V2I Deployment Coalition TWG 4 Monthly Meeting
Minutes
January 20, 2016 – 12:30-2:00 (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. Faisal Saleem/Ginny Crowson: Send final summaries of Issue 6: V2I Outreach and Issue 11: V2I Consumer Messaging to other V2I DC TWG chairs and co-chairs for review and approval.

3. Faisal Saleem/Ginny Crowson: Following approval by TWG chairs and co-chairs, submit summaries of Issue 6: V2I Outreach and Issue 11: V2I Consumer Messaging to USDOT.

4. Jonathan Walker: Send copy of TRB presentation on V2I Deployment Guidance and Products to Faisal Saleem for TWG 4 distribution.

Attendance

1. Faisal Saleem (Chair)*	Maricopa County, AZ	faisalsaleem@mail.maricopa.gov
2. Navin Katta (Co-Chair)*	Savari Inc.	navin@savarinetworks.com
3. Bob Arnold	USDOT FHWA	robert.arnold@dot.gov
4. Jonathan Walker	USDOT FHWA	jonathan.b.walker@dot.gov
5. Stephanie Fischer	USDOT	stephanie.fischer@dot.gov
6. Naveen Lamba	CH2M Hill	naveen.lamba@ch2m.com
7. Sean Pierce	Volpe Center-USDOT	sean.pierce@dot.gov
8. Martha Morecock Eddy	Timmons Group	martha.eddy@timmons.com
9. Mohammed Hadi	Florida Intl University	hadim@fiu.edu
10. Bob Taylor	PA Turnpike Commission	robtaylo@paturnpike.com
11. Bob Koeberlein*	Idaho DOT	robert.koeberlein@itd.idaho.gov
12. Tim Simodynes	Iowa DOT	tim.simodynes@dot.iowa.gov
13. Patrick Chan	Consystec	patrick.chan@consystec.com
14. Brian Burkhard	Jacobs	brian.burkhard@jacobs.com
15. Shaun Quayle	Kittleson & Associates	squayle@kittleson.com
16. Ginny Crowson (Liaison)*	Athey Creek Consultants	crowson@acconsultants.org

*** Denotes core member appointed by Project Team**

November Meeting Recap

Faisal Saleem reviewed highlights from the November 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 November, there was further discussion about outreach efforts by the Connected Vehicle Pooled Fund Study and CVRIA. Comments received and final edits to the summary of Issue 11: V2I Consumer Messaging were shared with the group. Faisal Saleem also shared that the Project Team has advised that this deliverable and the summary of Issue 6: V2I Outreach be shared with the other TWG chairs and co-chairs for coalition approval before sending the summaries to USDOT. Faisal Saleem concluded his remarks by explaining that the December meeting had been cancelled due to the continued delay of the V2I Deployment Guidance.

Issue 14: Federal V2I Policy Statement Discussion

Navin Katta introduced the primary discussion topic for the meeting. He explained that TWG 1: Deployment Initiatives had suggested Issue 14: Federal V2I Policy Statement at the V2I DC working in June. This issue has been described by the Coalition as follows:

> *The recent NHTSA resolution regarding vehicle-to-vehicle communications has helped the V2V industry. Similar strong encouragement from a federal agency to give infrastructure owners and operators a push to deploy V2I would also help V2I. It is recognized that a rulemaking is likely not possible, but perhaps another strong encouragement from a federal agency (e.g. something similar to the "Every Day Counts" model) could be released.* **The V2I industry needs a strong message from a federal agency encouraging V2I deployment***.*

The above referenced policy statements that have been issued by NHTSA to-date include the following:

- [Preliminary Statement of Policy Concerning Automated Vehicles](#)
- [Federal Motor Vehicle Safety Standards: Vehicle-to-Vehicle (V2V) Communications Advance Notice of Proposed Rulemaking](#)

Navin Katta further explained that, during the V2I DC Executive Committee meeting in September, Jeff Lindley, USDOT, supported further discussion regarding this issue. In December, Faisal Saleem and Bill Legg, chair of TWG 1, discussed how TWG 1 and TWG 4 could work together to address Issue 14. A meeting of the TWG 1 and TWG 4 core group members was held on January 19 to brainstorm potential topics of interest that could be addressed by such a policy statement. Navin Katta briefly reviewed the topics with the group. Following is a high-level summary of the initial topics of interest that TWG 1 and TWG 4 have brainstormed for consideration in a potential federal V2I policy statement.

- Explanation of **why agencies should deploy V2I**
- **Sample legislative language** for agency consideration
- Clarification of **aftermarket device role** in V2I deployment
- Requirements for deploying, operating and maintaining **V2I equipment**
- Statement on potential **liability implications**
- Direction on **how data should be protected** by vendors and agencies
- Explanation of how USDOT is **protecting DSRC** band for V2I
- Recommendations on **use of DSRC** band and related channels within the band for V2I

Bob Arnold and Jonathan Walker were asked to comment on the idea of a federal policy statement and the preliminary topics of interest that have been noted so far. Bob Arnold shared that USDOT is working hard to finalize the V2I Deployment Guidance and they hope to release it in the first quarter of 2016. There is a strong need for the guidance in relation to the [Connected Vehicle Pilot Deployment Program](#)

and the Smart City Challenge. He added that the new FAST Act legislation will further support Connected Vehicle deployment, particularly Sec. 6004. ADVANCED TRANSPORTATION AND CONGESTION MANAGEMENT TECHNOLOGIES DEPLOYMENT which states, "Not later than 6 months after the date of enactment of this paragraph, the Secretary shall establish an advanced transportation and congestion management technologies deployment initiative to provide grants to eligible entities to develop model deployment sites for large scale installation and operation of advanced transportation technologies to improve safety, efficiency, system performance, and infrastructure return on investment." The legislation further notes that this grant initiative will be funded at $60,000,000 for each of fiscal years 2016 through 2020. Bob Arnold added that USDOT is developing the solicitation for this initiative now.

Jonathan Walker added that USDOT presented an update on the V2I Deployment Guidance at TRB. The presentation shares the Federal vision and policy statements, as they will appear in the guidance. He offered to share the presentation with Faisal Saleem for distribution to TWG 1 and TWG 4. He also noted that several of the topics of interest brainstormed for a potential Federal V2I policy statement will be addressed by the guidance and corresponding products in some fashion. As such, it was suggested that TWG 1 and TWG 4 wait for release of the guidance and products before issuing anything formal regarding a potential Federal V2I policy statement.

Brian Burkhard noted that there are differing viewpoints on security management and asked if, as the pilots roll out, information will be shared on how they are managing security. Jonathan Walker shared that security and several of the topics of interest noted earlier (e.g. DSRC) are being or will be addressed for the pilot deployments in a webinar series sponsored by the Connected Vehicle Pilot Deployment Program. Many of the webinars are open to the public at large and most are also recorded/available on the pilot program website under Technical Assistance Events.

Bob Taylor asked if the V2I Deployment Guidance will address why agencies should deploy V2I. Jonathan Walker replied that the guidance focuses more on funding eligibility and approaches for deployment. He added that the guidance was not intended to convince agencies to deploy V2I. Rather, the supporting products associated with the guidance will likely better address agency questions about why to deploy V2I. He also noted that some of the recent and upcoming outreach tools developed by Karen Timpone's group may further support agency questions about why to deploy V2I.

Next Steps and Meeting

Faisal Saleem asked TWG 4 members to further consider what additional topics of interest they may want to see addressed in a Federal V2I policy statement. He added that this issue will also be discussed by TWG 1 and additional information will be shared during the February TWG 4 meeting. The February and March meeting dates were shared with the group, along with a note that a full V2I DC workshop is being planned for the week of April 18. A general announcement regarding the spring workshop is expected to be released soon.

- February 10, 11:00-12:30 (Eastern)
- March 9, 11:00-12:30 (Eastern)
- Week of April 18: V2I DC Workshop in Ann Arbor, MI

TWG 4 Member Questions/Closing Comments

There were no further comments from the group.

TWG 4 Work Plan Summary and Status

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.	6-29-2015 **Completed**
	• Identify outreach that may be needed to increase awareness and support of V2I among transportation agencies.	Q3-2015 **Completed** 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 **Completed**
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 **Underway**
Issue 15: Maintaining V2I Infrastructure	*No action planned*	