

Cooperative Automated Transportation (CAT) Coalition Policy, Legislative, and Regulatory Working Group

May 20, 2021 Webinar
Notes and Summary of Discussions

Welcome

Director Paul Ajegba (who serves as a co-chair of the working group together with Director Jennifer Toth) welcomed attendees. A webinar slide deck was used to support the discussions. A copy of the slide deck and presentations presented were circulated prior to the webinar and are being circulated with this summary.

Current Work Plan and Webinar Schedule

Paul noted that this working group recently submitted a research proposal titled “Multistate Coordination and Harmonization for AV Legislation” and received a notice that the proposal was approved for funding and will be a project completed by the TRB Highway Legal Panel. Paul noted this will be a great effort for this working group to be involved in. Paul reviewed the project background and scope of work for this effort.

Paul related the concept of harmonized legislation to the Manual on Uniform Traffic Control Devices, noting that if legislation is harmonized across the country, to the extent possible, it will benefit AV operations. Paul noted that for states that have not yet enacted any laws, this research will provide a playbook for them. An excerpt from the proposal, with an overview of the project is as follows:

A TRB Legal Research Digest should propose a potential path forward for national harmonization of AV laws, with special consideration to which laws and regulations need to be harmonized to better encourage seamless national deployment and operations of highly automated vehicles.

Paul recapped that this working group is still looking for topics for future webinars and assistance in identifying speakers. Paul recapped the following topic areas. Any members that have suggestions for specific topics or speakers should contact Pat Zelinski:

- Legislation needs for today’s AV testing (level 4/5)
- Multistate coordination/harmonization for AV legislation
- Multijurisdictional coordination for AV policies
- Electric vehicles – relationship with AV
- How states have updated CAT policies for emerging technologies
- AV policies that address innovative freight mobility
- AV planning to address equity and mobility needs

- Legislation needs for today's AV (level 1 & 2)

Gatik Solutions for Middle Mile Logistics

Rich Steiner introduced Gatik as an autonomous delivery network for the middle-mile movement of freight, delivering business to business short haul deliveries. Gatik operates 3-6 autonomous straight trucks (he defined straight trucks as those with all axles attached to a single frame). He noted that they operate on fixed repeatable routes up to 300 miles. Solving for hub and spoke logistics as a middle-mile carrier. He noted several key aspects:

- E-commerce is booming, what used to be long infrequent freight runs has been replaced by shorter more frequent routes. The delivery window is shrinking, where the expectation was once for two-day delivery, now it often is expected within hours.
- Costs of shipping to meet the demands for smaller more frequent deliveries are rising, especially from big retailers.
- Gatik operates fixed repeatable routes. From an engineering perspective, these are much more constrained. The vehicles are not operating on "general autonomy" as they are driving routes repeatedly.

Rich showed a video of their electric autonomous vehicles on the road delivering, noting that these were filmed in live operations with a paying customer (Walmart).

From Regulatory Perspective, Rich shared the following perspective:

- He noted he is happy to see that an increased number of states have introduced AV policies;
- Regulations are favorable to Gatik's Intra-state use case and the fact that all routes follow repeatable fixed routes, not general autonomy;
- When talking about ideal criteria, Rich noted that 21 states meet their ideal criteria:
 - Fully autonomous deployments (removing safety driver following safe successful testing) are permitted, and
 - Paid movements of freight are permitted – he noted Gatik is performing delivery paid services once all testing is completed.
- An additional 23 states currently have a variety of AV policies (e.g., task forces in place, testing programs) and are less than ideal for operations today but he looks forward to them allowing operations in the future.

Rich identified some key policy considerations that he suggests:

- Open dialogue between states and AV companies is critical – Rich noted that Gatik actively participates with states to inform legislation / policy-makers.
 - He noted that Gatik was the first AV company to obtain regulatory approval to operate fully autonomous in Arkansas.
- A range of approaches to AV adoption is understandable and beneficial.

Questions:

Who are competitors out there? Rich noted that there are no 100% competitors with them, performing “middle mile autonomous delivery”. Others typically are solving problems at other ends of spectrum (i.e., first-mile / last-mile). He anticipates that competitors will come. Reason is the middle-mile is not a flashy aspect of delivery of autonomous rides and therefore it kind of goes unnoticed. In the past, the emphasis of AVs was mostly passenger transportation, recently freight is growing in enthusiasm. Paul agreed that most of what we have seen is “first and last mile” but the middle mile offers advantages. Rich: we look to work with firms that share our long-term long vision (not those just interested in brief trials). Relationships with the big market are who we are approaching to support this portion of the supply chain.

Faisal: Do you see any value in connectivity? Rich confirmed that they do see value in connectivity. But they very deliberately designed and built their solution without the need for connected infrastructure. The simple reason is not everyone has it and Gatik did not want to have to wait for all agencies to operate connectivity. Rich noted that their system is fully redundant and employs technologies such as multiple cameras, radar, lidar, etc. Still, Rich indicated they welcome the opportunity to work with jurisdictions that will offer data.

Uniform Law Commission (ULC) Model AV Legislation

Libby Snyder (legislative counsel for the ULC) presented an overview of the ULC. ULC is a non-profit, non-partisan group, formed in 1892. The ULC is made up of 350 commissioners appointed by states, all are volunteer attorneys. The ULC is funded primarily by state appropriations but some from publishing royalties and grants. The ULC drafts legislation on topics of interest nationwide.

Libby provided background on the Uniform Automated Operations of Vehicles Act (UAOVA).

- In 2014, a study committee on state regulation of driverless cars was formed;
- In 2017, a highly automated vehicle drafting committee began drafting the act;
- After 2 years of drafting, the UAOVA was completed and was adopted by the ULC in 2019.

Structure of UAOVA

Libby noted that the committee chose an overlay approach, where the Motor vehicle code of any state continues to apply. The laws that apply to automobiles continue to apply to vehicles with automated driving systems (ADS), except to the extent this Act effects a change. The principal change is an additional requirement for registration that there be someone who comes forward and takes legal responsibility for the vehicle’s ability to comply with the rules of the road in the enacting jurisdiction.

Scope of UAOVA

Libby described the scope of the Act:

- Only relates to operation of SAE Levels 3-5 on roads open to public;
- The act addresses traffic laws and enforcement, vehicle registration, driver licensing;
- The act resolves potential conflicts with existing state motor vehicle laws; and

- Respects established state and federal roles in vehicle safety.
- The act does not apply to:
 - o SAE Levels 0-2 autonomous vehicles;
 - o Testing for the purpose of research and development; and
 - o Remote driving.

Libby noted that this was not an attempt to rewrite law of products liability, and the focus is on responsibility for violations of the motor vehicle code and direct consequences under the code.

Regarding question of what if there is no driver: Libby introduced the term Automated Driving Provider (ADP) with a definition provided by this act.

- The ADP is the legal driver of an automated vehicle.
- To become an ADP, an entity declares itself to the state and designates the AV for which it will act as the legal driver. The automated vehicle then becomes an associated AV.
- Only an associated AV may become registered in a state.
- Once the AV has been associated with an ADP, the UAOVA adopts a state’s existing Motor vehicle registration framework.

Libby addressed the question of “Who gets the speeding ticket if an AV is speeding?” She noted that if an AV is under automated operations when speeding, the ADP would be ticketed, if not, human driver would be ticketed. Each state’s rules of the road must be interpreted. ADP shall take reasonable steps to accommodate rules of the road.

Questions:

- Carole: Where do you see this going, what will be next steps? Libby noted that this Act is now available for states to consider adopting. Ideally there would be uniform enactment in all states. That is not always possible, but because of the narrow focus of this, as the vehicles hit the road, they hope to see more participation in enacting this. Libby noted that this is basically a procedure to register the vehicle and get it on the road, with information about the company and the ADP
- Paul: Are you looking at communication (V2X) aspects as well. Libby noted that right now they have only looked at this and not included it in the Act. There is interest into looking a products liability issues that may include communications, but this has not been the focus in efforts to date.
- King Gee: What is the status of the Act right now and next step? Libby noted that the Act has been finalized and is ready for enactment in any state that wishes to enact it. It has not yet been enacted by any state. Libby noted that she believes a lot of states are focusing on testing or platooning, and are not ready to step into permitting vehicles yet. But, she reiterated that the Act is ready.
- Is the ULC work done? Yes and no. ULC not only drafts the laws but also attempts to help get it enacted in states. The drafting aspect is completed. Libby noted there could always be proposals for revivals (and the ULC is open to those).
- Carole: Noted that Maryland is one of states looking at our laws to understand which laws are impacted. The first step for the university working on this was to look at the ULC work.

They are struggling to incorporate it. There may be some things that MD DOT could send that they think should be explored by the ULC. Libby noted that they always appreciate feedback.

- Paul: Have you thought of working with AASHTO and ITS America to explore how it could be pushed out to states. Libby noted this is a good point. ULC doesn't lobby but will have commissioners in the states work to outreach to enact the act. Commissioners are not as well connected in the transportation community. Presentations like this are intended to get the word out.

Libby offered in the chat box: "If anyone has any questions about the Uniform Automated Operation of Vehicles Act feel free to contact me at lsnyder@uniformlaws.org. Thanks!"

Updated PLR Website

Pat Zelinski updated members on recent updates and changes to the PLR Working Group's website, that is part of the overall CAT Coalition website. The website can be found at:

https://transportationops.org/CATCoalition/policy_legislative_regulatory_WG

Pat noted that the changes are updated to identify current chairs, focus of the group, primary contact from AASHTO. Webinar summaries and recaps of past work are included.

Paul suggested that since partners are important parts of the group, perhaps we could introduce who the partners are.

Partner Reports

AASHTO –

Pat Zelinski updated members that last week was the AASHTO Spring Meeting that was held virtual. The CTSO Committee is going to meet virtually this summer and dates will be formally announced in the coming weeks. AASHTO's first in-person meeting will be the Annual meeting in San Diego this fall. Pat noted that Venkat Nallamothe has left AASHTO and Pat has taken his position.

King Gee added that there are four inter-committee working groups and the CAV working group has been busy and is preparing a CEO level information sheet on the state of play in CAV. This will be coming from Scott Marler in the near future.

ITS America –

Carlos Alban updated that ITS America has been focused on the new transportation bill. Currently it seems action may be pushed further into the summer. Other main area of focus on legislative side is on transportation stimulus. The administration is in ongoing discussion with democrats and republicans about this.

From regulatory side, working in response to FCC proposed rulemaking regarding 5.9 GHz band on interference, reimbursement, additional spectrum needs for V2X services.

ITS America is also continuing to work with stakeholders to define the need to protect the remaining spectrum from interference and to obtain additional spectrum.

Carlos shared contacts for specific activities in the chat box as: For questions related to ITS America's legislative efforts please contact Ron Thaniel – rthaniel@itsa.org. For questions related to ITS America's regulatory efforts please contact Tim Drake – tdrake@itsa.org.

Other Member Updates

Meeting Close and Next Meeting

The next webinars of the PLR Working Group will be:

- June 29, 2021 1:30-3:00 PM ET
- August 25, 2021 1:30-3:00 ET

Policy, Legislative, and Regulatory WG May 20, 2020 Webinar Participants

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