

## V2I Deployment Coalition Monthly Meeting Minutes

**August 10, 2016 – 11:00-12:30 (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. 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. *Summaries will be submitted with Tech Memo 4 for the full V2I DC.*
3. Ginny Crowson: Keep in touch with Cliff Heise regarding Iteris work on CVRIA integration with ITS Architecture and explore options for presentation to TWG 4 toward the end of 2016. *This will remain an open action through 2016.*
4. Faisal: Email details on USDOT CV Pilots webinar to TWG 4.
5. Faisal: Email meeting slides to TWG 4 for further reference regarding the information presented by Max Azizi.

### Attendance

|                                |                            |  |
|--------------------------------|----------------------------|--|
| 1. Faisal Saleem (Chair)       | Maricopa Co., AZ           | <a href="mailto:faisalsaleem@mail.maricopa.gov">faisalsaleem@mail.maricopa.gov</a>   |
| 2. Navin Katta (Co-Chair)      | Savari, Inc.               | <a href="mailto:navin@savarinetworks.com">navin@savarinetworks.com</a>               |
| 3. Max Azizi                   | USDOT                      | <a href="mailto:max.azizi@dot.gov">max.azizi@dot.gov</a>                             |
| 4. Brian Cronin                | USDOT                      | <a href="mailto:brian.cronin@dot.gov">brian.cronin@dot.gov</a>                       |
| 5. Carl Andersen               | USDOT                      | <a href="mailto:carl.andersen@dot.gov">carl.andersen@dot.gov</a>                     |
| 6. Stephanie Fischer           | USDOT                      | <a href="mailto:stephanie.fischer@dot.gov">stephanie.fischer@dot.gov</a>             |
| 7. Gary Piotrowicz             | RCOC                       | <a href="mailto:gpiotrowicz@rcoc.org">gpiotrowicz@rcoc.org</a>                       |
| 8. Shel Leader                 | Private Consultant-Telecom | <a href="mailto:shel@sleader.com">shel@sleader.com</a>                               |
| 9. Sean Peirce                 | Volpe Center-USDOT         | <a href="mailto:sean.peirce@dot.gov">sean.peirce@dot.gov</a>                         |
| 10. Mohammed Hadi              | Florida Intl University    | <a href="mailto:hadim@fiu.edu">hadim@fiu.edu</a>                                     |
| 11. Robert Rausch              | Transcore                  | <a href="mailto:robert.rausch@transcore.com">robert.rausch@transcore.com</a>         |
| 12. Bob Koeberlein             | Idaho DOT                  | <a href="mailto:robert.koeberlein@itd.idaho.gov">robert.koeberlein@itd.idaho.gov</a> |
| 13. Cliff Heise                | Iteris                     | <a href="mailto:cdh@iteris.com">cdh@iteris.com</a>                                   |
| 14. Patrick Chan               | Consystec                  | <a href="mailto:patrick.chan@consystec.com">patrick.chan@consystec.com</a>           |
| 15. Alan Clelland              | Iteris                     | <a href="mailto:axc@iteris.com">axc@iteris.com</a>                                   |
| 16. Brian Burkhard             | Jacobs                     | <a href="mailto:brian.burkhard@jacobs.com">brian.burkhard@jacobs.com</a>             |
| 17. Barry Pekilis              | Transport Canada           | <a href="mailto:barry.pekilis@tc.gc.ca">barry.pekilis@tc.gc.ca</a>                   |
| 18. Scott Shogan               | PB                         | <a href="mailto:shogan@pbworld.com">shogan@pbworld.com</a>                           |
| 19. Jim Katsafanas             | Michael Baker              | <a href="mailto:jkatsafanas@mbakerintl.com">jkatsafanas@mbakerintl.com</a>           |
| 20. Ginny Crowson<br>(Liaison) | Athey Creek Consultants    | <a href="mailto:crowson@acconsultants.org">crowson@acconsultants.org</a>             |

## July Meeting Recap

Faisal Saleem reminded the group that Jonathan Walker presented an overview of the V2I message lexicon during the July meeting. The V2I message lexicon will explain the concepts and definitions for V2I communication messages. The lexicon identifies the contents of a V2I message, how the message is constructed, how the message relates to applications, and how the message relates to deployments. The V2I message lexicon will also show the relationships among the CVRIA, the National ITS Architecture, the various standards needed to define the V2I message, and the organizational entities that provide content or services to the V2I messages.

Faisal added that Karen Timpone presented an overview of the draft V2I outreach plan developed for USDOT by Iteris and Global 5 Communications, and TWG 4 was asked to email her any additional comments on the outreach plan. Following the July meeting, Karen also sought input from TWG 4 (via an online survey) regarding future articles featuring V2I.

Faisal reminded the group of other V2I DC items of interest, including USDOT's recent release of several new Connected Vehicle documents and the recent STSMO-SCOHT-RTSMO annual meeting. Faisal further shared that the STSMO-SCOHT-RTSMO annual meeting included a good mix of policy, executive and practitioner level staff from the agencies. Sessions throughout the meeting focused on Connected Vehicle issues including cyber security, standards, policy development, and operational issues. Faisal noted that TWG 3 is continuing to plan an OEM workshop for September to discuss data elements needed for select V2I applications. He added that TWG 1 is also hosting a webinar with UMTRI and NYC on September 13 regarding V2I infrastructure maintenance. Faisal also shared that USDOT will be hosting a series of CV pilot webinars on August 19 and 22. Details will be emailed to TWG 4.

Faisal concluded the July meeting recap by noting that a copy of the joint letter by the CEOs of AASHTO, ITS America and ITE to USDOT requesting the release of the V2I Guidance had been emailed to TWG 4.

## Review V2I Deployment Guidance Product: Incorporating C/AV into Transportation Planning

Max Azizi from USDOT joined the meeting to present an overview of the study to incorporate Connected and Autonomous Vehicles into transportation planning. The study aims to help facilitate the consideration of C/AV in transportation planning processes and products by States, MPOs and local agencies by reviewing:

- Impacts on products and processes
- Impacts on roles and responsibilities
- Impacts on tools, techniques and data
- Impact on organizational skills and expertise

Max then described the approach, general considerations and specific impacts identified for each area. Specific details regarding the study findings and deliverables are included in the slides that Max presented during the meeting. The slides will be emailed to TWG 4 for further reference. Max concluded his presentation by noting that the case studies developed during the study will be available in September and the primer and desk reference in October.

### Work Plan Status, Next Steps and Closing Comments

Ginny Crowson reviewed progress with the TWG 4 work plan, reminding the group of the additional review of Guidance products that will continue in the coming months.

During closing comments from TWG 4, Bob Rausch noted that the CV pilots are learning a lot lessons about the state of readiness for deployment. One strong point for agencies to consider is upgrading traffic control systems. Shel Leader asked about the use of 170 and 2070 controllers and Bob replied that 2070s are outdated but the ATC controllers with advanced communication capabilities are workable. Navin Katta added the need for guidance on device maintenance and including the vendor community in developing it. Vendors are often asked to support agencies with maintenance activities. Shel Leader offered to discuss maintenance issues in more detail offline. This may evolve into a future discussion topic for TWG 4.

Ginny concluded with a reminder that the next TWG 4 meeting is scheduled for September 14 from 11:00-12:30 (Eastern). There were no additional closing comments from the group.

## TWG 4 Work Plan Summary and Status

| <b>V2I Deployment Issues</b>   | <b>Anticipated TWG 4 Actions</b>   | <b>Anticipated Completion Date</b>             |
|--|--|--|
| <b>Issue 1: V2X Applications</b>                                       | <ul style="list-style-type: none"> <li>Identify relevant content from this issue that should be included in the overall outreach in Issue 6 based on TWG 3 findings.</li> </ul>  | <b>Q1-2016 Underway</b>                        |
| <b>Issue 2: Complementary Communications to DSRC</b>                   | <i>No action planned</i>   |  |
| <b>Issue 3: V2I Data</b>   | <i>No action planned</i>   |  |
| <b>Issue 4: Patents-Intellectual Property</b>                          | <i>No action planned</i>   |  |
| <b>Issue 5: Security</b>   | <i>No action planned</i>   |  |
| <b>Issue 6: V2I Outreach</b>   | <ul style="list-style-type: none"> <li>Provide input to USDOT on V14 of Deployment Guidance.</li> </ul>  | <b>6-29-2015 Completed</b>                     |
|  | <ul style="list-style-type: none"> <li>Identify outreach that may be needed to increase awareness and support of V2I among transportation agencies.</li> </ul>   | <b>Q3-2015 Completed and Q2-2016 Completed</b> |
|  | <ul style="list-style-type: none"> <li>Provide input to USDOT on additional content for next version of Deployment Guidance and associated products.</li> </ul>  | <b>Q4-2015 Underway</b>                        |
| <b>Issue 7: Understanding the Benefits and Costs of V2I Deployment</b> | <ul style="list-style-type: none"> <li>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.</li> </ul> | <b>Q2-2016 Underway</b>                        |
| <b>Issue 8: V2I Standards</b>  | <i>No action planned</i>   |  |
| <b>Issue 9: Understanding V2I Liability Assignment</b>                 | <ul style="list-style-type: none"> <li>Identify relevant content related to V2I liability assignment that should be included in overall outreach in Issue 6 based on TWG 2 findings.</li> </ul>                              | <b>Q2-2016</b>                                 |
| <b>Issue 10: V2I Synergies with Other Emerging Technologies</b>        | <i>No action planned</i>   |  |
| <b>Issue 11: V2I Consumer Messaging</b>                                | <ul style="list-style-type: none"> <li>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.</li> </ul> | <b>Q4-2015 Completed</b>                       |
| <b>Issue 12: V2I Multimodal Applications</b>                           | <i>No action planned</i>   |  |
| <b>Issue 13: Infrastructure Processes as V2I Obstacles</b>             | <ul style="list-style-type: none"> <li>Identify relevant content related to infrastructure processes based on work completed by TWG 1 that should be included in overall outreach in Issue 6.</li> </ul>                     | <b>Q1-2016 Underway</b>                        |
| <b>Issue 14: Federal V2I Policy Statement</b>                          | <ul style="list-style-type: none"> <li>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.</li> </ul>         | <b>Q4-2015 Underway</b>                        |
| <b>Issue 15: Maintaining V2I Infrastructure</b>                        | <i>No action planned</i>   |  |