

Ask VTA: Climate, Sustainability and Innovation

April 13, 2023

Today's Agenda

- Welcome
- Meet VTA Staff
- Getting to know you and how you get around
- VTA's Role in Santa Clara County
- Climate, Sustainability and Innovation: VTA's Climate Efforts
- **Ask VTA: Questions and Discussion**
- Thank you

Participating Staff

- Ann Calnan – Environmental Programs Manager
- Lani Lee Ho– Senior Environmental Planner
- Christina Jaworski – Senior Environmental Planner
- Adam Burger – Innovative Mobility & ZEB Program Manager
- Deanna Bolio & Gretchen Baisa – Community Outreach and Public Engagement

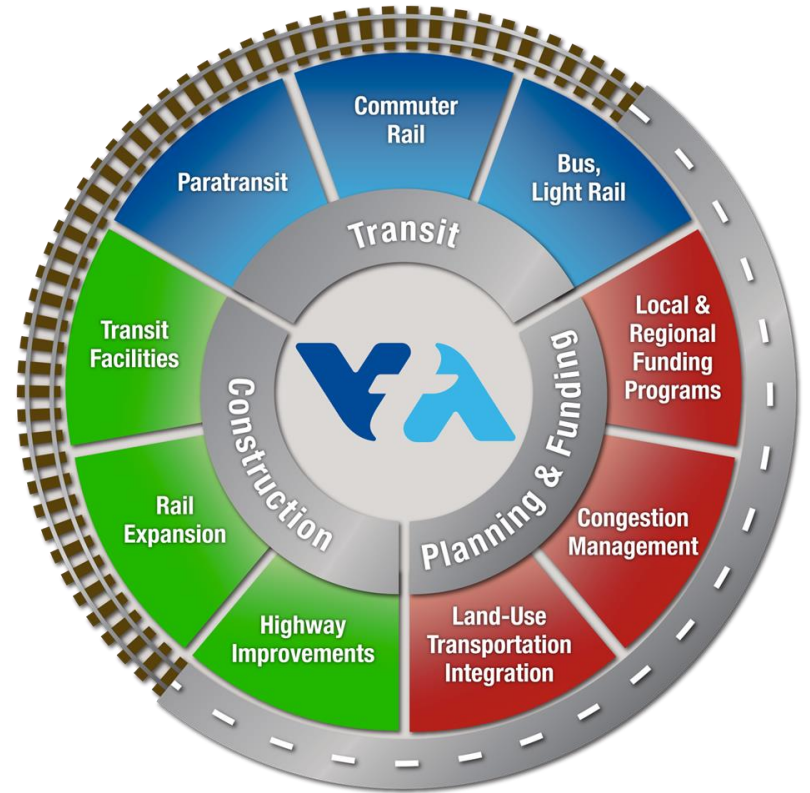
Quick Poll: How do you get around Santa Clara County?



VTA's Role in Santa Clara County

VTA is more than buses and light rail. As the County Transportation Agency, we also:

- Act as a funding conduit for local cities and other agencies
- Design and build transit facilities, highway improvements, and expand rail service
- Plan for congestion management and land-use
- Design, build and own BART to Silicon Valley infrastructure in Santa Clara County



VTA's Sustainability Program

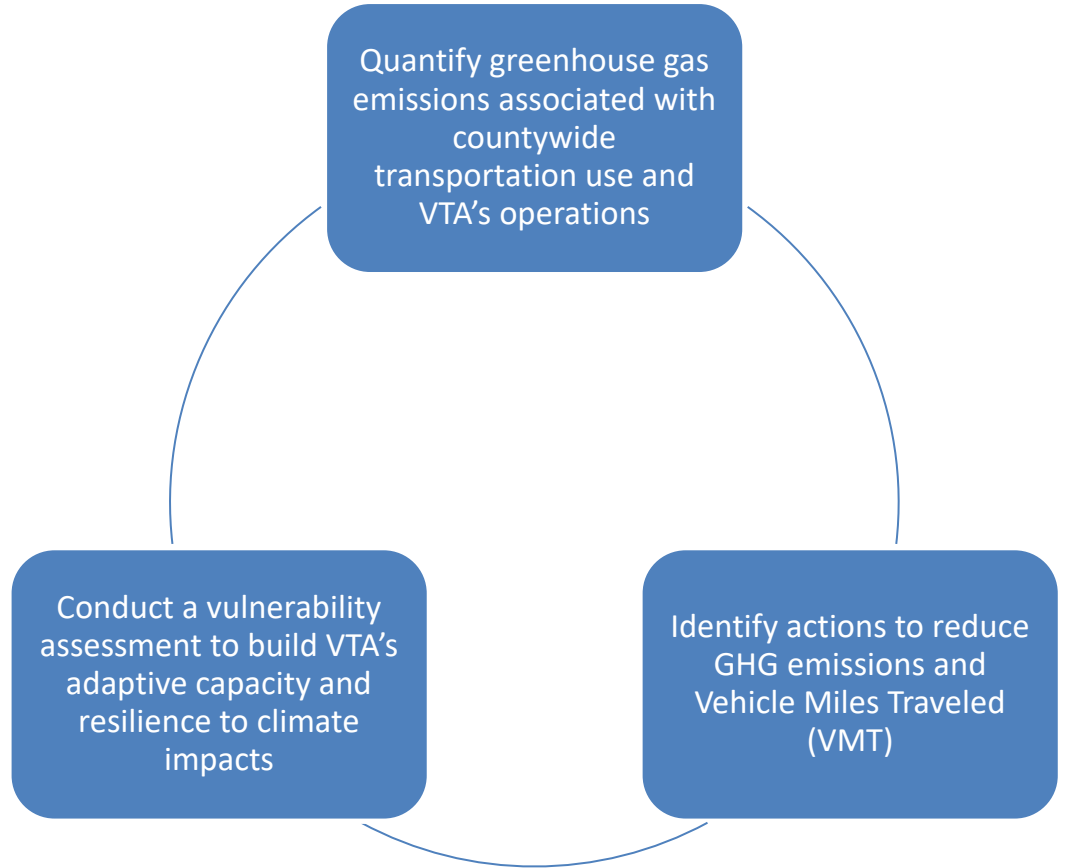
- Our mission is to create a culture of sustainability at VTA.
- We are driven by a diverse and inclusive Sustainability Team.
- Our work includes implementing projects and policies, raising awareness, tracking metrics, and reporting our progress.

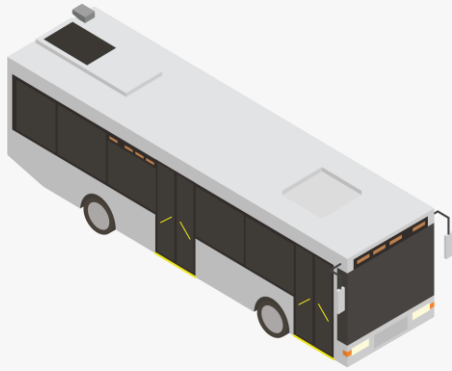


Figure 1



CLIMATE ACTION & ADAPTATION PLAN





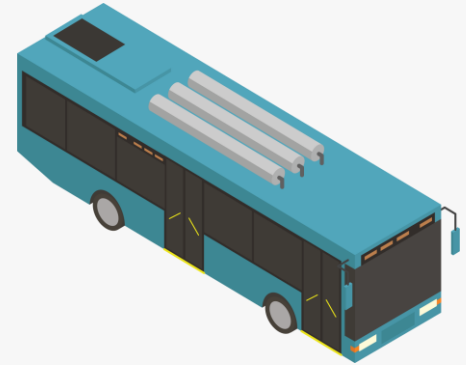
Hybrid-Diesel Bus

\$800,000/bus
400-mile range
Reliable
Quick fueling
Polluting



Battery-Electric Bus

\$1,000,000/bus
150-mile range
Semi-reliable
Slow charging
No emissions



Hydrogen Fuel Cell Bus

\$1,200,000/bus
300-mile range
Semi-reliable
Quick fueling
Emits water vapor

Cerone Microgrid Project

Charging infrastructure for 34 buses

VTA's first large-scale ZEB project

Estimated to be online in 2025



SCALE
MICROGRID SOLUTIONS

PRO

An aerial view of a bus charging station. The station features a large array of solar panels covering the charging area. Several blue buses are parked under the solar canopy. In the foreground, there are charging units with 'SCALE' and 'PROTEGRA' branding. The background shows a cityscape and hills under a clear blue sky.

High-Capacity Chargers
Each charges 17 buses

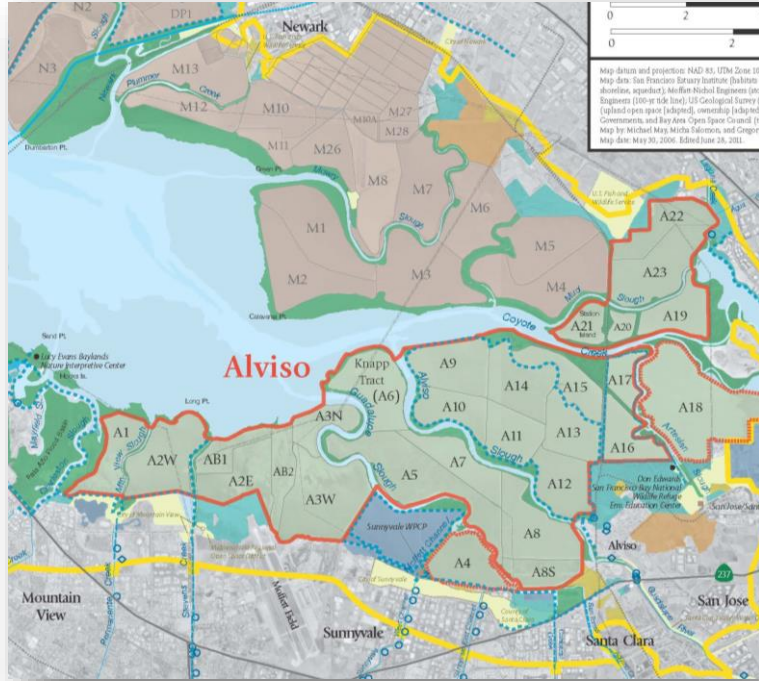
Solar Panels
Renewable energy source

Microgrid & Controller
Backup energy storage, energy management

Inverted Pantographs
Allows space-efficient charging

Beneficial Reuse of BART Silicon Valley Phase II Tunnel Excavated Material at Former Salt Production Ponds

Beneficial Reuse of BART Silicon Valley Phase II Tunnel Excavated Material at Former Salt Production Ponds



Excavated material from the BART Silicon Valley Phase II Project tunneling operations will be placed into various ponds in South San Francisco Bay at Alviso to raise pond bottoms and accelerate tidal marsh habitat development

Project benefits

- Sea level rise resilience
- Greenhouse gas emissions reductions
- Habitat creation for threatened and endangered species
- Water quality improvements
- Flood risk management
- Construction waste reuse

Status:

\$1.5M Grant Received; project is initiating environmental clearance and early community engagement

Envision Framework – Platinum Certification



VTA's BART SILICON VALLEY
PHASE II EXTENSION PROJECT

Sustainability Master Plan
Managing VTA's Sustainability Commitment

July 2021

	CRITERIA	FOCUS AREA
	QUALITY OF LIFE	PURPOSE COMMUNITY WELLBEING
	LEADERSHIP	COLLABORATION MANAGEMENT PLANNING
	RESOURCE ALLOCATION	MATERIALS ENERGY WATER
	NATURAL WORLD	SITING LAND & WATER BIODIVERSITY
	CLIMATE & RISK	EMISSIONS RESILIENCE

Habitat and Conservation

The Upper Penitencia Creek Improvement Project includes the restoration of a portion of this creek to enhance fish and wildlife habitat, improve water quality, and provide flood storage, as well as improve fish passage for the Central California Coast steelhead, a species protected under the Federal Endangered Species Act. The Project serves to fulfill the biological mitigation requirements associated with the BART Silicon Valley Project.

From This!



To This!

The eastern creek bank was lined with debris in an attempt to stop the channel from migrating to the east and undercutting private property.

The restored eastern bank was constructed of logs and boulders, then replanted with native vegetation.

Wildlife Connectivity



The Santa Clara Valley Wildlife Connectivity working group has been formed that includes POST, the Open Space Authority, the Santa Clara Habitat Agency, the Valley Transit Authority, County Parks, and CalTrans. Together, these inter-agencies and organizations are looking at how to facilitate animal crossings at Monterey Road.

Coyote Ridge



Coyote Ridge is a 500+ acre VTA-owned property in Coyote Valley, purchased to mitigate environmental impacts of highway construction at 101. This land management effort provides habitat for wildflowers such as California Goldfield and the Common Fiddleneck, and the endangered Bay Checkerspot Butterfly, thanks to a partnership between VTA and Santa Clara Valley Open Space Authority.

Today's Format

Ask VTA has been developed as a chance for the public to have a deeper discussion about the projects and programs that VTA delivers for the residents of Santa Clara County.

Today's Topic: VTA's Climate, Sustainability and Innovation Efforts

You might have questions about the following:

- How VTA is meeting our climate goals
- VTA's habitat restoration efforts in Santa Clara County
- What kind of trade-offs need to be considered when adding zero emission buses
- How VTA's efforts help reduce greenhouse gas emissions
- What is included in our Sustainability Plans and how they make a difference



Thank you!

Join us for the next Ask VTA!

May 1, 6 p.m.

Topic: **Bike to....Anywhere! VTA's Bike and Pedestrian Programs**

Register at: www.vta.org/ask-vta

To suggest a topic for Ask VTA or to provide feedback, please email:
community.outreach@vta.org