San Mateo County Automated Vehicles (AV) Strategic Plan

C/CAG Technical Advisory Committee

August 17, 2023

Project Goals

➢ Identify current local, statewide, and federal policy and regulatory frameworks for AV

➢ Establish a shared vision for AV deployment that aligns with local, state and federal objectives

➢ Identify opportunities and challenges for AV deployment and pilot projects

➢ Prioritize next steps for implementing AV Strategic Plan initiatives

Levels of Automation

0	1	2	3	4	5
No Automation	**Driver Assistance**	**Partial Automation**	**Conditional Automation**	**High Automation**	**Full Automation**
Zero autonomy, the driver performs all driving tasks.	Vehicle is controlled by the driver, but some driving assist features may be included in the vehicle design.	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.	Driver is necessity, but is not required to monitor the environment. The driver must be ready to take control of the vehicle at all times with notice.	The vehicle is capable of performing all driving functions under certain conditions. The driver may have the option to control the vehicle.	The vehicle is capable of performing all driving functions under all conditions. The driver may have the option to control the vehicle.

Society of Automotive Engineers (SAE) Automation Levels Full Automation

AV 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 and autonomous first/last mile shuttles.
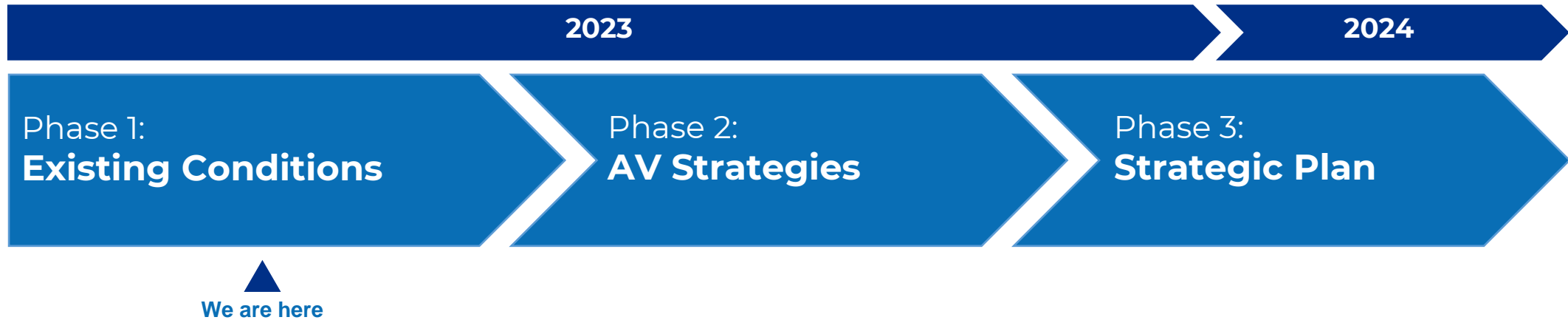
FREIGHT

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

Key Project Benefits

➢ Help transportation agencies and the public plan and prepare for future AV deployment

➢ Develop a cohesive strategy for the implementation of AV pilots and programs

➢ Position the county to strategically compete for funding and economic development opportunities related to future AV programs

Project Timeline

2023			2024

Phase 1: **Existing Conditions**	Phase 2: **AV Strategies**	Phase 3: **Strategic Plan**

▲ **We are here**

- **Phase 1 (Summer 2023):** Identify the existing AV programs at local, state, and federal levels

- **Phase 2 (Fall 2023):** Develop a framework for AV pilot programs, projects and activities

- **Phase 3 (Winter 2023):** Prepare the draft San Mateo Countywide AV Strategic Plan

TA

C/CAG
City/County Association of Governments
of San Mateo County

Existing Conditions Report

- ➢ Introduces the project and provides background on AV technology

- ➢ Reviews existing countywide plans, programs, and assets

- ➢ Reviews local, peer agency, state and federal AV policies and programs

- ➢ Provides inventory of existing AV providers

- ➢ Describes next steps, including possible focus areas for further consideration

Existing Conditions Report Findings

County Transportation Plans Reviewed → **County Transportation Programs Reviewed** → **Key Findings**

County Transportation Plans Reviewed:

- ❑ SMCTA ACR/TDM Plan
- ❑ C/CAG ITS Strategic Plan
- ❑ Countywide Transportation Plan 2040
- ❑ Short Range Transit Plan

County Transportation Programs Reviewed:

- ❑ C/CAG TDM Program
- ❑ C/CAG Smart Corridor
- ❑ C/CAG Intelligent Transit Signal Priority
- ❑ Towards an Autonomous Future in San Mateo County Virtual Workshop
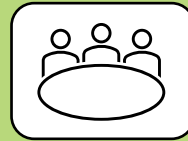- ❑ Roadway, Transit, Bike/Ped Networks

Key Findings:

There have not yet been any official AV policies, programs, or deployments in the county, though some policies and plans reference AVs or could be leveraged to support AVs
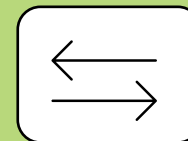
Upcoming Engagements – August & September

One-on-one Interviews*

- MTC
- CCTA
- DMV & CPUC
- CalTrans
- City of Burlingame
- Town of Hillsborough
- City of South San Francisco
- Nuro
- Beep
- Cruise

Roundtable Interview: SamTrans

- Discuss potential short-, medium- and long-term AV aspirations
- Identify opportunities and challenges
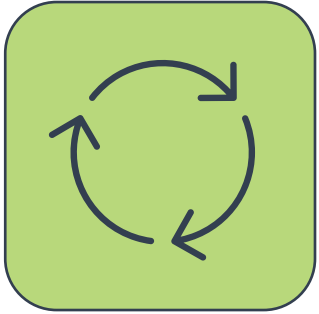- Determine opportunities for agency collaboration

Peer Exchange: SFCTA & SFMTA

- Explore lessons learned through current AV pilot programs
- Discuss potential short-, medium- and long-term AV aspirations
- Identify opportunities and challenges

*Invited for interviews by project team

Project Advisory/TAC Role & Next Steps

➢ The C/CAG TAC is the primary advisory body for this project; will advise recommendations to the C/CAG Board

➢ The TAC will have three deliverables to review/advise at key milestones of the project:

- **Meeting #1** – Today: Existing Conditions
    - Comments due: August 31st
- **Meeting #2** – Fall 2023: AV Strategies
- **Meeting #3** – Early 2024: Strategic Plan

➢ SMCTA & C/CAG will host a public workshop late fall 2023 to seek input and prioritize draft AV strategies

Questions/Feedback

Project Website/Factsheets/Draft Existing Conditions Report Available at:

https://www.smcta.com/planning-projects/SMCAVPlan

Contact Info: Vamsi Tabjulu, SMCTA, tabjuluv@samtrans.com

Audrey Shiramizu, C/CAG, ashiramizu@smcgov.org