



San Mateo County Automated Vehicles (AV) Strategic Plan

TA Board of Directors
December 7, 2023









PROJECT BACKGROUND

- TA and SamTrans hosted a workshop on **Towards an Autonomous Future in San Mateo County** in Nov 2021 and identified these potential next steps:
 - Develop a Countywide AV Strategic Plan
 - Organize an AV Working Group with local stakeholders
 - Plan and fund AV pilots and projects



LEVELS OF VEHICLE AUTOMATION

0	1	2	3	4	5
 <p>No Automation Zero autonomy, the driver performs all driving tasks.</p>	 <p>Driver Assistance Vehicle is controlled by the driver, but some driving assist features may be included in the vehicle design.</p>	 <p>Partial Automation Vehicle has combined automated functions, like acceleration and steering, but the driver must remain engaged with the driving task and monitor the environment at all times.</p>	 <p>Conditional Automation Driver is necessary, but is not required to monitor the environment. The driver must be ready to take control of the vehicle at all times with notice.</p>	 <p>High Automation The vehicle is capable of performing all driving functions under certain conditions. The driver may have the option to control the vehicle.</p>	 <p>Full Automation The vehicle is capable of performing all driving functions under all conditions. The driver may have the option to control the vehicle.</p>

Society of Automotive Engineers (SAE) Automation Levels Full Automation



AUTOMATED VEHICLE APPLICATIONS

PERSONAL VEHICLES



Automated cars may improve safety, reduce congestion, and provide new mobility options for individuals who are unable to drive.

RIDE HAILING VEHICLES



AV shuttles and taxis to supplement public transport and provide first and last-mile connections.

TRANSIT



Driver assistance technologies for mass transit

FREIGHT



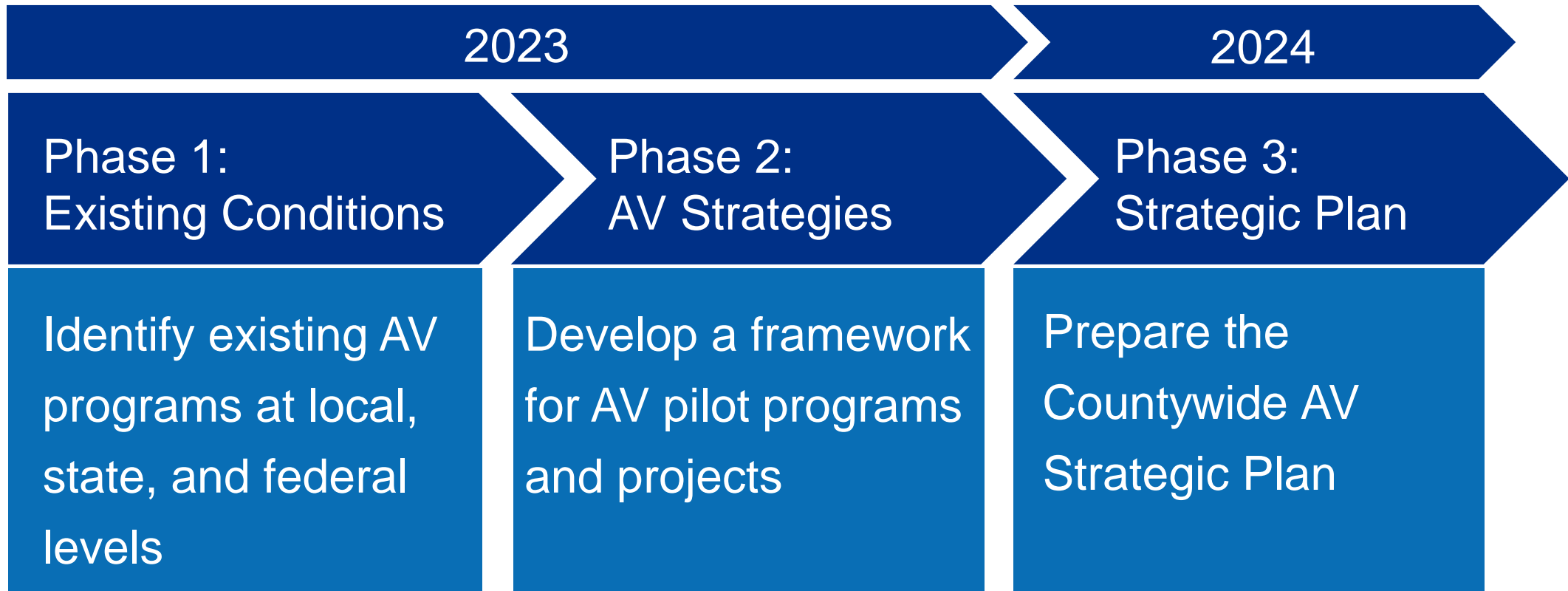
Automated trucking and package delivery aimed at increasing supply chain efficiency, improving safety, and reducing costs.

WHY AN AV STRATEGIC PLAN?

- Identify current policy and regulatory frameworks for AVs
- Develop a cohesive strategy for AV pilots and programs
- Compete for funding and economic opportunities
- Help prepare for future AV deployments in the County



PROJECT TIMELINE



We are here



WHAT HAVE WE DONE SO FAR?

- Reviewed County Transportation Plans & Programs
- Conducted One-on-One Interviews with Cities, State Agencies and Private Sector AV Operators
- Hosted a Public Workshop on November 15, 2023
- Created a Project Website at:
 - <https://www.smcta.com/planning-projects/SMCAVPlan>



EXISTING CONDITIONS FINDINGS

- AV Testing Permits have been issued in the County but no deployments yet.
- This is the First Countywide Program or Plan to Address AVs
- Learn from Existing Local, State, and Federal AV Policies and Programs



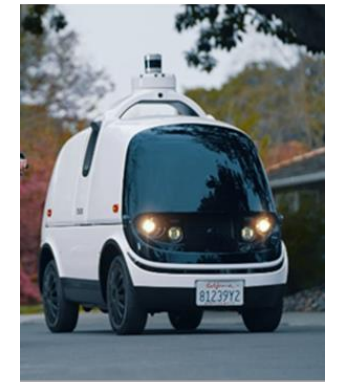
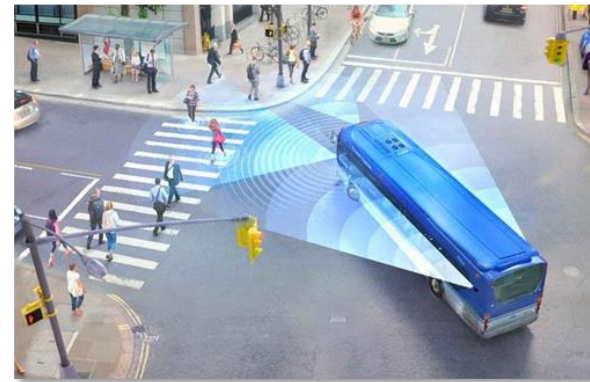
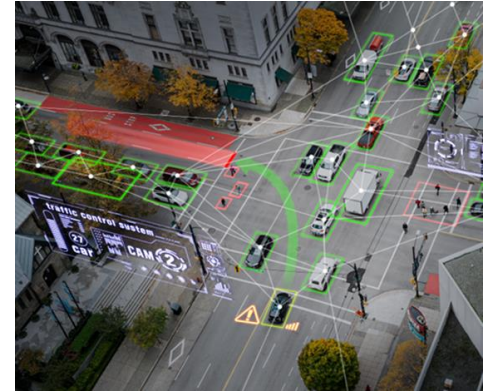
PUBLIC WORKSHOP - EVENT SUMMARY

- Virtual Public Workshop on November 15
- Total Attendance: 22
- Representation From:
 - Belmont, Burlingame, Brisbane, Colma, County of San Mateo, Half Moon Bay, Pacifica, Redwood City, San Bruno, South San Francisco, C\CAG BPAC, Stanford, UC Berkeley



AV STRATEGIES DISCUSSED

1. Shared AV Shuttles
2. Advanced Driver Assistance on Buses
3. Data Sharing with AVs
4. Automated Delivery Robots



WORKSHOP FEEDBACK SUMMARY

- Participants Prioritized:
 - AV Shuttles and Advanced Driver Assistance on Buses
 - Equity and Services for People with Disabilities and Seniors
 - Safety and Compatibility with Various Road Users
 - Significant Testing and/or Deployments in Controlled Environments
 - Geographical Distribution of Potential AV Pilots and Projects



DRAFT - VISION STATEMENT

- Support strategic measures toward implementing automated vehicle technologies that promote equitable levels of access, safety, reliability, and sustainability in San Mateo County.



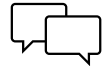
DRAFT – AV STRATEGIC PLAN GOALS



Accessibility & Equity



Safety



Engagement



Support Local Agencies



Connectivity



Sustainability



Workforce Development



NEXT STEPS

- Use Feedback from AV Workshop to Help Prioritize Projects and Programs
- Present to TA CAC/Board, C\CAG TAC/Board for Input
- Develop an AV Strategies Report
- Complete Countywide AV Strategic Plan by Spring 2024



QUESTION FOR THE BOARD

Does the Board agree with the priorities identified in the public workshop and are we missing anything the Board would like to see?

- AV Shuttles/Advanced Driver Assistance on Buses
- Equity/Services for People with Disabilities and Seniors
- Safety and Compatibility
- Testing in Controlled Environments
- Geographical Distribution



Thank you!

