V2I Deployment Coalition
Deployment Initiatives Technical Working Group (TWG 1)
January 28, 2016 Webinar
Notes and Summary of Discussions

Welcome / Overview of Webinar Logistics

Bill Legg welcomed the attendees. A list of those in attendance is provided at the end of these notes. This list may not be comprehensive, as attendees may have joined late and were not identified on the webinar. Please contact Dean Deeter at deeter@acconsultants.org to be added to the list.

Recap of the Benefit / Cost Webinars

Bill Legg reminded members that the previous two webinars for TWG 1 were focused on outside presentations of Connected Vehicle Benefit/Cost research efforts. The November webinar was a presentation on the *Desk Reference and Tools for Estimating the Local, Regional and State-wide Economic Development Benefits of Connected Vehicle Infrastructure Deployments.* The December webinar was a presentation on the *AASHTO Near-TermV2I Transition and Phasing Analysis Connected Vehicle Life Cycle Cost Model (LCCM).*

Both webinars were recorded, and TWG 1 produced a summary document of the webinar. This summary document was sent to TWG members and is available on the V2I DC portal access site.

Issue #14 Federal V2I Policy Statement

Bill led a discussion regarding Issue #14 – The Need for a Federal V2I Policy Statement. As background, during the June meeting in Pittsburgh, TWG 1 members decided to add a new issue to the set of issues addressed by the V2I DC that related to the need for a Federal policy statement regarding V2I. The text of the Issue, as added to the coalition issues, is 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 an "Every Day Counts" EDC model) could be released. **The V2I industry needs a strong message from a federal agency encouraging V2I deployment."***

In January, core members from TWG 1 and TWG 4 met by phone to discuss this issue and an approach for TWG 1 and TWG 4 collaborating on the issue. The idea is that the TWGs would collaborate, and any request to USDOT could come from TWG 4 as part of their input to V2I Guidance.

During the January call, a series of potential topic areas were discussed as a starting point for what might be requested in the federal statement. These included:

- 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

Bill went on to share that TWG 4 updated members during their January webinar. There were several USDOT representatives on the TWG 4 January webinar. They commented that many (perhaps all) of the topic areas would likely be addressed in the upcoming V2I Deployment Guidance and Supporting Products. Therefore, their suggestion was to wait until after the Guidance and Supporting Products are released before formulating such a request.

Bill concluded that both TWG 1 and TWG 4 will wait until the Guidance document is released, and then revisit this topic and make a determination if an additional request is needed. Attendees on the webinar agreed with this approach.

V2I Applications Survey

Bill updated members that the V2I applications survey has concluded and the results analyzed. Bill turned it over to Dean Deeter to step through a summary presentation of the results.

Dean presented a summary of the responses. A total of 21 complete responses were received. Question 3 was the most comprehensive question in that it asked responders to indicate:

- *Which CV applications are **included in the respondent's proposal or plans** for CV deployment.* The intent of this question was to capture the extensive consideration that infrastructure owners and operators dedicated to preparing Connected Vehicle pilot deployment proposals and/or other plans for connected vehicle deployment.

- *Which CV applications responding agencies felt **were most beneficial**.* The intent of asking this question was a recognition that applications included in proposals or plans might not be all the applications an agency feels are most beneficial. For example, proposals might focus on those applications that can be deployed in the very near-term or with the current level of in-vehicle devices. Note: for this portion of the question, each responder was asked only to indicate the top five most beneficial applications.

- *Which CV applications responding agencies **had already deployed.*** The intent of this question was to understand which applications have already been deployed by agencies and how these are similar or different to the applications they feel would be most beneficial.

The PPT that presents the summary of results and the written summary of results are both being circulated with this webinar summary. Therefore, in the interest of brevity, the results will not be

described in this report. However, the following figure illustrates the overlap of CV applications most often selected to be either "included in proposals or plans" or "most beneficial".

Top 11 Planned or Proposed CV Applications

- Incident Scene Work Zone Alerts for Drivers and Workers
- Speed Harmonization
- Emergency Vehicle Preemption
- Curve Speed Warning
- Warnings about Hazards in a Work Zone

Overlap

- Road Weather Motorist Alert & Warning
- Queue Warning
- Vehicle Data for Traffic Operations
- Intelligent Traffic Signal System
- Signal Phase & Timing
- Warnings About Upcoming Work Zones

Top 11 Most Beneficial CV Applications

- Transit Signal Priority
- Advanced Traveler Information Systems
- Red Light Violation Warning
- In-vehicle Signage
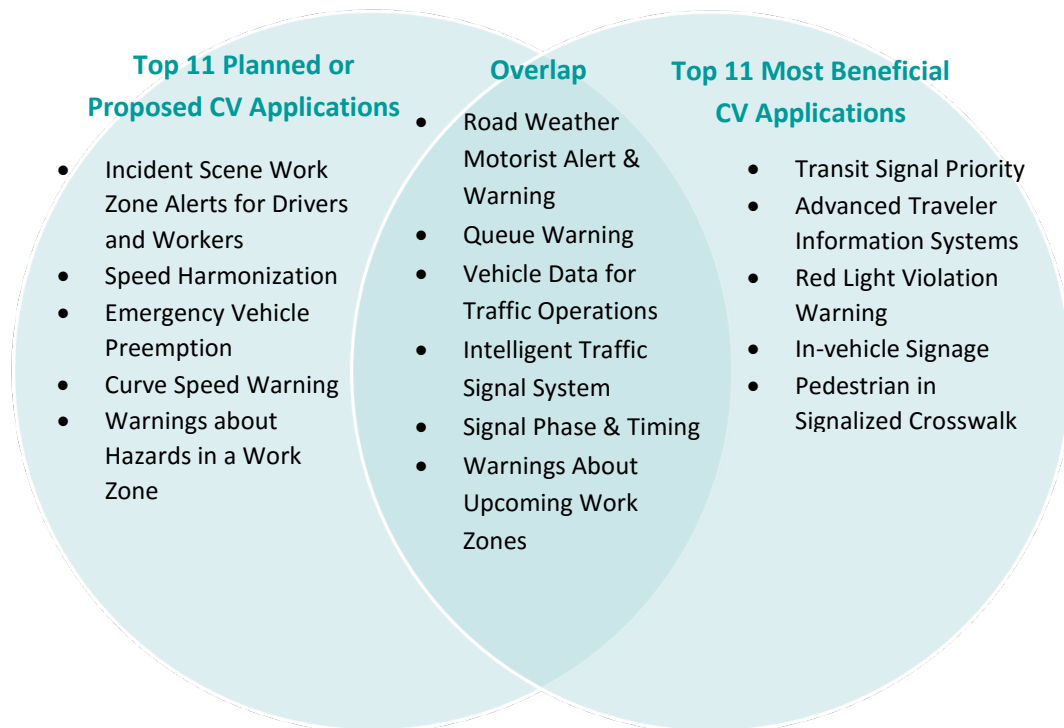- Pedestrian in Signalized Crosswalk

Figure 1:Overlap of Top 11 Connected Vehicle Applications Most Beneficial to Deploy and Top 11 CV Applications Planned or Proposed for Deployment

After the summary of the survey results, Bill Legg indicated that these results are all being shared with the other TWGs, who will use the results as they address Issue #1: V2X Applications. Bill asked if TWG members had ideas for additional activities this TWG might do with the results.

Barry Ensig described the concept that there are risks associated with thinking of any one V2I application in isolation. The true value of V2I comes in enabling all of the applications. Also, the costs to deploy one application might not be much different than the costs to deploy several additional, while the benefits might be tremendous.

Other suggestions were to wait for the written report, and then to discuss the survey again on a monthly webinar, and discuss if additional efforts are needed to share these results with the OEM community. Bill Legg agreed and reminded the group that TWG 3 will receive these results and that we have offered to present the results to TWG 3.

Next Webinar Topics

Bill reminded members that the next webinar will be February 25, 2016 from 2:00 – 3:00 PM Eastern. One topic of the webinar will be Issue #13: Infrastructure Processes as V2I Obstacles.

TWG 1 January 28 Webinar Participants

- Bill Legg, Chair
- Joe Averkamp
- Dave Miller
- Alvin Stamp
- Bob Rupert
- Vicki Waters
- Mark Kopko
- Hideki Hada
- James Li
- Barry Einsig
- Joey Yang
- Kyle Garrett
- Bob Sheehan
- Mohammed Hadi
- Reza Karimvand
- Peter Thompson
- Jonathan Riehl
- Leisa Moniz
- Dean Deeter