

AV update

City of Somerville
October 16, 2025

Waymo is not driving autonomously in Massachusetts



But there was significant public and media attention for the mapping done in Summer 2025

Motional is the only permitted AV company in Massachusetts



They have not driven on Massachusetts roads in 2025, testing in Las Vegas and Santa Monica

They are required to have a safety driver behind the wheel

They are limited to testing in the City of Boston

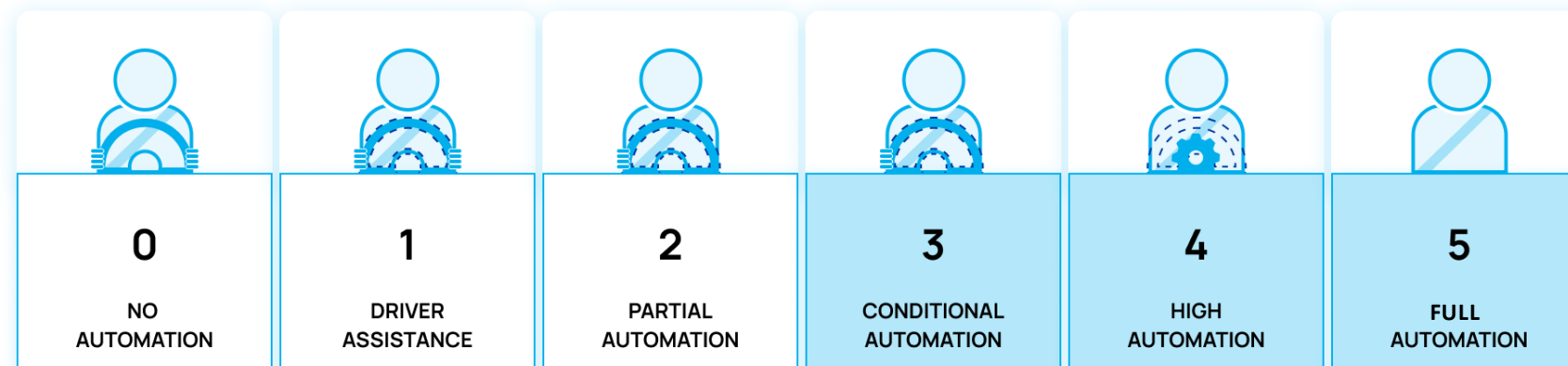
Their permit goes through February 2026

What are “Autonomous” Vehicles?

- Automated Driving System (ADS) performs **some** or **all** of a human driver’s responsibilities
- Uses a variety of onboard computers, sensors, and maps/GPS to navigate roadways



LEVEL OF DRIVING AUTOMATION



A few of the many forms of “Autonomous” Vehicles?



**Personally-owned
(Level 3)**



**Robo-Taxi
(Level 4)**



**Commercial Trucking
(Level 4)**

Why AVs?

Safety

Lower the rate and severity of crashes in most circumstances

Efficiency

Create opportunities for optimized routing and vehicle coordination, reduced emissions, and better in-vehicle productivity

Infrastructure

Reduce personal vehicle ownership, decrease the need for parking infrastructure, insurance costs, and improve equity

Why not AVs?

The opposite could be true
without good public policy

Different policy approaches have emerged across states...



California
(high regulation)

- Mileage-based permitting
- Strict insurance rules
- First Responder rules
- Live data and specialized crash reporting
- **NEW:** Openness to freight



Texas
(converts to regulation)

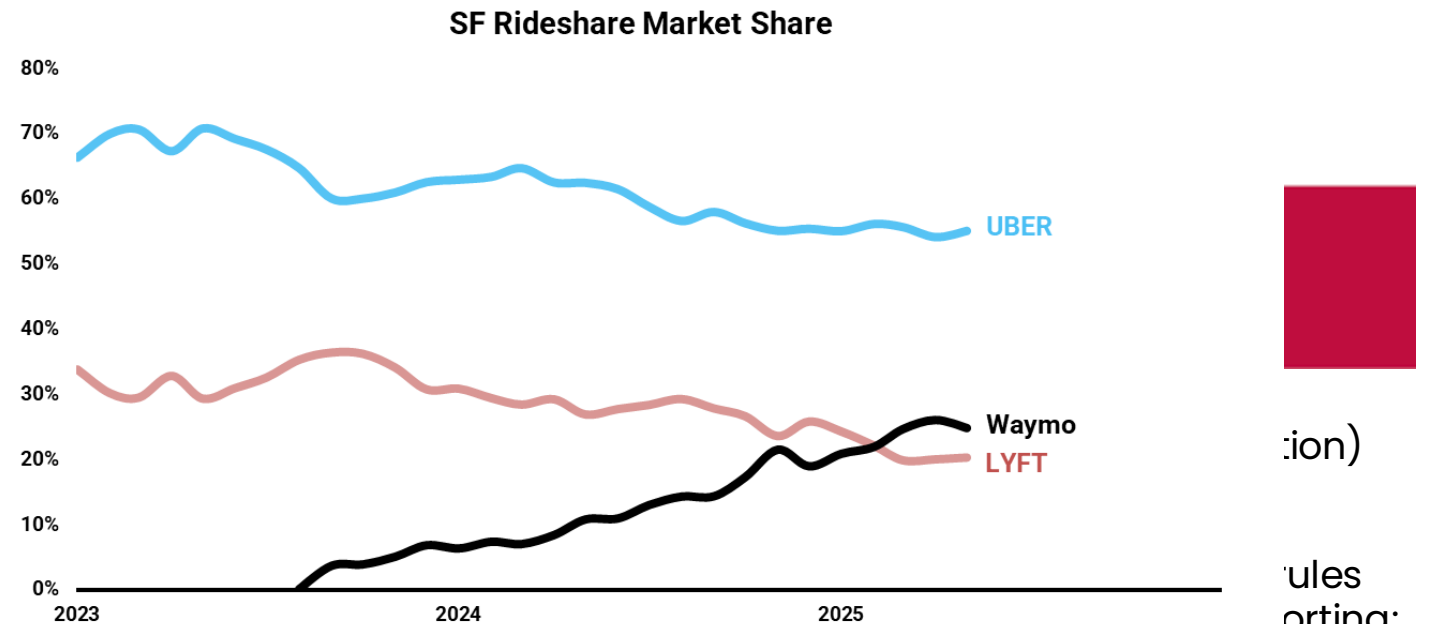
- **NEW:** Annual permits
- **NEW:** First Responder rules
- **NEW:** Annual data reporting; no specialized crash reporting
- **NEW:** Enhanced minimum liability
- **Law in effect as of Sept. 1, 2025**



Arizona
(no regulation)

- **NO** permitting system
- **NO** restrictions on ODD or fleet size
- **NO** unique insurance requirements
- **NO** data reporting
- Law Enforcement interaction plans

Different policy approaches have emerged across states...



PLATFORMAERONAUT.COM

- **NEW:** Openness to freight

ALTIMETER

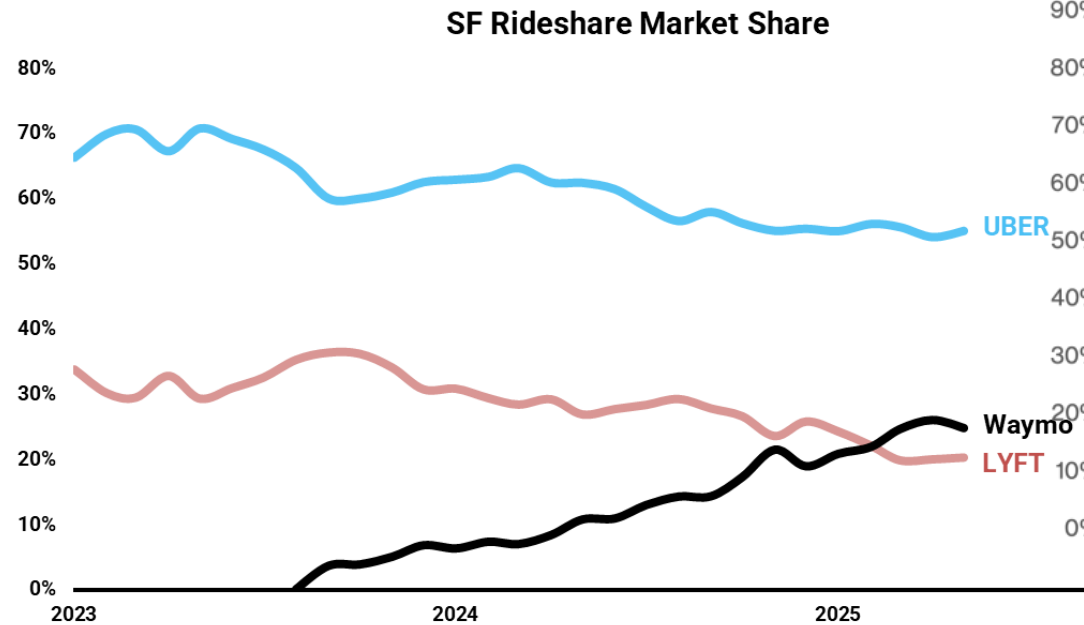
- **NEW:** Enhanced minimum liability
- **Law in effect as of Sept. 1, 2025**



Arizona
(no regulation)

- **NO** permitting system
- **NO** restrictions on ODD or fleet size
- **NO** unique insurance requirements
- **NO** data reporting
- Law Enforcement interaction plans

Different policy approaches have emerged across states...



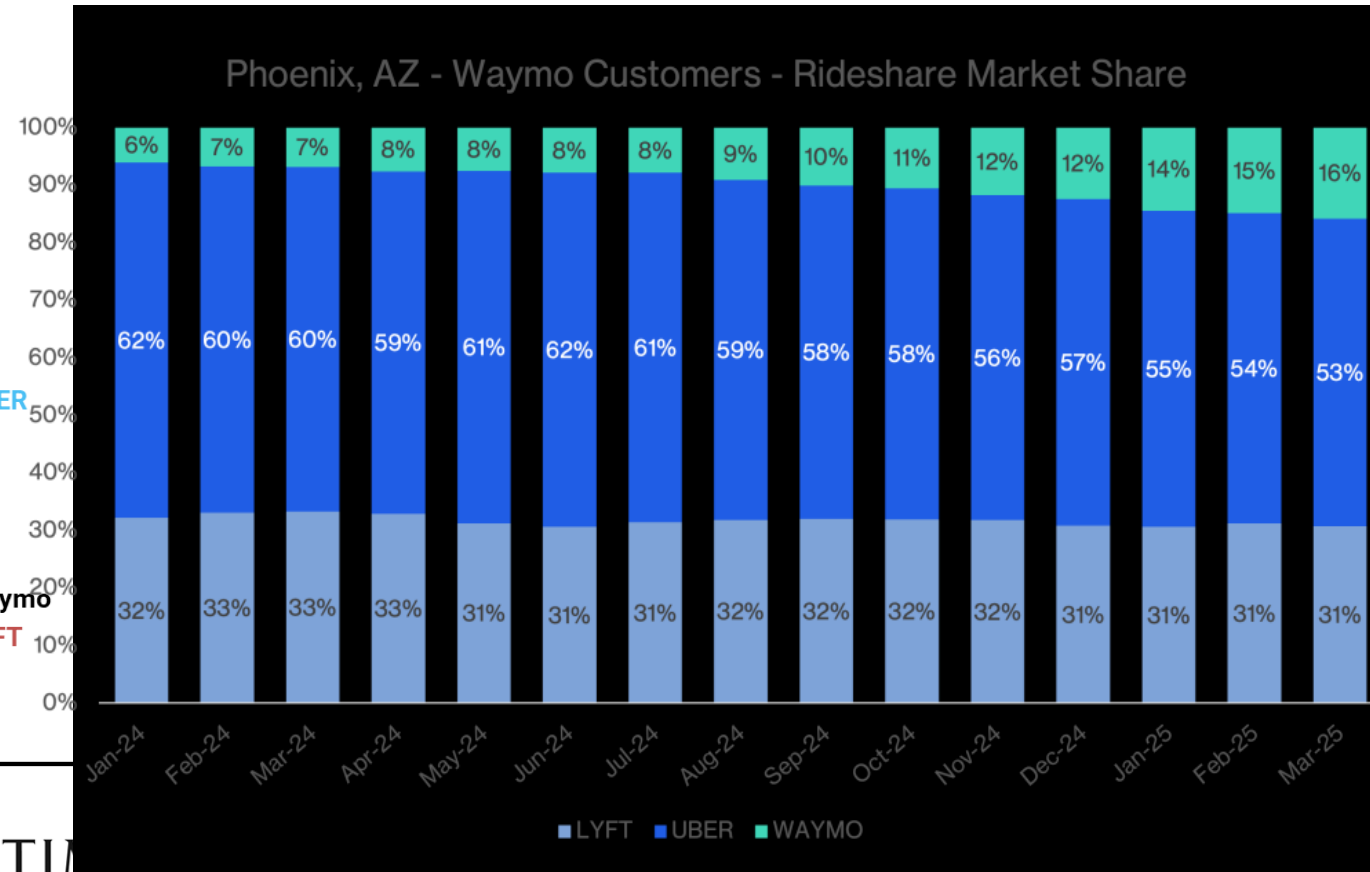
Source: Yipit



PLATFORMAERONAUT.COM

crash reporting

- **NEW:** Openness to freight



- **NEW:** Enhanced minimum liability
- **Law in effect as of Sept. 1, 2025**

- requirements
- **NO** data reporting
- Law Enforcement interaction plans

Massachusetts 2016–2025

- **2016: Dual Executive Orders makes Massachusetts an early leader**
 - Substantial testing application; heavy screening
 - Tiered testing approach, grows geography and ODD over time
 - Corporate/state/municipal partnerships based on Memoranda of Agreement
 - Attracts early university startups –
 - Optimus Ride; Motional (nuTonomy) and a Tier 1 player, Aptiv
 - Boston Executive Order allows testing; mostly in Seaport
- **2018: MOU on Regional AV Testing**
 - 14 Massachusetts communities sign regional agreement on AV testing (including **Somerville**)
 - Agreement requires municipalities to identify testing locations
- **2022: Optimus Ride ceases testing**– acquired by Magna, leaving only Motional testing in Massachusetts
- **2025: Waymo** begins mapping Boston area roadways for an 8-week period – not autonomously driven



Current Massachusetts Testing Process

Application



Approval by
MassDOT and
shared with
municipalities

Testing Plan



Reviewed by
MassDOT and
roadway owners

Memorandum of Agreement



Signed by all
roadway owners in
the testing plan and
testing company

If actively testing, companies submit semi-annual reports on activities.

So far, MA legislation has not been sufficiently specific or well-rounded enough to make progress

★ BILL S.2379 194th (Current)

AN ACT RELATIVE TO PROVIDING MULTIMODAL TRANSPORTATION TECHNOLOGIES

By Mr. Driscoll, a petition (accompanied by bill, Senate, No. 2379) of William J. Driscoll, Jr. for legislation relative fully autonomous vehicle and human drivers. Transportation.

[View Text](#)[Print Preview](#)[Download PDF](#)

Presenter: [William J. Driscoll, Jr.](#)

Status: Referred to [Joint Committee on Transportation](#)

★ BILL H.3669 194th (Current)

AN ACT RELATIVE TO THE SAFETY OF AUTONOMOUS VEHICLES

By Representative Giannino of Revere, a petition (accompanied by bill, House, No. 3669) of Jessica Ann Giannino for legislation to further regulate the operation of autonomous vehicles. Transportation.

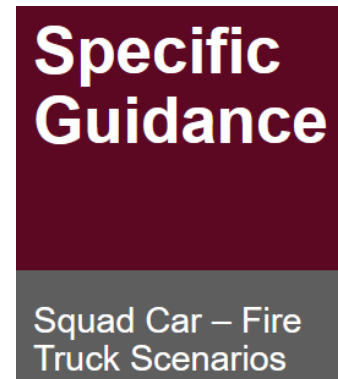
[View Text](#)[Print Preview](#)[Download PDF](#)

Presenter: [Jessica Ann Giannino](#)

Status: Referred to [Joint Committee on Transportation](#)

Learning from our peers

- MassDOT Lunch Chat Series – Summer 2025
 - 4 sessions, **by-government, for-government**
- **63** participants across **10** municipalities;
4 state agencies; **2** legislative staffers
- Sessions:
 - How will AVs change transportation?
 - How do governments need to adapt?
 - First responders' experiences
 - “All things data”



Public Data Reporting for
Automated Driving Systems (ADS)

Steven E. Shladover, Sc.D.
University of California PATH Program

Federal Level Activity – The SGO on Crashes

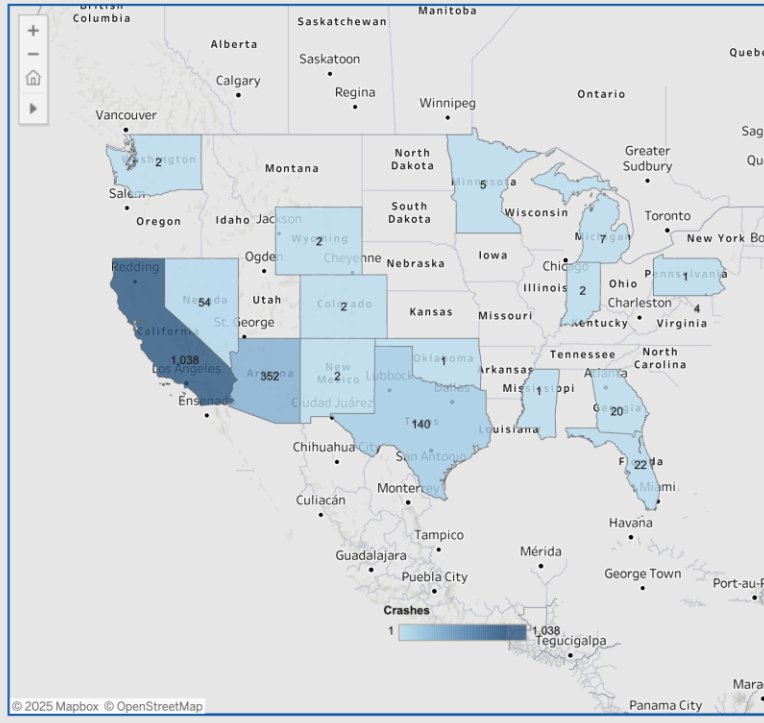


ADS-Engaged Vehicles

Crashes by:

Month (ADS) State (ADS) Reporting Entity (ADS) Collision & Severity (ADS) Source & Damage (ADS)

ADS Crashes by State



119TH CONGRESS
1ST SESSION

S. 1798

To prescribe standards for autonomous vehicles, and for other purposes.

IN THE SENATE OF THE UNITED STATES

MAY 15, 2025

Ms. LUMAS introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To prescribe standards for autonomous vehicles, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Autonomous Vehicle Acceleration Act of 2025".

If you're curious...a few voices I find helpful in learning about AVs who often write and publish research on the topic

Bryant Walker Smith – Law of the Newly Possible (newlypossible.org)

Matt Wansley – Prof. at the Cardoza School of Law

Bryan Reimer – Researcher at MIT Age Lab

Phil Koopman – Prof. at Carnegie Mellon

Catharine Ross – Prof. at Georgia Institute of Technology

Shift – Automotive News podcast on mobility; *perspective on industry evolution*

Future of Transportation – Trucks VC; *perspective on industry evolution*

Worth a read...

- Transforming Transportation Advisory Committee – 2024 Report to USDOT

How do you think we can ensure that Massachusetts is able to facilitate a **safe, efficient, and future-focused** deployment of autonomous vehicles on our roads?