

V2I Deployment Coalition Introduction

*V2I DC Project Team:
Gummada Murthy, AASHTO
Jennifer Carter, ITS America
Siva Narla, ITE*

Objectives

- Provide leadership on Connected Vehicle (CV) Program deployment efforts
- Establish CV deployment strategies
- Lead and provide support on continued technical research for CV
- Support CV standards development
- Provide input to and refinement of CV guidance

Purpose and Timeline

- Provide a mechanism for agencies to move forward with V2I deployment
- Not a federal advisory committee
- Not giving guidance to USDOT
- First phase through June 2016

Expected Final Outcomes

- Offer critical input through proposed project deliverables and technical memorandums that:
 - ✓ Identify enhancements needed to the V2I Guidance document and other V2I deployment tools
 - ✓ Identify best approaches and practices to advance V2I deployment
 - ✓ Identify research gaps and approaches to overcome them
 - ✓ Sustain a strong peer exchange framework

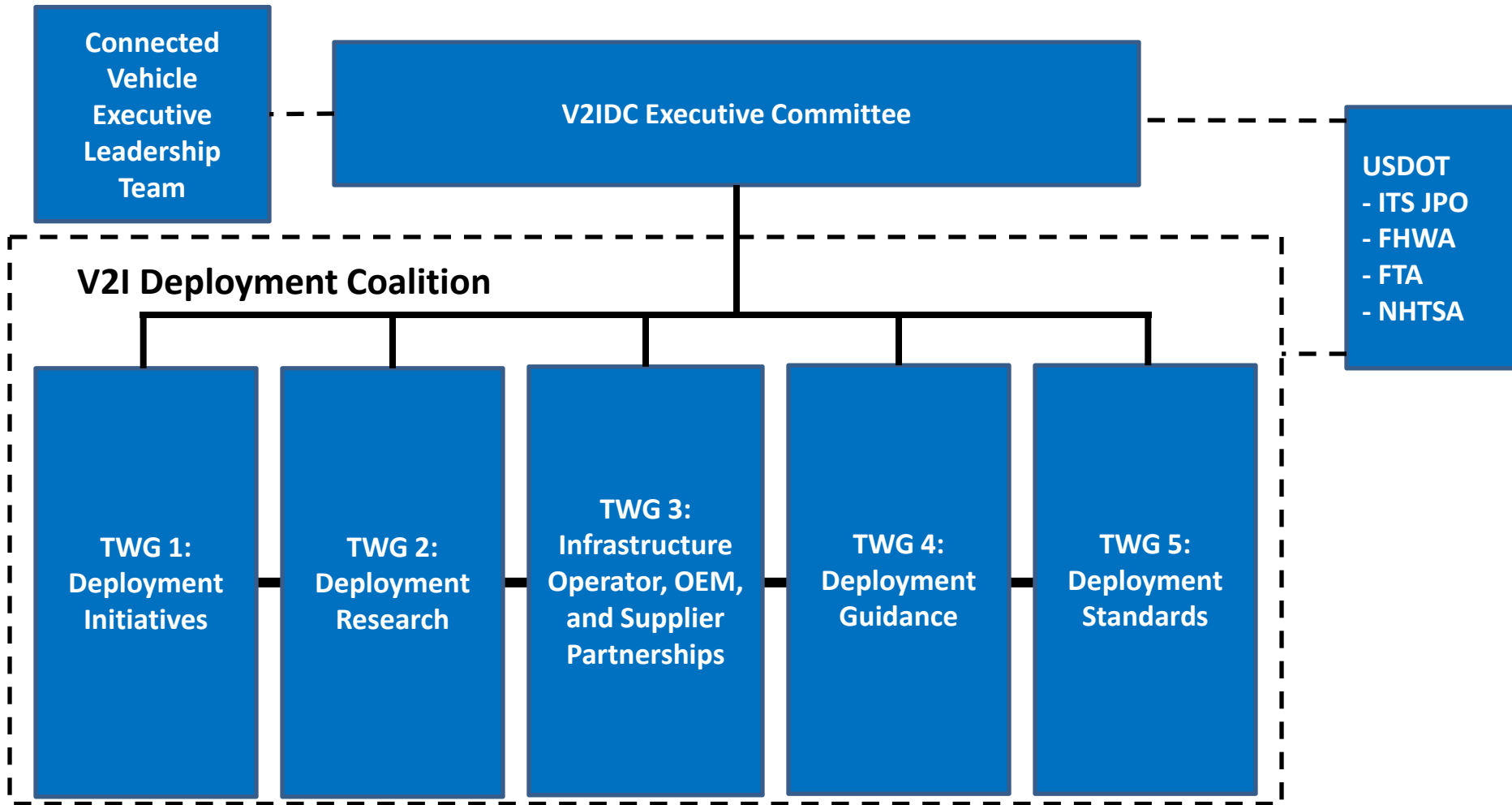
Products

- Up to 6 technical memos per year
 - Planning, technical, or operational issues requested by stakeholder recommendation
- Provide support to outreach
 - Develop customized modules to address technical, policy, and operational aspects of CV deployment
 - Conduct education to broader stakeholder community about the potential benefits of CV deployment
- Rapid response activities to be determined

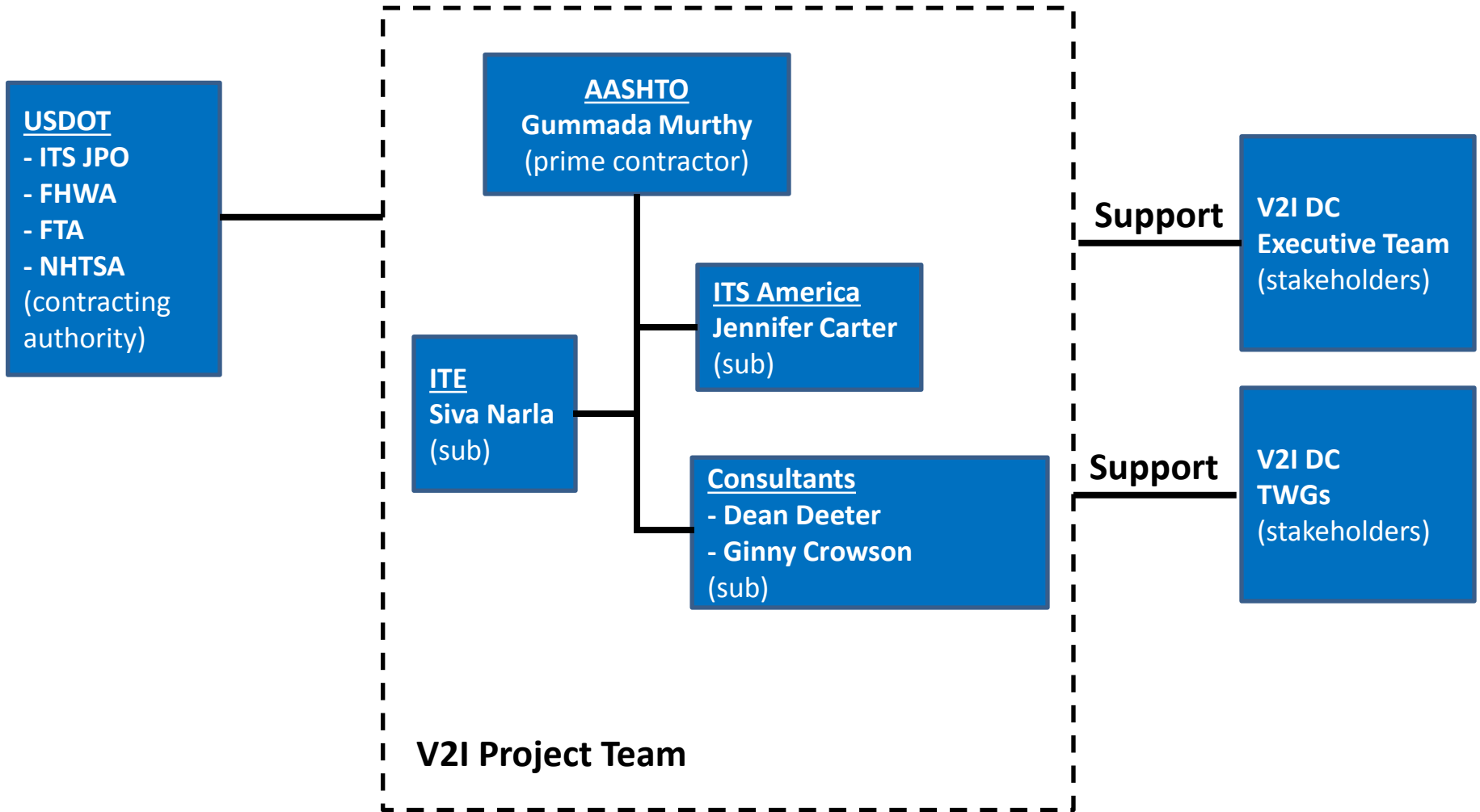
Vision and Mission

- *Vision:*
 - *An integrated national infrastructure that provides the country a connected, safe and secure transportation system taking full advantage of the progress being made in the Connected and Autonomous Vehicle arenas.*
- *Mission:*
 - *To work collaboratively with industry, state and local governments, academia, and USDOT to achieve the goal of deploying and operating a functioning V2I infrastructure.*

V2I Deployment Coalition Structure



V2I Deployment Coalition Structure



Key activities to date

- Conducted webinars to inform membership about start of the coalition
 - Solicited “top issues”
- Identified membership roster
- Created charter for the V2I DC
- Identified initial TWGs and chairs /co-chairs
- Planned meeting
 - Webinar with core members to get input on the meeting
 - Follow on discussion with chairs and co-chairs to to engage them in developing agendas for this meeting

Technical Working Groups

- Where the bulk of the work will get done
 - By volunteers
 - With help from V2I DC project team
- Have identified 5 groups to start
 - TWGs may be added or modified as the coalition members further define their needs

Technical Working Groups

- The role of the TWGs will be to:
 - Discuss issues prioritized by the V2I DC and assigned to the specific TWG;
 - Discuss additional issues identified by TWG members;
 - Recommend and/or perform actions to reach resolution of as many issues discussed in the TWGs as possible; and
 - Exchange information.

Technical Working Groups

- TWGs will work towards defining actions that are needed to resolve the issues associated with V2I deployment
- Limited resources so not expected to solve all issues identified
 - Rather to work towards defining specific actions that need to be performed to work toward resolution (e.g. additional demonstrations, additional pilot deployments, additional research, etc.)

Participation in Technical Working Groups

- Chaired by State DOT representatives
- Core Members consist of Coalition members
- TWGs open to entire stakeholder community
 - Contact V2I DC project team or TWG chair if you are interested in being involved in one of the other Technical Working Groups

TWG Leadership

TWG Name	TWG Chair / Co-Chair	TWG Liaison (V2IDC Project Team)
TWG 1: Initiatives	Bill Legg, Washington State DOT (chair) Gary Duncan, Econolite (co-chair)	Dean Deeter, Athey Creek
TWG 2: Research	Greg Larson, Caltrans (chair) Rob Bertini, Cal Poly State (co-chair)	Patrick Zelinski, AASHTO
TWG 3: OEM	Matt Smith, Michigan DOT (chair) Roger Berg, DENSO (co-chair)	Jennifer Carter, ITS America
TWG 4: Guidance	Elizabeth Birriel, Florida DOT (chair) Faisal Saleem, Maricopa County (co-chair)	Ginny Crowson, Athey Creek
TWG 5: Standards	Ed Seymour, TTI (chair) Gary Duncan, Econolite (co-chair)	Siva Narla, ITE

V2I DC Technical Working Groups Breakout Sessions Logistics

V2I DC Project Team

V2I Deployment Coalition Workshop

Agenda

William Penn Ballroom

Omni William Penn Hotel – Pittsburgh, PA

Day 1 – June 4, 2015

- 8:00 **Welcome and Introductions**
- King Gee, AASHTO (Moderator)
 - Regina Hopper, ITS America
 - John Hallkowski, Arizona DOT
 - Gary Plotrowicz, Road Commission for Oakland County, MI
 - Praveen Singh, Arada Systems
 - Susan Alt, Volvo Group North America
 - Jeff Lindley, FHWA
- 8:45 **V2I Deployment Coalition Background and Brief Update on Connected Vehicle Activities**
- Jonathan Walker, FHWA
- V2I Deployment Coalition Introduction**
- Gummada Murthy, AASHTO
 - Jennifer Carter, ITS America
 - Silva Naria, ITE
- 9:10 **V2IDC Technical Working Groups Breakout Sessions Logistics**
- Gummada Murthy, AASHTO / Dean Deeter, Athey Creek Consultants
- 9:30 **Break**
- 9:45 **V2IDC Technical Working Group Breakout Session (Part I)**
Please refer to individual TWG Agendas
- TWG 1: Deployment Initiatives – Chair, Bill Legg, Washington State DOT; Co-chair, Joe Averkamp, Xerox
 - TWG 2: Deployment Research – Chair, Greg Larson, Caltrans; Co-chair, Robert Bertini, California Polytechnic State University
 - TWG 3: Infrastructure Operator, OEM & Supplier Partnerships – Chair, Matt Smith, Michigan DOT; Co-Chair, Roger Berg, Denso
 - TWG 4: Deployment Guidance – Chair, Elizabeth Birriel, Florida DOT; Co-chair, Faisal Saleem, Maricopa Co., AZ
 - TWG 5: Deployment Standards – Chair, Ed Seymour, TTI; Co-chair, Gary Duncan, Econolite
- 11:30 **Lunch (on your own)**

1:00 V2IDC Technical Working Group Breakout Session (Part II)
Please refer to Individual TWG Agendas

2:30 **Break**

3:00 **V2IDC Technical Working Group Report Out**
The V2IDC TWG Chairs will:

- Provide updates on what was discussed within their TWG
- Solicit input from the larger group
- Present plans for next day

4:30 **Wrap Up / Day 2 Activities Overview**

4:45 **Adjourn**

Day 2 – June 5, 2015

8:00 V2IDC Technical Working Group Breakout Session (Part III)
Please refer to Individual TWG Agendas
The TWGs, with staff support, will finalize next steps and work plans

9:30 **Break**

10:00 **V2IDC Closing Session**
The V2IDC TWG Chairs will present their important issues for the program to consider, work plans and discuss next steps.

12:00 **Adjourn**

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Agenda for next day and a half

- Individual agendas for each TWG developed by the chair and co-chair
 - Customized to the needs of each group
 - Same end goal

Product resulting from this meeting

- Tech memo summarizing initial work plans of individual TWGs to include:
 - Issues to be addressed
 - Overall approach towards defining the actions needed to resolve issues
 - TWG operational logistics (e.g. meeting frequency and method of meeting)
 - Target activities through June 2016 and beyond

Technical Working Group Descriptions

TWG	Description
TWG 1: Deployment Initiatives	Provide a peer to peer forum where current and previous V2I implementation efforts can explain and share their experiences
TWG 2: Deployment Research	Provide insight into what further research, analysis, and planning studies are needed to be undertaken to guide the states and others as they proceed toward implementation
TWG 3: Infrastructure Operator, OEM, and Supplier Partnerships	Identify cross-cutting issues related to infrastructure operators, OEMs, and suppliers, and discuss possible approaches towards resolving these issues
TWG 4: Deployment Research	Provide review and input to the USDOT Deployment Guidance Identify gaps and provide recommendations for additional products needed for the V2I deployment community
TWG 5: Deployment Standards	Identify and discuss applicable standards, the state of practice in standards development and deployment, and the expectations for future standards

Core Members

TWG 1: Deployment Initiatives

Name	Organization
Bill Legg (Chair)	Washington State DOT
Joe Averkamp (Co-Chair)	XEROX
Dave Miller	Siemens
Gary Duncan	Econolite
Randell Iwasaki	CCTA
Ray Resendes	VTTI
Mark Kopko	Pennsylvania DOT
Steve Galgano	New York City DOT
Barry Einsig	Cisco
Leland Key	NXP
Blaine Leonard	Utah DOT
Reza Karimvand	Arizona DOT
John Maddox	Michigan MTC
Dean Deeter (Project Team Liaison)	Athey Creek

Core Members

TWG 2: Deployment Research

Name	Organization
Greg Larson (Chair)	Caltrans
Robert Bertini (Co-Chair)	Cal Poly St University
Alan Korn	Meritor Wabco
Jianming Ma	Texas DOT
Douglas Gettman	Kimley Horn
Thomas West	Cal PATH
Roger Berg	DENSO
Randell Iwasaki	CCTA
Zachary B. Rubinstein	CMU
Scott Marler	Iowa DOT
Patrick Zelinski (Project Team Liaison)	AASHTO

Core Members

TWG 3: Infrastructure Operators, OEM, and Supplier Partnerships

Name	Organization
Matt Smith (Chair)	Michigan DOT
Roger Berg (Co-Chair)	DENSO
Richard McDonough	New York DOT
Mike Shulman	Ford
Ed Bradley	Toyota
Peter Thompson	SANDAG
John Thai	City of Anaheim
Ray Starr DOT	Minnesota DOT
Melissa Lance	Virginia DOT
Scott Geisler	General Motors
Monali Shah	HERE
Ravi Puvvala	Savari
Jennifer Carter (Project Team Liaison)	ITS America

Core Members

TWG 4: Deployment Guidance

Name	Organization
Elizabeth Birriel (Chair)	Florida DOT
Faisal Saleem (Co-Chair)	Maricopa Co., AZ
George Webb	Palm Beach Co
Gary Piotrowicz	RCOC
Emil Wolanin	Montgomery Co., MD
Robert Rausch	Transcore
Bob Koeberlein	Idaho DOT
Clifford D. Heise	Iteris
Virginia Lingham	MTC (Bay Area)
Scott Marler	Iowa DOT
Ginny Crowson (Project Team Liaison)	Athey Creek

Core Members

TWG 5: Deployment Standards

Name	Organization
Ed Seymour (Chair)	TTI
Gary Duncan (Co-Chair)	Econolite
Charles J. Mraz	Kapsch
John Thai	City of Anaheim
Jim Misener	Qualcomm
Robert Rausch	Transcore
Andy Mao	Texas DOT
Ray Starr	Minnesota DOT
Richard McDonough	New York DOT
Clifford D. Heise	Iteris
Raman Patel	NYU Polytechnic School of Engineering
Siva Narla (Project Team Liaison)	ITE

TWG Breakout Locations

- TWG 1 – Oliver Room (upstairs on conference level floor, level CL)
- TWG 2 – Phipps Room (upstairs on conference level floor, level CL)
- TWGs 3 & 4 – stay in the ballroom
- TWG 5 – Anchor Room (downstairs)

Questions / Comments