

# What is Connected Vehicle

## BI-DIRECTIONAL COMMUNICATION RECAP





# WHAT DOES THIS MEAN FOR YOUR TEAMS & SUPPLIERS?

With all of the new technologies represented, it will be imperative that managers and transportation departments gain a better understanding of what their teams need for successful deployment and maintenance of these systems.

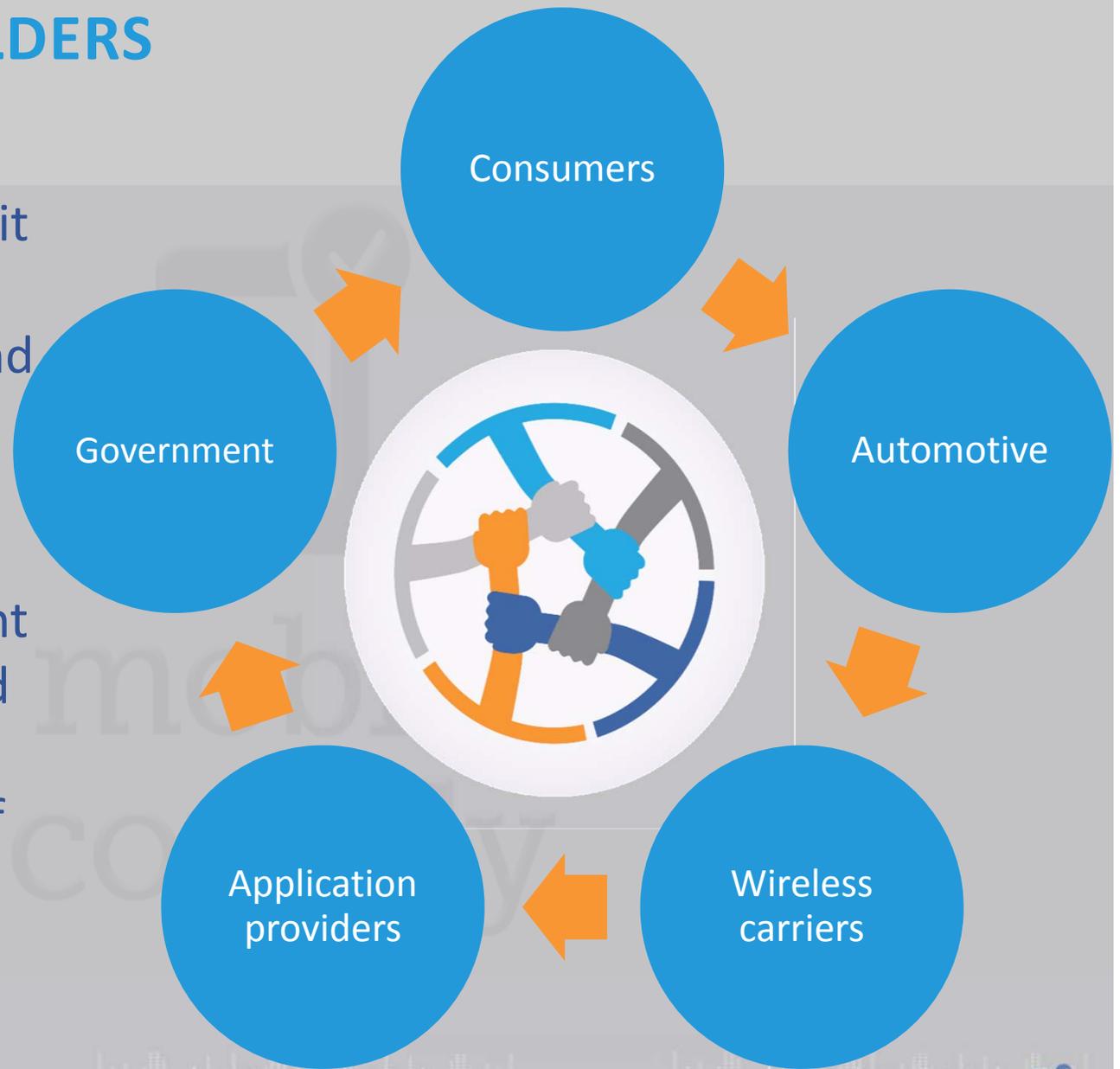




Professionals will be expected to effectively communicate with technologies in environments that traditionally have not been “connected”.

# THE STAKEHOLDERS

With so many stakeholders involved, it is important for managers to understand that the teams are communicating properly and DOT managers feel confident that they have selected the right teams to support deployment of these technologies.





## WHY IS CERTIFICATION IMPORTANT?

- Connected vehicle certification validates that your team has the education, training, and experience required to deploy and maintain these systems.
- With so many stakeholders involved, it is important for managers to understand that the teams are communicating properly and transportation managers feel confident that they have selected the right teams to support deployment of these technologies.



## WHY IS CERTIFICATION IMPORTANT?

BUSINESSES AND GOVERNMENT SECTORS PARTICIPATING IN THE  
CONNECTED VEHICLE ECOSYSTEM:

- ✓ DATA ANALYTICS
- ✓ COMMUNICATIONS AND NETWORKING ENTITIES
- ✓ CONTENT DEVELOPERS AND AGGREGATORS
- ✓ MOBILE AND NOMADIC DEVICE PROVIDERS
- ✓ TRANSPORTATION DEPARTMENTS
- ✓ CITY AND TRANSPORTATION PLANNERS
- ✓ FINANCIAL AND LEGAL ENTITIES



## WHY IS CERTIFICATION IMPORTANT?

- ✓ WHO NEEDS TRAINING, IN WHAT SECTORS, AND HOW WILL INDUSTRIES BE IMPACTED?
- ✓ WHEN WE LOOK AT THE TERABYTES OF DATA THAT WILL BE PRODUCED, HOW WILL ORGANIZATIONS BE ABLE TO ANALYZE DATA AND INTERPRET IT INTO USEFUL INFORMATION, COMMUNICATIONS AND NETWORKING ENTITIES?
- ✓ HOW WILL THE TELECOMMUNICATION PROFESSIONAL UNDERSTAND THE “IN VEHICLE” TECHNOLOGIES. AND, HOW WILL THEY SUPPORT THE GROWING NEED FOR CONNECTIVITY AND SECURITY?

**CONTENT DEVELOPERS AND AGGREGATORS** - WILL NEED TO UNDERSTAND HOW TO PROPERLY DELIVER CONTENT THAT IS MEANINGFUL TO THE USER

**MOBILE DEVICE PROVIDERS** — WILL NEED TO SUPPORT THE APPLICATIONS AND DATA THAT WILL BE INTERCHANGED WITHIN THE VEHICLE

**TRANSPORTATION DEPARTMENTS, CITY AND TRANSPORTATION PLANNERS** - WILL NEED TO BE RESPONSIBLE FOR MANAGING AND DEPLOYING INFRASTRUCTURE BASED SYSTEM THAT CAN BE USED FOR SAFETY AND TRANSPORTATION

**FINANCIAL AND LEGAL ENTITIES** - WILL NEED TO BE RESPONSIBLE FOR THE FINANCIAL AND LEGAL ISSUES THAT WILL OCCUR FROM THE ONSET OF THE RAPID GROWTH OF CONNECTED VEHICLE.

# CONNECTED VEHICLE PROFESSIONAL CERTIFICATION PROGRAMS





## CONNECTED VEHICLE PROFESSIONAL CERTIFICATION PROGRAMS

### CERTIFICATION PROGRAMS:

- ✔ ENSURE THE TECHNICAL COMPETENCE OF PROFESSIONALS THROUGH A TANGIBLE MEASUREMENT OF SKILLS AND KNOWLEDGE.
- ✔ ESTABLISH STANDARDS FOR IT EDUCATION AND PLAY AN IMPORTANT ROLE IN DEVELOPING A QUALIFIED WORKFORCE.

THE CERTIFICATION EXAMS GO BEYOND TRAINING BY PROVIDING AN OBJECTIVE MEASUREMENT OF A PROFESSIONAL'S KNOWLEDGE AND SKILLS IN A SPECIFIC IT SUPPORT FUNCTION OR TECHNOLOGY.

# CONNECTED VEHICLE PROFESSIONAL CREDENTIALING

“Preparing your workforce for a connected world”



mobile  
comply

## Mobile Comply: The Innovative Educator

- ✔ A SERIES OF INFORMATIVE COURSES DESIGNED TO ENHANCE THE SKILL SETS OF TECHNICAL PROFESSIONALS WHO WILL ULTIMATELY PARTICIPATE IN THE EVOLUTION OF CONNECTED VEHICLE
- ✔ SAE INTERNATIONAL, MOBILE COMPLY AND THE CONNECTED VEHICLE TRADE ASSOCIATION PARTNERED TO PROVIDE A CREDENTIALING PROGRAM TO PROVIDE CERTIFICATION WITH ADVANCES IN INFORMATION AND EDUCATION



## THE CONNECTED VEHICLE PROFESSIONAL CREDENTIALING PROGRAM

- ✔ IS A COMPREHENSIVE EDUCATION AND CERTIFICATION CURRICULUM COLLABORATIVELY LAUNCHED BETWEEN SAE INTERNATIONAL, THE CONNECTED VEHICLE TRADE ASSOCIATION (CVTA ) AND MOBILE COMPLY
- ✔ HELPS PROFESSIONALS BUILD A VALUABLE SKILL SET AND INCREASES PROFESSIONAL CREDIBILITY IN THE INTELLIGENT TRANSPORTATION SYSTEM (ITS) COMMUNITY
- ✔ IS A VENDOR-NEUTRAL CREDENTIALING PROGRAM THAT SIGNIFIES THAT AN INDIVIDUAL HAS THE REQUISITE FOUNDATIONAL UNDERSTANDING NECESSARY TO PERFORM TASKS INVOLVING CONNECTED VEHICLE AND INTELLIGENT TRANSPORTATION BEST PRACTICES, IN-VEHICLE SAFETY, INFRASTRUCTURE, AND COMMUNICATIONS

# CONNECTED VEHICLE PROFESSIONAL CREDENTIALING

## CONNECTED VEHICLE PROFESSIONAL™ CREDENTIALING PROGRAM

### CVP I - Function, Protocols, and Architecture

Focus on connected vehicle application concepts and vision, performance functions, communication protocols, hardware architecture components and software architecture methodologies within the connected vehicle ecosystems.

Learners are given in-depth, wide-ranging course materials, suggested reading resources, and are tested on various key areas of instruction.



Total learning content equals 30 hours of training.

### CVP II - Standards, Organizations, Programs, V2X

Emphasis on connected vehicle standards from various organizations such as SAE International and the Institute of Electrical and Electronics Engineers (IEEE), as well as training in Vehicle-to-Vehicle (V2V), Vehicle-to-Infrastructure (V2I) and Vehicle-to-X (V2X) technologies.

Learners are given in-depth, wide-ranging course materials, suggested reading resources, and are tested on various key areas of instruction.



Total learning content equals 30 hours of training.

### CVP III - Data, Markets, Policy and Regulations

Focus on data generated by connected vehicle and data security with an introduction to major consortia and agencies supporting the development, implementation and regulation of connected cars and other connected vehicle ecosystems.

Learners are provided overviews on policies and regulations being introduced into this space, and presented with in-depth, wide-ranging course materials, suggested reading resources, and are tested on various key areas of instruction.



Total learning content equals 40 hours of training.

Individuals who successfully complete the end-of-course learning assessments are awarded the SAE International/CVTA Certificate of Competency.



**CONNECTED VEHICLE PROFESSIONAL I- FUNCTION, PROTOCOLS, AND ARCHITECTURE-** FOCUSES ON CONNECTED VEHICLE APPLICATION CONCEPTS AND VISION, PERFORMANCE FUNCTIONS, COMMUNICATION PROTOCOLS, HARDWARE ARCHITECTURE COMPONENTS AND SOFTWARE ARCHITECTURE METHODOLOGIES WITHIN THE CONNECTED VEHICLE ECOSYSTEMS.

**CONNECTED VEHICLE PROFESSIONAL II- STANDARDS, ORGANIZATIONS, PROGRAMS,V2X-** EMPHASIZES CONNECTED VEHICLE STANDARDS FROM VARIOUS ORGANIZATIONS SUCH AS SAE, IEEE AND OTHER STANDARDIZATION GROUPS. THIS WILL ALSO EXPOSE LEARNERS TO MULTIPLE ORGANIZATIONS AND PROGRAMS RECOGNIZED THROUGHOUT THE INDUSTRY. EMPHASIS IS ON VEHICLE-TO-VEHICLE (V2V), VEHICLE-TO-INFRASTRUCTURE (V2I), VEHICLE-TO-DATA (V2D) TECHNOLOGIES.

**CONNECTED VEHICLE PROFESSIONAL III-DATA ,MARKETS, POLICY AND REGULATIONS-** FOCUSES ON DATA GENERATED BY CONNECTED VEHICLE. FURTHER, LEARNERS ARE INTRODUCED TO MAJOR CONSORTIA AND AGENCIES SUPPORTING THE DEVELOPMENT, IMPLEMENTATION AND REGULATION OF CONNECTED FLEETS AND OTHER CONNECTED VEHICLE ECOSYSTEMS. ADDITIONALLY, LEARNERS ARE PROVIDED OVERVIEWS ON POLICIES AND REGULATIONS BEING INTRODUCED IN THIS SPACE.

Elaina Farnsworth

[efarnsworth@mobilecomply.com](mailto:efarnsworth@mobilecomply.com)

SAE: <http://www.sae.org/congress/2015/cvpprogram/>  
and <http://training.sae.org/seminars/cmc1501/>

CVTA: <http://www.connectedvehicle.org/cvp/>

Mobile Comply: <http://mobilecomply.com>

