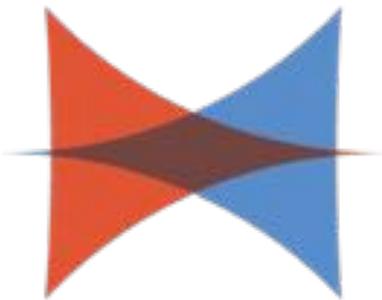


# The Future of Transportation on the Caltrain Corridor

11.30.16



Ideas + Action  
for a Better City



**PENINSULA  
CALTRAIN  
CORRIDOR  
VISION PLAN**



# Today

What is happening

Vision

Recommendations

What is costs

How to pay for it

**The Caltrain Corridor is home to the world's innovation economy – but its transportation system is falling short.**

# The Caltrain Corridor



# Caltrain is increasingly crowded during peak hours



**Caltrain's limited off-peak service makes transit less usable.**



**User of highway 101 face growing delays due to traffic and inefficiencies.**

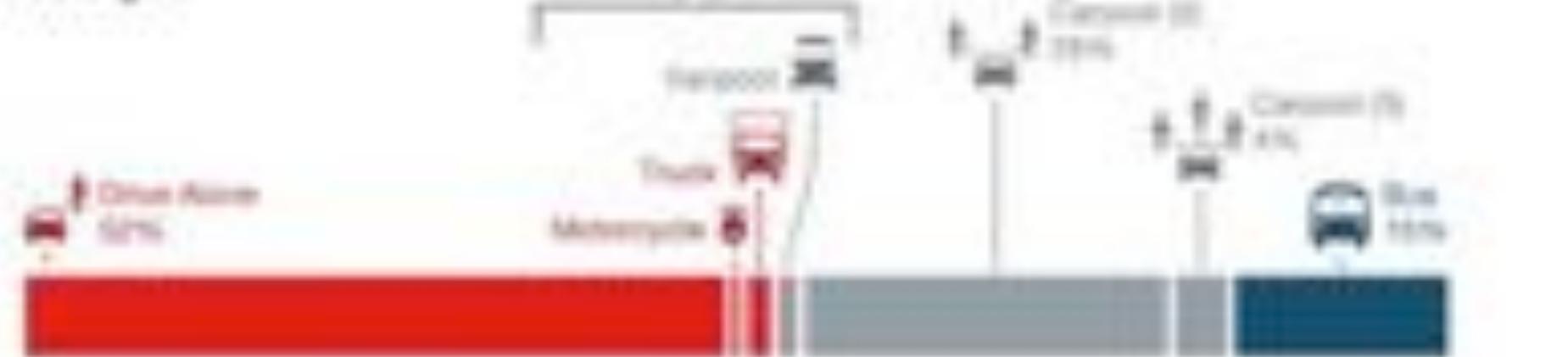


# Single-occupancy vehicles take up most of the space on highway 101

## Vehicles



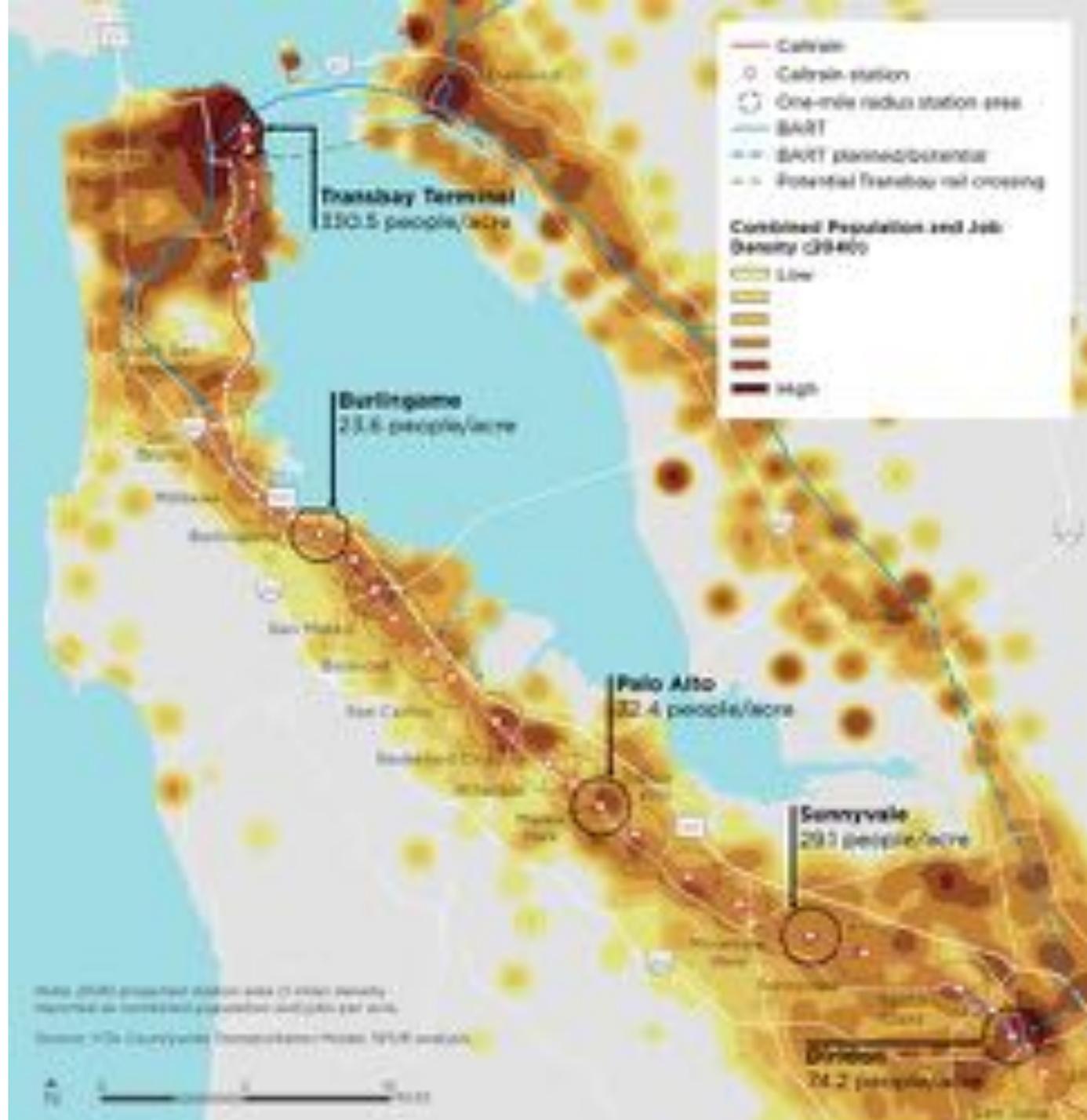
## Passengers



# Access to opportunity needs to grow.



As the region grows, we'll need to move more people.



# Densification



# Densification



# **Our Vision for the Caltrain Corridor**

**Convenience**

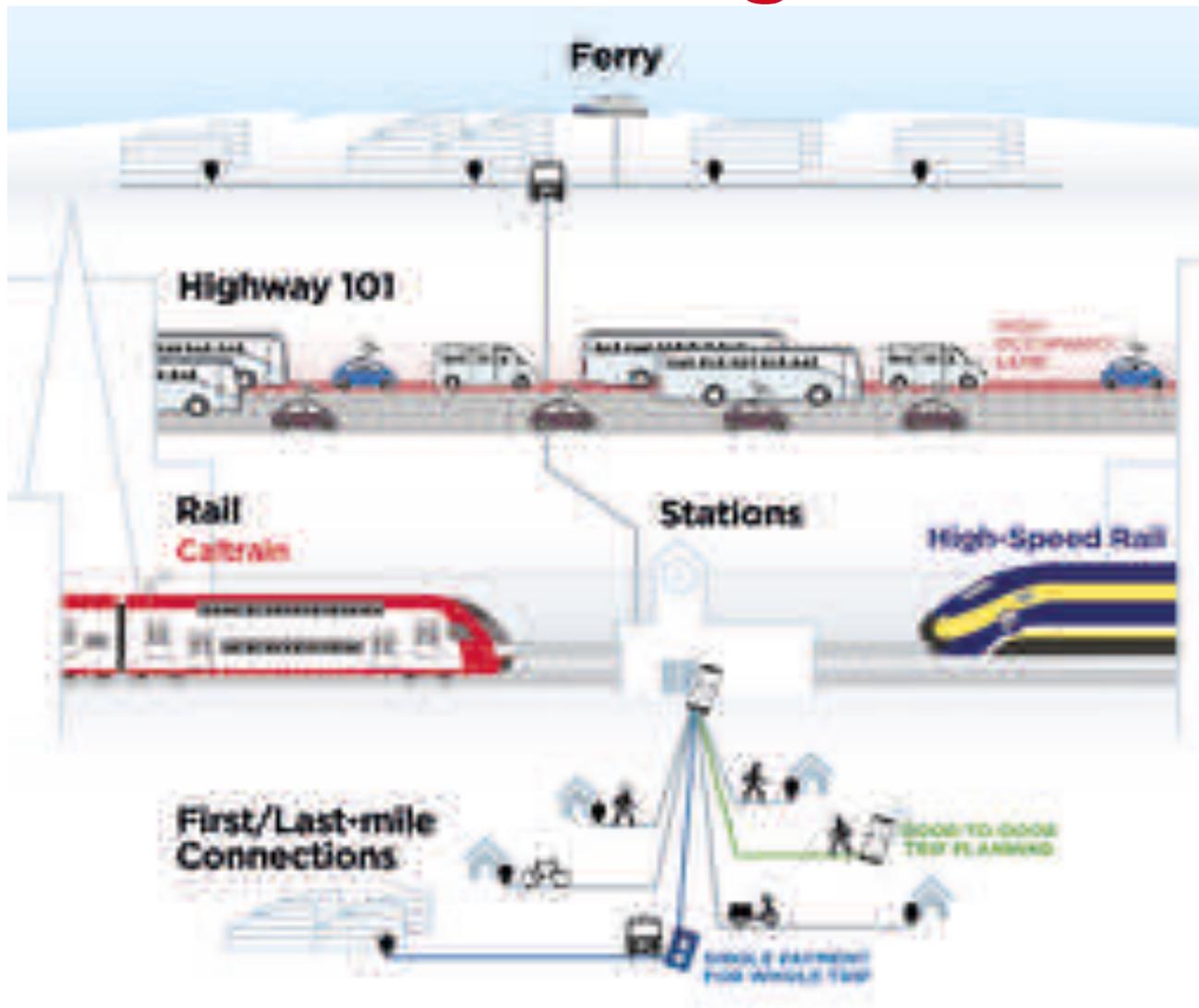
**Connectivity**

**Capacity**

**Community**

**Climate Protection**

# Vision: Highway, rail and ferry system that work together.



# New Capacity

	<b>People moved during peak hour today (each direction)</b>	<b>People moved during peak hour under the vision plan (each direction)</b>
Caltrain	3,250	10,000*
Highway 101	1,780	5,680
Ferry	0	1,400

Does not include capacity provided by HSR.

# Opportunities

**Electrification and high-speed rail can dramatically improve rail capacity, comfort and reliability.**



**Electrification  
can transform  
the economics  
of the railroad.**



**With high-speed rail and statewide rail modernization, this corridor will become part of an improved statewide rail network.**



**The digital age of transportation portends safer, more efficient, more convenient passenger transportation.**



# Challenges

# The corridor's transportation system was built for a different era.



# The corridor's transportation system was built for a different era.



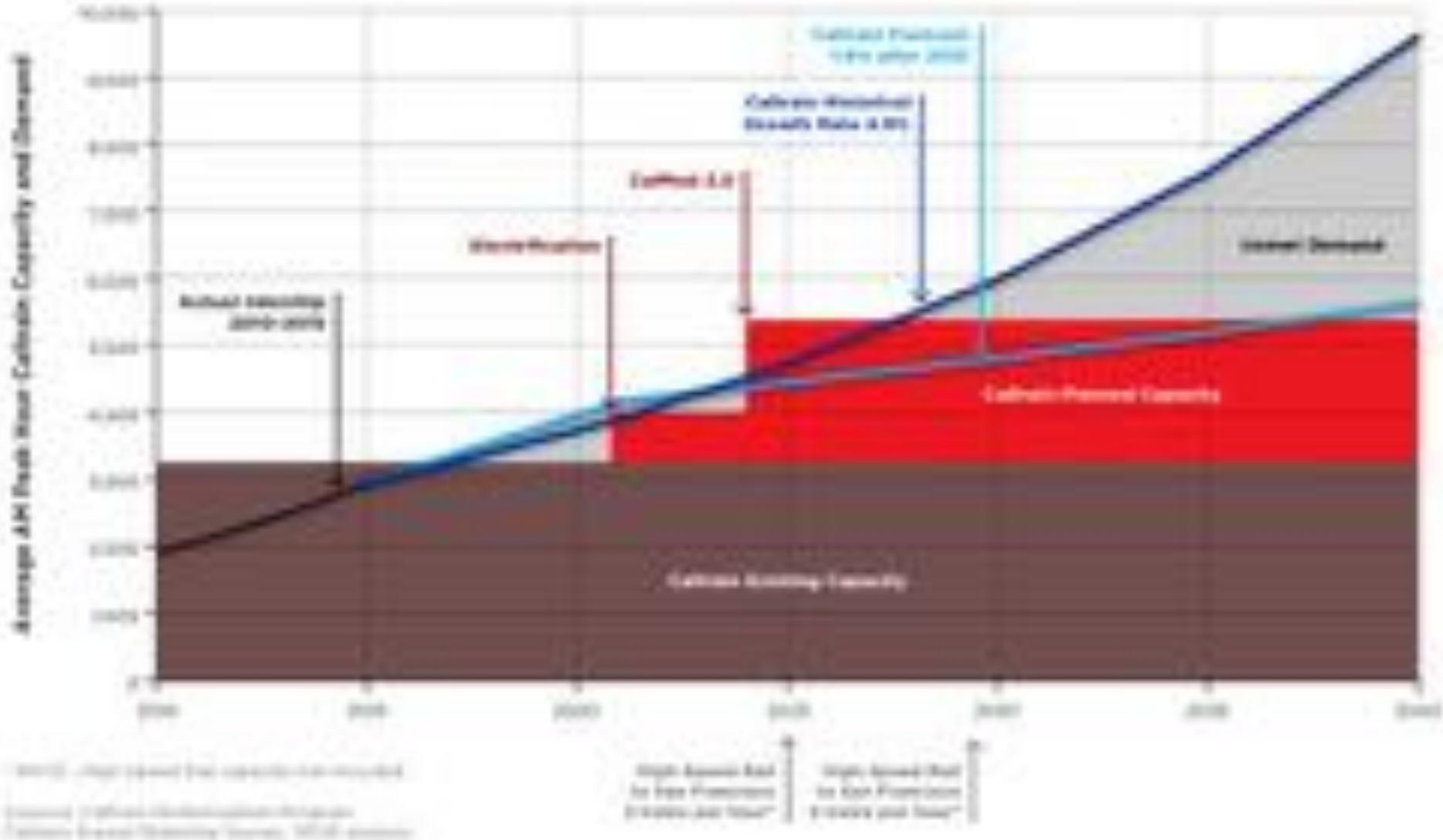
Photograph by of San Francisco of 1931 of San Miguel, CA

Bob Tomney Collection

**The corridor's transportation system was built for a different era.**



# Caltrain is financially unstable, making it difficult to plan for the



**Neighborhood impacts make it harder to grow rail service.**



**Many origins and destinations are far from rail.**



**Transportation planning is done locally, for one mode at a time, instead of through an integrated, corridor-wide approach.**



# Recommendations

**A corridor shaped by an outstanding rail system.**





# 1. Rail

Caltrain Characteristics by Phase

	Existing	Electrification	Existing E.O.	Rail Modernization E.O.	Rail Modernization E.O.	Rail Modernization E.O.
Estimated construction	-	2021	2021	2021	2021	2021
Estimated total daily capacity	60,000	64,000	65,000	269,000	269,000	320,000
Peak hour capacity per direction	3,200	4,000	3,400	1,200	1,200	3,500
Off-peak capacity per direction	600-1,300	1,300	1,800	6,400	6,400	6,400
Trains per peak hour	6	6	6	6	6	10
Peak hour station headway	12-16 minutes	10-12 minutes	10-12 minutes	7.5-8 minutes	7.5-8 minutes	6-8 minutes
Service pattern	Daily Bullet + Limited	Daily Bullet + Limited	Daily Bullet + Limited	A-B Stop-Stop	A-B Stop-Stop	Daily Bullet + A-B Stop-Stop
Rolling stock	+ 10 diesel cars	+ 60 new electric cars	+ 60 new electric cars	+ 60 new electric cars	-	+ 60 new electric cars
Infrastructure	-	Track changes, signal system	Track changes, new 6 car trains	100+ new passing tracks/stations, grade separations	100+ new passing tracks/stations, grade separations	100+ new passing tracks/stations, grade separations

1 NOTE: Actual capacity for local lines on MTP in the Revenue Contract will likely be significantly less than total capacity due to disrupted flows. Source: Caltrain Modernization Program (California High Speed Rail Authority Business Plan May 2016, MTP analysis)

# Additional Rail Recommendations.

- Improve Caltrain in short-term – before electrification.
- Connect Caltrain to downtown SF (the DTX)
- Develop a business plan for Caltrain.

**Use a corridor-wide strategy to address the impact of at-grade crossings.**



# New Rail Services: Concepts for the Future

Local Rail Connections (spurs and branches)

Major Connecting Corridors

- Second Transbay Rail Crossing

- Dumbarton Rail Corridor

- BART Silicon Valley

New Alignments within the Caltrain Corridor

## 2. Rail Stations and First/Last Mile-Connections



# Stations and First/Last-mile Recommendations

Create a station modernization program

- Upgrade Stations to attract and accommodate new riders.
- Improve station access – for sustainable and space-efficient modes of travel.

Create a first/last-mile program.

- Proactively manage station access and first- and last-mile connections at each rail station.

# 3. Highway 101



# Highway 101 Recommendations

- Manage a lane (or more) of highways 101 as an “optimized” high-occupancy toll (HOT) lane, along the entire corridor.
- Adopt equity policies and programs for HOT lanes.
- Use revenue from pricing Highway 101 to add more public transit service.
- Grow regional express bus services.

# 4. Ferries



# Ferry Recommendations

- Create a ferry terminal at the Port of Redwood City.
- Expand ferry services to include Peninsula stops.

# 5. A Seamless Transit Experience



# Seamless Transit Recommendations

- Integrate information and payment across mobility services.
- Operate BART, Caltrain and high-speed rail as one system from the rider's perspective.
- Use fare subsidies and fare policies to improve transit affordability and make transit work for more people.
- Conduct short-range and long-range transportation planning as a corridor.

# Governance: Everyone has a part to play.

Caltrans  
Samtrans  
Caltrain  
VTA  
SMCTA  
SFCTA  
SFMTA  
Cities  
MTC  
CAHSR  
BART  
CalSTA



# What the Vision Costs: \$16 - \$21 billion (20 years)

	<b>Fleet</b>	<b>Capital</b>	<b>Operations and Maintenance</b>
Rail	\$140 million	\$8.2 - \$12.3 billion	\$4.95 billion
Stations and First/Last-Mile Connections	n/a	\$1.6 - 1.7 billion	\$660 million
Highway 101	\$40 million	\$20 - \$150 million	\$210 - \$735 million
Ferry	\$80 million	\$40 million	\$260 million
Coordinated Transit	n/a	\$15 million	\$140-150 million
<b>Total</b>	<b>\$260 million</b>	<b>\$9.8 - \$14.1 billion</b>	<b>\$6.2 - \$6.8 billion</b>

# How Do We Fund the Vision?

<b>Strategy</b>	<b>Anticipated Revenue</b>
1. Anticipated Regional/State/Federal revenue	\$3.0 Billion
2. Transit fares and highway toll	\$5.0 Billion
3. Countywide sales taxes	\$2.0 Billion
4. Corridor parcel tax	\$2.4 Billion
5. Local property-based and business-based funding	\$3.0 Billion
6. New regional and state funding	\$3.0 Billion
7. Public-Private Partnership	
<b>Total</b>	<b>\$18.5 Billion</b>

# Next Steps: What we need to do now.

## Policy Agreement:

1. Caltrain/high-speed rail operating plan.
2. Highway 101 lane management across three counties.
3. Alignment for the Downtown Extension.

## Funding:

4. Advocate for Vision Plan projects in the Regional Transportation Plan.
5. Organize 2018 funding measures to fund rail infrastructure, fleet and operations, highway 101 management.

## Rail Service:

6. Improve today's rail schedule, add trains.

# The Future of Transportation on the Caltrain Corridor