Title
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https://escholarship.org/uc/item/4xv6z4mj

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Publication Date
2019-10-01
Insights on Autonomous Vehicle Policy from Early Adopter Cities and Regions

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October 2019

Issue
Autonomous vehicles (AVs) are being widely tested and piloted to carry passengers and freight. However, the potential uses and impacts of AVs in communities are uncertain. There are claims that AVs may be able to improve road safety, make travel more convenient, lower shipping costs, and reduce the need for automobile parking. But there are also concerns that AVs may increase road congestion, reduce transit ridership, compete for curb space, and even increase urban sprawl.

To better understanding how cities and regions are currently engaging with and planning for AVs, twenty interviews were conducted with individuals from “early adopter” public agencies across the U.S. who are involved in AV testing, regulation, and planning. Interviews were supplemented by an extensive review of policy and planning documents. This policy brief highlights key findings from this research with more details available in the full report: Autonomous Vehicles in the United States: Understanding Why and How Cities and Regions are Responding.

Key Findings
There is sharp variance in the pace and degree to which cities are identifying and adopting AV policies. Some municipalities are developing policies in order to encourage AV firms to locate within their limits and increase local employment. Others are holding off from enacting AV policy in spite of AV firms carrying out testing on their roads. These approaches reflect different views about the long-term penetration of AVs, as well as the appropriate role of local government in ushering in this technology. There is little consensus in terms of what cities should do regarding AVs, while the vast majority of municipalities have not carried out planning for AVs.

Cities that are developing AV policies assume AVs will operate as medium-capacity shuttles and private ridehailing fleets, not via personal ownership. AV fleets are expected to benefit from economies of scale to keep ridehailing prices low and to benefit from fleet-based operating updates and machine learning. Prospects for AV-transit partnerships, sponsorship of public AV pilots, AV-specific taxes, and the push to transition curb space away from parking, all depend on this ownership model.

State pre-emption of AV regulation has not fully prevented local governments from influencing AV pilots. Multiple cities (including New York City and San Jose) have influenced AV testing operations even when existing state regulations pre-empt municipalities from directly regulating AVs. Thus, even cities outside Massachusetts – which is unique among states in granting local control over AV activity – have the ability to affect how AVs operate via multiple channels. Furthermore, even when AV operators are not legally required to coordinate with a city to test there, there are often
Local public agencies believe their coordination and communication with AV companies is inadequate. Nearly all public-sector interviewees felt the information shared by AV companies was insufficient for their planning purposes, even in cases where explicit partnerships had been established. While understanding that AV companies are operating in a highly competitive market, public agencies continue to seek even rudimentary information about the number of vehicles in a given company’s local AV fleet and the geographic extent of testing and pilots. Many interviewees expressed concern that their relationships with AV companies will mirror difficulties with app-based ridehailing services such as Uber and Lyft, including data sharing difficulties, worsening traffic and emissions, and competition with public transit.

The role for regional planning agencies in regards to AVs is uncertain. Examples of how regional agencies are interfacing with AV policy and planning include incorporating AVs into scenario-planning models, and potentially coordinating the dissemination of road-construction updates to AV fleets. Each regional planning agency has a different relationship with its member cities and towns, and provide different types of expertise and resources. This may make developing regional AV policy a challenge, particularly for those MPOs that do not advise cities and towns on land use.

Further Reading
This brief is drawn from Autonomous Vehicles in the United States: Understanding Why and How Cities and Regions are Responding report authored by Professor Daniel G. Chatman and Marcel E. Moran, Department of City and Regional Planning, UC Berkeley. The report and this brief are available for download at www.ucits.org/research-project/avs-and-cities.

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