V2I Deployment Coalition TWG 4 Monthly Meeting
Minutes
November 18, 2015 – 1:00-2:30 (Eastern)

Actions

1. Faisal Saleem: Work with Steve Lockwood and USDOT to arrange follow-up discussion between TWG 4 and USDOT regarding Deployment Guidance comments. *It was suggested that this discussion take place during the October or November meetings for TWG 4. The action will remain open until USDOT identifies a publication date for the Deployment Guidance.*

2. Ginny Crowson: Finalize summaries of Issue 6: V2I Outreach and Issue 11: V2I Consumer Messaging for coalition review and submission to USDOT.

3. All: Review and comment on draft summary of Issue 11: V2I Consumer Messaging by 12/2. Send comments to Ginny Crowson.

4. Faisal Saleem/Navin Katta/Ginny Crowson: Contact USDOT in late-November to determine if the V2I Deployment Guidance may be released in time for the December meeting and update TWG 4.

5. Ginny Crowson: Issues schedule poll for potential informal TWG 4 meeting at TRB.

Attendance

1. Faisal Saleem (Chair)*	Maricopa County, AZ	faisalsaleem@mail.maricopa.gov
2. Navin Katta (Co-Chair)*	Savari Inc.	navin@savarinetworks.com
3. Melissa Lance	Virginia DOT	melissa.lance@vdot.virginia.gov
4. Gary Piotrowicz*	RCOC	gpiotrowicz@rcoc.org
5. Emil Wolanin*	Montgomery Co., MD	emil.wolanin@montgomerycountymd.gov
6. Bob Arnold	USDOT FHWA	robert.arnold@dot.gov
7. Jonathan Walker	USDOT FHWA	jonathan.b.walker@dot.gov
8. Bob Sheehan	USDOT ITS-JPO	robert.sheehan@dot.gov
9. Mike Pina	USDOT	mike.pina@dot.gov
10. Stephanie Fischer	USDOT	stephanie.fischer@dot.gov
11. Shel Leader	Private Consultant-Telecom	shel@sleader.com
12. Naveen Lamba	CH2M Hill	naveen.lamba@ch2m.com
13. Martha Morecock Eddy	Timmons Group	martha.eddy@timmons.com
14. Mohammed Hadi	Florida Intl University	hadim@fiu.edu
15. Rod Schebesch	Stantec	rod.schebesch@stantec.com
16. Bob Koeberlein*	Idaho DOT	robert.koeberlein@itd.idaho.gov
17. Ed Alegre	Metro	alegree@metro.net
18. Brian Burkhard	Jacobs	brian.burkhard@jacobs.com
19. Ginny Crowson (Liaison)*	Athey Creek Consultants	crowson@acconsultants.org

Denotes core member appointed by Project Team

October Meeting Recap

Navin Katta reviewed highlights from the October meeting, noting that all but one of the actions have been completed. The action to discuss disposition of the initial comments TWG 4 submitted to USDOT will remain open until the new Deployment Guidance is issued.

In October, there was a review of the V2I DC Executive Committee meeting and their discussion about roles, initial focus areas and a business plan for future coalition work. An interim meeting with USDOT regarding outreach was summarized for the group, noting that USDOT is beginning a new Knowledge and Technology Transfer effort that has a broad-based outreach focus that will address several of the point identified in the TWG 4 summary of Issue 6: V2I Outreach. USDOT will also continue to expand Connected Vehicle training offered through the Professional Capacity Building program. Finally, TWG 4 continued the discussion about Issue 11: V2I Consumer Messaging by reviewing messages surrounding the Chrysler Jeep hack.

Connected Vehicle Pooled Fund Study and CVRIA Outreach

Faisal Saleem introduced Melissa Lance from Virginia DOT and the Connected Vehicle Pooled Fund Study. Melissa was invited to share information about the pooled fund's interests, as they may relate to the work of TWG 4. Melissa explained that the pooled fund was formed in 2009 to prepare state and local transportation agencies for the deployment of Connected Vehicle technologies. Fifteen organizations participate in the pooled fund which is in its third phase of work focused on the dynamic mobility application, Multimodal Intelligent Traffic Signal System (MMITS). During their first phase of work, the pooled fund completed research to educate agencies on Connected Vehicle technologies such as the Connected Vehicle certification program. In their second phase, the pooled fund developed and field tested Connected Vehicle applications including the 5.9 GHz DSRC Vehicle-Based Road and Weather Condition Application. Additional information about the pooled fund is available online at http://cts.virginia.edu/CTSPFS_1.html.

Navin Katta provided a brief introduction to the Connected Vehicle Reference Implementation Architecture (CVRIA) as an educational resource. As noted on the CVRIA web site, it is being developed as the basis for identifying the key interfaces across the Connected Vehicle environment which will support further analysis to identify and prioritize standards development activities. CVRIA will also support policy considerations for certification, standards, core system implementation, and other elements of the Connected Vehicle environment. Navin further explained the variety of databases, documents, stakeholder workshops and outreach materials available through the CVRIA web site – many of which could be used during outreach to transportation agencies.

Members agreed with the value of information and materials available from CVRIA and the Connected Vehicle Pooled Fund Study but it's still unclear how these and other materials relate to one another, who they are targeted to or how they should be used. USDOT explained that many of these materials will be referenced and further explained in the new version of the Deployment Guidance that will soon be released. TWG 4 should continue to observe this challenge, how it is addressed in the new guidance and make further suggestions, as needed, to USDOT on how to further address it.

Comments on Draft Summary of Issue 11: V2I Consumer Messaging

Ginny Crowson explained that the draft summary was distributed with the November meeting reminder. She briefly explained that the content of the summary highlights the TWG 4 discussion about samples of

messaging from government, academia and private industry, and how those messages were believed to be common, supportive or questionable. It was noted that Virginia Lingham shared three additional references to add to the summary:

- Connected Bicycle: VanHawks Valour. Video is from a year ago. Bike is currently available out of Toronto for about $1,000. Started out as a Kickstarter project. https://vimeo.com/93113021
- FRATIS Outreach from Gateway Cities. This is a series of videos released to support their efforts. https://youtu.be/c71Qm6HxVTY
- Automatic – Your Smart Driving App. This is a connected eco-smart driving app. http://youtu.be/_AyXNeRbpRk

Bob Koeberlein also noted that messaging may need to consider explaining if and how Connected Vehicle data will be shared with police for enforcement. Additional review and comment from TWG 4 is requested by 12/2 and comments should be sent to Ginny Crowson. Once this and the Issue 6: V2I Outreach summary are finalized, they will be shared with the rest of the coalition and USDOT as deliverables from TWG 4.

Next Steps and Meeting

Faisal Saleem noted that the December meeting is tentatively focused a review of the new V2I Deployment Guidance – but only if it is released by then. If, two weeks after this meeting, USDOT is still unsure when the guidance will be released, the December meeting may be canceled. The group will be notified by 12/2 of plans regarding the December meeting. Faisal added that notices will also be sent for the first three meetings in 2016:

- January 20, 1:30-3:00 (Eastern) *Note this meeting is later in January to accommodate TRB.*
- February 10, 11:00-12:30 (Eastern)
- March 9, 11:00-12:30 (Eastern)

It was mentioned that the January meeting was scheduled for later in the month to accommodate TRB and some of the group members asked if an informal TWG 4 meeting could be arranged during TRB. A schedule poll will be included in follow-up email to this meeting and an informal meeting may be arranged if responses support it.

TWG 4 Member Questions/Closing Comments

There were no further comments from the group.

TWG 4 Work Plan Summary

V2I Deployment Issues	Anticipated TWG 4 Actions	Anticipated Completion Date
Issue 1: V2X Applications	• Identify relevant content from this issue that should be included in the overall outreach in Issue 6 based on TWG 3 findings.	Q1-2016
Issue 2: Complementary Communications to DSRC	*No action planned*	
Issue 3: V2I Data	*No action planned*	
Issue 4: Patents-Intellectual Property	*No action planned*	
Issue 5: Security	*No action planned*	
Issue 6: V2I Outreach	• Provide input to USDOT on V14 of Deployment Guidance.	Completed 6-29-2015
	• Identify outreach that may be needed to increase awareness and support of V2I among transportation agencies.	Q3-2015 and Q2-2016
	• Provide input to USDOT on additional content for next version of Deployment Guidance.	Q4-2015
Issue 7: Understanding the Benefits and Costs of V2I Deployment	• Identify relevant content related to calculating the benefits and costs of V2I applications based on work by TWG 1 that should be included in overall outreach in Issue 6.	Q2-2016
Issue 8: V2I Standards	*No action planned*	
Issue 9: Understanding V2I Liability Assignment	• Identify relevant content related to V2I liability assignment that should be included in overall outreach in Issue 6 based on TWG 2 findings.	Q2-2016
Issue 10: V2I Synergies with Other Emerging Technologies	*No action planned*	
Issue 11: V2I Consumer Messaging	• Develop a description of the type of content and guidelines that are needed to be developed to enable consistent, accurate consumer messaging related to V2I applications.	Q4-2015
Issue 12: V2I Multimodal Applications	*No action planned*	
Issue 13: Infrastructure Processes as V2I Obstacles	• Identify relevant content related to infrastructure processes based on work completed by TWG 1 and TWG 3 that should be included in overall outreach in Issue 6.	Q1-2016
Issue 14: Federal V2I Policy Statement	• Identify relevant content related to a Federal V2I policy statement based on work done by TWG 1 that should be included in feedback on the V2I Guidance documents.	Q4-2015
Issue 15: Maintaining V2I Infrastructure	*No action planned*	