ESCAP
Economic and Social Commission for Asia and the Pacific

US Autonomous Vehicles

Markets, Policies & Outlooks

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Outline of Remarks

I. US Autonomous Vehicle (AV) Market
II. US Governance of AVs
III. Timeline
IV. Role of Judiciary
V. Key Takeaways

Autonomous Passenger Mobility

Major L4 players:

Waymo

- 220.6 million **rider-only** miles driven

Zoox

- 2 million miles

May Mobility

- 1.1 million miles



Other key Market leaders

- Tesla
- Uber
- Nuro

Key Takeaway:

Market Leaders Deep Pockets

Autonomous Freight and Logistics

Major players:

- Aurora (440,000 miles total)
- Kodiak (40,000 miles – paid miles)
- Nuro (2 million autonomous miles)
- PlusAI

Key Takeaway:
US AV Truck Market is very small now and pace is hard to predict

Less than 100 trucks, but poised to scale

Experts report wide range of predictions on scaling and pace of market growth



Driverless is not humanless, but labor transition will not happen automatically

New roles will emerge

Remote assistance, operational monitoring, emergency communications, maintenance, and fleet support

Workforce is a safety issue

Staffing and job design affect operational risk. Safety policies also shape workforce outcomes.

Transition gaps remain

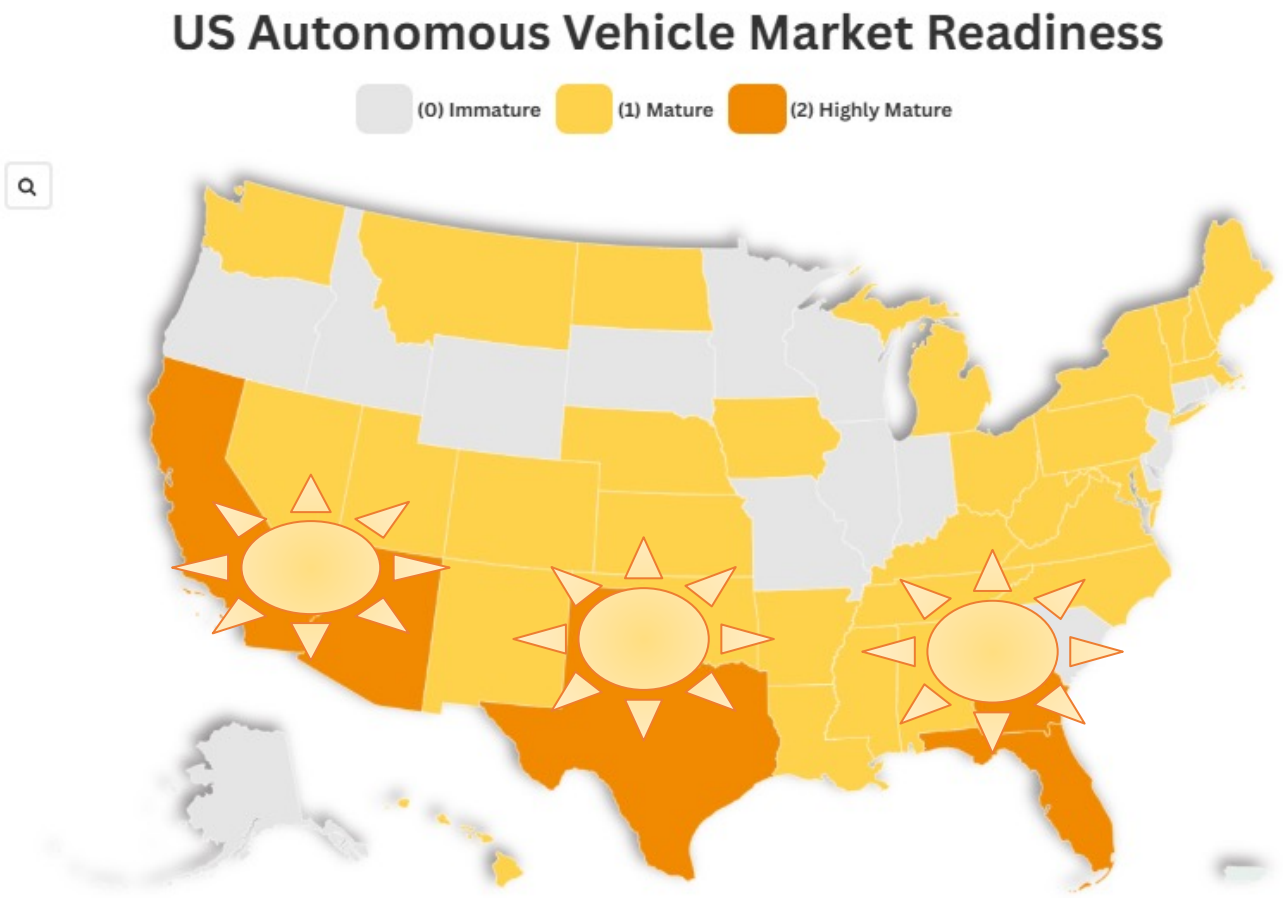
Industry-labor collaboration is limited, and impacts extend beyond drivers to warehousing and logistics workers.

US Variance Market

Market blossomed where there was:

- Warm weather and/or
- Innovation economies and/or
- An absence of policy oversight

Key Takeaway: US Autonomous Vehicle (AV) Market is highly Variable across US States

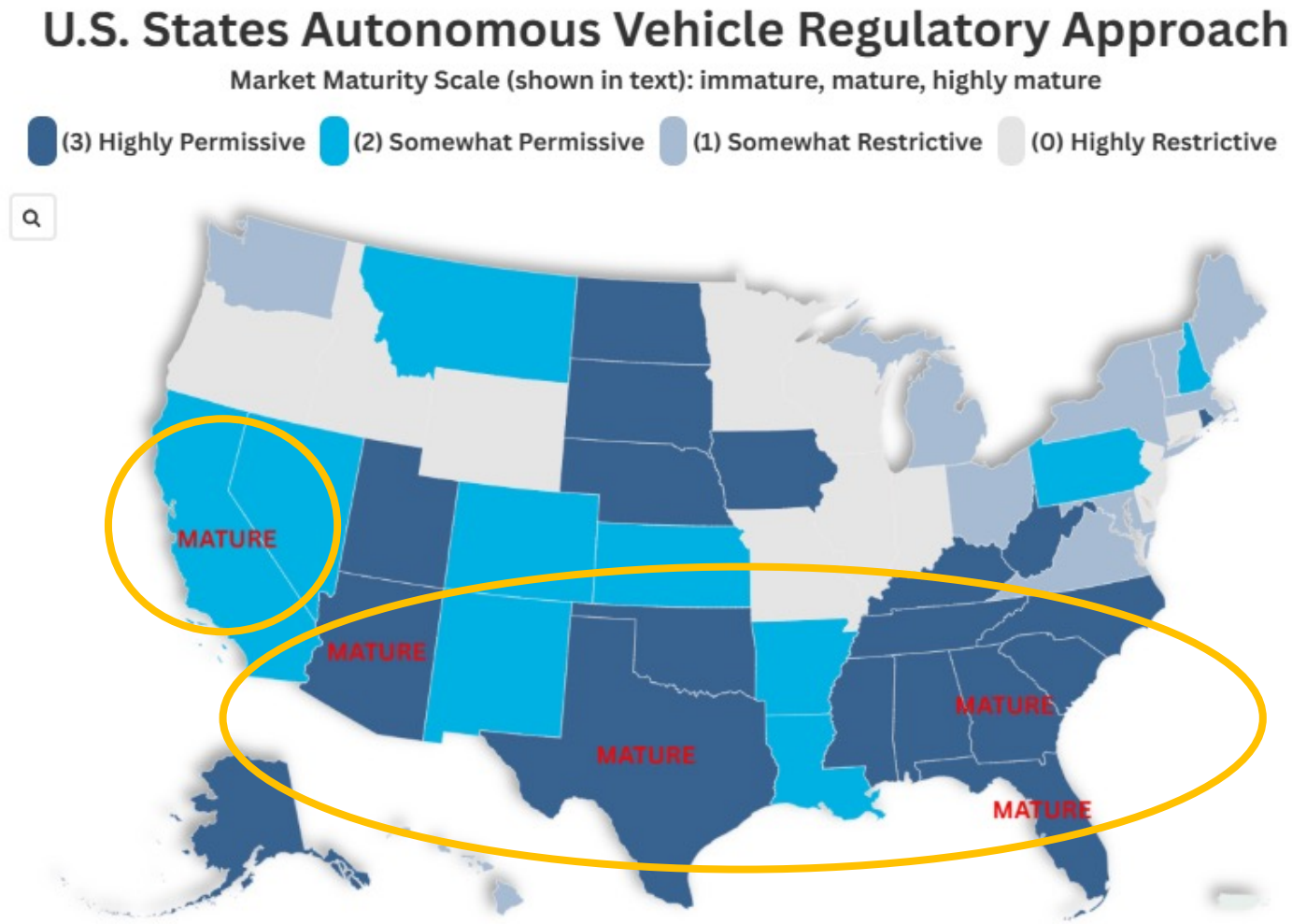


Source: Map U.S. Census Bureau 2021 boundaries , D'Agostino, 2026

US Policy Variance

Mature markets tend to be highly permissive- applying a “hands-off” approach to AV scaling.

The exception is California.



US AV Governance

Permission to deploy and capacity to oversee are separate powers in the US content

Federal Authority

Vehicle safety standards, recalls, investigations, interstate commerce

State Authority

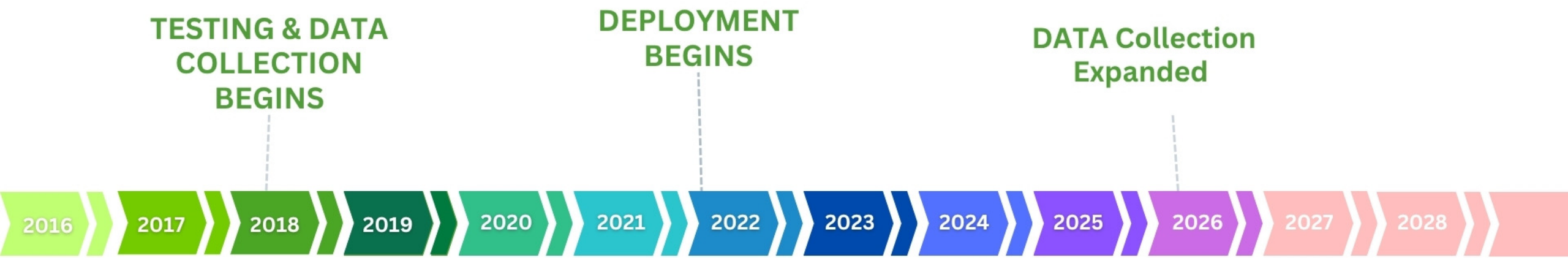
Early testing and deployment authorization, licensing, registration, insurance

City Authority

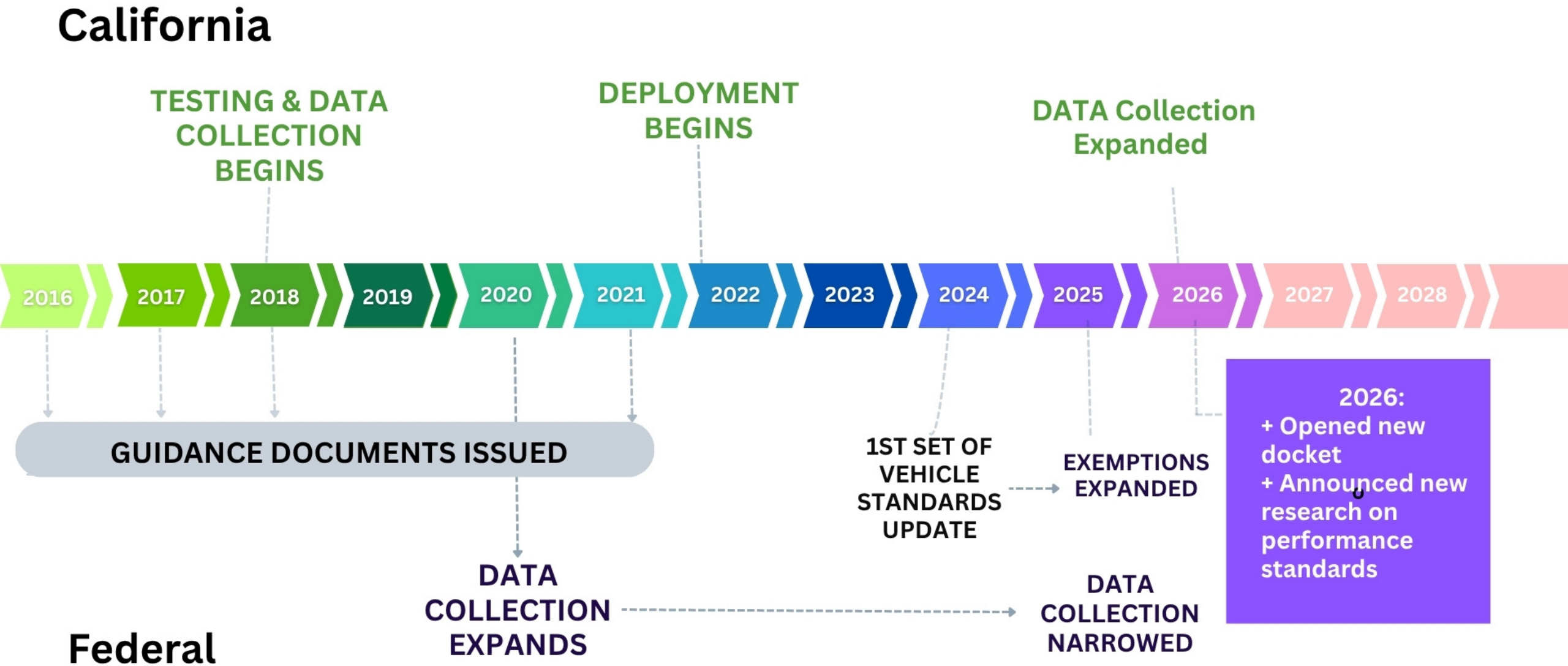
Streets, curbs, emergency response, traffic management, transit integration

Timeline of Select US Automation Vehicle Policy Activities

California

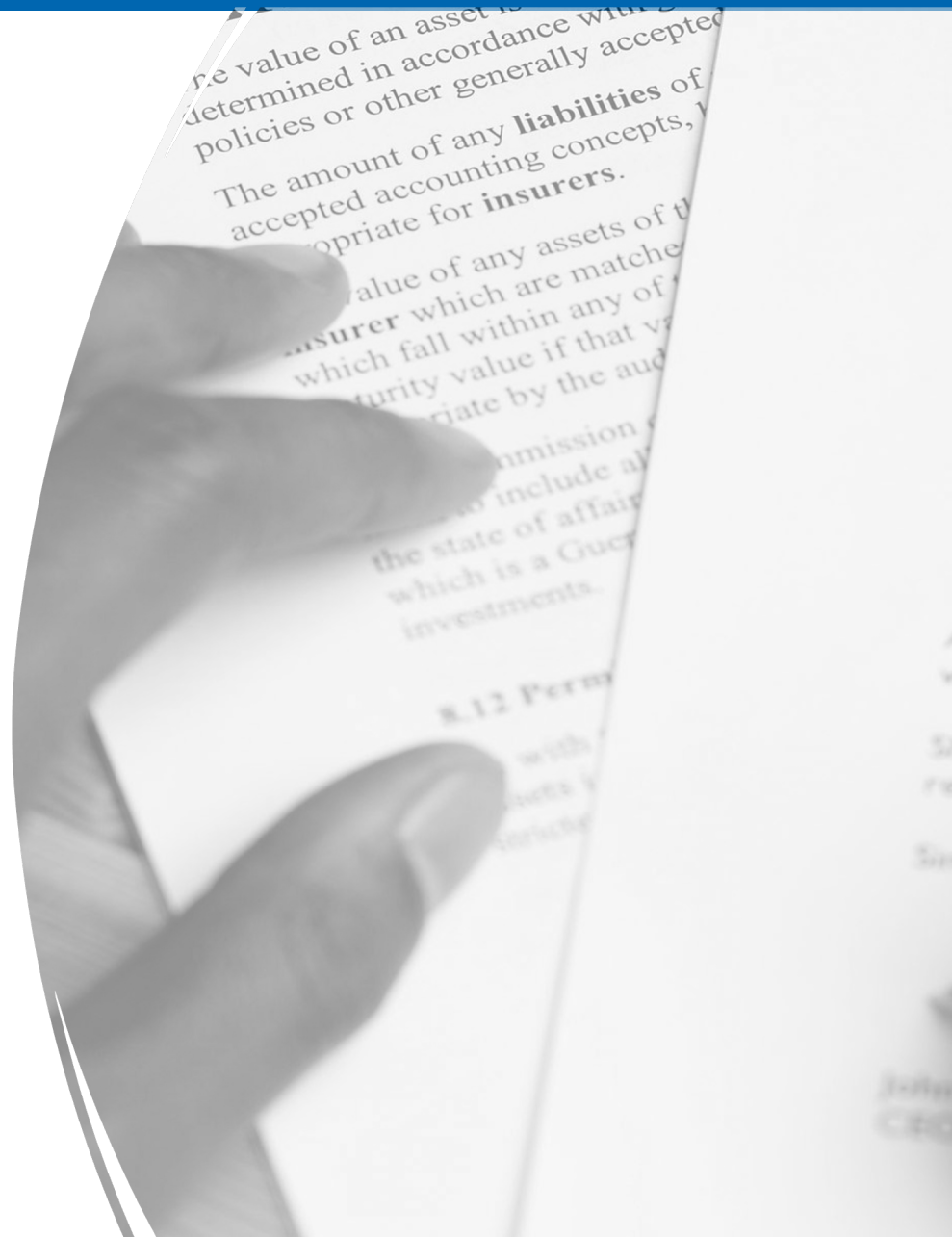


Timeline of Select US Automation Vehicle Policy Activities



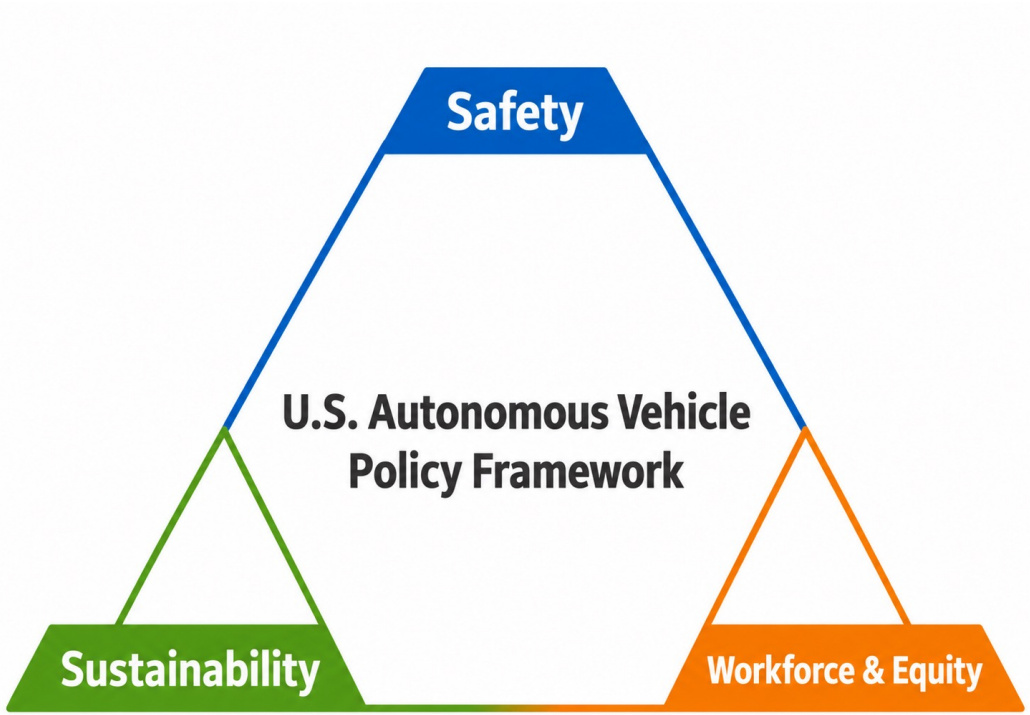
Judicial Focus

- US courts play a critical role in resolving legal disputes
- This may include determining the reasonableness of safety risks if there's a crash
- Courts will have significant impacts on liability, insurance, and thus market adoption and scaling of ADS



Conclusions: Many Open questions Remain

- Can US institutions evolve from a phase focused on enabling technology to a phase focused on effective management
- Are different US governmental stakeholders for market growth and seamless integration into the existing transportation network?
- Can US autonomous vehicle policy help to advance sustainability, improving access and mobility?



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