

TOWARD AN AUTONOMOUS FUTURE IN SAN MATEO COUNTY VIRTUAL WORKSHOP

Hosted By

San Mateo County Transportation Authority (TA)

San Mateo County Transit District (SamTrans)

MINUTES OF NOVEMBER 17, 2021

KEYNOTE SPEAKER: William Riggs, Associate Professor – Autonomous Vehicles & the City Lead, University of San Francisco

SPEAKERS: M. Imran Ali, Partnerships, Via Transportation

Jose Alvarado, Manager of Government Affairs, Cruise

Adam Burger, Senior Transportation Planner, Santa Clara Valley Transportation Authority

Peter Calcaterra, Senior Transportation Planner, Connecticut Department of Transportation

Jack Hall, ITS CV/AV Program Manager, Contra Costa Transportation Authority

Shaina Quinn, Innovative Mobility Solutions Researcher, Utah Transit Authority

Mark Rosekind, Chief Safety Innovation Officer, Zoox

FACILITATORS: Steve Kuciemba, National ITS/CAV Practice Leader, WSP

Virginia Lingham, Senior ITS/CAV Program Consultant, WSP

JOINT CHAIRS: Emily Beach, Chair, SMCTA & Councilmember, City of Burlingame

Charles Stone, Chair, SamTrans & Mayor, City of Belmont

1. WORKSHOP KICK-OFF

Patrick Gilster, Manager, Programming and Monitoring, San Mateo County Transportation Authority (TA), welcomed the participants and reviewed the Zoom workshop protocols and agenda.

2. WELCOME

Emily Beach, Chair, TA, and Councilmember, City of Burlingame, said the goal of the workshop was to think about what the cities, agencies, and County should be doing to prepare for this new technology in terms of adapting infrastructure, policy, land use decisions, and transit systems.

Charles Stone, Chair, San Mateo County Transit District (SamTrans), and Mayor, City of Belmont, welcomed the other SamTrans Board members and city council members who were in attendance. He introduced William Riggs, PhD, Professor and Program Director at the University of San Francisco School of Management, where he leads the annual Autonomous Vehicles and The City symposium.

3. KEYNOTE

Dr. Riggs reviewed how technology shapes how we respond to the environment. He provided a presentation on the future of mobility platforms.

4. PANEL DISCUSSION 1- AV TECHNOLOGY AND DEPLOYMENT

SPEAKERS: Mark Rosekind, Chief Safety Innovation Officer, Zoox
Jose Alvarado, Manager of Government Affairs, Cruise
Imran Ali, Partnerships, and Meghan Grela, Associate Principal, Via Transportation, Inc.
Dan Mitchell, City and Community Engagement, Nuro

Mr. Gilster introduced Virginia Lingham, Senior ITS/CAV Program Consultant, WSP, who introduced the panelists on AV (autonomous vehicle) technology and deployment.

Imran Ali, Partnerships, Via Transportation, discussed Via and how it provides digital transportation infrastructure supporting on-demand public transit, fixed-route paratransit, and other services for more than 500 public transit agencies around the world.

Jose Alvarado, Manager of Government Affairs, Cruise, provided a presentation on Cruise and an overview of self-driving vehicle technology.

Dan Mitchell, City and Community Engagement, Nuro, provided a presentation on his company, which uses zero-occupant (driverless) autonomous delivery vehicles that provide commercial delivery services.

Mark Rosekind, Chief Safety Innovation Officer, Zoox, provided a presentation on Zoox and promoting safety, mobility, and sustainability.

Ms. Lingham asked what the County do to help improve safety in vehicles on the road. Dr. Rosekind said improving infrastructure sets the groundwork for emerging technology.

Mr. Ali said they are focused on gaining the trust of customers on the safety of autonomous vehicles.

Mr. Mitchell said they wanted the whole community to be safe when interacting with these vehicles.

Ms. Lingham said it was important to do community outreach. Mr. Michell said that Nuro does outreach to local cities and at community events to reach riders directly. He said it's important to have a dedicated liaison in local law enforcement departments: police, fire, first responders.

Dr. Rosekind said he advocated sharing safety and accident data across the industry.

Ms. Lingham asked about connectivity levels with current systems. Mr. Alvarado said Cruise can upload data instantly.

Mr. Ali said that AV should be deployed without the community having to make infrastructure changes.

Ms. Lingham asked how the pandemic has affected the future of shared vehicles. Dr. Rosekind said rideshare is the model for decreasing congestion. Mr. Alvarado said the pandemic has provided new ways to use AV, saying they have been safely delivering meals in San Francisco. Mr. Ali said the moving to a shared platform was critical to reducing congestion. Ms. Lingham asked about shared delivery. Mr. Mitchell explained how Nuro is deploying shared delivery pilots.

Ms. Beach submitted a question about cities' identifying backbone routes for AV and balancing the need for first/last mile solutions. Dr. Rosekind said the most important things that cities and counties can do is get a task force or working group together and create a strategic plan. Ms. Lingham asked if dedicated lanes would be a solution. Mr. Ali said AVs need to solve an existing need and be supported by the community.

5. PANEL DISCUSSION 2 – AV TRENDS FOR PUBLIC SECTOR PILOTS AND DEPLOYMENTS

- SPEAKERS:** Peter Calcaterra, Senior Transportation Planner, Connecticut Department of Transportation (CTDOT)
- Shaina Quinn, Innovative Mobility Solutions Researcher, Utah Transit Authority (UTA)
- Adam Burger, Senior Transportation Planner, Santa Clara Valley Transportation Authority (VTA)
- Jack Hall, ITS CV/AV Program Manager, Contra Costa Transportation Authority (CCTA)

Adam Burger, Senior Transportation Planner, VTA, provided a presentation on imminent projects

Jack Hall, ITS CV/AV Program Manager, CCTA, provided a presentation on current projects and AV trends.

Shaina Quinn, Program Manager, UTA, provided a presentation on a statewide AV shuttle pilot.

Peter Calcaterra, Senior Transportation Planner, CTDOT, provided a presentation on CTfastrak, a full-size automated bus system that uses safety drivers and a fixed guideway.

Ms. Lingham asked the panelists how they create and plan their vision. Mr. Burger said to make connections with local industry groups.

Mr. Calcaterra said they are fully invested in electrifying their fleet. He advocated pursuing grant applications.

Mr. Hall said his board is supportive of innovation and technology.

Ms. Quinn said the mobility solutions group at UTA tries to make operations more efficient and cost-effective and seeks to create a better experience for the rider using

AVs to provide on-demand services.

Ms. Lingham asked how they handled challenges.

Mr. Hall said funding was their biggest challenge.

Mr. Calcaterra said the biggest challenge is that everything they are doing has never been done before.

Mr. Burger said how their operators feel about pursuing AV technology. He said the innovation future at VTA may be too driven by political interests. He said they do not want to pursue technology for technology's sake.

Ms. Quinn said labor, funding, taking something that is brand new and building a service plan. Incorporating AV technology into existing projects.

Ms. Lingham asked about how the panelists saw the benefits of AV.

Mr. Hall said the public is looking forward to AV and using that mode of transportation.

Mr. Burger said that the technology needed to fit in with agency mission and customer focus.

6. BREAKOUTS – Q&A WITH SPEAKERS

SPEAKERS: Lauren Tsoi, WSP

Jeremy Halpern, WSP

Virginia Lingham, Senior ITS/CAV Program Consultant, WSP

Lori Low, Government and Community Affairs Officer, San Mateo County Transit District (SamTrans), TA, Peninsula Corridor Joint Powers Board (JPB)

Patrick Gilster, Manager, Programming and Monitoring, TA

Peter Skinner, Director, Grants and Fund Programming, TA

The panelists and participants engaged in small group question-and-answer sessions facilitated by staff, who reported out for each group.

Group #1

Lauren Tsoi, WSP, said their group discussed people with disabilities and equity solutions.

Group #2

Jeremy Halpern, WSP, said they talked about how guideways could be helpful. They talked about how different AV companies have different funding levels. He said they discussed the needs of the senior community.

Group #3

Lori Low, Government and Community Affairs Officer, San Mateo County Transit District (SamTrans), TA, Peninsula Corrido (JPB), said they discussed applications for AV technology such as corporate campuses and schools.

Group #4

Ms. Lingham said they talked about where they would like to see AVs deployed. She said priority steps would be documents to help support and prepare for grants and funding opportunities. She said they discussed safety and equity.

Group #5

Peter Skinner, Director, Grants and Fund Programming, TA, said they discussed the transparency and consistency of safety data. He said they thought that cities should have a clear strategic plan or vision about AV pilots that emphasize what is important for residents rather than being approached by AV companies.

Group #6

Mr. Gilster said they discussed mobility to transit in hilly areas, public-private partnerships, focus on documentation to establish policy, having backbone routes and guideways, collaborating and knowledge-sharing throughout the County and partnering with VTA and San Francisco, and ensuring that everyone has access to the technology.

7. PRIORITIZATION EXERCISE

Steve Kuciemba, National ITS/CAV Practice Leader, WSP, polled the participants with questions:

1. What type of participant are you?

Answer	% of Votes
San Mateo County jurisdiction	52%
Regional or state agency	16%
Community-based/advocacy organizations	0%
Private company or economic group	12%
Interested member of the public	16%
Other	4%

2. Do you think your city/town would be interested in developing or testing a pilot project?

Answer	% of Votes
Yes	72%
No	0%
Not sure	28%

3. What types of AV opportunities or applications do you think could be good candidates in your city/town?

Answer	% of Votes
Paratransit or senior services	83%
School trips	38%
First/last-mile transit access (Shared AVs/Shuttles)	92%
Deliveries	42%
Connected transit vehicles	42%
Other	0%

4. What short-term local actions do you think are needed first to begin preparing for future potential AV deployments/pilots?

Answer	% of Votes
New/modified policies or General Plan update	27%
AV Action Plan or planning/feasibilities studies	65%
Identification of local AV champions	19%
Staff resources or technical assistance	35%
Community engagement	62%
Infrastructure improvements (signals, street striping, curb space)	62%
Other	8%

5. What countywide support or coordination would be beneficial to promoting AV or connected transit opportunities in San Mateo County?

Answer	% of Votes
Additional workshops or technical trainings	35%
Knowledge sharing of funding opportunities	45%
Dedicated AV working group	40%
Recurring updates within existing working group(s)	20%
Dedicated AV coordinator/planner/engineer	55%
Countywide planning study/action plan	75%
Other	5%

Mr. Kuciemba summarized the participant responses.

8. NEXT STEPS – A BLUEPRINT FOR SAN MATEO

Mr. Kuciemba said that safety is paramount and that shared transit is a part of our future.

9. WRAP-UP & GOODBYE

Mr. Gilster thanked everyone for their participation. He noted that the soon-to-be-released Alternative Congestion Relief and Transportation Demand Management Plan includes an Intelligent Transportation Systems category, which allows for planning and policy development for autonomous vehicles and pilots.

An audio/video recording of this meeting is available online at www.smcta.com. Questions may be referred to the Authority Secretary's office by phone at 650.508.6242 or by email to board@smcta.com.