Connected and Autonomous Vehicle (C/AV) Resources

American Association of Motor Vehicle Administrators (AAMVA)

- **About:** AAMVA “is a tax-exempt, nonprofit organization developing model programs in motor vehicle administration, law enforcement, and highway safety. The association also serves as an information clearinghouse in these areas, and acts as the international spokesman for these interests. AAMVA represents the state and provincial officials in the United States and Canada who administer and enforce motor vehicle laws...The association also serves as a liaison with other levels of government and the private sector.”
- **Relevance to C/AV:**
  - Autonomous Vehicles Information Sharing Group, the Autonomous Vehicle Working Group, and the Automated Vehicle Information Library.

American Association of State Highway and Transportation Officials (AASHTO)

- **About:** “AASHTO is a nonprofit, nonpartisan association representing highway and transportation departments in the 50 states, the District of Columbia, and Puerto Rico...Its primary goal is to foster the development, operation, and maintenance of an integrated national transportation system. AASHTO serves as a liaison between state departments of transportation and the Federal government.”
- **Relevance to C/AV:**
  - Autonomous Vehicle Policy Workshops
  - C/AV Executive Leadership Team (CAVELT)
  - Subcommittee on Transportation Systems Management and Operations (STSMO) C/AV Working Group
  - C/AV Research Roadmap and related tasks
  - CV Field Infrastructure Near Term Analysis Tool
  - CV Field Infrastructure Footprint Analysis
- **See factsheet and** [http://stsmo.transportation.org/Pages/default.aspx](http://stsmo.transportation.org/Pages/default.aspx).

Metropolitan Planning Organizations (MPOs), State Departments of Transportation (State DOTs), and other transportation agencies

- **Contra Costa Transportation Authority**
  - **Relevance to C/AV:** GoMentum Station “is the nation’s largest secure testing facility for autonomous and connected vehicle technology. The Contra Costa Transportation Authority and its partners lead a collaborative effort at GoMentum Station, bringing together automobile manufacturers, communications companies, technology companies, researchers and public agencies with the aim of accelerating the next generation of transportation technologies.” [http://gomentumstation.net/about/](http://gomentumstation.net/about/)

- **Florida DOT (FDOT)**
  - **Relevance to C/AV:** The Florida DOT Automated Vehicles Initiative is “helping to create the framework for implementation by engaging stakeholders, developing research and pilot projects, and creating awareness of the technologies and how they support FDOT’s vision statement.” [http://www.automatedfl.com/](http://www.automatedfl.com/)

- **Miami-Dade MPO**
  - **Relevance to C/AV:** Miami-Dade MPO Connected-Autonomous Vehicle Program and Task Force is “working alongside its transportation partners to plan for this new technology with upgraded...”
roadways, transit systems, and freight facilities that will move our community into the future.”

**Michigan DOT**

Relevance to C/AV: Michigan DOT’s Connected Vehicles Program includes a working group, Vehicle to Infrastructure (V2I) Applications, Connected Vehicle Infrastructure Investments, Data Management, research, its Mobility Transformation Center, and a Safety Pilot Model Deployment with the U.S. Department of Transportation (USDOT).

[http://www.michigan.gov/mdot/0,1607,7-151-9621_11041_38217---,00.html](http://www.michigan.gov/mdot/0,1607,7-151-9621_11041_38217---,00.html)

**Pennsylvania DOT**

Relevance to C/AV: In 2014, the Pennsylvania DOT developed a Connected and Autonomous Vehicles 2040 Vision.


**Nevada DOT**

Relevance to C/AV: Nevada DOT is developing an Autonomous and Connected Vehicle Policy Framework


**San Diego Association of Governments (SANDAG)**

Relevance to C/AV: The San Diego region has been designated as one of the USDOT’s proving grounds for autonomous vehicles.


**National Conference of State Legislatures (NCSL)**

About: Representing the interests of legislators and staff, the NCLS “mission is to improve the quality and effectiveness of state legislatures, promote policy innovation and communication among state legislatures, and ensure state legislatures a strong, cohesive voice in the federal system.”

Relevance to C/AV:

- Autonomous vehicle legislative information and database


**National Operations Center of Excellence (NOCoE)**

About: “A partnership of AASHTO, the Institute of Transportation Engineers, and the Intelligent Transportation Society of America with support from the Federal Highway Administration (FHWA),” NOCoE provides “resources to serve the transportation systems management and operations (TSMO) community” and “technical services such as peer exchange workshops and webinars, ongoing assessments of best practices in the field, and on-call assistance.”

Relevance to C/AV:

- Vehicle to Infrastructure Deployment Coalition (V2I DC)
- Preparing for Connected/Autonomous Vehicles Webinar


**Private:**

**Google**

- About/Relevance to C/AV: The Waymo self-driving technology company evolved from Google’s self-driving car. The project began in 2009 with the Toyota Prius. In 2012, the
Lexus RX450h was added and in 2014, they designed a prototype vehicle, which began testing on public roads in 2015.  https://waymo.com

- INRIX
  - About/Relevance to C/AV: In its 2017 Autonomous Vehicle Study, INRIX identifies the top U.S. cities for shared highly autonomous vehicle (HAV) deployment, discusses how cities can leverage data to plan for HAVs, and discusses the data analysis needed to help public sector stakeholders strategically bring this technology to market.  http://www2.inrix.com/2017-autonomous-vehicle-study

- Tesla
  - About/Relevance to C/AV: “All Tesla vehicles produced in...[their] factory, including Model 3, have the hardware needed for full self-driving capability.”  https://www.tesla.com/autopilot

- Toyota Research Institute (TRI)

RAND Corporation
- About: “The RAND Corporation is a nonprofit institution that helps improve policy and decision making through research and analysis.”
- Relevance to C/AV:

SAE International
- About: “SAE International is a global association of more than 128,000 engineers and related technical experts in the aerospace, automotive and commercial-vehicle industries.”
- Relevance to C/AV:
  - Standard J3016: Taxonomy and Definitions for Terms Related to On-Road Motor Vehicle Automated Driving Systems identifies six levels of driving automation and has been adopted by the National Highway Traffic Safety Administration (NHTSA) and the USDOT’s Policy on Automated Vehicles.
  - See factsheet and http://www.sae.org/servlets/pressRoom?OBJECT_TYPE=PressReleases&PAGENUM=1

Transportation Research Board (TRB)
- About: TRB “facilitates the sharing of information on transportation practice and policy by researchers and practitioners; stimulates research and offers research management services that promote technical excellence; provides expert advice on transportation policy and programs; and disseminates research results broadly and encourages their implementation.”  TRB administers the NCHRP, which is “sponsored by the member departments (i.e., individual state departments of transportation) of AASHTO, in cooperation with the FHWA.”
- Relevance to C/AV:
  o Regional Transportation Systems Management and Operations (RTSMO) Committee (AH810) Subcommittee on Connected and Autonomous Vehicles https://sites.google.com/site/trbrtsmocommittee/subcommittees/connected-autonomous-vehicles

Uniform Law Commission (ULC)
  • About: The ULC “provides states with non-partisan, well-conceived and well-drafted legislation that brings clarity and stability to critical areas of state statutory law...It is a non-profit unincorporated association, comprised of state commissions on uniform laws from each state, the District of Columbia, the Commonwealth of Puerto Rico, and the U.S. Virgin Islands.”
  • Relevance to C/AV:
    o Draft model legislation for self-driving vehicles
    o Study Committee on State Regulation of Driverless Cars
  • http://www.uniformlaws.org/NewsDetail.aspx?title=New%20ULC%20Study%20and%20Drafting%20Committees%20will%20be%20Appointed

University Affiliated
  • Texas A&M Transportation Institute (TTI)
    o About: TTI “develops solutions to the problems and challenges facing all modes of transportation. The Institute conducts over 700 research projects annually with over 200 sponsors at all levels of government and the private sector.”
    o Relevance to C/AV:
      ▪ C/AV test beds
      ▪ C/AV physical infrastructure projects and transportation applications
      ▪ Commercial truck platooning demonstration project
      ▪ Policy research and planning studies
  • University of Maryland Center for Advanced Transportation Technology Laboratory (CATT Lab)
    o About: CATT Lab’s mission “is to support national, state, and local efforts to provide safe and efficient transportation systems through improved operations and management by means of research and development, technology implementation, training, and education. The CATT Lab’s research and development activities provide a bridge between the intelligent transportation systems (ITS) community, the information technology community, and other disciplines essential to the successful application of ITS.”
    o Relevance to C/AV:
      ▪ Automated Small Vehicle Transportation Research
      ▪ Proposed expansion of research activities
• University of Virginia Center for Transportation Studies
  o About: The Center for Transportation Studies research program activities include areas such as ITS, transportation planning and logistics, traffic simulation, freight, safety, sustainable transportation, infrastructure management, and traffic operations.
  o Relevance to C/AV:
    ▪ Connected Vehicle/Infrastructure University Transportation Center (CVI UTC) Consortium http://www.cvi-utc.org/
    ▪ Connected Vehicle Pooled Fund http://www.cts.virginia.edu/cvpfs/

U.S. Department of Transportation (USDOT)
• About: The USDOT was established by an act of Congress on October 15, 1966. Its mission is to “serve the United States by ensuring a fast, safe, efficient, accessible and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future.”
• Relevance to C/AV:
  o Vehicle-to-Infrastructure (V2I) webpage: www.its.dot.gov/v2i
  o Connected Vehicle Pilot Deployment Program https://www.its.dot.gov/pilots/
  o Connected Vehicle Test Beds https://www.its.dot.gov/factsheets/connected_vehicle_testbed_factsheet.htm
  o Connected Vehicle Reference Implementation Architecture (CVRIA) http://local.iteris.com/cvria/
  o NHTSA Automated Vehicles webpage: https://www.nhtsa.gov/technology-innovation/automated-vehicles

Victoria Transportation Policy Institute (VTPI)
• About: The VTPi “is an independent research organization dedicated to developing innovative and practical solutions to transportation problems.”
• Relevance to C/AV:

In The News
• Consumer Reports Self-Driving Cars: Driving Into the Future http://www.consumerreports.org/autonomous-driving/self-driving-cars-driving-into-the-future/