# Shared Autonomous Vehicle Program

**Timothy Haile** 

Deputy Executive Director, Projects

Contra Costa Transportation Authority

October 2018



### Who We Are

- CCTA is a public agency formed by voters in 1988 to manage the county's transportation sales tax program and to lead transportation planning efforts.
- We are responsible for maintaining and improving the county's transportation system by delivering critical transportation infrastructure projects to safely and efficiently get people where they need to go.
- Managing entity of autonomous vehicle (AV) testing site: GoMentum Station.



### What We Do



#### **PEDESTRIAN**

Make improvements to sidewalks, crosswalks, trails, and paths



#### **LOCAL STREETS**

Smooth traffic flow on major roads and invest in improvements such as repairing potholes and road surfaces



#### **BUSES**

Invest in a reliable, comfortable and convenient bus network



#### **SAFE ROUTES TO SCHOOLS**

Focus on programs and projects aimed at bicycle and pedestrian safety for K-12 students



#### **FERRIES**

Expand the Bay Area ferry system by looking to ferries as an alternate commute method between West County and San Francisco



#### **BICYCLE**

Invest in safe routes and infrastructure improvements for bicyclists



#### **BART**

Improve BART service and stations, extend routes and increase parking at stations



#### **HIGHWAYS**

Complete Contra Costa's highway system, and improve air quality and noise protection along these corridors



#### CARPOOL/RIDESHARE

Implement programs to reduce traffic congestion by encouraging carpooling and ridesharing



#### PROGRAMS FOR SENIORS AND PEOPLE WITH DISABILITIES

Enhance transit options to improve mobility for seniors and people with disabilities

### What We Heard





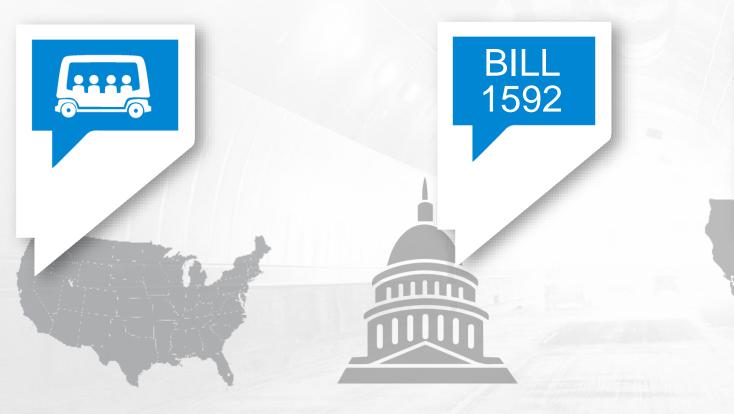




### Searched the World for the Perfect SAV



# We've Celebrated Many "Firsts"









### **SAV** Partners

















# **Expanding SAV Project**

















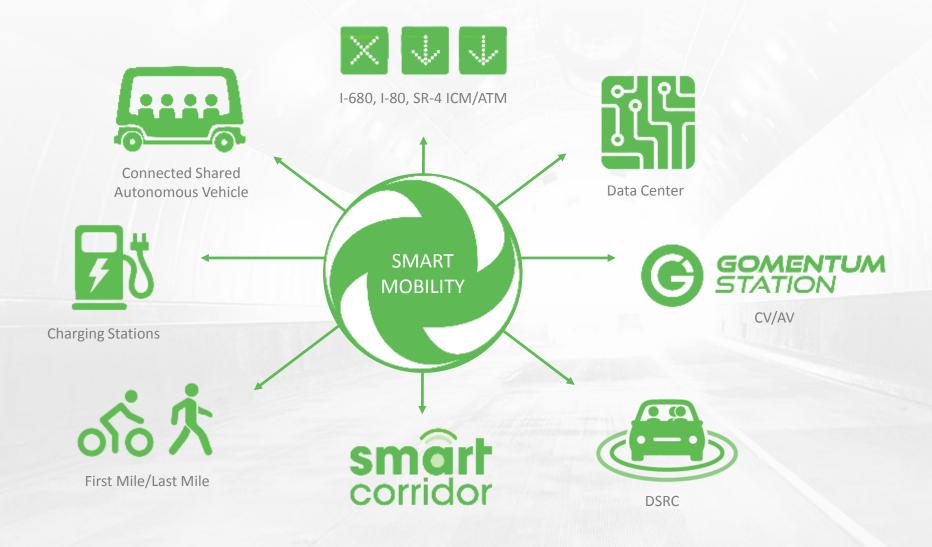


### What are we learning?

- Institutional and regulatory challenges were far more complicated than envisioned.
- Development of comprehensive test plan with specific test case scenarios needs to be prepared up
  front before starting the procurement.
- It must be understood that testing in real world environment is totally different than controlled environment.
- Vendors high level specifications and technology maturity (although theoretically true) need to be validated in field
- Collaboration between Public and Private entities is the must for the project in this nature
- Expect some unexpected road blocks i.e., CPUC jurisdictions over SAV and prepare stakeholders for it
- Always keep in mind that there is no Guide Book for this and we are developing one for first time
- Make sure your management team are up for challenges as you are



## **Smart Mobility**



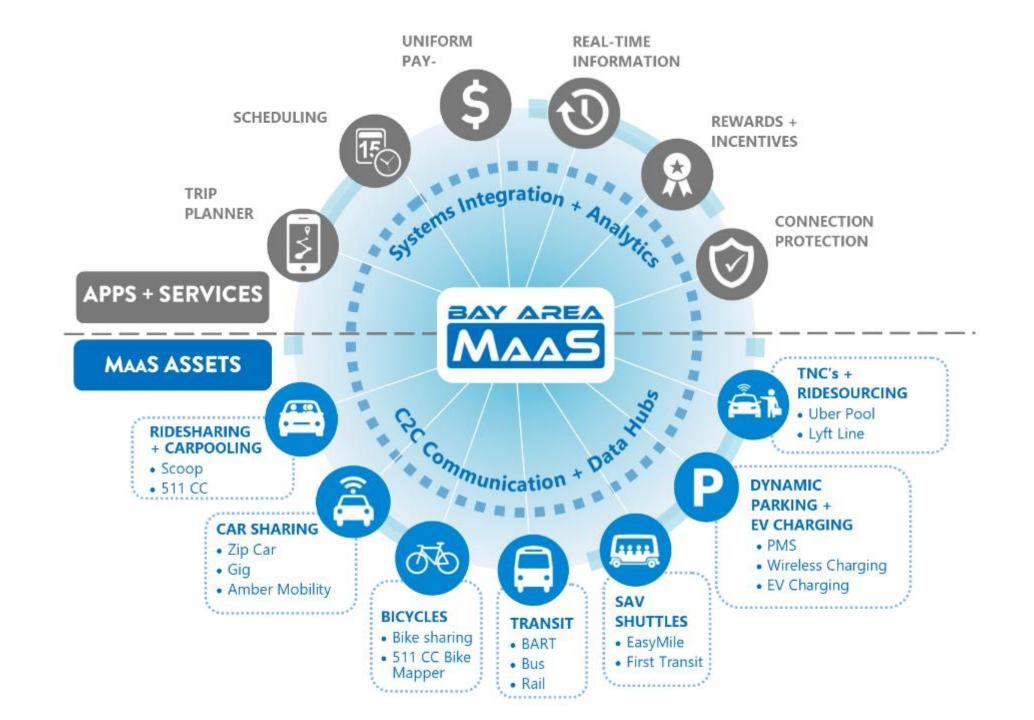
# Shuttle Service within Bishop Ranch

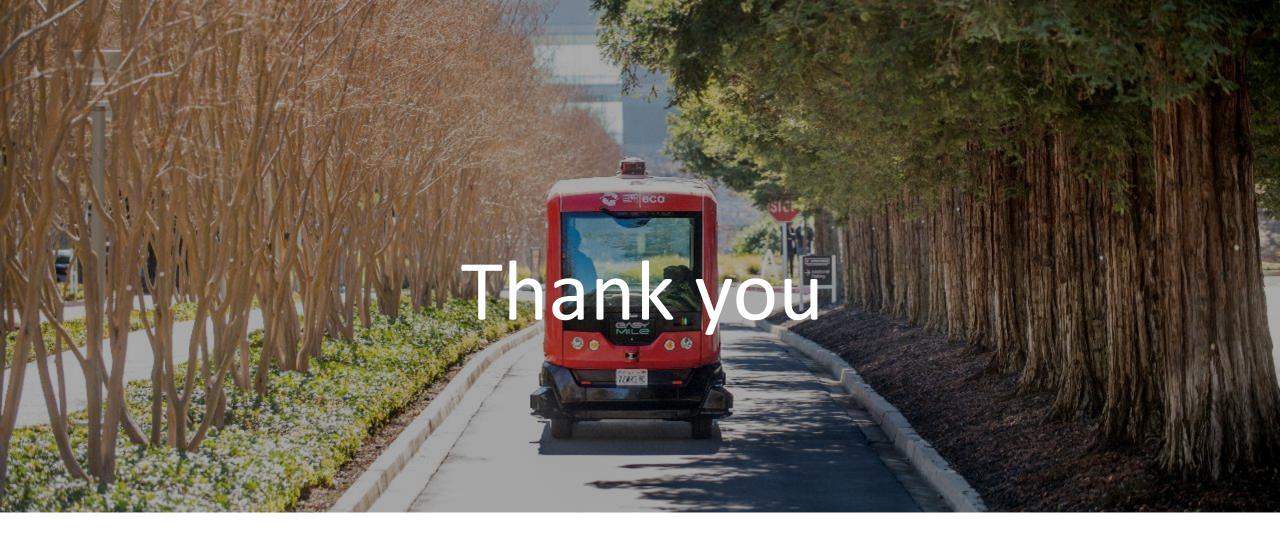


# Complement to Transit









#### **Timothy Haile**

Deputy Executive Director, Projects **Contra Costa Transportation Authority #**tthaile thaile@ccta.net



transportation authority