



Quarterly Progress Report

Award Information

Title	Award #	Awardee
Smart City Challenge Demonstration	DTFH6116H00013	City of Columbus, OH

Report Information

Date Submitted	Submitted To	Period Covered by Report
January 30, 2017	Kate Hartman	September 2016 -December 2016

Project Scope

Scope Statement
<p>Implementation of the Smart Columbus Smart City Demonstration consisting of 15 projects spread across 2 enabling Technologies and 4 Districts:</p> <ol style="list-style-type: none">1. Columbus Connected Transportation Network (CCTN)<ol style="list-style-type: none">1. Connected Vehicle Environment2. Smart Street Lighting3. Transit Pedestrian Collision Avoidance System2. Integrated Data Exchange (IDE)<ol style="list-style-type: none">4. IDE3. Residential District<ol style="list-style-type: none">5. Common Payment System6. Multi-Modal Trip Planning Application7. Smart Mobility Hubs8. Mobility Assistance for People with Cognitive Disabilities4. Commercial District<ol style="list-style-type: none">9. Connected Electric Automated Vehicles5. Downtown District<ol style="list-style-type: none">10. Delivery Zone Availability11. Enhanced Permit Parking12. Event Parking Management6. Logistics District<ol style="list-style-type: none">13. Truck Platooning14. Oversize Vehicle Routing15. Interstate Truck Parking Availability



Financial Status

Task Financial Summary

Task	Cost Share			Federal Funding			Total		
	Budget	Cost To Date	Remaining	Budget	Cost To Date	Remaining	Budget	Cost To Date	Remaining
1 Program Management	\$8,000,000.00	\$0.00	\$8,000,000.00	\$4,086,645.00	\$141,298.12	\$3,945,346.88	\$12,086,645.00	\$141,298.12	\$11,945,346.88
2 Communications and Outreach	\$0.00	\$0.00	\$0.00	\$3,369,998.00	\$79,909.50	\$3,290,088.50	\$3,369,998.00	\$79,909.50	\$3,290,088.50
3 Enabling Technologies (Integration)	\$8,000,000.00	\$0.00	\$8,000,000.00	\$23,020,933.00	\$267,309.22	\$22,753,623.78	\$31,020,933.00	\$267,309.22	\$30,753,623.78
4 Projects Within the Districts (Implementation)	\$3,000,000.00	\$0.00	\$3,000,000.00	\$9,522,424.00	\$110,570.31	\$9,411,853.69	\$12,522,424.00	\$110,570.31	\$12,411,853.69
Totals	\$19,000,000.00	\$0.00	\$19,000,000.00	\$40,000,000.00	\$599,087.15	\$39,400,912.85	\$59,000,000.00	\$599,087.15	\$58,400,912.85

Costs Incurred vs Budgeted Costs

	FEDERAL SHARE		COST SHARE		TOTAL	
	Current Quarter	Cumulative	Current Quarter	Cumulative	Current Quarter	Cumulative
Costs Incurred	\$599,087.15	\$599,087.15	\$0.00	\$0.00	\$599,087.15	\$599,087.15
Budgeted	\$1,655,136.00	\$1,655,136.00	\$1,475,000.00	\$1,475,000.00	\$3,130,136.00	\$3,130,136.00
Difference	\$1,056,048.85	\$1,056,048.85	\$1,475,000.00	\$1,475,000.00	\$2,531,048.85	\$2,531,048.85

Costs Incurred vs Obligated Federal Funding

	FEDERAL SHARE	
	Cumulative	
Costs Incurred to Date	\$599,087.15	
Obligated Funding to Date	\$15,000,000.00	
Remaining Obligated Funding to Date	\$14,400,912.85	
Funding Subject to Availability	\$25,000,000.00	

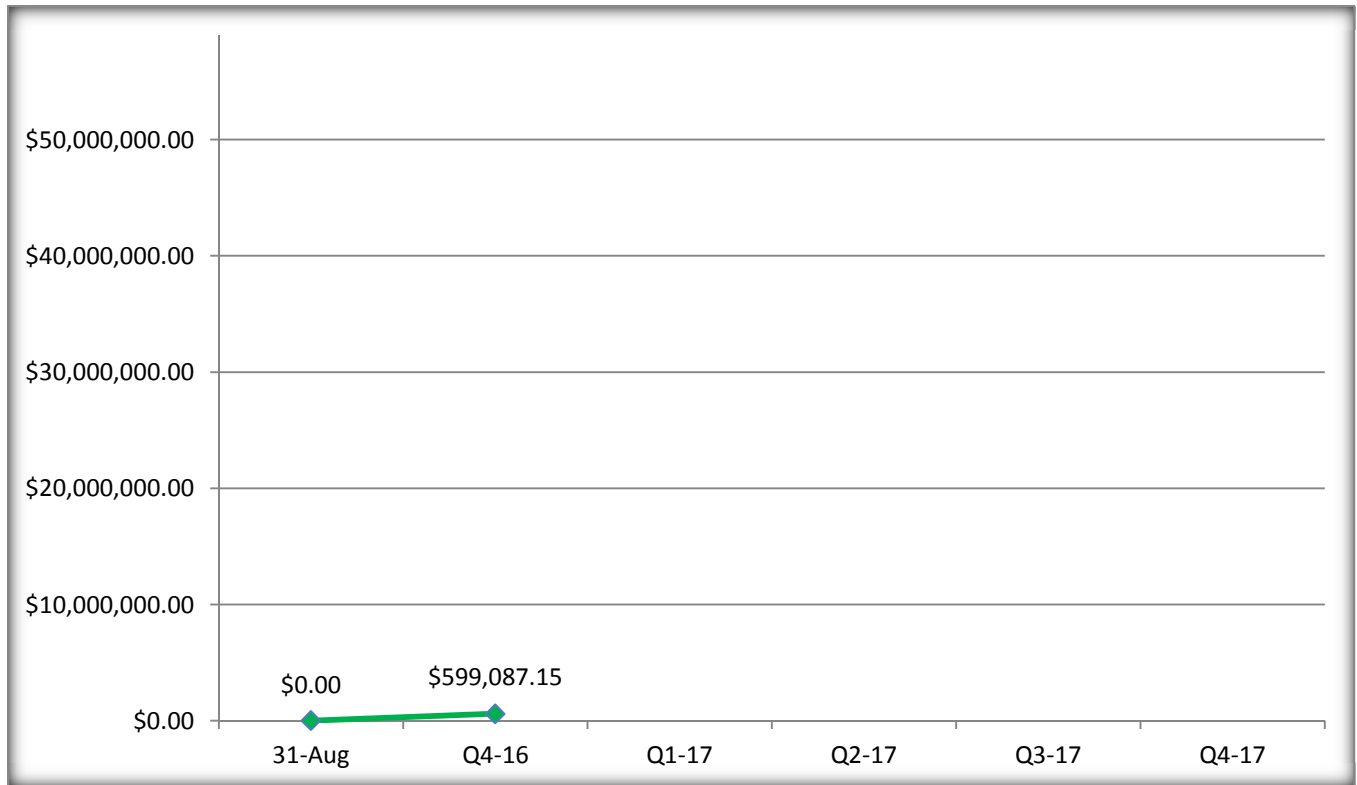
Direct Labor Hours Worked

Name/Category	FEDERAL SHARE	
	Current Quarter	Cumulative
Aparna Dial/Program Manager	448.00	448.00
Randy Bowman/Deputy Program Manager	391.00	391.00
Jeff Ortega/ Communications	110.00	110.00
Brandi Braun/ Partner Stakeholder Engagement PM	304.00	304.00
Ryan Bollo/ Project Manager	606.00	606.00
Kevin McSweeney/ Management Analyst	93.00	93.00
Sonja Summer/ Student Intern	48.00	48.00
TOTAL	2,000.00	2,000.00

*Note: Includes some estimated hours



Budget vs Cost to Date Summary



Costs Incurred by Cost Element

Cost Element	FEDERAL SHARE		COST SHARE		TOTAL	
	Current Quarter	Cumulative	Current Quarter	Cumulative	Current Quarter	Cumulative
Direct Labor	\$104,655.62	\$104,655.62	\$0.00	\$0.00	\$104,655.62	\$104,655.62
Fringe Benefits and Insurance Costs	\$36,642.50	\$36,642.50	\$0.00	\$0.00	\$36,642.50	\$36,642.50
Travel	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Subcontractor Costs - HNTB	\$377,879.53	\$377,879.53	\$0.00	\$0.00	\$377,879.53	\$377,879.53
Subcontractor Costs - Engage	\$79,909.50	\$79,909.50	\$0.00	\$0.00	\$79,909.50	\$79,909.50
Other Direct Costs	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Cost Share - City of Columbus	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Cost Share - Ohio DOT	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Cost Share - Franklin County	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
TOTAL	\$599,087.15	\$599,087.15	\$0.00	\$0.00	\$599,087.15	\$599,087.15



Estimated Cost to Complete

Task	Original Budget	Cost To Date	Remaining Budget	Estimated Changes Needed to Budget	Estimated Cost To Complete Project
1 Program Management	\$12,086,645.00	\$141,298.12	\$11,945,346.88	\$0.00	\$11,945,346.88
2 Communications and Outreach	\$3,369,998.00	\$79,909.50	\$3,290,088.50	\$0.00	\$3,290,088.50
3 Enabling Technologies (Integration)	\$31,020,933.00	\$267,309.22	\$30,753,623.78	\$0.00	\$30,753,623.78
4 Projects Within the Districts (Implementation)	\$12,522,424.00	\$110,570.31	\$12,411,853.69	\$0.00	\$12,411,853.69
Totals	\$59,000,000.00	\$599,087.15	\$58,400,912.85	\$0.00	\$58,400,912.85

Invoices Submitted

Invoice #	\$ Amount	Date	Notes/Comments
1	\$-To be revised	12/15/16	One invoice was submitted and rejected. No other invoices have been submitted.

Federal Financial Report

Status
1) The email of the Quarterly Progress Report contains signed scan copy of the Federal Financial Report.

Schedule Update

Key Tasks/Milestones Completed This Quarter/Milestones Scheduled for Near Future

Task Name and Deliverable	Due Date	Status
Task A: Project Management		
USDOT Kick Off Meeting	9/13/2016	Final Delivered
Draft Project Schedule	9/26/2016	Draft Delivered
Initial Partnership/Stakeholder Status Summary	9/26/2016	Draft Delivered
Draft PMP	10/24/2016	Draft Delivered
Project Schedule Monthly Updates for October	10/31/2016	Draft Delivered
Project Schedule Monthly Updates for November	11/30/2016	Draft Delivered
Partner Stakeholder Summary	11/30/2016	Draft Delivered



Task Name and Deliverable		Due Date	Status
	Respond to US DOT Comments related to 24-Oct-16 Draft PMP Plan	12/8/2016	Final Delivered
	Project Schedule Monthly Updates for December	12/30/2016	Draft Delivered
	Quarterly PMP Update	1/31/2017	100% Complete
	Project Schedule Monthly Updates for January	1/31/2017	100% Complete
	Partner Stakeholder Summary	1/31/2017	Draft Completed
Task B: Systems Engineering Approach			
	Draft Systems Engineering Management Plan (SEMP)	11/21/2016	Draft Submitted
	Engineering Process Decision Matrix	1/17/2017	Draft Submitted
	Revised Systems Engineering Management Plan (SEMP)	2/2/2017	95% Complete
	Concept of Operations (ConOps)	4/24/2017	35% Complete
	System Architecture and Standards Plan	5/8/2017	Not Initiated
	Demonstration Site Map and Installation Schedule	5/15/2017	Not Initiated
Task C: Performance Measurements			
	Performance Measurement Plan	6/2/2017	Not Initiated
Task D: Data Privacy Requirements			
	Data Privacy Plan	1/24/2018	Not Initiated
Task E: Data Management and Support for Independence Evaluation			
	Independent Evaluation Support Plan	3/21/2017	Not Initiated
	Data Management plan	12/11/2017	Not Initiated
Task F: Safety Management and Safety Assurance			
	Safety Management Plan	6/13/2017	Not Initiated
	Human Use Approval Summary	6/6/2017	Not Initiated
Task G: Communications and Outreach			
	A Smart City Demonstration Website	11/18/2016	Draft Delivered
	Communications and Outreach Plan	12/5/2016	Draft Delivered
	Final Communications and Outreach Plan	1/25/2017	Final Delivered
	Crisis Communication Plan	1/25/2017	Final Delivered
Task H: International Collaboration			
	International Collaboration Meeting	9/30/17	Not Initiated
Task I: Participation in Relevant ITS Architecture and Standards Development Efforts			



Task Name and Deliverable	Due Date	Status
Architecture Meeting and Report	9/30/17	Not Initiated
Task J: Interim and Final Reports		
Smart City Demonstration Interim Report	9/30/17	Not Initiated

Key Activities /Accomplishments

Task A. Program Management

Activities/Accomplishments in September
2) Held USDOT Kick Off meeting on 09/12/2016 and 09/13/2016 in Columbus, OH.
3) Submitted Draft Schedule on 09/26/2016.
4) Submitted Initial Partnership/Stakeholder Status Summary 09/26/2016.
Activities/Accomplishments in October
1) Met with USDOT to review PMP outline. Submitted Draft PMP on 10/24/2016.
2) Submitted CRR for Schedule and Schedule monthly update on 10/31/2016.
3) Initial set-up Program SharePoint / Dropbox Portal for project files to begin enrolling members.
4) Continued work to identify and refine working groups and participants.
5) Began work on draft IDE Framework and on the Concept of Operations outline.
Activities/Accomplishments in November
1) Submitted Draft PMP on 10/24/2016 and received USDOT comments on 11/4/2016. Revised PMP submitted to USDOT on 12/8/2016.
2) Completed configuration design for SharePoint enhancements to incorporate additional program needs.
3) Refined working groups and participants. Held working group chairperson kickoff meeting on 11/7/2016. Held six prep meetings with working group chairs for the first working group meeting on user needs.
4) Submitted Updated Schedule on 10/31/2016. USDOT responded with no comments for the month of November.
5) Bi-monthly Partnership/ Stakeholder Status summary is submitted to USDOT on 11/30/2016.
Activities/Accomplishments in December
1) Submitted updated PMP on 12/8/2016 and received USDOT comments on 12/22/2016. Quarterly PMP update is due to USDOT by end of January 2017.
2) Refined working groups and participants. Held prep meetings with working group chairs for all USDOT working groups. Held Meeting 01: User Needs: <ul style="list-style-type: none"> • Connected Vehicles on 12/19/2016



<ul style="list-style-type: none">• Downtown Parking 12/22/2016.
3) Submitted Updated Schedule on 11/30/2016. USDOT AO responded with comments on 12/02/2016. Updated schedule submitted to USDOT on 12/30/2016.
4) Updated SharePoint configuration and invited new users and uploaded and organize files such as monthly schedule updates, revised PMP, weekly progress reports, partner tracking spreadsheets, etc.
Activities/Accomplishments in January
1) Held Working Group Meeting 01: User Needs: <ul style="list-style-type: none">• Data and Analytics on 1/6/2017• Autonomous Vehicles on 1/17/2017• Smart Street Lighting on 1/19/2017• Smart Logistics on 1/20/2017• Mobility Assistance on 1/24/2017• Transit/ Ped Safety on 1/26/2017• Connected Travelers on 1/26/2017
2) Revised monthly deliverables table to meet the USDOT requested changes. Schedule monthly update is submitted to USDOT on 1/31/2017.
3) Quarterly PMP update submitted to USDOT on 1/30/2016.
4) Bi-monthly Partnership/ Stakeholder Status summary submitted to USDOT on 1/31/2017.
5) Progressed partner agreements for the 28 likely partners (10 recruited by USDOT and 18 recruited by City of Columbus) <ul style="list-style-type: none">• Signed agreements (3) with AEP, MORPC and OSU.• Fully negotiated agreements (7) awaiting signature with the Columbus Partnership, D.C. Solar, Econolite, Fleetcarma, GCAC, Honda and Siemens.• Actively negotiating agreements with nine (9) partners.• Nine (9) other partner agreements in preliminary stages of negotiation.
Activities to be Performed in February and March
1) Working Group Meeting 01 - User Needs: <ul style="list-style-type: none">• Truck Platooning on 2/7/2017 and• First Mile/ Last Mile on 2/14/2017
2) Several Working Group meeting 02: Concept of Operations will be held in February and March.

Task B. Systems Engineering Approach

Activities/Accomplishments in September
1) 9/22/16: Discussed Systems Engineering Management Plan (SEMP) with USDOT Task leads. The City agreed to provide an Annotated Outline for the USDOT to review and comment on.
Activities/Accomplishments in October
1) SEMP Annotated Outline is delivered to USDOT on Wednesday 10/5/2016; Met with USDOT



on Wednesday 10/12/2016 to discuss outline.
Activities/Accomplishments in November
1) Held 1 Day Workshop on 11/2/2016 with USDOT to discuss the SEMP and Systems Engineering Process.
2) Met with OSU IRB leads to discuss approach to IRB on this grant.
3) Participated in and facilitated IDE workshop on 11/8/2016.
4) Submitted draft SEMP on 11/21/2016.
Activities/Accomplishments in December
1) Developed first draft of a SEMP Engineering Process Decision Matrix based on discussion with USDOT. Submitted draft to USDOT for review/ approval on 1/17/2017.
2) Conference call with USDOT and City on 12/12/2016 to discuss 11/21/2016 SEMP.
3) Began development of Program Architecture.
4) Prepared outline for IDE tech Memo and ConOps. Began developing ConOps for USDOT projects.
5) Participated in IDE/Agile discussions with the City Department of Technology and the USDOT. Updated Agile/ Scrum documentation per SEMP conference calls with USDOT.
Activities/Accomplishments in January
1) Continued updating SEMP based on comments/feedback received from USDOT.
2) Prepared material and attended Scrum Kick-off workshop on 01/17/2017 - 01/18/2017 in Columbus. Product Vision, SEMP, meeting notes and User stories and sizing documentation is updated following Scrum Kickoff meeting.
3) Daily conference call with USDOT starting 01/09/2017 on Scrum Kick-off and IDE project development schedule.
Activities to be Performed in February and March
1) Submit SEMP to USDOT on 2/2/2017.
2) Continued coordination with USDOT on ConOps development.

Task C. Performance Measurement

Activities/Accomplishments in September
1) No work to report.
Activities/Accomplishments in October
1) No work to report.



Activities/Accomplishments in November
1) No work to report.
Activities/Accomplishments in December
1) No work to report.
Activities/Accomplishments in January
1) Participated in bi-weekly US DOT CV Pilot Perf Measures / IE / Human Use Approval Meeting.
2) Met with USDOT at HQ to discuss Columbus Evaluation, Performance Measurement and Data on 1/12/2017.
Activities to be Performed in February and March
1) Continued dialogue on best approach for performance measurement.

Task D. Data Privacy Requirements

Activities/Accomplishments in September
1) No work to report.
Activities/Accomplishments in October
1) No work to report.
Activities/Accomplishments in November
1) No work to report.
Activities/Accomplishments in December
1) No work to report.
Activities/Accomplishments in January
1) No work to report.
Activities to be Performed in February and March
1) Schedule initial meetings for Data Privacy with USDOT to incorporate into the development of the Integrated Data Exchange (IDE).

Task E. Data Management and Support for Independence Evaluation

Activities/Accomplishments in September
1) No work to report.
Activities/Accomplishments in October
1) Participated in and facilitated the USDOT Data Management Workshop (10/13/2016 - 10/14/2016).



Activities/Accomplishments in November
2) No work to report.
Activities/Accomplishments in December
1) No work to report.
Activities/Accomplishments in January
1) Participated in bi-weekly US DOT CV Pilot Perf Measures / IE / Human Use Approval Meetings.
Activities to be Performed in February and March
1) Continue to participate in bi-weekly US DOT CV Pilot Perf Measures / IE / Human Use Approval Meetings.

Task F. Safety Management and Safety Assurance

Activities/Accomplishments in September
1) No work to report.
Activities/Accomplishments in October
1) No work to report.
Activities/Accomplishments in November
1) No work to report.
Activities/Accomplishments in December
1) No work to report.
Activities/Accomplishments in January
1) Participated in bi-weekly US DOT CV Pilot Perf Measures / IE / Human Use Approval Meetings.
Activities to be Performed in February and March
1) Continue to participate in bi-weekly US DOT CV Pilot Perf Measures / IE / Human Use Approval Meetings.

Task G. Communications and Outreach

Activities/Accomplishments in September
1) Initial design meeting held between outreach team and City's web team 9/28/2016.
2) Issued first Smart Columbus E-newsletter
3) Conducted research/discovery efforts to start branding, messaging effort, and development of Communications/Outreach Plan
4) The City staff and/or their consultants presented on the USDOT Program at the following events:



- Norwegian Transport Minister, September 21, 2016
- Business First Smart City Editorial Forum, Columbus Public Sector Digest Webinar, September 20, 2016
- ITS Midwest, September 22-23, 2016
- Midwest Green Fleets, September 27, 2016
- Smart Mobility Panel, MEMA Midwest Green Fleets Conference, September 27, 2016
- Smart Cities Week 2016, September 27-29, 2016
- ITS Wisconsin, September 28, 2016
- CEOs for Cities National Meeting, September 28-30, 2016

Activities/Accomplishments in October

- 1) Held partner meetings (Honda/OSU on 10/7/2016) to discuss Communication/Outreach/Marketing strategies and tactics, that informed the Communication/Outreach Plan.
- 2) Copywriting/editing for weekly e-newsletters (6 issued through October).
- 3) Continued website development; coordinated website updates.
- 4) Provided copywriting and graphic design services for e-newsletters, various reports, templates, submittals, presentations, conferences and fact sheet #1.
- 5) Developed brand and message to coordinate with USDOT brand guidelines; received USDOT approval.
- 6) The City staff and/or their consultants presented on the USDOT Program at the following events:
 - ITS NJ, October 18-19, 2016
 - Department of Public Service Annual Meeting with Mayor, October 20, 2016
 - Storm Electric Motorcycle Event, October 21, 2016
 - Netherlands Delegation, October 21, 2016
 - MORPC Summit on Sustainability, October 21, 2016
 - Columbus Foundation Retreat, October 21, 2016
 - Ohio Transportation Engineering Conference, October 25-26, 2016

Activities/Accomplishments in November

- 1) Developed trade show display and materials for Smart City Expo in Barcelona.
- 2) Submitted Smart Columbus website on 11/14/2016.
- 3) Copywriting/editing for weekly e-newsletters (10 issued through November).
- 4) Ensured OSU had appropriate materials for OSU trade show booth.
- 5) Supported material for Governor Kasich news conference.
- 6) Planned first public Smart Columbus event
- 7) The City staff and/or their consultants presented on the USDOT Program at the following events:
 - WTS San Diego, November 1-2, 2016
 - ITS America Leadership Circle Forum, November 2,4, 2016
 - WELD Women You Should Know, November 3, 2016



- Smart City World Expo, November 15-17, 2016
- Franklin County Energy Baseline Study, November 28, 2016
- Whitehouse Domestic Policy Council and Office of Science and Technology Electric Vehicle Datathon, November 29, 2016

Activities/Accomplishments in December

- 1) Distributed Communications/Outreach Plan for internal review and submitted to USDOT on 12/5/2016.
- 2) Continued website refresh: further progress on other web page design and incorporating USDOT comments.
- 3) Continued copywriting/editing: edited weekly e-newsletters. (12 issued through December); incorporated input from USDOT and executive committee into fact sheet and updated project and working group descriptions, various graphics and templates.
- 4) Provided fact sheet and branding materials to Jobs Ohio and OSU/Detroit Auto Show. Assisted with various Smart Columbus presentations.
- 5) Started strategy, outreach and planning for Linden Innovation Sessions
- 6) The City staff and/or their consultants presented on the USDOT Program at the following events:
 - Texas Mobility Summit, December 1, 2016
 - IEEE Vehicular Networking Conference, December 8-10, 2016

Activities/Accomplishments in January

- 1) Submitted Communications/Outreach Plan, Crisis Communication Plan, brand standards and disposition of comments to USDOT on 1/25/2017.
- 2) Continued copywriting/editing: edited weekly e-newsletters. (13 issued through January 2017).
- 3) Linden innovation session planning and outreach to community partners:
 - Sent out meeting notification e-blast to email lists; posted on website
 - Hand distributed fliers to North and South Linden Area Commissions and Linden-McKinley STEM High School
 - Briefed pastors and other community leaders
 - Further developed program and user needs questions
 - Sought and secured donations; confirmed program direction with Core Communication Team and PMO
 - Coordinated logistics and
 - Proceeding with designating a Linden liaison.

A document containing the framework, plan and desired outcome of the Linden Innovation Sessions continues to evolve as planning continues.
- 4) Participated in multiple conferences, media interviews and events (TRB, Detroit Auto Show, Honda at Consumer Electronics Show).
- 5) The City staff and/or their consultants presented on the USDOT Program at the following events:



- Consumer Electronic Show, January 5-8, 2017
- TRB, January 8-12, 2017
- North American International Auto Show, January 9, 2017

Activities to be Performed in February and March

- 1) Facilitate Linden Innovation Sessions on 02/10/2017 and 02/11/2017. Develop follow up strategy.
- 2) Finalize brand and message platform.
- 3) Convene Communications Working Group and implement Communications/Outreach Plan.
- 4) Crisis Communications training.
- 5) Continued support for conferences, media interviews and events.

Table of Events Attended (Synopsis of Activities in Task G)

Date	Event
September 20, 2016	Business First Smart City Editorial Forum, Columbus Public Sector Digest Webinar,
September 21, 2016	Norwegian Transport Minister
September 22-23, 2016	ITS Midwest
September 27, 2016	Midwest Green Fleets
September 27, 2016	Smart Mobility Panel, MEMA Midwest Green Fleets Conference
September 27-29, 2016	Smart Cities Week 2016
September 28, 2016	ITS Wisconsin
September 28-30, 2016	CEOs for Cities National Meeting
October 18-19, 2016	ITS NJ
October 20, 2016	Public Service Department Annual Meeting with Mayor
October 21, 2016	Storm Electric Motorcycle Event
October 21, 2016	Netherlands Delegation
October 21, 2016	MORPC Summit on Sustainability
October 21, 2016	Columbus Foundation Retreat
October 25-26, 2016	Ohio Transportation Engineering Conference



November 1-2, 2016	WTS San Diego
November 2,4, 2016	ITS America Leadership Circle Forum
November 3, 2016	WELD Women You Should Know
November 15-17, 2016	Smart City World Expo
November 28, 2016	Franklin County Energy Baseline Study
November 29, 2016	Whitehouse Domestic Policy Council and Office of Science and Technology Electric Vehicle Datathon
December 1, 2016	Texas Mobility Summit
December 8-10, 2016	IEEE Vehicular Networking Conference
January 5-8, 2017	Consumer Electronic Show
January 8-12, 2017	Transportation Research Board
January 9, 2017	North American International Auto Show

Task H. International Collaboration

Activities/Accomplishments in September
1) No work to report.
Activities/Accomplishments in October
1) No work to report.
Activities/Accomplishments in November
1) Incorporated preliminary USDOT feedback into fact sheet.
2) Drafted content and graphic design: designed/printed poster and tip cards at international Smart City Expo World Congress in Barcelona; briefed OSU Communication Lead on Smart Columbus; shared brand, messaging and media relations protocols.
Activities/Accomplishments in December
1) No work to report.
Activities/Accomplishments in January
1) No work to report.
Activities to be Performed in February and March
1) TBD



Task I. Participation in Relevant ITS Architecture and Standards Development Efforts

Activities/Accomplishments in September
1) No work to report.
Activities/Accomplishments in October
1) No work to report.
Activities/Accomplishments in November
1) No work to report.
Activities/Accomplishments in December
1) No work to report.
Activities/Accomplishments in January
1) Participated in SAE J2945/2- Dedicated Short Range Communications (DSRC) Performance Requirements for V2V Safety Awareness Comment Resolution discussion.
Activities to be Performed in February and March
1) TBD

Task J. Interim and Final Reporting

Activities/Accomplishments in September
1) No work to report.
Activities/Accomplishments in October
1) No work to report.
Activities/Accomplishments in November
1) No work to report.
Activities/Accomplishments in December
1) No work to report.
Activities/Accomplishments in January
1) No work to report.
Activities to be Performed in February and March
1) No work anticipated.



Subcontractor Status Summary

Key Tasks/ A summary of Subcontractor Coordination and Management Activities

Status of Key Procurements and sub-contract awards in September
1) No work to report.
Status of Key Procurements and sub-contract awards in October
2) NTP to consultant for engineering work.
Status of Key Procurements and sub-contract awards in November
3) No work to report.
Status of Key Procurements and sub-contract awards in December
4) NTP to consultant for engineering work.
Status of Key Procurements and sub-contract awards in January
4) No work to report.
Status of Key Procurements and sub-contract awards February and March
5) No work anticipated.

Leveraged Partner Resources Status Summary

A summary of activities related to Leveraged Partner Resources

Status of Key Procurements and sub-contract awards in September
1) Developed templates for partnership agreements. 2) Outreach to potential partners identified in the application that have supplied preliminary agreements/letters of support to sign a Cooperative Agreement with Columbus.
Status of Key Procurements and sub-contract awards in October
1) Continued outreach to potential partners identified in the application that have supplied preliminary agreements/letters of support to sign a Cooperative Agreement with Columbus.
Status of Key Procurements and sub-contract awards in November
1) Continued outreach to potential partners identified in the application that have supplied preliminary agreements/letters of support to sign a Cooperative Agreement with Columbus. 2) Cooperative agreement with American Electric Power (AEP)
Status of Key Procurements and sub-contract awards in December
1) Continued outreach to potential partners identified in the application that have supplied preliminary agreements/letters of support to sign a Cooperative Agreement with Columbus. 2) Cooperative agreement with the Mid-Ohio Regional Planning Organization (MORPC). Cooperative agreement with The Ohio State University (OSU).



Status of Key Procurements and sub-contract awards in January

- 1) Cooperative agreement with Siemens.
- 2) Continued outreach to potential partners identified in the application that have supplied preliminary agreements/letters of support to sign a Cooperative Agreement with Columbus.
- 3) Fully negotiated agreements six (6) awaiting signature with the Columbus Partnership, D.C. Solar, Econolite, Fleetcarma, GCAC, and Honda.
- 4) Actively negotiating agreements with nine (9) partners.
- 5) Nine (9) other partner agreements in preliminary stages of negotiation.

Status of Key Procurements and sub-contract awards February and March

- 1) Continue progressing partner Cooperative Agreements.

Schedule Update

Current schedule for the project

Status of schedule

- 1) Page 18 and 19 contains the Table of Deliverables that is current for the January 2017 Monthly Update to be submitted on January 31, 2017.
- 2) The email of the Quarterly Progress Report contains the MS Project file of the schedule.



Task	Deliverable	Original Cooperative Agreement			Approved Revised Dates				Requested Revised Dates				Actual Submittal Date			Notes
		Draft Due Date	Final Due Date	508 Compliant	Draft Due Date	Final Due Date	508 Compliant	Date Approved by AOR	Draft Due Date	Final Due Date	508 Compliant	Date Request Submitted by Columbus	Draft	Final	508 Compliant	
A	Kick-off Meeting	N/A	4 weeks of award	N/A	N/A	9/12/16	N/A	11/1/16	-	-	-	-	N/A	9/12/16	N/A	-
A	Project Management Plan (PMP)	10/24/16	TBD	N/A	10/24/16	12/8/16	N/A	11/1/16	-	-	-	-	10/24/16	12/8/16	N/A	-
A	Project Schedule	9/26/16	N/A	N/A	-	-	-	-	-	-	-	-	9/26/16	N/A	N/A	-
A	Project Schedule Monthly Updates	N/A	Monthly	N/A	-	-	-	-	-	-	-	-	N/A	Monthly	N/A	-
A	Partnership/Stakeholder Status Summary	9/26/16	N/A	N/A	9/26/16	2/23/17	N/A	11/1/16	-	-	-	-	9/26/16	-	-	-
A	Quarterly Progress Reports and Briefings	N/A	Quarterly	N/A	-	-	-	-	-	-	-	-	N/A	Quarterly	N/A	-
B	Systems Engineering Management Plan	11/21/16	TBD	TBD	11/21/16	2/2/17	3/24/17	1/18/17	-	-	-	-	11/21/16	-	-	-
B	Concept of Operations (ConOps)	2/27/17	TBD	TBD	4/24/17	7/24/17	5/14/18	1/18/17	-	-	-	-	-	-	-	-
B	Demonstration Site Map and Installation Schedule	3/31/17	TBD	TBD	5/15/17	5/9/18	7/6/18	1/18/17	-	-	-	-	-	-	-	-
B	Systems Requirements Specification (SyRS)	6/12/17	TBD	TBD	8/16/17	11/16/17	6/5/18	1/18/17	-	-	-	-	-	-	-	-
B	Interface Control Document (ICD)	7/3/17	TBD	TBD	8/15/17	9/27/17	11/19/17	1/18/17	-	-	-	-	-	-	-	-
B	System Design Document (SDD)	9/18/17	TBD	TBD	12/1/17	2/13/18	3/28/18	1/18/17	-	-	-	-	-	-	-	-
B	Test Plan (TP)	8/13/17	TBD	TBD	10/27/17	12/13/17	2/16/18	1/18/17	-	-	-	-	-	-	-	-
B	System Architecture and Standards Plan	3/24/17	TBD	TBD	5/8/17	6/20/17	8/16/17	1/18/17	-	-	-	-	-	-	-	-
B	Other Systems Engineering documents – as identified by the Recipient and agreed to by the USDOT – that provide evidence of following a systems engineering approach	TBD	TBD	TBD	-	-	-	-	-	-	-	-	-	-	-	-
C	Performance Measurement Plan	12/21/16	TBD	TBD	6/2/17	7/17/17	9/12/17	1/18/17	-	-	-	-	-	-	-	-
C	Response to USDOT Deployment Tracking Surveys (as required)	N/A	TBD	N/A	-	-	-	-	-	-	-	-	N/A	TBD	N/A	-
D	Data Privacy Plan	7/31/17	TBD	TBD	1/24/18	3/8/18	5/3/18	1/18/17	-	-	-	-	-	-	-	-
E	Data Management Plan	7/3/17	TBD	TBD	12/11/17	2/7/18	4/5/18	1/18/17	-	-	-	-	-	-	-	-
E	Independent Evaluation Support Plan	12/21/16	TBD	TBD	-	-	-	-	-	-	-	-	-	-	-	-
E	Data to support USDOT's Independent Evaluation	N/A	TBD	N/A	-	-	-	-	-	-	-	-	N/A	-	N/A	-
E	Data provided to the USDOT's Research Data Exchange (RDE)	N/A	TBD	N/A	-	-	-	-	-	-	-	-	N/A	-	N/A	-
F	Safety Management Plan	11/21/16	TBD	TBD	6/13/17	7/26/17	9/21/17	1/18/17	-	-	-	-	-	-	-	-
F	Human Use Approval Summary	2/1/17	TBD	N/A	6/6/17	8/16/17	N/A	1/18/17	-	-	-	-	-	-	N/A	-
G	Communications and Outreach Plan	12/5/16	TBD	TBD	12/5/16	1/25/17	3/23/17	1/18/17	-	-	-	-	12/5/16	1/25/17	-	-



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G	A promotional video (3-5 minutes) about the Smart City Demonstration, including two additional updates;	N/A	TBD	TBD	-	-	-	-	-	-	-	-	N/A	Completed	-	-
G	A Smart City Demonstration website	11/18/16	Monthly	TBD	-	-	-	-	-	-	-	-	11/18/16	Monthly	-	-
G	Travel and participation in six workshops/conferences/trade shows each year with one of them being international	N/A	TBD	N/A	-	-	-	-	-	-	-	-	N/A	-	N/A	-
G	Participation in four public USDOT-organized webinars per year regarding Smart City Challenge Demonstration progress/performance and lessons learned	N/A	TBD	N/A	-	-	-	-	-	-	-	-	N/A	-	N/A	-
H	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	N/A	TBD	N/A	-	-	-	-	-	-	-	-	N/A	-	N/A	-
I	Attendance at 6 architecture and standards meetings, of which 2 are expected to be held outside of the United States	N/A	TBD	N/A	-	-	-	-	-	-	-	-	N/A	-	N/A	-
I	Architecture and Standards Meeting Trip Reports	N/A	TBD	N/A	-	-	-	-	-	-	-	-	N/A	-	N/A	-
J	Smart City Demonstration Interim Reports (annually)	Last Friday of September (annually)	TBD	N/A	-	-	-	-	-	-	-	-	-	-	N/A	-
J	Smart City Demonstration Final Report	9/23/2020	TBD	TBD	-	-	-	-	-	-	-	-	-	-	-	-

The dates in the Table of Deliverables are hereby approved by the AOR, inclusive of the update(s) proposed above. The Recipient may update the table to reflect the written AOR approval provided by the signature below.

Kate Hartman, AOR _____ Date



Risk Status

A summary of risks identified

Legislative Risk: Legislation is likely required to allow for the deployment of the program’s planned automation. This affects the truck platooning project in the Logistics District and the deployment of the autonomous shuttle in the Commercial District. Discussions are underway with ODOT and the Mayor’s and Governor’s Offices to determine the best path forward.

Partner Risk: The SPARC site will likely not be ready when the Smart Columbus Program needs it, so alternatives are being evaluated.

Schedule Risk: Outreach activities associated with obtaining user needs are taking longer than anticipated and may affect the schedule more significantly depending on the community recommendations.

Risk Log

RATING	RISK IDENTIFICATION	RISK MITIGATION STRATEGY
1	Legislation will likely be required to allow for the deployment of the planned autonomous shuttles on city streets.	<ul style="list-style-type: none"> Review current state statutes to determine needs. Evaluate statutory authority in other states to determine applicability to the Smart Columbus situation. Work with appropriate policy makers in Ohio to address legislative needs related to vehicle automation solutions on the Smart Columbus program
2	Legislation is likely required to allow automated trucks and truck platooning on public streets and highways, such as that proposed for the Logistics District.	<ul style="list-style-type: none"> Review current state statutes to determine needs. Evaluate statutory authority in other states to determine applicability to the Smart Columbus situation. Work with appropriate policy makers in Ohio to address legislative needs related to vehicle automation solutions on the Smart Columbus program
3	Schedule: Due to the enthusiasm and interest in the Smart Columbus Program, there have been many more players to coordinate with to allow appropriate time to listen and respond to user needs. In Linden six (6) projects will be impacted by the results of this engagement. Depending on the extent of the user/community comments and need to change direction, the schedule may be impacted.	We are working very closely with Linden leadership to ensure buy-in to the process and ultimately the user needs and projects. We expect this will provide meaningful feedback for the design of a Smart City that solves real problems.



RATING	RISK IDENTIFICATION	RISK MITIGATION STRATEGY
4	Partners: SPARC , a committed local partner in the City's grant application, has not yet broken ground on their development, which is the City's proposed primary site for vehicle testing prior to deployment.	Hold team meetings to review partnering offers, and include team members in negotiating sessions, and identifying alternate sites to SPARC.

Issues/Concerns/ Other

See note in the risk section.