# Update on AV Operations & Regulatory Developments



San Francisco County Transportation Authority



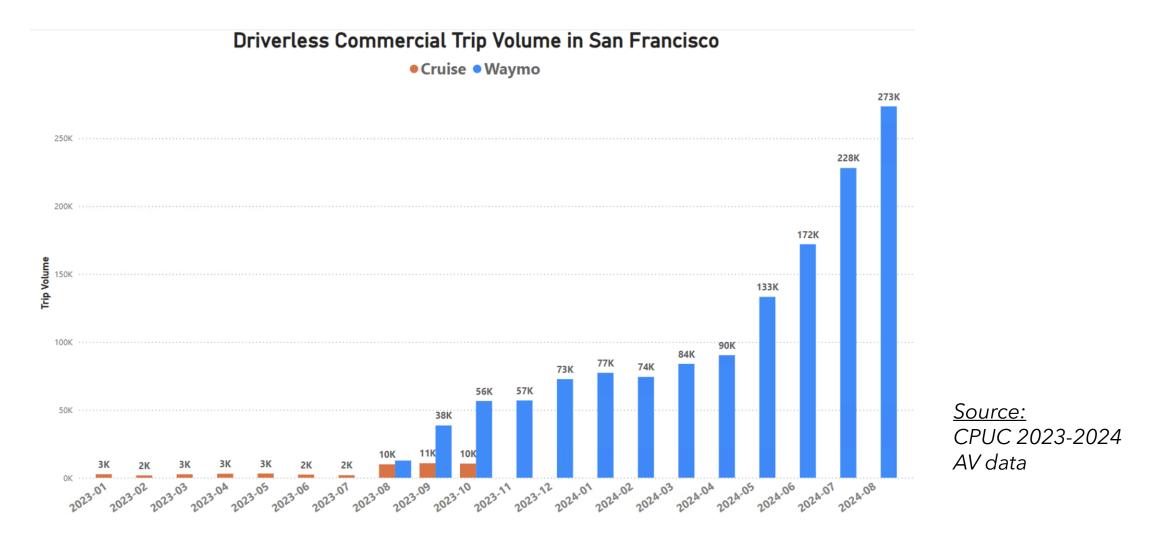


Community Advisory Committee November 20, 2024 Item 10

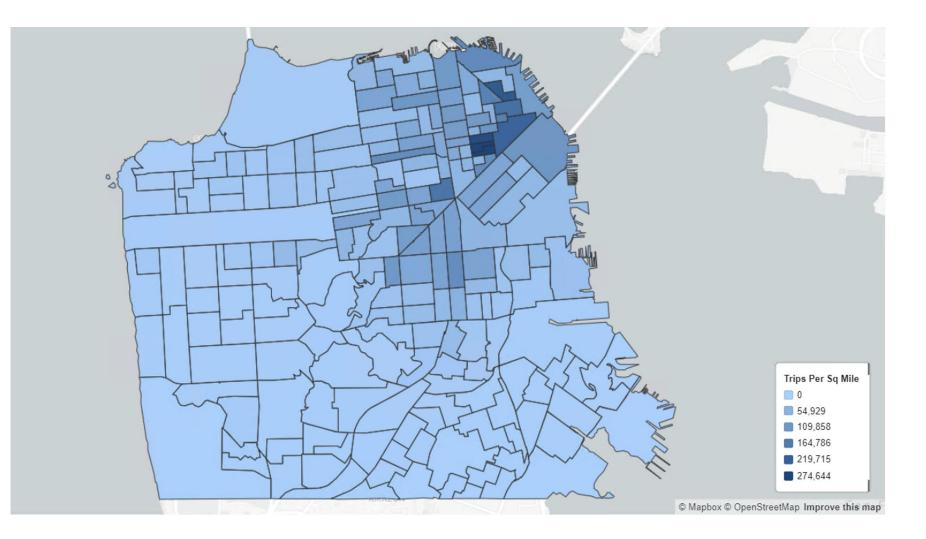
### Agenda

- 1. Operational Update
- 2. Legislative and Regulatory Update
- 3. Studies/Research Update
- 4. Advocacy

#### **Driverless Operations in SF 2023-2024**



#### **2024 Waymo Trip Density by Census Tract**



<u>Source:</u> CPUC 2024 AV data

# Key Operational Concerns 2023-2024

**Stops that interfere** with other road users, including emergency responders, transit & others

**Inadequate response** to human traffic control

**Slow, ineffective communication** with emergency responders & other street workers

# Driving errors that would be citable violations of the CVC



Waymo was the primary AV operator in SF in 2023-24



The Zoox purpose-built AV, launched in SF in 11/24

#### **Other Noteworthy Events 2023-2024**







12/23 - Treasure Island Autonomous Shuttle Pilot ends operations 10/24 - **Cruise** starts supervised testing operations in Sunnyvale and Mountain View 11/24 – **Zoox** starts testing fully driverless, purpose-built robotaxi in San Francisco

# **2024 Legislative Initiatives**

Bill	Content	Outcome
AB-1777, Ting	Establishes operational requirements and performance standards for AV-emergency responder interactions & mechanism to document AV traffic violations	Signed into law
AB-3061, Haney	Addressed critical gaps in data reporting and data transparency requirements	Vetoed by Governor Newsom
SB-915, Cortese	Authorized cities of >250K citizens to enact local ordinance for AV ops in their jurisdiction	Pulled by author after Assembly Transportation presented major amendments

# **2024 State Regulatory Initiatives**

#### **CPUC New Data Reporting Requirements** (Adopted 11/7)

- Expands and align collision & incident reporting requirements at both testing and deployment stage
- New reporting for "stoppage events"

#### **DMV Preliminary Draft of Regulations** (Pre-Regulatory Process)

- Would establish **graduated permitting process** with progression based on success
- Would **expand reporting and clarify tools for DMV response** to poor permittee performance
- Would increase requirements for **remote support** operations
- Would provide process for **permitting AV trucking**

# Litigation

SF has filed **2 separate lawsuits** centered on CPUC's 2023 decision to grant Waymo a permit to operate commercial driverless services throughout SF, 24/7, without fleet restrictions

- **Court of Appeal:** Inadequate decision-making process for such a major action and absence of provisions to ensure public safety
- California Supreme Court: No environmental review, violating CEQA

#### **2024 Federal Efforts**

- NHTSA ongoing **investigations**
- New NHTSA Office of Automation Safety
- USDOT **Transforming Transportation Advisory Committee (TTAC)** tasked with issuing advice and recommendations to Secretary on AVs and other transportation innovations
  - SFMTA appointed to TTAC
- FHWA **Center of Excellence on New Mobility and AVs** to study impacts of new mobility and highly automated vehicles on land use, urban design, transportation, real estate, equity, and municipal budgets
  - SFCTA appointed to COE Board
- Representative Mullin et al have submitted various letters to NHTSA demanding expansion data collection efforts under Standing General Order to improve AV safety data and analysis

#### **2024 Progress on SF Advocacy Priorities**

- Collaboration with industry on AB-1777 led to adoption of communication requirements and performance standards for AV-emergency responder interactions
- New CPUC data reporting requirements incorporated many SF recommendations, including reporting AV stoppage events
- **DMV preliminary draft regulations** incorporate many SF recommendations, including expanded data reporting requirements, and graduated permitting process
- SF collaboration with other early AV deployment cities on emergency responder needs led to consensus on top emergency responder needs, and increased industry & regulator understanding of needs

#### **AV Safety Research Initiatives**

#### **Conceptual AV Safety Permitting Framework**

 Board requested SFCTA staff to expand on principle of "incremental, performancebased approach to AV deployment"

#### **Al-driven Smart Infrastructure for AV Benchmark Data Set**

- Federal grant application to FHWA Smart Grant Program seeking to demonstrate ability to detect, classify and support safety analysis to better inform Vision Zero and AV Safety efforts
- Aims to develop methodologies to **compare human driver and AV safety performance** with the same data bases and metrics

# **Disability Access**

Regulators have yet to establish clear standards for disability access, leaving the responsibility for outcomes in the hands of AV providers

Issue	Notes
Equitable app design	The app is fully accessible to people with different disabilities
Accessible pick-up and drop-off locations	AVs use safe and convenient locations for people with different disabilities according to their particular needs
Access for wheelchair users	AVs are accessible to wheelchair users and those who use of other moving aids, with equivalent quality of service
Safety for pedestrians of all abilities and bodies	AV need to recognize all pedestrians, including wheelchair users, people of short stature, and people who use service animals
Prioritize transit needs	AV operations ensure the safety and quality of transit services, as many people with disabilities depend on them for mobility

# Looking ahead: 2025 and 2026

#### State

- 2025 legislative session
- Expected formal start of DMV rulemaking building on 2024 draft regulations
- Start of Phase II of CPUC's AV Deployment Program

#### Federal

- Potential regulatory proposals (e.g. NHTSA AV STEP)
- Potential legislative initiatives

#### Local

• Proposed SF AV Resource Portal

# Thank you.

Jean Paul Velez Principal Planner, Technology Policy San Francisco County Transportation Authority

Julia Friedlander

Senior Manager Automated Driving Policy San Francisco Municipal Transportation Agency



San Francisco County Transportation Authority



