes) about the Smart City Demonstration, including two additional updates;
- A Smart City Demonstration website;
- As pre-approved in writing by the AOR, travel and participation as speakers, panel members, and/or facilitators in six workshops/conferences/trade shows each year; and
- Participation in public USDOT-organized webinars regarding Smart City Challenge Demonstration deliverables, progress/performance and lessons learned.
 - The Recipient shall organize, publicize, and host webinars on topics pre-approved by the AOR. The Recipient shall publish all presentation materials and webinar recordings on the Smart City Demonstration website such that the public can easily locate all completed and upcoming webinar information.
 - Webinars shall be led by the Recipient, and be presented as such. Webinars shall not include the USDOT name, logo or the names of USDOT personnel in the presentation materials.
 - Acknowledgment of USDOT support and a disclaimer must appear early in the webinar presentation as follows: "This material is based upon work funded by the USDOT under the Smart City Challenge Demonstration Cooperative Agreement No. DTFH6116H00013. Any opinions, findings, conclusions or recommendations expressed in this webinar are those of the City of Columbus, Ohio or the webinar presenters, and do not necessarily reflect the view of the USDOT."

Required Deliverables

- Communications and Outreach Plan
- ~~Public relations and marketing materials defined by the Recipient~~

- Outreach Products, including:
 - A promotional video (3-5 minutes) about the Smart City Demonstration, ~~including two additional updates;~~
 - A Smart City Demonstration website;
 - As pre-approved in writing by the AOR, travel and participation as speakers, panel members, and/or facilitators in ~~six~~ workshops/conferences/trade shows ~~each year;~~ and
 - Participation in public ~~USDOT-organized~~ webinars ~~per year~~ regarding Smart City Challenge Demonstration deliverables, progress/performance and lessons learned.
- ~~Other communications and outreach deliverables as identified by the Recipient.~~

6. TABLE OF DELIVERABLES

Task	Deliverable	Original Due Date	Due Date as of this Amdt <u>3</u>	Publish on Recipient's Website?")
A	Kick-off Meeting – conduct a kickoff meeting at the USDOT or the Recipient's site.	Within four weeks after award	Within four weeks after award	No
A	Project Management Plan (PMP)	10/24/2016	11/28/17	No
A	Project Schedule	9/26/2016	6/29/18	No
A	Partnership/Stakeholder Status Summary (Draft and Final)	9/26/2016	2/23/17	No
A	Quarterly Progress Reports and Briefings – submit progress reports to document technical activities performed. See Quarterly Progress Reports clause below.	Quarterly	Quarterly	No
B	Systems Engineering Management Plan (SEMP)	11/21/2016	2/2/17 3/16/17	Yes
B	Concepts of Operations (ConOps)	2/27/2017	9/11/18 (PTA)	Yes

Task	Deliverable	Original Due Date	Due Date <u>as of this Amdt 3</u>	Publish on Recipient's Website?")
B	Demonstration Site Map and Installation Schedule	3/31/2017	Draft 12/17/18 Final 10/30/19	Yes
B	Systems Requirements Specifications (SyRS)	6/12/2017	12/19/18 (CPS)	Yes
B	Interface Control Documents (ICD)	7/3/2017	4/8/19 (CVE) 7/15/19 (TRPL)	Yes
B	System Design Documents (SDD)	9/18/2017	8/8/19 (CVE)	Yes
B	Test Plans (TP)	8/13/2017	9/23/19 (CVE) 11/26/19 (TRPL)	Yes
B	Testing Documentation		7/7/20 (CVE)	No
B	System Architecture and Standards Plans	3/24/2017	3/6/19	Yes
B	Operations and Maintenance Plans		7/7/20 (CVE)	No
B	Other Systems Engineering documents that provide evidence of following a systems engineering approach including agile systems engineering deliverables/artifacts	TBD	12/7/19 (CPS) ¹	As needed
C	Performance Measurement Plans	12/21/2016	4/2/19	Yes
C	Response to USDOT Deployment Tracking Surveys (as required)	TBD	8/14/18	No

¹ 4 weeks from end of Release 3

Task	Deliverable	Original Due Date	Due Date <u>as of this Amdt</u> <u>3</u>	Publish on Recipient's Website?")
			8/29/19	
D	Data Privacy Plans	7/31/2017	3/25/19	Yes
E	Data Management Plans	7/3/2017	2/26/19	Yes
E	Independent Evaluation Support Plan	12/21/2016	6/12/19	Yes
E	Data to support USDOT's Independent Evaluation	TBD	Latest start CVE: 7/8/20. Continues through 3/31/21.	No
E	Data provided to the USDOT's <u>ITS Public Data Hub</u> (https://www.its.dot.gov/data/)	TBD	Latest start CVE: 7/8/20. Continues through 3/31/21.	No
F	Safety Management Plans	11/21/2016	11/30/18 (Draft) 10/28/19 (Final)	Yes
F	Human Use Approval Summary	2/1/2017	4/25/19	No
G	Communications and Outreach Plan	12/5/2016	Draft 10/16/18 Final 11/30/18	Yes
G	A promotional video (3-5 minutes) about the Smart City Demonstration, including two additional updates;	TBD	<u>Completed</u> 6/28/19 Update 1:	Yes

Task	Deliverable	Original Due Date	Due Date <u>as of this Amdt</u> <u>3</u>	Publish on Recipient's Website?")
			1/10/20 Update 2: 7/20/20	
G	A Smart City Demonstration website	11/18/2016	3/23/17	Yes
G	As pre-approved in writing by the AOR, travel and participation as speakers, panel members, and/or facilitators in <u>six</u> workshops/conferences/trade shows <u>each year</u>	TBD	As approved	No
G	Participation in four public USDOT-organized webinars per year regarding Smart City Challenge Demonstration deliverables, progress/performance and lessons learned	TBD	2018: 11/14/18 2019: as scheduled 2020: as scheduled	No
H	<u>(OPTION, ONLY AS PRE-APPROVED BY AOR)</u> Participation in one International Collaboration meeting each year of approximately three days duration, plus six days of effort for meeting preparation, and six days for reports preparation associated with the collaboration aspects of this project	TBD	As approved	No
I	<u>(OPTION, ONLY AS PRE-APPROVED BY AOR)</u> Attendance at 6 architecture and standards meetings, of which 2 are	TBD	As approved	No

Task	Deliverable	Original Due Date	Due Date <u>as of this Amdt</u> <u>3</u>	Publish on Recipient's Website?")
	expected to be held outside of the United States			
I	<u>(OPTION, ONLY AS PRE-APPROVED BY AOR)</u> Architecture and Standards Meeting Trip Reports	TBD	As approved	No
J	Smart City Demonstration Final Report	5/31/2021	5/10/21	Yes

Note: Section 508 requirements are not applicable to documents and deliverables created under this agreement. The Recipient shall post deliverables on the Recipient's website for public availability to the extent feasible and as required herein.

7. DELIVERABLE REVIEW AND PUBLICATION REQUIREMENTS

The following steps apply to each deliverable in the Table of Deliverables listed above. Steps related to web publication and webinars apply only to those deliverables listed above that are required to be published on the Recipient's website (those marked "Yes" in the Deliverables Table, Column 4, entitled "Publish on Recipient's Website?")

1. The Recipient must submit the draft deliverable to USDOT.
2. USDOT will review the draft deliverable and may provide one round of high-level advisory USDOT review comments in return.
3. The Recipient must submit the revised deliverable, if applicable, to USDOT.
4. USDOT will acknowledge receipt of draft and revised deliverables.
5. The Recipient must post the deliverable (draft and/or final) on the Columbus Smart City Challenge website, solicit public feedback on the deliverable, and provide a mechanism online for submittal of public comments on the deliverable.
6. The Recipient must present a public webinar on the deliverable to support the agreement goal of technology and knowledge transfer.
 - ~~USDOT will provide the webinar hosting logistics. USDOT will promote the webinar through the ITS JPO's outreach mechanisms.~~
 - The Recipient may group multiple deliverables together for a webinar. Each deliverable does not require a separate stand-alone webinar.
7. The Recipient must conduct outreach to invite the Recipient's partners and community to review the deliverable and participate in the public webinar. **The Recipient must also**

conduct outreach to invite industry representatives, Federal Government representatives, cities and other relevant local public agencies across the United States to review the deliverable and participate in the public webinar.

8. The Recipient must post on the Columbus Smart City Challenge website the resulting link to the webinar recording ~~(to be provided by USDOT).~~

SECTION C - FEDERAL AWARD ADMINISTRATION INFORMATION

2. ADMINISTRATIVE AND NATIONAL POLICY REQUIREMENTS

F. KEY PERSONNEL

Pursuant to 2 CFR 200.308(c)(2), the Recipient must request prior written approval from the AO for any change in Key Personnel specified in the award. The following person(s) are/have been identified as Key Personnel:

Name	Title/Position
Mandy Bishop	Program Manager
<u>Andy Wolpert</u>	Deputy Program Manager

H. SUBAWARDS AND SUBCONTRACTS APPROVAL

Note: See 2 CFR §200.330, Subrecipient and contractor determinations, for definitions of subrecipient (who is awarded a subaward) versus subcontractor (who is awarded a subcontract).

Note: Recipients with a procurement system deemed approved and accepted by the Government or by the AO are exempt from the requirements of this clause. See 2 CFR 200.317 through 200.326.

Applicability: Unless described in the application and funded in the approved award, the Recipient must obtain prior written approval from the AO for the subaward, transfer, or contracting out of any work in excess of ~~\$150,000~~ \$4,000,000 under this award. This provision does not apply to the acquisition of supplies, material, equipment, or general support services. This applicability threshold is hereby effective retroactive to the agreement award date.

The following subawards and subcontracts are currently approved under the Agreement by the AO. This list does not include supplies, material, equipment, or general support services which are exempt from the pre-approval requirements of this clause.

Name, amount of Federal share
HNTB, \$15,550,000 total (consists of \$13,100,000 Federal share plus \$2,400,000 Non-Federal share)
Pillar Technology, \$11,581,749 Federal share

Approval of each subaward and subcontract is contingent upon a fair and reasonable price determination, and approval by the AO for each proposed subcontractor/sub-recipient. Consent to enter into subawards and subcontracts will be issued through written notification from the AO or a formal amendment to the Agreement.

Subsequent to AO approval, and as needed during performance, the Recipient may increase such AO-approved subawards and subcontracts up to \$100,000 without obtaining additional AO approval, and within the value of the agreement.

[end of amendment]