Vehicle to Infrastructure Deployment Coalition
V2I DC

Update on Issue Collaboration
## TWGs Focus on Issues

<table>
<thead>
<tr>
<th>Issue</th>
<th>TWG 1 Initiatives</th>
<th>TWG 2 Research</th>
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<td>Issue 14: Federal V2I Policy Statement</td>
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<td>Issue 16: Operator and OEM Goals for V2I</td>
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Several Issues “Cross-cut” across multiple TWGs

- TWGs will coordinate & cooperate on Issues when appropriate
- Issues 1, 3, 6, 7 most critical for cooperation
Progress to date

• TWG Chairs met and discussed:
  ▪ Issue 1,
  ▪ Issue 3,
  ▪ Issue 6,
  ▪ Issue 7.

• Agreed to a set of complementary actions
Issue 1 - Coordination

**Issue #1 V2X Applications**
There is a need for prioritization of V2X Applications (including multi-modal applications) and common understanding of how OEM and infrastructure applications work together.

**TWG 1 Deployment Initiatives**
Survey infrastructure owners & operators to ask what CV applications are planned, proposed, or would be most beneficial. Summarize results.

**TWG 2 Research**
Define a research definition that will build upon survey results and help define additional research needs to address Issue #1.

**TWG 5 Standards**
Identify standards needs and gaps related to CV applications based on USDOT effort and survey results, with an emphasis on the 4 focus areas of the V2I DC.

**Target Outcomes**
1. Synopsis of the survey results, describing the V2I applications that owners and operators feel would be most beneficial and/or they are planning/proposing to deploy.
2. Summary of the standards needs and gaps identified by TWG 5 that relate to the applications believed to be most beneficial based on the survey.
3. Definition of any additional research proposed to further explore Issue #1.
4. Outreach sharing survey results conducted to the V2IDC and the Connected Vehicle stakeholders outside the coalition.

**Issue 3 - Coordination**

**Issue #3 Data Strategies**
V2I partners need to understand and reach common agreement on the availability, accessibility, security, ownership, privacy, management, and storage of data.

**TWG 3 Partners**
- Facilitate discussions with infrastructure owners/operators and OEMs to **define the issues that must be addressed** regarding data that relate to the 4 focus areas of the V2I DC, and to **prioritize the issues** that must be addressed in the coming 2-5 years.

**TWG 5 Standards**
- Respond to TWG 3 request for assistance or any questions about standards needs for data elements defined. Iterative process that will occur throughout the process.

**TWG 2 Research**
- Define a research definition, scope, anticipated results, and cost estimate to research the data related issues identified by TWG 3 (expected to include: availability, accessibility, security, ownership, privacy, management, and storage of data).

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**Target Outcomes**
1. Clearly defined list of issues related to V2I data.
2. Prioritized list describing the most critical issues to be resolved by the industry in the coming 2-4 years.
3. A Research Plan of Action to research and resolve as many of the prioritized list as possible over the coming 2-5 years.
Issue 6 - Coordination

Target Outcomes

1) Input to USDOT on V14 of the V2I Deployment Guidance

2) “One-stop-shop” for V2I related research concept described to the point where entities could estimate the costs and resources required to create and operate the ‘shop’

2) Input to USDOT on additional content for next versions of the V2I Deployment Guidance

3) Identify outreach that might be needed to increase awareness and support of V2I.
Issue 7 - Coordination

**Target Outcomes**

1) V2I DC members will be informed of current & completed B/C studies and tools.

2) Case studies conducted by TWG 3 will derive an understanding of the value and costs of a set of V2I applications related to the V2I DC focus areas.

3) A Research Plan of Action will be created defining additional research needed to supplement current and completed B/C studies and the case study analyses conducted by TWG 3.

4) Benefit and Cost tools and resources will be added to V2I Guidance documents in future versions.

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**Issue #7 Understanding the benefits and costs of V2I deployment and operation**

Each transportation agency will face the challenge of prioritizing V2I applications deployments, weighing the benefits to costs.

- **TWG 1 Deployment Initiatives**
  - Facilitate presentations of existing or completed Connected Vehicle B/C studies through webinars, and invite other TWGs to participate in webinars. Facilitate a discussion about additional needs for B/C research.

- **TWG 2 Research**
  - Based on the findings of TWGs, identify gaps in cost/benefit information and define a research definition for additional research activities to support stakeholders needs not supported by current Benefit / Cost studies or TWG 3 case study results.

- **TWG 3 Partners**
  - Develop, with OEMs operators, and suppliers, an understanding of how and what value operators associate with V2I applications, and then determine what costs are associated with those applications, using case studies (focus is on the 4 focus areas).

- **TWG 4 Guidance**
  - Identify relevant content related to calculating the benefits and costs of V2I Applications that should be included in overall outreach in Issue 6 or the next version of the guidance.

Timeline:

- 7/1/2015
- 10/1/2015
- 1/1/2016
- 4/1/2016
- 6/30/2016