

Building Resilience

Planning and Investing in the Bay Area's Future

Annual Report to Congress | March 2019



ASSOCIATION OF BAY AREA GOVERNMENTS
METROPOLITAN TRANSPORTATION COMMISSION



March 2019

To Our Federal Representatives:

We are thankful to have a strong Bay Area delegation that recognizes the enormity of the challenges facing our region in the 21st century. This report highlights the need to invest significantly more federal funds in transportation infrastructure and affordable housing, as well as disaster preparedness and climate protection.

We support a national infrastructure initiative to modernize our nation's highways, ports, trains, buses and housing stock to help sustain economic growth, relieve congestion and improve the quality of life for Bay Area residents. We urge Congress to include the long-term solvency of the Highway Trust Fund in any infrastructure package.

The first portion of our report highlights our infrastructure priorities while the balance provides an update on our federal appropriations priorities, our work to increase transportation and housing funding at the state and regional levels, and a collaborative effort to address the Bay Area's chronic housing shortage through an ambitious 10-point plan known as the CASA Compact.

As you know, the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) serve as the San Francisco Bay Area's transportation and land-use planning agencies, respectively, and are now in our second year of working as a consolidated staff under MTC. Conversations will commence later this year regarding what, if any, changes should be made to the underlying governance of our agencies to bring us even closer together.

This year also marks a Bay Area return for our new executive director, Therese W. McMillan. Therese is no stranger to MTC, having worked for 25 years as a member of the Commission staff (including eight years as deputy executive director for Policy) before her 2009 appointment by then-President Obama to serve as deputy administrator of the Federal Transit Administration (FTA). Therese subsequently served as acting FTA administrator before taking a position in 2016 as chief planning officer for the Los Angeles County Metropolitan Transportation Authority. We thank our outgoing executive director, Steve Heminger for his many years of public service, and wish him well in his retirement.

Thank you for your steadfast leadership advocating for the Bay Area's interests in Congress. We look forward to working with you and your staff in 2019. If MTC or ABAG can be of assistance in issues related to material in this report or any other matter, please contact Randy Rentschler, Director of Legislation and Public Affairs, at rrentschler@bayareametro.gov or 415.778.6780, or Tom Bulger, MTC's Washington Representative, at 202.255.3526.

Sincerely,



Scott Haggerty

Chair

Metropolitan Transportation Commission



David Rabbitt

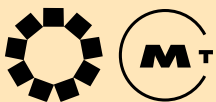
President

Association of Bay Area Governments

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San Francisco Bay Area: Transportation and Land Uses

- Urbanized Area
- Publicly Owned Parks and Open Space
- Priority Development Area (PDA)
- Priority Conservation Area (PCA)

ROADS

- Freeway
- Major Road

RAIL SYSTEM

- Altamont Corridor Express
- Amtrak
- BART
- Caltrain
- SMART
- Light Rail (Muni & VTA)
- Cable Car (Muni)

Oakland 2010 POPULATION

- > 350,000
- Novato 50,000–350,000
- Pacifica < 50,000

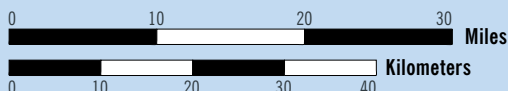


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Priorities for a National Infrastructure Initiative

MTC and ABAG support a national infrastructure initiative to modernize our nation's highways, ports, trains, buses and housing stock and safeguard our metropolitan areas from the threats posed by climate change. Such an effort would help grow the economy, create well-paying jobs, relieve traffic congestion and improve the quality of life for Bay Area residents.



Reward Local Self-Help

MTC and ABAG continue to support the Trump Administration's proposal to reward local investments in infrastructure with supplemental federal funds. But there should be no arbitrary cap on the size of that reward to any single state. Local self-help, moreover, is no substitute for core federal infrastructure programs.

We need all levels of government to pitch in and do their part.

In 2018, Bay Area voters once again supported transportation priorities by passing city, county and statewide self-help measures. Each year, voter-approved taxes and tolls generate nearly \$2 billion for road, bridge and transit improvements in the Bay Area.

This self-help trend is extending to housing — Alameda County, Santa Clara County and the City and County of San Francisco have each approved affordable housing measures generating hundreds of millions of dollars. And the new CASA Compact proposes \$1.5 billion a year in new regional funds for affordable housing (see pp. 16–17).

The Bay Area is continuing to create new jobs, inspire innovation and strengthen the national economy. Yet, residents are struggling with the high cost of housing and frustrated by increasingly congested highways and overcrowded transit systems, and businesses face challenges attracting and retaining talent due to the high cost of living. Communities across the country are experiencing similar challenges that threaten the middle class and limit the nation's ability to remain globally competitive.

MTC and ABAG continue to recommend the following principles for a national infrastructure initiative:

- 1 Restore the Highway Trust Fund's solvency.** The Highway Trust Fund has been the backbone of the nation's funding for transportation and yet it is on a direct path to insolvency. Any funding package should include new revenues to make the Highway Trust Fund solvent after 2020. Innovative financing tools, including Build America Bonds, can and should play an important role but cannot replace direct federal investment in major infrastructure projects.
- 2 Invest in existing programs.** An infrastructure package should grow core surface transportation programs authorized under the Fixing America's Surface Transportation (FAST) Act. Surface transportation programs, both formula and discretionary, have proven effective in delivering essential funds for states and regions to address their pressing state of good repair and capital investment needs.
- 3 Target funding to metropolitan regions.** Metro areas drive the nation's economy and require substantial infrastructure investment to accommodate future growth. Providing additional flexible funding directly to



Persistent traffic delays afflict over 180,000 people who cross the Bay Bridge every day. (Photo: Peter Beeler)

metro areas will empower local communities to deliver a smarter, cleaner transportation future. Congress should increase the level of Surface Transportation Program (STP) funds that are suballocated to regional agencies like MTC.

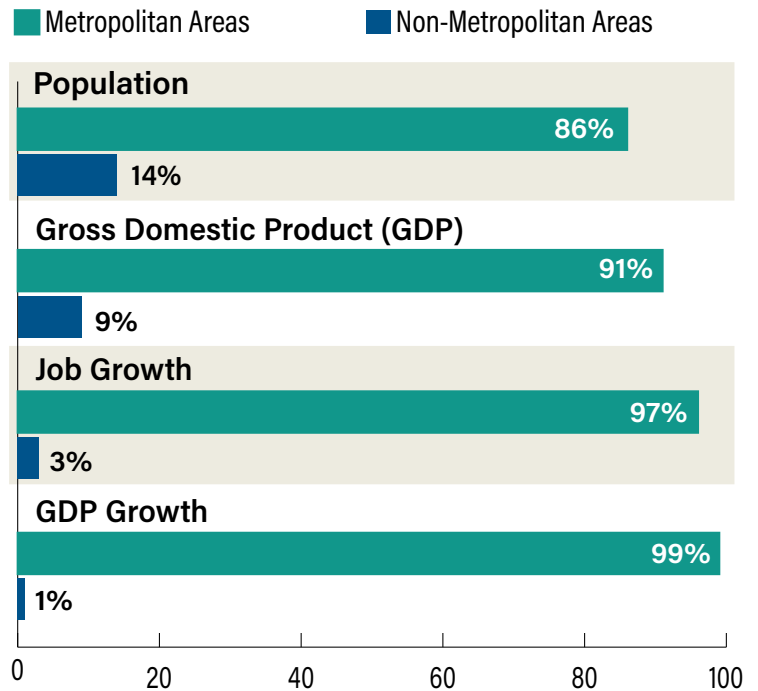
4 Shorten project delivery time. Project reviews by multiple agencies can add years to projects. Expediting process and permit reviews, without diminishing environmental safeguards, will help deliver both highway and transit projects more efficiently.

5 Prioritize regionally- and nationally-significant projects. Invest in competitive grant funding for mega-projects that improve freight and commuter mobility across all modes, provide congestion relief, improve safety, and build resiliency against extreme weather and climate change.

6 Increase housing supply. An infrastructure package should expand the nation’s most effective affordable housing financing tool, the Low Income Housing Tax Credit, to generate new housing supply near job centers and transit. Federal funding and financing tools for housing-supportive infrastructure investments also should be expanded.

United States Metro Economies

(Percent Share of 2015 National Economic Indicators)



Source: United States Conference of Mayors. (2016). *GMP and Employment Report: 2015-2017*.

Fully Fund the FAST Act

MTC urges Congress to protect the progress made in the bipartisan Fixing America's Surface Transportation (FAST) Act. Adopted in 2015, the FAST Act provides long-term certainty for core federal highway and transit programs and preserves flexibility to advance Bay Area priorities.

The Bay Area invests federal transportation funds for public transit, road repair, safety and mobility projects throughout the region.

Bay Area transit operators anticipate \$2.6 billion in core formula funding through 2020, which is essential for maintaining the region's aging transit capital infrastructure. Additionally, seven of the Bay Area's 10 largest transportation investments through 2040 have received or anticipate receiving billions in federal transit capital grants primarily from the FAST Act's Capital Investment Grant (CIG) program, as highlighted in the chart at right.



Federal dollars support road, transit and bicycle/pedestrian safety projects in the Bay Area. (Photo: Noah Berger)

"Top 10" Plan Bay Area Capital Projects

Project	Total Project Cost*	Capital Investment Grant Request
	(Millions)	(Millions)
California High-Speed Rail (Bay Area Segments)	\$8,500	
Bay Area Express Lane Network	\$6,000	
BART to Silicon Valley, Phase 2†	\$5,500	\$1,500
Transbay Transit Center (Phase 2/ Caltrain Downtown Extension)†	\$4,300	\$1,000
BART Transbay Core Capacity Project†	\$3,500	\$1,250
BART to Silicon Valley, Phase 1	\$2,500	\$900
Caltrain Peninsula Corridor Electrification Project	\$2,400	\$647
Transbay Transit Center (Phase 1)‡	\$2,300	
Presidio Parkway	\$1,600	
San Francisco Central Subway	\$1,600	\$942

* Total cost includes capital and operating expenses.

† Projects are in the CIG pipeline and anticipate seeking grant awards.

‡ Project received more than \$600 million in federal grants and loans, but did not seek a full funding grant agreement from the CIG program.

Flexible federal highway funding in the FAST Act also allows Bay Area cities and counties to invest in local transportation priorities that improve safety, spur economic development, encourage construction of affordable housing, and help the region meet climate change and air quality improvement goals.

MTC invests around \$180 million of these flexible highway funds each year, primarily through the One Bay

Area Grant (OBAG) program. MTC recently awarded a second round of OBAG grants, known as OBAG 2, to fund projects from 2017–18 through 2021–22.

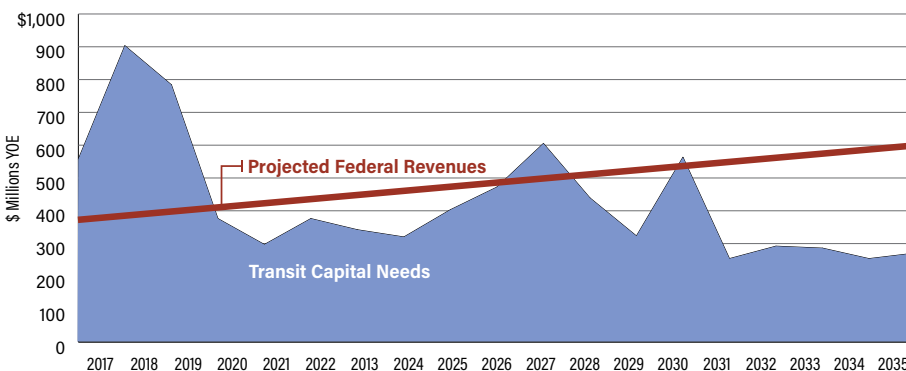
Funding Certainty Will Help Jumpstart the Bay Area’s Transit Modernization

On February 14, 2019, MTC received approval from FTA for a Letter of No Prejudice which will allow securitization of FTA formula funds through fiscal year 2034–35 to accelerate the Bay Area Rapid Transit (BART) car replacement project. This will enable MTC to deliver the following improvements more than a decade earlier than if the projects were completed as formula funding became available:

- **BART** rail car replacement and expansion
- **Caltrain** electric railcars
- **San Francisco Municipal Transportation Agency** (SFMTA) fleet replacement and expansion
- **Alameda-Contra Costa Transit District** (AC Transit) fleet replacement and expansion

Congress has historically honored transit formula funding commitments but, in the recent past, appropriations have been reduced below authorized levels. Appropriations consistent with FAST Act levels would result in lower interest rates, thereby allowing more federal funds to be directed at capital investments rather than borrowing costs.

Financing Addresses Mismatch Between Timing of Transit Capital Needs and Revenues, 2017–2035



Transportation Funds as a Housing Production Incentive

The Housing Incentive Pool, or HIP for short, is a \$76 million grant program that MTC developed using some of our flexible highway funding to reward local jurisdictions that produce or preserve the largest number of affordable housing units in the region’s Priority Development Areas or in Transit Priority Areas from 2018 through 2022.

Of the total, \$71 million will be distributed on a per-unit basis to the 15 jurisdictions that issue certificates of occupancy for the greatest number of eligible housing units — both newly-built and preserved as affordable to low-, very-low- and moderate-income households from 2018–2022. The remaining \$5 million will fund a competitive pilot program for local infrastructure improvements around affordable housing developments.

To be eligible for HIP funding, local jurisdictions must demonstrate compliance with state housing laws relative to surplus lands, accessory dwelling units and density bonuses further leveraging the policy benefits of the funds.

Multi-family dwelling under construction in Silicon Valley

(Photo: Martin Klimek)



High-Speed Rail: Still in California's Statewide Future

*Contrary to the wishes of some naysayers, California is **not** abandoning its statewide high-speed rail plans. While Governor Newsom's State of the State Address pledged to focus the state's high-speed rail efforts on the Central Valley in light of the sizable funding shortfalls to complete the entire project, lost in the news cycle was his support for completing the environmental work on the Bay Area and Los Angeles segments and continuing to pursue federal and private funding to complete the entire project.*

The Federal Government Must Honor Its Commitments

We strongly oppose President Trump's decision to terminate a \$929 million Federal Railroad Administration grant from fiscal year 2010 and intent to withdraw \$2.5 billion in federal American Reinvestment & Recovery Act (ARRA) funds already spent on the project. Such action would not only wreak havoc on the project's finances, placing existing contracts and jobs at risk, it also would set a disastrous precedent which could have ripple effects across all existing and future infrastructure projects relying on federal funds. If a president can unilaterally claw back federal funds that have already been spent on a project, then any project that relies upon them will need contingency funding and face higher borrowing costs to account for the risk of funds being withdrawn.

"Valley to Valley" Connection Will Unleash New Economic and Housing Opportunities

MTC continues to believe in the transformational benefits of connecting Silicon Valley to the Central Valley, the so-called "Valley to Valley" segment prioritized in the High Speed Rail Authority's 2018 Business Plan. This line would provide service from San Francisco to Bakersfield after first building the connection to San Jose.

Not only will the project bring tremendous new economic opportunities to Central Valley residents, it will also help address the region's housing affordability crisis by enabling people to work at high-tech jobs while having access to more affordable housing options in cities such as Gilroy, Merced and Fresno. A trip from San Jose to Fresno, where the average cost for a one-bedroom apartment is currently less than \$1,000/month, would be reduced to about an hour from the three hours it currently takes to make the trip by car.

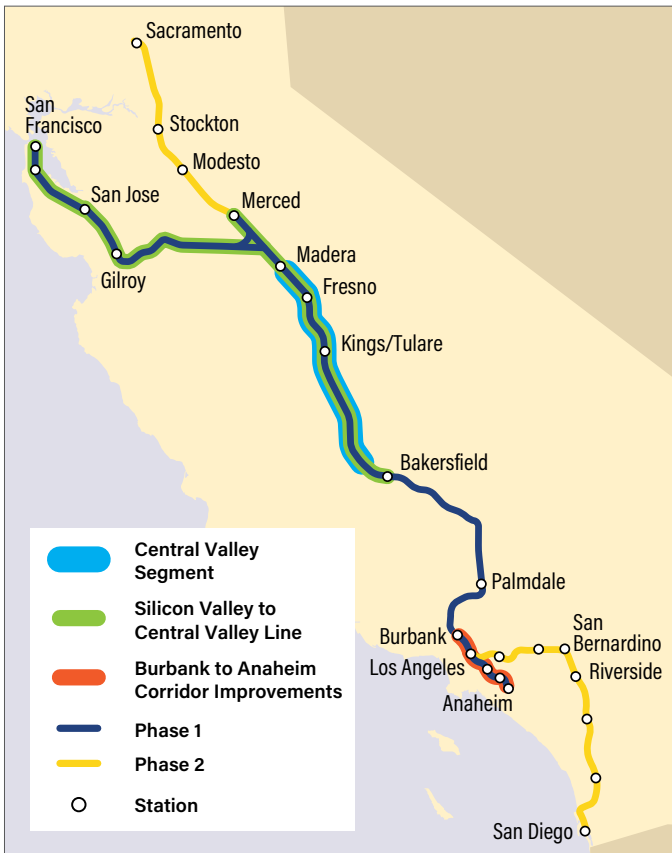
"This is so much more than a train project. It's a transformation project. Anchored by high-speed rail, we can align our economic, workforce, and transportation strategies to revitalize communities across our state."

— Governor Gavin Newsom



Proposed redesign of San Jose's Diridon Station to accommodate high-speed rail (Rendering: nc3d)

Phased High-Speed Rail System Implementation



Source: California High-Speed Rail Authority

Bay Area Connection Must Remain a Long-Term Goal

Between San Francisco and San Jose, high-speed rail will use 51 miles of the existing Caltrain corridor, which is currently being electrified thanks to funding from FTA's Capital Investment Grant program. The San Francisco high-speed rail terminus will be the Salesforce Transit Center, which opened in August 2018 and has already been constructed to accommodate high-speed rail tracks. Once Caltrain electrification and the Central Valley segments are completed, there will be approximately 224 miles of high-speed-rail-ready infrastructure on two different lines, one in the Central Valley and one connecting San Francisco to Gilroy.

According to the High-Speed Rail Authority's 2018 Business Plan, providing the same capacity as high-speed rail from San Francisco to Los Angeles would require **4,300 new highway lane miles** and **115 additional airport gates**.

Caltrain Modernization

The Peninsula Corridor Electrification Project (PCEP) is transforming Caltrain from an old-fashioned diesel system into a modern railway featuring high-performance electric trains that increase capacity and deliver cleaner, quieter and safer service.



Caltrain's new electric trains are being assembled by workers at the new Stadler U.S. manufacturing facility in Salt Lake City, Utah. (Rendering: Courtesy of Stadler)

Caltrain, a vital link in the Bay Area's transportation network connecting San Francisco to San Jose and to the nation's most high-profile tech companies, secured a \$647 million Full Funding Grant Agreement (FFGA) in 2017, accelerating an electrification project that has been in the works for more than two decades.

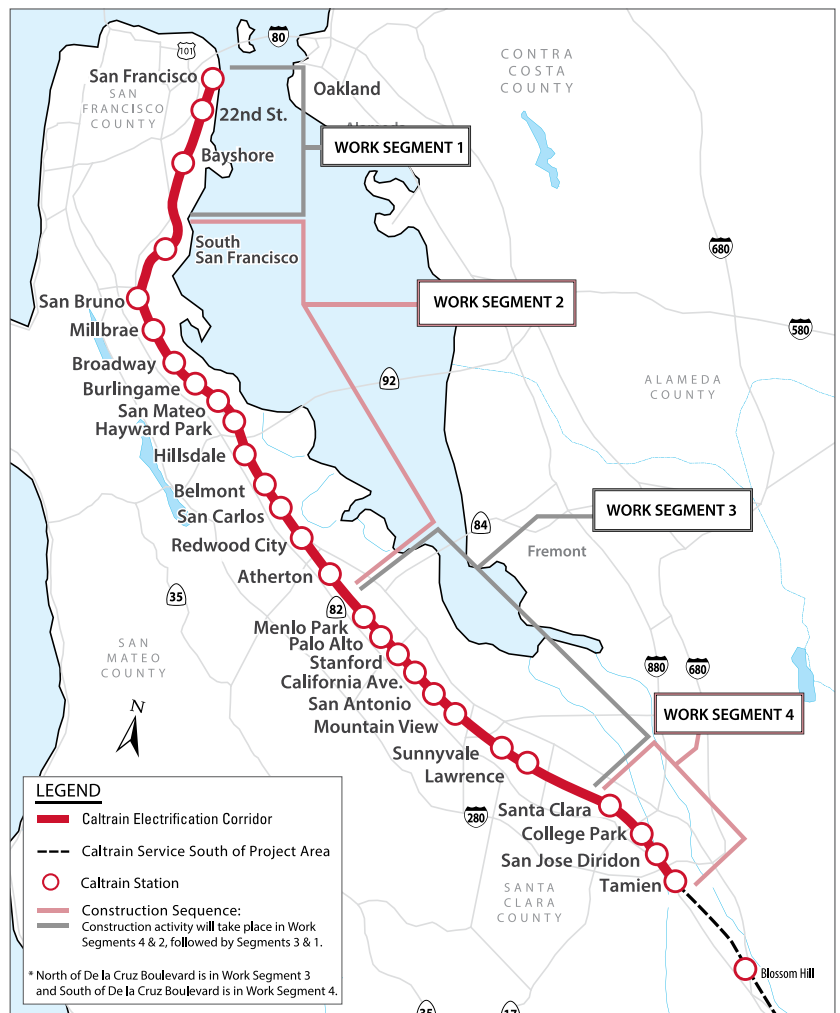
PCEP will help create over \$2.5 billion in economic value and address one of the Bay Area's principal barriers to economic growth by relieving traffic on the increasingly congested Interstate 280 and U.S. Route 101 corridors.

Modernizing Caltrain will put Americans to work and significantly increase rail-commuting capacity to Silicon Valley, one of the most economically productive areas in the United States. As shown in the chart opposite, Caltrain ridership has skyrocketed

over the past decade, with demand for the service now far-exceeding existing capacity.

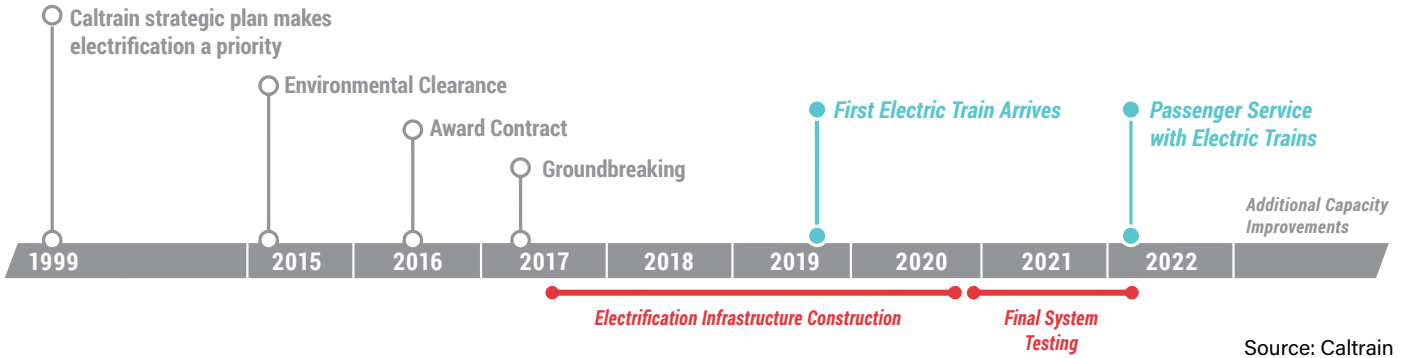
As shown in the map below, the project is comprised of four work segments. Construction is underway on Segments 2 and 4. The first electric trains are anticipated to be in service by 2022.

MTC urges Congress to appropriate \$100 million for fiscal year 2020 consistent with the FFGA.



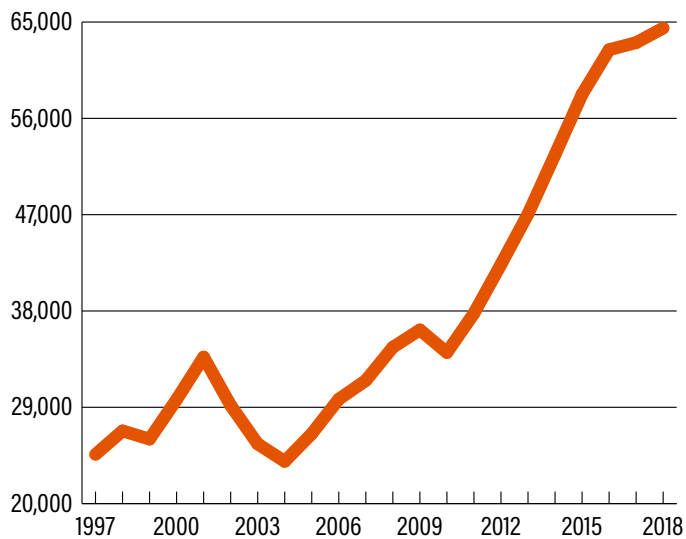
Source: Caltrain

Caltrain Electrification Timeline



Construction of electrification infrastructure within rail tunnels in San Francisco (photo: Caltrain)

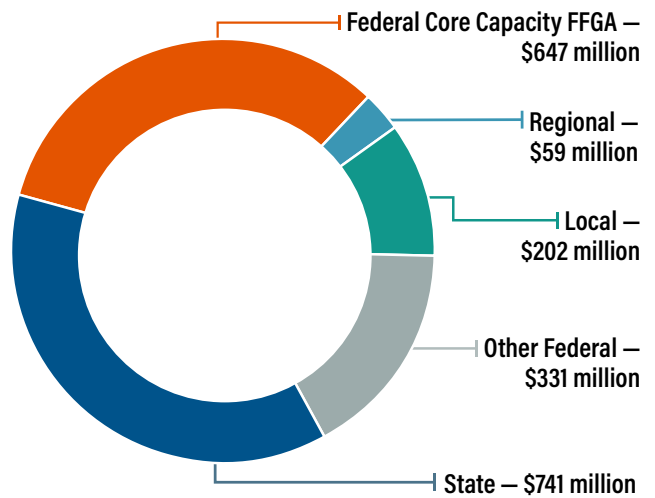
Caltrain Ridership Growth: 1997-2018



Source: Caltrain

Caltrain Modernization Funding Plan

Federal Core Capacity funds are overmatched 2-to-1



Source: Caltrain

Bay Area's Next Generation of Transit Capacity Projects

Plan Bay Area 2040 includes an aggressive \$26 billion investment plan to improve transit connectivity between the region's population and job centers. Capital Investment Grant program funding — matched 2-to-1 by state and local dollars — will be key to advancing the following three critical transit capacity expansion priorities:

- ▶ BART Silicon Valley, Phase II
- ▶ Caltrain Downtown Extension
- ▶ BART Transbay Corridor Core Capacity



Rendering of Downtown San Jose Station interior
(Rendering: Courtesy of VTA)

BART Silicon Valley, Phase II

With BART Silicon Valley, Phase I slated for completion in 2019, the Santa Clara Valley Transportation Authority (VTA) is making progress on the second phase to extend BART via subway to downtown San Jose. A proposed \$1.4 billion federal Expedited Project Delivery (EPD) grant comprises 25 percent of the \$5.6 billion Phase II funding plan.

In June 2018, the Federal Transit Administration (FTA) provided a Record of Decision for BART Silicon Valley, Phase II. The VTA requested to participate in FTA's EPD grant program and anticipates receiving an FFGA in 2020.

The six-mile extension includes five miles of tunnel and four stations (Alum Rock/28th Street, Downtown San Jose, Diridon and Santa Clara). Once completed, the 16-mile BART Silicon Valley extension will complete a major rail link between downtown San Jose, San Jose State University, HP Pavilion, Santa Clara University, a major new employment cluster proposed by Google and the other major urban centers in the Bay Area.

Next Generation Transit Funding Plans (Billions)

Project	Committed Funding	FFGA Anticipated	Other Funding	Total Project Cost	FFGA Share
BART Silicon Valley, Phase II Extension	\$4.2	\$1.4	N/A	\$5.6	25%
Caltrain Downtown Extension (DTX)	\$0.8	\$1.0	\$2.1	\$3.9	26%
BART Transbay Corridor Core Capacity	\$0.7	\$1.3	\$1.5	\$3.5	36%

Note: "Other Funding" refers to a variety of local, state and federal funds that would be committed to the project.
Source: VTA, BART and MTC

Caltrain Downtown Extension

The Caltrain Downtown Extension (DTX) will modify the existing Caltrain station at Fourth and King streets in San

Francisco, including adding a new adjacent underground station at Fourth and Townsend streets, and extend the Caltrain rail line 1.3 miles downtown into the new Salesforce Transit Center near the heart of the Financial District. The project is in the early design phase and faces a significant funding gap, though voters helped shrink this gap by \$325 million with approval of Regional Measure 3 in June.

The underground rail line is being designed to accommodate high-speed rail and other rail connections to the East Bay. A Record of Decision from the FTA is expected shortly. The project is expected to seek a \$1 billion FFGA.



Caltrain at the 4th and King Station in San Francisco (Photo: MTC archives)



One of BART's popular new railcars, hundreds more of which will be funded by the Core Capacity project.

(Photo: Felicia Kieselhorst)

BART Transbay Corridor Core Capacity

While overall BART ridership dipped in 2018, the transbay commute continues to be a crunch, with the system exceeding its design capacity. The region's continued economic growth and mobility depends on BART adding more capacity.

BART's Transbay Corridor Core Capacity project will boost transbay capacity by 30 percent from 23 trains per hour to 30 trains per hour in both directions. The project includes a communication-based train control system to reduce headways, a railcar fleet expansion, increased vehicle storage capacity, and added traction power capacity to support higher frequencies and longer trains. The preliminary cost estimate for the project is \$3.5 billion.

In December 2018, FTA approved BART's request to enter into the engineering phase. BART anticipates receiving an FFGA later in 2019.

Salesforce Transit Center Repairs

In September 2018, workers at the new Salesforce Transit Center discovered cracks in two steel beams above the third-level bus deck, resulting in an immediate shutdown of the terminal. In response, San Francisco Mayor London Breed and Oakland Mayor Libby Schaaf requested that MTC convene an independent peer review panel to identify the causes of the fractured girders and examine proposed repairs.

The Panel consists of five nationally-recognized experts in steel structures, fracture mechanics and metallurgy. The Panel approved the Transbay Joint Powers Authority's (TJPA) repair strategy in December 2018 and is overseeing the TJPA's review of drawings, inspection reports and design documents that will determine if other inspections will be necessary before reopening. After this review is complete, the TJPA is expected to announce a reopening date.

Antioch BART Extension Hits Home Run

In May 2018, BART's eastern Contra Costa County line was renamed the Antioch line as the system opened a hugely popular 10-mile extension from the former Pittsburg/Bay Point terminus along the Highway 4 median to a pair of new stations at Pittsburg Center and Antioch.



eBART car at the new Antioch Station (Photo: Karl Nielsen)

The East Contra Costa County extension, funded entirely with local and state funds, was an immediate hit, with average daily ridership topping 7,500 in the first full month of service in June and climbing to more than 8,600 by the end of 2018. This created a new challenge for BART to expand parking at the Antioch station, which opened with a 1,000-space lot, including some 370 stalls shaded by solar panels. The Pittsburg Center station at Highway 4 and Railroad Avenue includes an additional 240 stalls.

The Antioch extension not only provides a crucial link to Bay Area job centers for lower- and middle-income communities in Pittsburg and Antioch but also opens a new chapter in BART's operating history, with service provided on standard gauge track by diesel multiple unit trains similar to those used by the new Sonoma-Marín Area Rail Transit (SMART) system in Sonoma and Marin counties.

Passengers transfer to and from traditional BART trains by walking just a few steps across a new transfer platform located a couple hundred yards east of the Pittsburg/Bay Point station. Wait times for transferring passengers traveling in the peak direction are no more than two minutes during morning and evening commute periods and no more than eight minutes in the non-peak direction.

At night and on weekends, BART's schedule accommodates a seamless transfer with no wait time at all. Each of the new BART-to-Antioch cars can accommodate 200 passengers, with a peak-period capacity of 2,400 passengers per hour. Fueled by clean-burning biodiesel, the trains travel at a maximum speed of 75 miles per hour (mph), and average 60 mph including the intermediate stop at Pittsburg Center station.



Cutting the ceremonial ribbon at the new Antioch BART station are (front, left to right): Then MTC Commissioner Julie Pierce; U.S. Rep. Jerry McNerney; Contra Costa Co. Supervisor Diane Burgis; El Cerrito City Councilmember Janet Abelson. (Photo: Karl Nielsen)

SMART — Expanding Travel Options in the North Bay

Sonoma-Marin Area Rail Transit (SMART), which connects Sonoma and Marin counties by 43 miles of rail and links up with other Bay Area public transit systems, opened for service in August 2017. SMART has exceeded ridership and revenue expectations, surpassing the one-million-passenger mark in January 2019.

SMART SYSTEM MAP



SMART operates a fleet of state-of-the-art diesel trains.

(Photo: Jim Maurer)

Larkspur, Novato Downtown and Windsor Extensions

The new North Bay rail system is already growing with a 2.1-mile Larkspur extension on track to open in 2019. Funding is also secured, and work is underway on an in-fill station in downtown Novato and an extension station in Windsor, slated to open by 2021. Future stations planned for Cloverdale, Healdsburg and Petaluma North will be constructed as funds become available.

A Leader in Positive Train Control

Positive Train Control (PTC) is a federally overseen, communications-based train control system designed to enhance safety and prevent accidents. SMART was the first commuter railroad in the United States to enter revenue service demonstration (an advanced form of testing that occurs while trains operate in regular service) as a PTC system. Since opening in August 2017, SMART has safely carried passengers on more than 13,000 trips under the enforcement of the PTC system.



SMART's initial rail corridor includes 10 stations, from the Sonoma County Airport to Downtown San Rafael.

(Photo: MTC archives)

Voters Approve Local and Regional Funding Measures

Bay Area voters last year continued their strong support of transportation and housing, providing more leverage than ever for federal funds. In June 2018, Bay Area voters approved Regional Measure 3 (RM 3), the first bridge toll increase since 2010; and in November, voters rejected Proposition 6, an ill-advised repeal of a recent state gas tax increase, and supported \$6 billion in state affordable housing bonds.

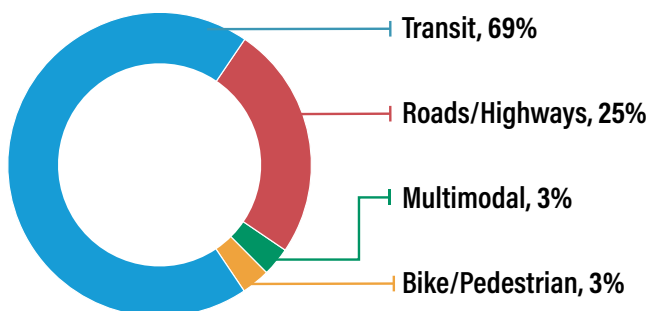


(Photo: adamkaz/iStock)

Regional Measure 3 Passed

In June 2018, 55 percent of Bay Area residents approved RM 3, a comprehensive suite of highway and transit improvements across the region's nine counties. In addition to three dozen capital projects, the measure will provide up to \$60 million a year in bus and ferry operating funds to improve transbay commutes. The measure is paid for by a \$3 bridge toll increase to be phased in over six years on the Bay Area's seven state-owned toll bridges. The first \$1 increase took effect

RM 3 Expenditure Plan by Transportation Mode (Capital and Operating Funding Over 25 Years)



January 1, 2019; however, the Howard Jarvis Taxpayers' Association filed a lawsuit challenging RM 3 as an illegal "tax." Pending resolution of the lawsuit, the new toll revenue is being transferred to an escrow account.

Senate Bill 1 Upheld

In 2017, the California Legislature enacted Senate Bill 1 (Beall), a bold new funding package providing approximately \$5 billion per year over 10 years for deteriorating roads, bridges and transit systems.



Proposition 6, an initiative on the November 2018 ballot, sought to repeal the SB 1 tax and fee increases. California voters roundly defeated Proposition 6, with a whopping 70 percent of Bay Area voters rejecting the measure. The secured funds, which are constitutionally dedicated to transportation purposes, will provide over \$450 million annually for the Bay Area — not including competitive funds available for transit and highway projects.

Affordable Housing Bonds Passed

In recognition of the severity of the housing crisis, voters also endorsed two new bond measures for housing. Proposition 1 authorizes \$4 billion in general obligation bonds to fund specified housing assistance programs, and Proposition 2 authorizes \$2 billion in revenue bonds to fund existing housing programs for individuals with mental illness. These monies will provide vital new funding to support affordable housing in the Bay Area.

Local Bonds and Taxes Passed

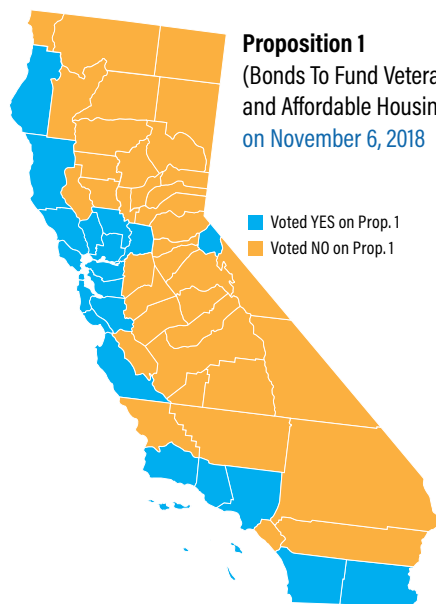
Voters also approved many notable local funding measures last November:

- **Voters in the City of San Jose** authorized \$650 million in bonds to upgrade infrastructure and mitigate for flooding;
- **San Francisco voters** authorized \$425 million in bonds to gird the Embarcadero seawall for earthquakes, flooding and a rising Bay;
- **San Francisco** also passed a new tax on businesses to fund housing and homeless services;
- **Marin County** extended its half-cent transportation sales tax through 2049, raising another \$872 million; and
- **San Mateo County** passed a new half-cent transportation sales tax, which will generate an estimated \$2.4 billion over 30 years.

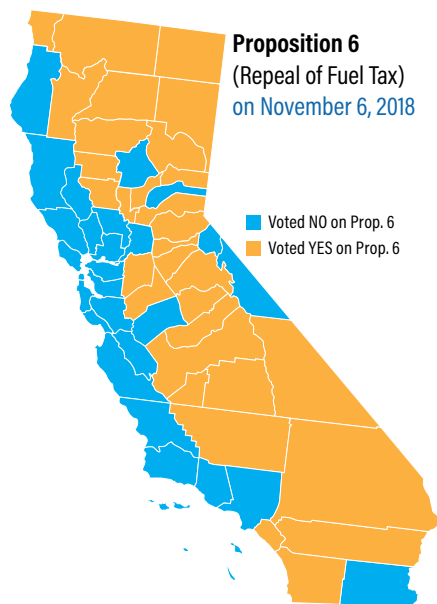
California Split on State Investment, Local Measures Get Broader Support

Counties that endorsed Proposition 1 — a \$4 billion housing bond — were many of the same counties that rejected Proposition 6, the gas tax repeal. As shown below, there is a distinct divide between coastal California and the rest of the state on support for increased spending. However, when it came to local sales tax measures dedicated to transportation, Central Valley voters in a number of counties voted in support by more than the two-thirds margin required. New sales taxes are now in place in Tulare, Merced, San Joaquin, Stanislaus, Fresno and Madera Counties, as shown in the map at bottom right.

Comparison of Voter Support for Statewide Ballot Measures by County – November 6, 2018



SOURCE: <https://vote.sos.ca.gov/returns/maps/ballot-measures/prop/1>
Statewide Results: 100.0% (24,312 of 24,312) precincts reporting as of November 14, 2018, 8:41 a.m.



SOURCE: <https://vote.sos.ca.gov/returns/maps/ballot-measures/prop/6>
Statewide Results: 100.0% (24,312 of 24,312) precincts reporting as of November 14, 2018, 8:41 a.m.

Self-Help Counties in California



SOURCE: Self-Help Counties Coalition <http://selfhelpcounties.org>

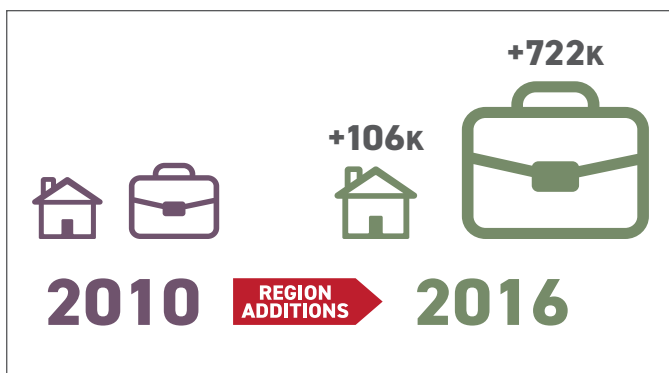
CASA: A Bold Housing Platform for the Bay Area

Whether renters, homeowners or homeless, few Bay Area residents are untouched by the extraordinarily high — and ever rising — housing prices throughout the nine-county region. Even the most comfortable homeowners worry that their children and grandchildren will face huge affordability obstacles if they wish to remain in the Bay Area as adults.



The Bay Area's housing crisis is fueled by a broad mismatch between strong job growth and insufficient commensurate growth in housing units to meet that new demand. The region added 722,000 jobs from 2010 through 2016 — yet built only 106,000 new housing units.

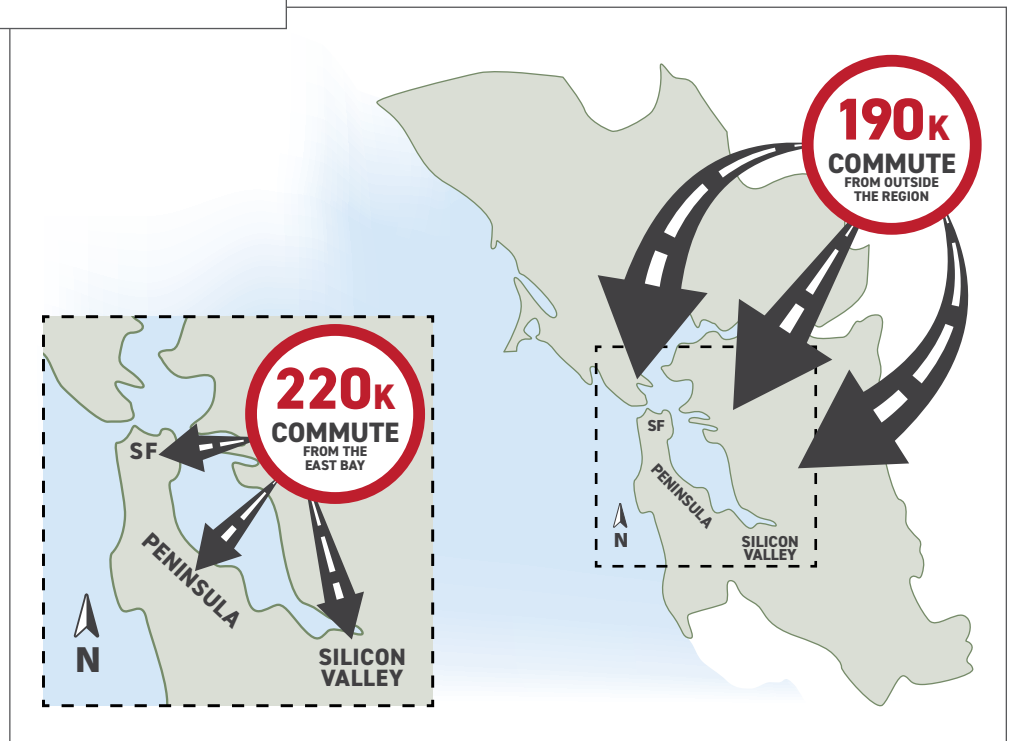
tech industry leaders, tenants' rights advocates, labor representatives, philanthropists, developers and local elected officials — agreed to a 10-point plan known as the CASA Compact aimed at three key goals: accelerate housing production, preserve existing affordable housing and protect tenants.



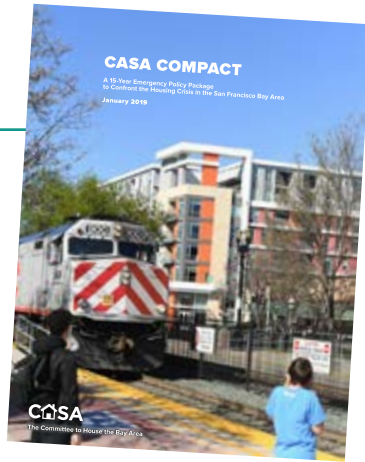
Production strategies include allowing higher building heights near transit, making some surplus and underutilized public land available for housing and raising new funding to help subsidize affordable housing. Tenant-related strategies include eviction protections, access to legal counsel, rent caps and emergency rental assistance.

We face not just a housing crisis but also growing traffic congestion that snarls freeways and drives up the region's carbon emissions as increased numbers of workers commute ever greater distances between housing and jobs.

In a bid to tackle this regional challenge, MTC and ABAG in 2017 convened a blue-ribbon panel known as CASA, the Committee to House the Bay Area. After 18 months of negotiation, the CASA Steering Committee — comprised of



Source: MTC Graphics



The CASA Compact can be downloaded at: mtc.ca.gov/casa

Funding

One of the boldest CASA Compact recommendations is to raise an additional \$1.5 billion annually at the regional level to help close an estimated \$2.5 billion affordable housing gap regionwide. Funds are proposed to be administered by a new regional housing entity and distributed with 75 percent returning to the county of origin. As for revenue source, CASA identified a number of options across a wide array of sectors, including a new vacant homes tax, a head tax for large employers, a commercial linkage fee structured to encourage greater jobs-housing balance, a share of local property tax growth and a quarter-cent sales tax.

Next Steps

Since the CASA Compact is only advisory, the next phase of the CASA effort will be in Sacramento, where the Bay Area delegation is authoring bills to implement each of the Compact’s policy recommendations. A key tenet of the CASA negotiations was a commitment to moving all components of the Compact together. Adoption of all items in 2019 is highly ambitious, but with strong support at the local level, combined with

leadership by Governor Gavin Newsom and the Bay Area’s state and federal legislative delegations, there is hope that significant progress can be made this year, in advance of the 2020 general election when funding measures could be placed on the ballot.



A VTA light-rail vehicle passes in front of an apartment complex in the South Bay. (Photo: MTC archives)



Example of an Accessory Dwelling Unit (ADU) (Photo: MTC archives)

CASA’S 10 RECOMMENDATIONS

1	Just-Cause Eviction Policy
2	Rent Cap
3	Rent Assistance and Access to Legal Counsel
4	Remove Regulatory Barriers to Accessory Dwelling Units
5	Minimum Zoning Near Transit
6	Reforms to Housing-Approval Processes
7	Expedited Approvals and Financial Incentives for Select Housing Types
8	Unlock Public Land for Affordable Housing
9	Raise \$1.5 Billion Annually from a Range of Sources to Fund Implementation of the Compact
10	Establish a Regional Housing Enterprise

Horizon: Scenario Planning for Multiple Futures

The Bay Area's future will be shaped not just by population growth, but also by natural forces such as sea-level rise, earthquakes and fires, as well as by economic booms and busts, political volatility and new technology that may fundamentally change how we travel. To explore how these and other external forces could fundamentally alter the Bay Area's future by the year 2050, MTC launched Horizon, a planning initiative to explore not just the usual transportation and land use issues addressed in our regional plan, but also economic development, resilience to natural hazards and the effects of emerging technologies over the next 30-plus years.



MTC turned to the Bay Area public to develop guiding principles for the region's future and received **over 10,000 unique comments** from residents across the region via "pop-ups" at farmers markets, libraries, shopping malls and diverse community events, as well

Horizon's Guiding Principles

Affordable: All Bay Area residents and workers have sufficient housing options they can afford. Households are economically secure.

Connected: An expanded, well-functioning transportation system connects the Bay Area. Fast, frequent and efficient intercity trips are complemented by a suite of local transportation options, connecting communities and creating a cohesive region.

Diverse: Bay Area residents support an inclusive region where people from all backgrounds, abilities and ages can remain in place—with access to the region's assets and resources.

Healthy: The region's natural resources, open space, clean water and clean air are conserved. The region actively reduces its environmental footprint and protects residents from environmental impacts.

Vibrant: The Bay Area is an innovation leader, creating quality job opportunities for all and ample fiscal resources for communities.



(Photo: MTC archives)

Participants at a Horizon pop-up event — Spring 2018

as an online engagement tool. Staff asked, "What are the most pressing issues we should consider as we plan for life in 2050?" and heard that the Bay Area public prioritizes a region that is affordable, connected, diverse, healthy and vibrant, as described in detail at left.

Connected and Autonomous Vehicles

Autonomous vehicles (AVs) and connected vehicles (CVs) have been an early focus of the Horizon initiative. While these technologies offer the potential to drastically improve transportation access in low-income areas with limited car ownership or transit options, these communities could be overlooked without specific government policies related to equitable access. Unless mandated to do otherwise, AV service providers may serve only the most profitable areas, such as busy, high-

(Photo: MTC archives)



A GoMentum test vehicle, one of a number being tested at the Concord testing facility.

income zones, business centers and shopping districts, leaving low-income areas with longer wait times and dropped rides. A Horizon study proposed the following options to minimize such risks:

Mandate equitable provision of mobility services with transparent reporting,

Subsidize public and private, shared autonomous transit innovations to supplement or replace fixed-route transit where warranted, and

Create incentives in state and federal funding programs for AV companies to prioritize underserved communities in their business models and shared mobility platforms.

Transbay Crossings Concepts

BART Crossing	Rail Crossing	Highway Crossing	BART & Highway Crossing
1	2	3	4
5	6	7	

- 1 Southern Crossing
- 2 Mission Street Redundancy
- 3 New Markets
- 4 Greater Regional Rail
- 5 Mid-Bay Bridge
- 6 San Mateo-Hayward Bridge Widening
- 7 New Markets (#3) + Greater Regional Rail (#4)

New Transbay Crossing Study Underway

With transbay corridors jammed across all modes of travel during commute hours, MTC is analyzing potential new San Francisco Bay crossing projects, including new transit and highway concepts, across multiple future scenarios. The resulting report, **Crossings - Transformative Investments for an Uncertain Future** will be an integral part of the Horizon initiative, and is expected to be published in spring 2019.

Other topics for Horizon in 2019 include studies delving into regional growth strategies, the future of jobs in the region, regional governance and sea-level rise.



Rendering of a potential new San Francisco Bay crossing alternative, accommodating rail and auto traffic.

(Rendering: MTC archives)



Clipper 2.0: Modernizing Fare Payment

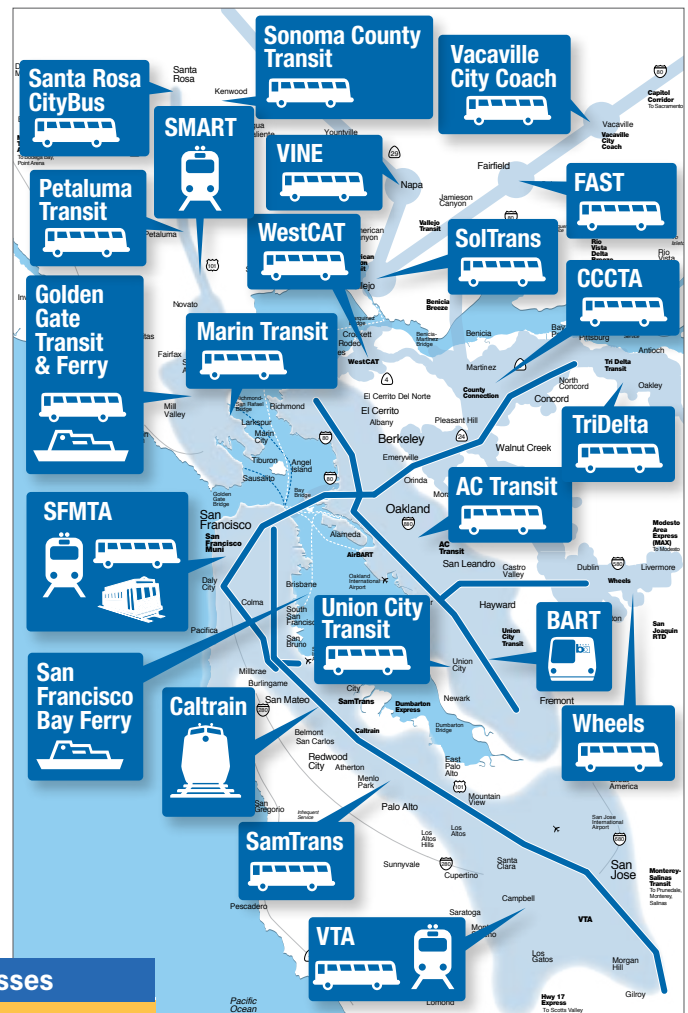


MTC in September 2018 authorized a major technological upgrade to Clipper, the Bay Area’s popular transit-fare payment card. Federal funds (both Federal Highway Administration and FTA formula dollars) comprise the majority of the Clipper 2.0 project’s \$194 million budget, with matching funds provided by voter-approved bridge tolls and state transit formula funding.

The new Clipper system will roll out over the next five years, with major improvements including:

- **A new mobile app** that will allow Bay Area transit riders to pay fares and manage their accounts with their phones;
- **Faster loading time for value** purchased online or by phone;
- **More account flexibility**, such as the ability to manage a whole family’s cards in one account; and
- **Installation of new, technologically upgraded equipment** on transit vehicles.

Bay Area Transit Operators Who Accept Clipper



Clipper offers a youth discount card, enabling young riders to receive discounts on all systems that offer them. (Photo: Noah Berger)

Clipper Successes	
23M Monthly Fare Payments	\$55M Monthly Transit Operator Revenue
825,000 Daily Weekday Transactions	97% Customer Satisfaction Rating

MTC manages Clipper on behalf of the region’s transit agencies, allowing customers to easily transfer between systems, often with discounted transfers.

Growing Express Lanes Network Offers More Motorists a Faster Commute

When completed, the Bay Area Express Lanes Network will total some 600 miles. With help from funding sources approved in 2018 — new state transportation dollars and Regional Measure 3 — an additional 124 lane miles of express lanes will be under construction this year in Alameda, Contra Costa, San Mateo and Santa Clara counties, with 68 of these lane miles set to open by mid-2020.

Bay Area Express Lanes Network



Express lanes are freeway lanes that are free for carpools, buses, motorcycles and eligible clean-air vehicles, but also available to solo drivers for a fee that varies depending on congestion and length of trip.

Today, 70 miles of express lanes are in operation on Bay Area freeways, delivering travel time savings for drivers and transit riders alike along some of the region's most heavily-trafficked commute corridors.

Contra Costa Express Lanes customers on Interstate 680 travel 10 to 13 miles per hour faster than those in the adjacent lanes. Express lanes are also beginning to generate significant revenue, as shown below.

Road pricing is one of many MTC strategies to move people more efficiently within the existing freeway footprint.
(Photo: Noah Berger)

Express Lanes: Fiscal Year 2018

Route	Revenue	Trips
Interstate 680 Contra Costa County	\$9.1 million	9.2 million
Interstate 580 Alameda County	\$15.6 million	8.3 million
State Route 237 Santa Clara County	\$1.3 million	3.0 million

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Meet Our New Executive Director

On March 1, the Metropolitan Transportation Commission welcomed a new executive director, Therese Watkins McMillan, the first woman to lead MTC. The position also serves as the executive director of the Association of Bay Area Governments. Most recently, Therese served as the chief planning officer at the Los Angeles County Metropolitan Transportation Authority. Therese replaces Steve Heminger, who retired at the end of February, after serving as MTC's executive director since January 2001 and as ABAG's executive director since July 2017.

Therese is no stranger to the Bay Area or to MTC, having worked for 25 years as a member of the Commission staff, and for more than eight years as MTC's deputy executive director for Policy before her 2009 appointment by President Barack Obama to serve as deputy administrator of the Federal Transit Administration (FTA) and subsequently as acting FTA administrator from March 2014 to March 2016.

During the final five years of her original MTC tenure, Therese also was an instructor of transportation funding and finance in the Transportation Management Graduate program at San Jose State University's Mineta Transportation Institute.

Therese received her bachelor of science degree from U.C. Davis in 1981, a master's degree in Civil Engineering Science from U.C. Berkeley in 1983, and a master's degree in City and Regional Planning from U.C. Berkeley in 1984.



Therese Watkins McMillan

She has served since 2012 as a member of the Advisory Board for the UCLA Lewis Center for Regional Policy Studies, and was named a senior fellow for the 2011-12 academic year at the UCLA Luskin School of Public Affairs. She received an Alumni Award of Distinction from the U.C. Davis College of Agriculture and Environmental Studies in 2016; a 'Women Moving the Nation' award from the Conference of Minority Transportation Officials in 2013; and a Distinguished Alumna Award from the U.C. Berkeley College of Environmental Design in 2011.

Therese has long been active in the Women's Transportation Seminar (WTS) and served as president of the San Francisco Chapter in 1989 and 1990. She was named WTS National Woman of the Year for 2016, and as Woman of the Year for the Washington, D.C., Chapter in 2015 and the Los Angeles Chapter in 2011. WTS' San Francisco Bay Area Chapter named Therese its Member of the Year for 2002 and as its Woman of the Year for 2010.



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