
Washington State Transportation Commission

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UNIFORM AUTOMATED OPERATION OF VEHICLES ACT



Michele Radosevich
Uniform Law Commission
920 Fifth Avenue, Suite 3300
Seattle, Washington 98104
(206) 757-8124
micheleradosevich@dwt.com

What is the ULC?

- Uniform Law Commission (ULC)
 - Non-profit, non-partisan organization formed in 1892
 - Commissioners are volunteer attorneys appointed by the states
 - Funded by state appropriations (~75%), publishing royalties (~15%), and grants (~10%)
 - ULC drafts legislation on topics where uniformity among the states is desirable and practical
 - Drafting meetings are open to any interested party – get involved!
 - Legislative staff based in Chicago headquarters

Background on the UAOVA

- 2014: Study Committee on State Regulation of Driverless Cars
- 2017: Highly Automated Vehicles Drafting Committee
- After two years of drafting, the Highly Automated Vehicles Drafting Committee finalized the Uniform Automated Operation of Vehicles Act
- 2019: Uniform Law Commission formally adopted the Uniform Automated Operation of Vehicles Act at the Commission's Annual Meeting

Scope of the UAOVA

- UAOVA does cover:
 - The deployment of automated vehicles on roads held open to the public.
 - Traffic laws and enforcement
 - Vehicle registration
 - Driver licensing, and
 - Resolves potential conflicts with existing state motor vehicle laws
- UAOVA does not cover:
 - Testing of aspirational automated vehicles for the purposes of research and development;
 - Remote driving, in which a human drives a vehicle while outside of or far from it;
 - Vehicle features that merely assist a human driver. Even if these features brake, steer, and accelerate, they are still designed with the expectation that a human driver will monitor the road.

Structure of the Uniform Act

- Early in the drafting process, the Committee considered whether to:
 - Create a new legal framework for automated vehicles to wholly supplant existing vehicle codes;
 - Adopt a model vehicle code applicable to all motor vehicles and then amend it to explicitly address automated vehicles; or
 - Draft a hybrid act to map an existing vehicle code onto automated vehicles.

Structure of the Uniform Act

- Overlay approach
 - The motor vehicle code of any enacting state continues to apply
 - Laws that apply to automobiles continue to apply to vehicles with automated driving systems without change, *except to the extent this Act effects a change*
 - The principle 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

Three Key Points

Automated driving...

1. Will likely be very diverse
2. Implicates many legal topics and policy issues
3. Will involve federal, state, and local governments

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1. Contemplates this diversity
2. Focuses on a typical state vehicle code
3. Respects established state and federal roles in vehicle safety

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Diversity of Automated Driving

Types of Trips

- You may need to drive if prompted in order to maintain safety
- You may want to drive if prompted in order to reach your destination
- You will not need to drive for any reason

Types of Vehicles

- Vehicles you can drive
- Vehicles you can't drive



SAE J3016™ LEVELS OF DRIVING AUTOMATION

	SAE LEVEL 0	SAE LEVEL 1	SAE LEVEL 2	SAE LEVEL 3	SAE LEVEL 4	SAE LEVEL 5
What does the human in the driver's seat have to do?	You are driving whenever these driver support features are engaged – even if your feet are off the pedals and you are not steering			You are not driving when these automated driving features are engaged – even if you are seated in “the driver’s seat”		
	You must constantly supervise these support features; you must steer, brake or accelerate as needed to maintain safety			When the feature requests, you must drive	These automated driving features will not require you to take over driving	
What do these features do?	These are driver support features			These are automated driving features		
	These features are limited to providing warnings and momentary assistance	These features provide steering OR brake/acceleration support to the driver	These features provide steering AND brake/acceleration support to the driver	These features can drive the vehicle under limited conditions and will not operate unless all required conditions are met	This feature can drive the vehicle under all conditions	
	<ul style="list-style-type: none"> • automatic emergency braking • blind spot warning • lane departure warning 	<ul style="list-style-type: none"> • lane centering OR • adaptive cruise control 	<ul style="list-style-type: none"> • lane centering AND • adaptive cruise control at the same time 	<ul style="list-style-type: none"> • traffic jam chauffeur 	<ul style="list-style-type: none"> • local driverless taxi • pedals/steering wheel may or may not be installed 	<ul style="list-style-type: none"> • same as level 4, but feature can drive everywhere in all conditions
Example Features						

For a more complete description, please download a free copy of SAE J3016: https://www.sae.org/standards/content/J3016_201806/

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The Uniform Automated Operation of Vehicles Act applies only to SAE Levels 3 - 5

Types of Vehicle Features

Assisted Driving Features

- **L0:** You're driving
- **L1:** You're driving, but you're assisted with either steering or speed
- **L2:** You're driving, but you're assisted with both steering and speed

Automated Driving Features

- **L3:** You're not driving, but in order to maintain safety you will need to drive if prompted
- **L4a:** You're not driving, but in order to travel somewhere you may need to drive if prompted
- **L4b:** You're not driving, but you can't travel everywhere
- **L5:** You're not driving, and you can travel everywhere

Some Automated Driving Models

- Original manufacturer owns vehicles and offers rides
- Another company modifies vehicles and offers rides
- Fleet operator buys vehicles and offers rides
- Individuals buy vehicles and offer rides
- Individuals buy vehicles with subscriptions for features
- Individuals buy vehicles with unrestricted use of features
- Individuals buy vehicles and modify them

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Production Modification Maintenance Operation



CURRENT ROLES IN VEHICLE SAFETY

Federal Government

State Governments

Federal Motor Vehicle Safety Standards (FMVSS)
Investigations for Noncompliance and Defects
Regulatory Recalls

FMVSS-Compatible Vehicle Standards
Products Liability Law
Vehicle Registration
Vehicle Inspections
Roadworthiness
Rules of the Road
Driver Licensing

Manufacturer

Owner

Driver

Automated Driving Providers

- Who is the “driver” of an automated vehicle under automated operation?
 - Under the Uniform Act, the **automated driving provider** or **ADP** is the legal driver of an automated vehicle under automated operation.
 - An ADP declares itself to the state and designates the automated vehicles for which it will act as the legal driver.
 - Once an ADP designates an automated vehicle for which it will act as the legal driver, that automated vehicle becomes an **associated automated vehicle**.
 - The ADP might be an automated driving system developer, a vehicle manufacturer, a data provider, a fleet operator, or another kind of market participant that has yet to emerge.

Automated Driving Providers

- Only an **associated automated vehicle** – i.e. an automated vehicle that is designated by an automated driving provider – may be registered in an enacting state.
- Once the automated vehicle has been associated with an ADP, the UAOVA adopts a state’s existing motor vehicle registration process.
- In this way, the Act uses the motor vehicle registration framework that already exists in states – and that applies to both conventional and automated vehicles – to incentivize self-identification by automated driving providers.
- By harnessing an existing framework, the Act also seeks to respect and empower state motor vehicle agencies.

Scope of the Uniform Act

- We did not attempt to rewrite the law of products liability
 - Drafting committee participants included automobile manufacturers, parties developing automated driving systems, trial lawyers, insurance industry representatives, etc.
 - Fair level of consensus that – at least for the time being – the existing legal system likely can cover problems that arise in initial deployments which are likely to be in the fleet model
 - The drafting committee opted not to try to take on tort reform or adopt or change the law of products liability as it relates to these vehicles

Scope of the Uniform Act

- To the extent UAOVA focuses on any sort of responsibility or liability, it is limited to responsibility for violations of the motor vehicle code and the direct consequences under the motor vehicle code.
- Who gets the speeding ticket?
 - If the automated vehicle is under automated operation, the automated driving provider will get the speeding ticket under this act.
 - If the automated vehicle is *not* under automated operation, the human driver will get the speeding ticket.



Questions?

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