

Connected and Automated Future of Transportation for Kansas

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Introduction

The connected and automated vehicle (CAV) technologies will bring unprecedented changes in the landscape of transportation systems for areas like operations, management, and infrastructure needs. To assure a safe, reliable, and trustworthy connected and automated transportation system, it is important to have a clear CAV implementation pathway that includes operational guidelines, expected benefits, and deployment standards, which will allow all stakeholders (general public, infrastructure owner operators, department of transportation, cities, metropolitan planning organizations, technology developers) to work holistically. To support the foundational CAV implementation pathways for the state of Kansas, this research aims to synthesize the existing CAV regulation and policies, ongoing and planned deployments of CAV technologies, and workforce development and educational outreach efforts. This will help build a functional knowledge base and allow us to learn from ongoing efforts to transition to the CAV environment.

Project Description

Our synthesis study also examines the CAV readiness of the different states using the survey data collected by the U.S. Intelligent Transportation System Joint Program Office. This report summarizes the strategic priorities of these states and the steps that these different states have undertaken for expanding educational outreach, focusing on the stakeholder, specifically the general public, transportation agencies, policymakers, and technology developers. This study can be used as a resource to compare and contrast the policies, laws, and guidelines that other progressive states are following (e.g., license for testing AVs on roads, vehicle registration procedures). What the steps taken by the states to educate their citizens about these emerging technologies (e.g., webinars, training programs) are. How much the states are ready to accommodate these technologies in the future (e.g., infrastructure development, managing funding resources); and what type of pilot projects has been undertaken and currently ongoing (e.g., automated shuttles, delivery services).

Project Results

Many state policies (and vision plans), particularly in the Midwest and South, underscored the economic and technological opportunities of connected and automated transportation systems. A major catalyst for effective CV/AV deployments is workforce development and educational outreach (Wong & Shaheen, 2020). This chapter explores how the states plan to reach out to the general public, policymakers, and transportation professionals to educate about connected and automated vehicle technologies and the future deployment paths.

Some states are more focused on CV technologies compared to AV. Also, in many cases, the legislation and testing guidelines do not differentiate between CV and AV operations. States need to initiate efforts to build standards regarding CV/AV operations and testing, leveraging collaboration with industry partners and research institutions.

Some states raised concerns about the necessary financial resources to invest in CV/AV infrastructure. Furthermore, distributing CV/AV infrastructure development resources is an ongoing topic, and states are constantly exploring viable solutions.

Project Information

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