V2I Deployment Coalition TWG 4 Monthly Meeting
Minutes
August 12, 2015 – 11:00-12:30 (Eastern)

Actions

1. Elizabeth Birriel and Faisal Saleem to work with Steve Lockwood and USDOT to arrange follow-up discussion between TWG 4 and USDOT regarding Deployment Guidance comments.

2. Elizabeth Birriel to issue recurring meeting notice for future TWG 4 meetings, with adjusted meeting time for September to accommodate V2I DC Executive Committee.

3. Ginny Crowson to coordinate with Elizabeth Birriel, Faisal Saleem and Bob Sheehan to schedule meeting with USDOT to discuss current and developing outreach efforts that TWG 4 can provide feedback on.

4. Ginny Crowson to prepare draft summary of outreach discussion and circulate it for TWG 4 review and comment.

5. All TWG 4 members to email Ginny Crowson by 8/31 outreach materials that seem to be targeted for consumer (public) audiences.

Roll Call Attendance

1. Elizabeth Birriel (Chair)* Florida DOT Elizabeth.Birriel@dot.state.fl.us
2. Faisal Saleem (Co-Chair)* Maricopa Co., AZ faisalsaleem@mail.maricopa.gov
3. Gary Piotrowicz* RCOC gpiotrowicz@rcoc.org
4. Emil Wolanin* Montgomery Co., MD Emil.Wolanin@montgomerycountymd.gov
5. Virginia Lingham* MTC (Bay Area) vlingham@mtc.ca.gov
6. Jonathan Walker USDOT jonathan.b.walker@dot.gov
7. Shel Leader Private Consultant shel@sleader.com
8. Martha Morecock Eddy Timmons Group martha.eddy@timmons.com
9. Koorosh Olyai Stantec koorosh.olyai@stantec.com
10. Rod Schebesch Stantec rod.schebesch@stantec.com
11. Steve Lockwood PB lockwoods@pbworld.com
12. Darryl Dawson ITS Engineering Ltd. ddawson@itsengineering-ltd.com
13. Bob Koeberlein* Idaho DOT robert.koeberlein@itd.idaho.gov
14. Patrick Chan Consystec patrick.chan@consystec.com
15. Ed Alegre Metro alegree@metro.net
16. Alan Clelland Iteris axc@iteris.com
17. Bob Rupert USDOT robert.rupert@dot.gov
July Meeting Recap
Elizabeth Birriel recapped the main topics discussed at the 7/8 meeting and noted that all follow-up actions have been completed. The summary of TWG 4 comments on the USDOT Deployment Guidance were emailed just prior to this meeting and Jonathan Walker explained that each comment was addressed as appropriate and the actions expressed in the summary reflect how USDOT dealt with each comment.

Steve Lockwood asked about “Closed; General Comment” notations and noted that some of the comments that was used for may be worth further discussion with Bob Arnold and Jonathan Walker at another time – perhaps an informal meeting at TRB. Jonathan was open to a meeting for further discussion. TWG 4 could also allow discussion during one of the upcoming group meetings.

Faisal Saleem asked for clarification on the release plans for the new USDOT Deployment Guidance. Jonathan Walker explained that the initial release was in September 2014. The initial release was open for public comment and then further revised from November 2014-March 2015. USDOT’s internal review began in March 2015. TWG 4 comments were reviewed for what could reasonably addressed now without restarting USDOT’s internal review. USDOT plans to release the next version of the Deployment Guidance in September 2015.

Elizabeth Birriel noted the work plan summary for TWG 4 (included at the end of these minutes for reference), and Issue 6 from the work plan was highlighted as the key topic for today’s discussion. The 7/8 meeting recap was concluded by noting the regular meeting time for TWG 4 will be targeted for the second Wednesday of each month from 11:00-12:30 (EST), with an immediate exception noted for the September meeting to accommodate the V2I DC Executive Committee meeting. The TWG 4 meeting has been adjusted to take place on Wednesday, 9/9, 12:00-1:30 (EST). Elizabeth Birriel will issue meeting notices for this and other future monthly TWG 4 meetings.

Discuss Issue 6: V2I Outreach
Ginny Crowson briefly reviewed the focus of Issue 6: V2I Outreach which emphasizes the need for additional outreach, education and information sharing within the V2I community. TWG 4 plans to identify outreach that may be needed to increase awareness and support of V2I among transportation agencies. Two rounds of input are planned for TWG 4 – one now and another in Q2-2016. The approach for today’s discussion included:

1. Clarify outreach needs
2. Review materials available or being developed (based on feedback and examples from TWG 4 members)
3. Identify gaps and describe what additional outreach may be needed

The initial needs that were discussed during the June workshop were recapped for the group and additional needs were expressed.
Talking points for executive agency officials to address the **what/why/how/benefits/opportunities** of Connected Vehicles and V2I.

- **Supporting statements** from executive agency officials for Connected Vehicles and V2I.
- Cursory, high-level materials for executive agency officials to understand the **business case** for Connected Vehicles and V2I.
- Information about **big picture issues** regarding funding, costs, priorities, maintenance/operations and staffing.
- Explain the **need for V2I** when there will be so many benefits from V2V.
- **All levels of transportation agency staff** – executive to technical, state to local – need to learn more about Connected Vehicle and V2I deployment.
- **Elected officials and local level associations** (e.g. city and county engineer associations) need to learn more about Connected Vehicles and V2I deployment.
- **Manufacturers and suppliers** of products that will support Connected Vehicle and V2I need to learn more about deployment.

The list of existing and developing materials shared by TWG 4 members was reviewed with the group. It was noted that this list is far from comprehensive and is merely a reflection of outreach materials that TWG 4 members were aware of and able to share prior to the meeting.

1. **How Connected Vehicles Work** – ITS JPO (fact sheet)
2. **Planning for the Future of Transportation: Connected Vehicles and ITS** – ITS JPO (fact sheet)
3. **Connected Vehicles: The Future of Transportation** – ITS JPO (video)
4. **Road Weather – Connected Vehicle Applications** – ITS JPO (infographic)
5. **The US Department of Transportation to Unveil New Connected Vehicle 102 Course at the ITS America Annual Meeting in Pittsburgh** – ITS JPO (news release/training)
6. **Connected Vehicle Field Infrastructure Footprint Analysis** – AASHTO (executive briefing)
7. **Connected Vehicles and Autonomous Vehicles: Where Do ITE Members Stand?** – ITE (12/2013 article)
8. **Transportation: Connecting the Past to the Future** – ITE (4/2015 article)
9. **Fundamental Issues for Road Transport Automation** – ITS America (webinar)
10. **Concept of Operations for C-ITS Core Functions** – Austroads Research Report AP-R479-15 (report)
11. **C-ITS Interoperability with Existing ITS Infrastructure** – Austroads Research Report AP-R458-14 (report)

Steve Lockwood noted that there have been similar conversations recently about outreach to similar audiences regarding transportation systems management and operations (TSM&O). There may be opportunities to combine V2I messaging in some TSM&O outreach or, at a minimum, there may be an opportunity to follow the outreach patterns being used for TSM&O.

Bob Sheehan shared USDOT recently issued a task order for V2I Knowledge/Technology Transfer and Outreach. The task order is being led by Karen Timpone at USDOT and it requests the development of an
outreach plan, website and marketing materials, and gathering feedback from stakeholders. Work is expected to begin in the coming month. The TWG 4 discussion offers good feedback for the KTT work, as well as the Professional Capacity Building effort being led by Mac Lister at USDOT and cooperative ITS deployment platform discussions about outreach in Europe. Mike Pina is another good staff resource to touch base with as he has been developing materials for ITS JPO. Bob Sheehan offered to serve as a USDOT coordination point for TWG 4 to have further discussions about when and how the group can provide additional feedback on outreach.

Ginny Crowson will prepare a draft summary of the outreach discussion and circulate it for TWG 4 review and comment prior to the next meeting. The goal is to submit a final summary to USDOT by the end of September (work plan target was Q3-2015).

Discuss Next Steps and Meeting
Elizabeth Birriel reviewed dates, time and tentative topics for meetings through 2015.

- 9/9, 12:00-1:30 (EST), Issue 11: V2I Consumer Messaging
  - Later start time to accommodate V2I DC EC meeting
  - All TWG 4 members should send Ginny consumer-oriented outreach materials by 8/31
- 10/14, 11:00-12:30 (EST), Issue 14: Federal V2I Policy
  - Coordinate with TWG 1
- 11/18, 1:00-2:30 (EST), Issue 6: V2I Outreach *Revised date/time to accommodate Veteran’s Day*
  - Discussion will focus on newly released Deployment Guidance from USDOT
  - Could include further discussion of TWG 4 comments previously submitted
- 12/9, 11:00-12:30 (EST), meeting topic TBD

TWG 4 members were specifically asked to look again for additional outreach/educational materials – this time geared toward consumers (public) – for discussion about Issue 11: V2I Consumer Messaging during the next meeting.

Other V2I DC Activity Highlights
Faisal Saleem briefly highlighted other V2I DC activities to keep TWG 4 aware of and engaged in other coalition work. He noted that other TWGs are continuing to meet monthly to finalize work plans and begin work, much like TWG 4. The Project Team continues to meet weekly. They have drafted Technical Memorandum 2 for FHWA which summarizes Workshop 1, TWG work plans, status of deployment issues and establishment of the V2I DC EC. The Project Team has also established the Executive Committee and is developing file sharing (Sharepoint) and information sharing (web site) resources for TWGs and overall coalition. The Executive Committee will meet on 9/9-10 to review TWG work plans and to discuss a V2I DC business plan.

TWG 4 Member Questions/Closing Comments
Steve Lockwood shared observations about the Automated Vehicles Symposium 2015 that took place July 21-23 in Ann Arbor, Michigan. He also provided presentations on the topic to be shared with the group.
## TWG 4: Deployment Guidance – Work Plan Summary

<table>
<thead>
<tr>
<th>V2I Deployment Issues</th>
<th>Anticipated TWG 4 Actions</th>
<th>Anticipated Completion Date</th>
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<tbody>
<tr>
<td><strong>Issue 1: V2X Applications</strong></td>
<td>• Identify relevant content from this issue that should be included in the overall outreach in Issue 6 based on TWG 3 findings.</td>
<td>Q1-2016</td>
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<td><strong>Issue 2: Complementary Communications to DSRC</strong></td>
<td>No action planned</td>
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<td><strong>Issue 3: V2I Data</strong></td>
<td>No action planned</td>
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<td><strong>Issue 4: Patents-Intellectual Property</strong></td>
<td>No action planned</td>
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<td><strong>Issue 5: Security</strong></td>
<td>No action planned</td>
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| **Issue 6: V2I Outreach**                                  | • Provide input to USDOT on V14 of Deployment Guidance.  
• Identify outreach that may be needed to increase awareness and support of V2I among transportation agencies.  
• Provide input to USDOT on additional content for next version of Deployment Guidance.                                                                                                                                                                                                 | Completed 6-29-2015        |
| **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 |