

CCAM R&D&I Ecosystem in USA

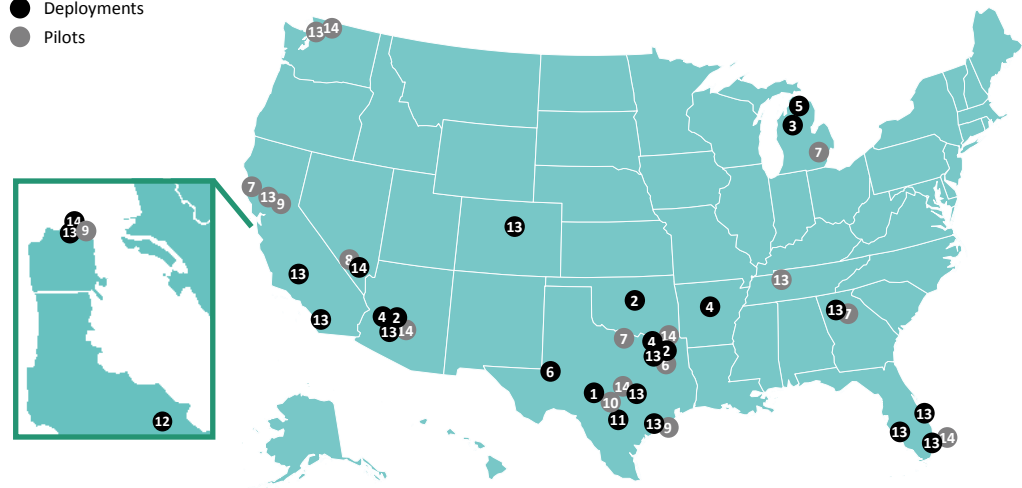


The US CCAM ecosystem is mainly market-driven, with private industry leading technology development and early deployment, while public authorities focus on impact assessment, guidance and post-market safety oversight rather than pre-market type approval. Vehicle safety is regulated at federal level by NHTSA through a self-certification regime, whereas testing and deployment rules are largely determined at state level, resulting in a fragmented regulatory environment. Public CCAM R&D is coordinated mainly by USDOT through the ITS JPO,

which manages cross-modal research on automated driving, human factors, simulation and connectivity. Unlike the EU or Japan, connectivity and V2X are not mandated for automated driving; automation-only approaches dominate. Since 2021, the Infrastructure Investment and Jobs Act has significantly reinforced federal investment in digital infrastructure, traffic operations, safety and connectivity pilots.

Main Stakeholders, Pilots & Deployments

- Deployments
- Pilots



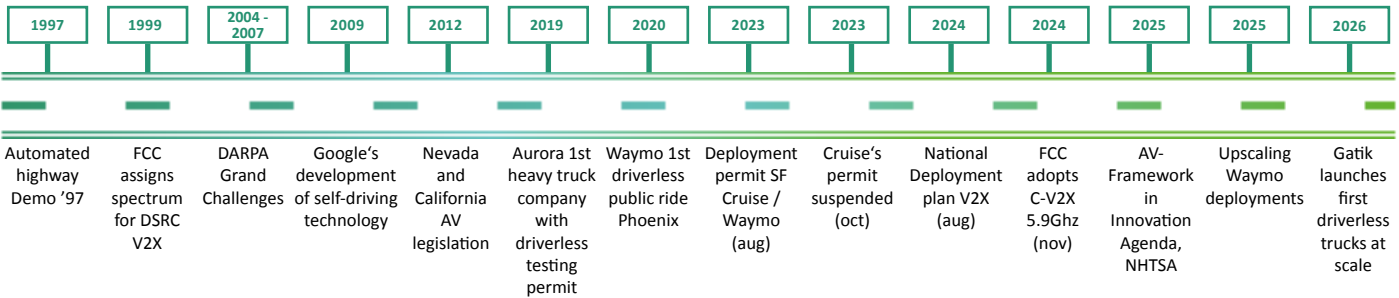
POLICY

- NHTSA, Washington, DC
- FHWA, Washington, DC
- FTA, Washington, DC
- FMCSA, Washington, DC
- ITS JPO, Washington, DC

INDUSTRY

- 1 AVIRIDE
- 2 Aurora
- 3 Ford
- 4 Gatik
- 5 gm
- 6 Iz kodak
- 7 MAY
- 8 Motional
- 9 nuro
- 10 Plus
- 11 STARSHIP
- 12 Uber
- 13 WAYMO
- 14 ZOOX

National CCAM Timeline



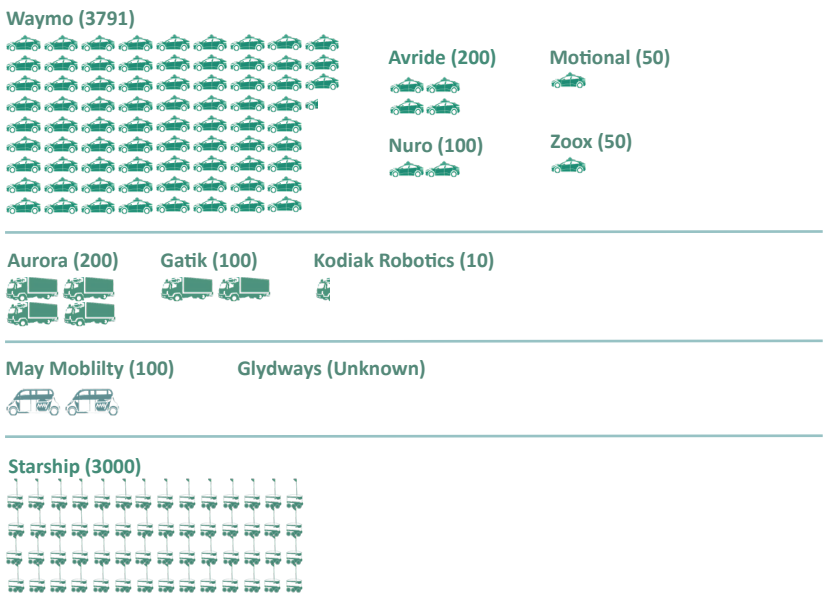
Primary R&D Topics

- Safety Validation (NHTSA)
- V2X / Connectivity (ITS- JPO)
- ADAS and ADS in bus and transit shuttles (FTA)
- Freight Automation (FMCSA)
- Cooperative driving automation with digital infrastructure (FHWA)

Building Block Index

Successful implementation of CCAM depends on a combination of regulatory, organisational, technical and societal conditions that enable automated mobility solutions to move beyond pilot projects and into everyday operation. Europe has identified the following key Deployment Building Blocks (DBBs) to support this transition: Vehicle (inside the vehicle), Person (users, citizens, workforce), Physical & Digital Infrastructure (communication, roadside, server), Business, Design and operations (operational challenges, lessons learnt, integration into public transport) and Regulation. A qualitative assessment by the CCAM ambassador team to see to what extent these building blocks are addressed in the various regions around the world led to the following insights / relative ranking. In the US the most mature building blocks are Business, Vehicle, Design and operations and Regulation, followed by Physical & Digital Infrastructure and Person.

Relative Fleet Sizes



This factsheet is based on publicly available information, input from CCAM ambassador experts and relevant national stakeholders. Despite best efforts to ensure accuracy and completeness, it should not be considered authoritative or exhaustive. Suggestions or remarks? Contact info@connectedautomateddriving.eu

