# ACCELERATING PROGRESS: Strong Partnerships Move the Bay Area Forward

Annual Report to Congress March 2018





ASSOCIATION OF BAY AREA GOVERNMENTS METROPOLITAN TRANSPORTATION COMMISSION





BayAreaMetro.gov

March 2018

To Our Federal Representatives:

In 2018, Congress has an opportunity to make a stand for America's infrastructure. First and foremost the Metropolitan Transportation Commission (MTC) and Association of Bay Area Governments (ABAG) urge Congress to honor existing bipartisan commitments to core transportation, housing and disaster relief programs. A supplemental infrastructure initiative to modernize our nation's highways, ports, trains, buses and housing stock could further grow the economy, relieve congestion and improve the quality of life for Bay Area residents.

MTC and ABAG look forward to engaging in the conversation about America's infrastructure and the first portion of our report seeks to further that dialogue. The balance of this report provides an update on our federal appropriations priorities, North Bay wildfire recovery, and the region's ongoing efforts to improve mobility and address the Bay Area's chronic housing shortage.

Please note that this is our first joint Report to Congress. As you know, MTC and ABAG serve as the San Francisco Bay Area's transportation and land use planning agencies, respectively. In July 2017, the two agencies signed a contract for services to consolidate staff under MTC, culminating a two-year effort to enhance regional cooperation and better serve Bay Area residents and local governments. Building on this collaboration, MTC and ABAG have coordinated to identify the Bay Area's federal priorities related to the interwoven issues of housing affordability, access to jobs, and congestion across the Bay Area's highways and transit systems.

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 2018. 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, 202.775.0079.

Sincerely,

Jake Mackenzie Chair Metropolitan Transportation Commission

David Rabbitt President Association of Bay Area Governments

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ASSOCIATION OF BAY AREA GOVERNMENTS METROPOLITAN TRANSPORTATION COMMISSION

Published by the Legislation and Public Affairs Section

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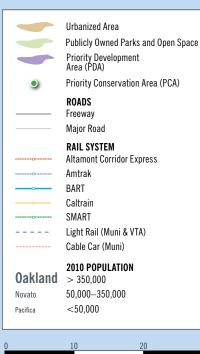
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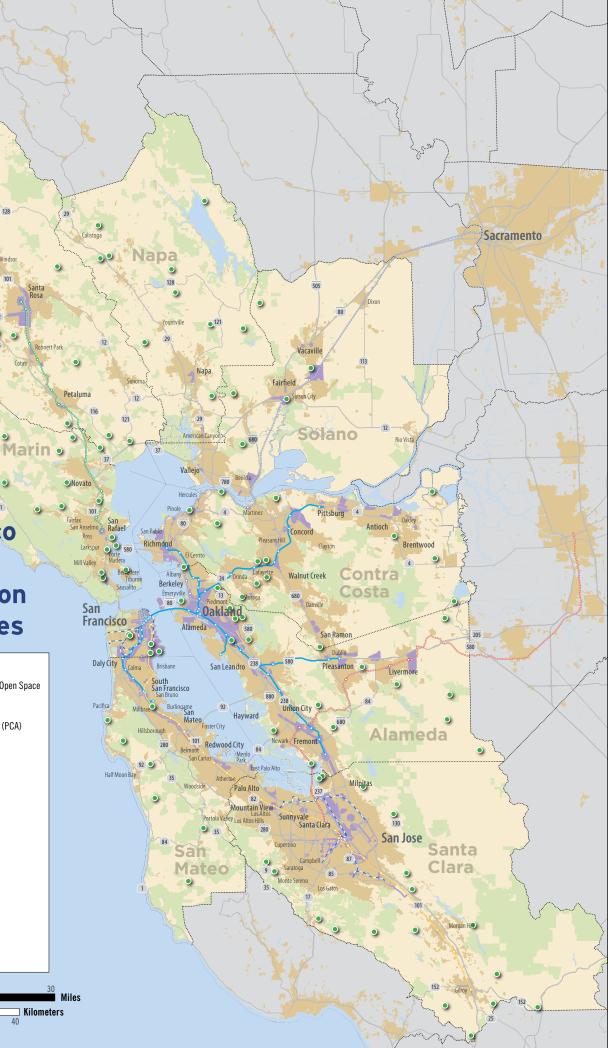


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# Priorities for a National Infrastructure Initiative

MTC and ABAG are encouraged that Congress and the Trump Administration are discussing a national infrastructure initiative. Robust federal investment in our nation's highways, ports, trains, buses and housing stock will grow the economy, relieve congestion and improve the quality of life for Bay Area residents.



# Support a Federal Incentive for Self-Help

TC and ABAG 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 — as is proposed in the Trump initiative. 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.

Bay Area voters time and again have supported transportation priorities by passing city, county and regionwide self-help measures. Each year, voterapproved taxes and tolls generate nearly \$2 billion for road, bridge and transit improvements in the Bay Area.

This trend is extending to housing — Alameda County, Santa Clara County and the City and County of San Francisco have each approved multimillion dollar affordable housing bonds. This year, voters will again consider ballot measures to invest in traffic relief and new housing supply (see page 20). The Bay Area is creating new jobs, inspiring innovation and strengthening the national economy. Yet, residents are frustrated by increasingly long, crowded commutes and businesses are struggling to retain talent as their employees face skyrocketing housing costs. Similar challenges in communities across the country threaten the middle class and limit the nation's ability to remain globally competitive.

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

1. Restore the Highway Trust Fund's solvency.

Any 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 flexible funding directly to metro areas will empower local communities to deliver a smarter, cleaner transportation future.



Persistent traffic delays afflict over 180,000 people who cross the Bay Bridge every day, as evident in the above toll plaza backup. (Photo: Noah Berger)

- 4. Shorten project delivery time. Reviews by multiple agencies can add months or even 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. Housing prices driven by demand that has far outpaced supply have pushed residents farther and farther away from job centers, contributing to record congestion levels. 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.

### **United States Metro Economies**

(% Share of 2015 National Economic Indicators)

Metropolitan Areas Non-Metropolitan Areas Population 86% 14% Gross Domestic Product (GDP) 91% 9% Job Growth 97% 3% **GDP Growth** 99% 1% 0 20 40 60 80 100

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

# President's Budget Moves the Bay Area Backward

Simultaneous with the release of its long-awaited infrastructure proposal, the Trump Administration released a budget that radically reduces federal investments in bipartisan-supported programs that enhance the nation's infrastructure. This is a major step in the wrong direction. MTC and ABAG strongly urge Congress to reject the President's fiscal year 2019 budget request to slash billions of dollars in transportation and housing funding. We need to make expanded investments — not cuts — in the Bay Area and communities around the country.

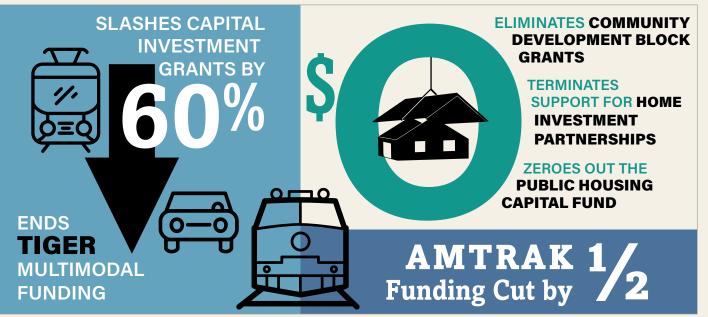
President Trump's \$200 billion infrastructure proposal will barely make a dent in the nation's infrastructure funding backlog. The American Society of Civil Engineers estimates the United States needs to invest ten times more, or \$2 trillion over 10 years, to bring our roads, rail, energy and other infrastructure into a state of good repair.

To make matters worse, the President's fiscal year 2019 budget would slash billions of dollars from rail and transit programs that help the Bay Area relieve congestion and improve mobility. It would also eliminate federal funding for local governments to revitalize communities and provide shelter for our region's most vulnerable households.

In total, the budget would cut federal transportation investment by \$3 billion and reduce support for housing by nearly \$7 billion, a 14 percent drop. Unfortunately, neither the President's fiscal year 2019 budget nor the infrastructure package proposes a solution to the impending insolvency of the Highway Trust Fund — the primary federal transportation funding source — which is set to run out of money after the FAST Act expires in 2020. An additional \$110 billion is needed to simply maintain current levels of highway and transit funding in the next long-term transportation bill.

Congress should reject this destructive proposal and continue to work on long-term, bipartisan solutions to reinvest in America.

### **2019 Budget Would Decimate Housing and Transportation Programs**



# Financing Bay Area Transit Capital Projects

Federal Transit Administration (FTA) funding certainty is needed to jump-start the region's ongoing transit modernization. MTC urges Congress to fully appropriate FTA grants as authorized and asks for the FTA green light for our transit project acceleration proposal.

MTC, with the support of Bay Area transit operators, is requesting administrative approval from FTA to accelerate the delivery of high-priority transit projects by issuing revenue bonds or grant anticipation notes backed by future FTA formula funds. This would require a Letter of No Prejudice from FTA, which would allow MTC to commit future FTA funds to repaying the debt.

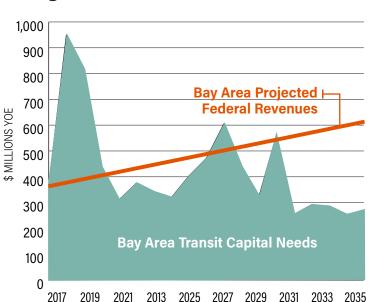
Financing secured by these formula dollars, matched with other regional funds, would empower MTC to deliver the following package of fleet modernization and core capacity improvements more than a decade earlier than if the projects were completed as formula funding became available:

- Bay Area Rapid Transit (BART) train 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. Unreliable federal funding could result in higher interest rates, driving up borrowing costs. For example, a one percent interest rate increase could add an estimated \$114 million to MTC's debt service payments.



*BART's new train cars will feature three doors on each side to reduce noise, improve reliability and increase capacity.* (Photo: Courtesy of BART)



#### Financing Addresses Mismatch Between Timing of Transit Needs and Revenues

# 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 keep the Bay Area moving.

The Bay Area invests federal transportation funds for public transit, road repair, safety and mobility projects throughout the region. The federal-state-local partnership was reinforced with the passage of the FAST Act, which increased California's federal transportation formula funding by nearly \$700 million over the course of the authorization (2016–2020).

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 <sup>†</sup>	\$5,500	\$1,500
Transbay Transit Center (Phase 2/ Caltrain Downtown Extension) <sup>†</sup>	\$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 and help the region meet climate change and air quality improvement goals (see the sidebar on page 7).



The Golden Gate Bridge suicide barrier, shown in the rendering above, will finally answer the call of so many families who have lost loved ones to suicide. (Rendering: Courtesy of the Golden Gate Bridge, Highway and Transportation District)

MTC invests around \$170 million of these funds each year, primarily through the One Bay Area Grant (OBAG) program. MTC recently awarded a second round of OBAG grants, funding projects like:

- Vision Zero Priority Safety Corridor Improvements along McKee Road and Tully Road — two of San Jose's most dangerous streets
- Multimodal transportation improvements in El Cerrito that will catalyze transit-oriented development around El Cerrito del Norte BART Station
- Repaving Willow Pass Road in Concord to improve ADA accessibility and deliver a safe walking and biking route to Wren Avenue Elementary School

The program also provided \$40 million to close the funding gap for the Golden Gate Bridge suicide barrier, which began construction in early 2017, and \$22 million to implement proven greenhouse gas reduction strategies.



### Transportation Funds as a Housing Production Incentive

Since 1997, the Bay Area has leveraged federal highway funds to increase housing supply in transit-accessible neighborhoods. Currently, MTC rewards cities and counties that approve new housing construction and adopt housing-supportive local plans with additional Surface Transportation Block Grant (STBG) and Congestion Mitigation and Air Quality Improvement (CMAQ) funds.\*

Cities and counties may use the funds for a wide range of transportation projects, from Safe Routes to School to local street and road maintenance. Focusing new housing near high-quality transit will be even more important in the future, as the Bay Area absorbs a 33 percent increase in population through 2040 while meeting state-mandated climate goals to reduce per capita greenhouse gas emissions.

\* Funds are awarded through the OBAG program.

### New Starts Projects Near Completion

The Bay Area is making great progress on game-changing rail expansions. Thanks to strong funding commitments from local, state and federal partners, the North Bay's first modern passenger rail service — Sonoma-Marin Area Rail Transit (SMART) — is exceeding ridership and revenue expectations, and the Bay Area Rapid Transit (BART) Silicon Valley, Phase 1 extension to Berryessa and the San Francisco Municipal Transportation Agency's (SFMTA) Central Subway project are slated to open in 2018 and 2019, respectively. The projects are awaiting their final installments of federal funds.



The Warm Springs BART station opened in 2017, bringing rapid transit closer to job growth in Silicon Valley. (Photo: Jim Maurer)



Construction of the Central Subway's Yerba Buena/Moscone Station in San Francisco (Photo: Courtesy of SFMTA)

#### **BART Silicon Valley, Phase 1**

BART Silicon Valley is a 16-mile, six-station extension of the BART system from its current terminus in Fremont to Silicon Valley. The Berryessa extension project (Phase 1 of 2) consists of a 10-mile extension into San Jose and two stations — Milpitas and Berryessa. Trains with frequencies of approximately 15 minutes will operate during peak commute periods.

Construction work on Phase 1 is nearly complete and systems testing is underway. The project is under budget and is expected to open for revenue service in 2018.

MTC urges Congress to appropriate and the Federal Transit Administration (FTA) to award the final \$97 million installment of federal funds.

### **SFMTA Central Subway**

San Francisco's Central Subway project is making good progress. When open for revenue service in 2019, the 1.7mile extension of Muni Metro's T Third line will provide direct connections to major cultural, educational, retail and employment opportunities between the South of Market (SOMA) area, downtown and Chinatown, as well as seamless intermodal links with BART, Caltrain and future California High-Speed Rail.

MTC urges Congress to appropriate and FTA to award the project \$23 million to close out the full funding grant agreement (FFGA).

#### **SMART Larkspur Extension**

The Larkspur Extension project is a 2.1-mile extension of the locally funded 43-mile SMART passenger rail system. SMART opened in 2017 with a fully compliant Positive Train Control (PTC) system — the first new PTC-compliant rail system in the United States. The project received a \$23 million Small Starts appropriation in fiscal year 2016 and hopes to receive a single-year small starts grant agreement (SSGA) from FTA in 2018. Contracts have been awarded and work has been underway since September 2017. The project is scheduled to open in late 2019.



SMART's clean diesel trains — which are assembled in Rochelle, Illinois — are providing a new transportation option for North Bay residents. (Photo: Jim Maurer)

MTC urges FTA to expeditiously award the SSGA.

### **FTA Capital Investment Grants Deliver Major Projects**



**Bay Area CIG Projects** 

Federal dollars account for only nine percent of the Bay Area's total transportation investments, but are nonetheless critical to delivering some of the region's most important transit modernization and expansion projects. The Capital Investment Grants (CIG) program is key to delivering major projects that will improve transit connectivity between the region's population and job centers. The Bay Area anticipates receiving \$4.5 billion in CIG funding in the coming years. Five CIG grant-funded projects are currently under construction, and Bay Area transit operators hope to secure future awards for another six projects.

The bipartisan passage of the FAST Act in 2015 delivered a significant win for the Bay Area by expanding the CIG program. MTC urges Congress and the Trump Administration to continue to fund and administer the program as authorized in the FAST Act.

# Caltrain Modernization

Construction is underway to make Caltrain a modern, electric commuter rail system whose tracks can accommodate future high-speed rail. Thanks to strong leadership from the Bay Area congressional delegation, Caltrain's Peninsula Corridor Electrification Project (PCEP) secured a \$647 million full funding grant agreement (FFGA) in 2017, allowing the long-anticipated modernization project to move forward.



Caltrain's new electric trains will be assembled by workers beginning in May 2018 at the new Stadler U.S. manufacturing facility in Salt Lake City, Utah. (Rendering: Courtesy of Stadler)

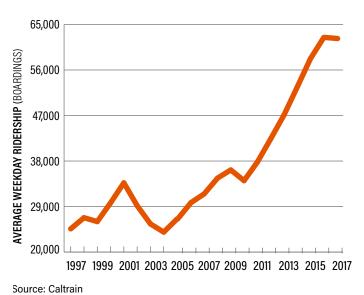


Governor Jerry Brown joined Congresswoman Anna Eshoo, Congresswoman Jackie Speier, House Democratic Leader Nancy Pelosi and state and local officials at the Millbrae Caltrain Station for the official PCEP groundbreaking. (Photo: Courtesy of Caltrain)

Caltrain serves as a vital link for employees living in San Francisco and working at many of the nation's most high-profile tech companies. As shown in the chart below, ridership has skyrocketed over the past decade, with demand for the service now far-exceeding existing capacity. PCEP will transform 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.

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 eliminating some 620,000 daily vehicle miles from busy local streets and the increasingly congested Interstate 280 and U.S. Route 101 corridors. The project will create over 9,600 jobs, including 550 jobs in Salt Lake City, Utah, where the project is the driving force behind a new domestic railcar facility.

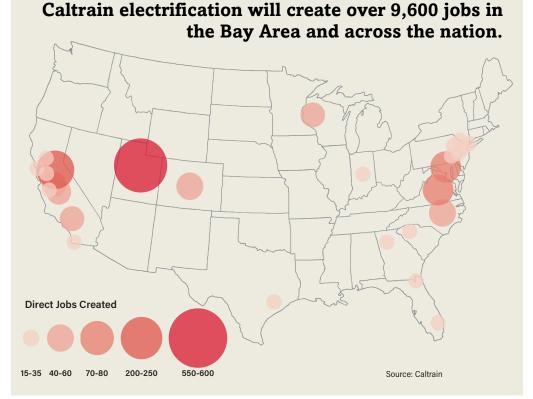
#### Caltrain Ridership Growth, 1997–2017

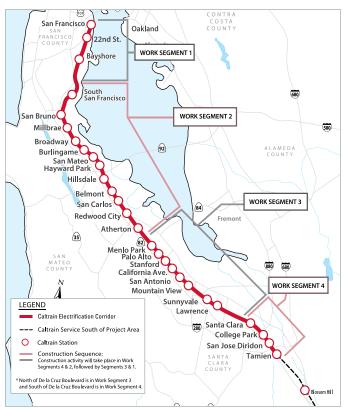


The project broke ground in May 2017. As shown in the map below, the project is comprised of four work segments. Construction is underway on Segments 2 and 4. The first electric trains are anticipated to be in service by 2022.

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.

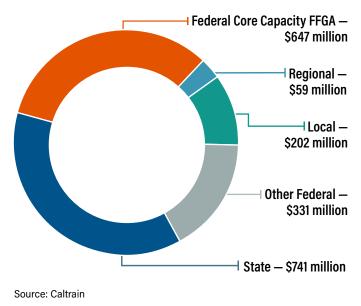
MTC urges Congress to appropriate \$100 million for fiscal years 2018 and 2019, consistent with the President's budget request.





#### **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 expansions:

- BART Silicon Valley, Phase 2
- San Francisco Transbay Transit Center (Phase 2/Caltrain Downtown Extension)
- BART Transbay Core Capacity



BART will connect with future high-speed rail at the planned Diridon Station in San Jose. (Rendering: Courtesy of VTA)

### **BART Silicon Valley, Phase 2**

With BART Silicon Valley, Phase 1 slated for completion in 2018, progress is being made on the second phase to extend BART via subway to downtown San Jose. A proposed \$1.5 billion federal New Starts grant comprises 32 percent of the \$4.7 billion Phase 2 funding plan.

In early 2016, the Federal Transit Administration (FTA) approved BART Silicon Valley, Phase 2 to enter into New Starts project development, and a record of decision from FTA is needed in 2018. The Santa Clara Valley Transportation Authority (VTA) anticipates seeking an FFGA for this next phase of the project in 2019.

The six-mile extension includes five miles of tunnel and four stations (Alum Rock, Downtown San Jose, Diridon Station 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.

	Committed Funding	FFGA Anticipated	Other Funding	Total Project Cost	FFGA Share
BART Silicon Valley, Phase 2	\$2.5	\$1.5	\$0.7	\$4.7	32%
San Francisco Transbay Transit Center (Phase 2/ Caltrain Downtown Extension)	\$0.8	\$1.0	\$2.1	\$3.9	26%
BART Transbay Core Capacity	\$0.7	\$1.3	\$1.5	\$3.5	36%

Next Generation Transit Funding Plans (Billions)

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

# San Francisco Transbay Transit Center (Phase 2/Caltrain Downtown Extension)

The second phase of the Transbay Transit Center Project, commonly referred to as the Downtown Rail Extension or DTX, will modify the existing Caltrain station at Fourth and King streets, including adding a new adjacent underground station at Fourth and Townsend streets, and extending the Caltrain rail line 1.3 miles downtown into the new transit center near the heart of the Financial District. Phase 2 of the Transbay Program will also include the buildout of the below-grade train station, a BART/Muni pedestrian tunnel and an intercity bus facility.

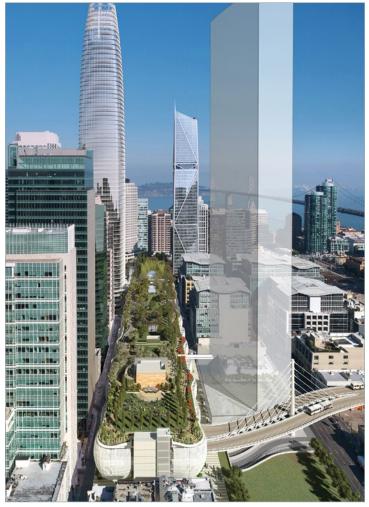
The underground rail line is being designed to accommodate high-speed rail and other rail connections to the East Bay, making the new transit center a future hub for rail service in Northern California. The project is seeking a \$1 billion FFGA.

### **BART Transbay Core Capacity Project**

BART ridership continued at record levels in 2017, averaging 27,000 riders each hour during the transbay morning commute. While this robust growth is good, the system exceeds its design capacity during the peak commute times, compromising the region's continued economic growth and mobility.



*Peak direction rush-hour trains on BART regularly exceed 100 percent capacity.* (Photo: Jim Maurer)



An aerial rendering of the Transbay Transit Center. Transbay and local bus operations are slated to begin service this year. (Rendering: Pelli Clarke Pelli. Courtesy of Transbay Joint Powers Authority [TJPA])

BART's Transbay Core Capacity Project will ultimately 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.

BART is completing project development work and has applied for FTA approval into the engineering phase. BART anticipates seeking an FFGA in 2019.

# Improved Regional Coordination for a Better Bay Area

In July 2017, MTC and ABAG became one consolidated staff serving two boards, culminating a twoyear effort to enhance regional cooperation and better serve the Bay Area.



#### **Better Serving Bay Area Residents**

MTC and ABAG serve as the San Francisco Bay Area's transportation planning and land use agencies, respectively. For decades, the two agencies have worked in partnership, but California's landmark greenhouse gas reduction law — Senate Bill 375 (Steinberg, 2008) — enhanced this collaboration.

Now, MTC and ABAG are jointly responsible for creating Plan Bay Area 2040, a regional roadmap for accommodating projected household and employment growth as well as a transportation investment strategy. This long-range plan is one of MTC's responsibilities as the Bay Area's federally designated metropolitan planning organization. It also meets the state requirement for the region's growth strategy to reduce greenhouse gas emissions from cars and light-truck travel, including planning for adequate housing near jobs and transit.

#### Action in the Face of Crisis

Today, three of the Bay Area's most critical challenges are the interwoven issues of housing affordability, access to jobs, and congestion across the Bay Area's highways and transit systems. From 2011–2015, the region added more than 500,000 jobs but only 65,000 housing units, creating the most expensive housing market in the country. High housing costs are driving workers farther and farther away from job centers, degrading

their quality of life and hindering our efforts to achieve state climate goals.

With one staff reporting to a single executive team, MTC and ABAG are better positioned to develop creative, effective strategies for addressing these complex challenges. Currently, the consolidated staff still reports to the governing boards of each agency. Under their agreement, the two agencies will consider broader governance reforms in 2019.

#### Bay Area 2011–2015 NEW JOBS 500,000 MARK HOUSING 65,000 MARK HOUSING

# Resilient by Design — Innovative Ways to Hold Back the Tides \_\_\_\_\_

Sea level rise is an impending threat in the Bay Area where many communities and some of our most critical infrastructure — including all three airports — are situated along the waterfront.

### A Bay Area Challenge

Resilient by Design is a \$6 million community-driven competition that is challenging the world's top architects, designers, environmental engineers, ecologists and other experts to imagine design solutions for 10 at-risk locations along the San Francisco Bay shoreline. The winning teams are working directly with Bay Area residents to address specific threats in their communities through innovative design solutions developed at each site that can be replicated throughout our region. The 10 design concepts will be revealed in May 2018. The Bay Area Regional Collaborative — which includes representatives from MTC, ABAG, the San Francisco Bay Conservation and Development Commission, and the Bay Area Air Quality Management District — is coordinating with a diverse set of Bay Area partners to spearhead Resilient by Design. This design challenge is one piece of an aggressive and coordinated effort to understand and prepare for the impacts of climate change. Moving forward, the region will require strong support from our federal partners to build more resilient infrastructure.



South San Francisco in San Mateo County, pictured above, is one of the Resilient by Design Bay Area sites. (Photo: iStock)

# North Bay Wildfires – Road to Recovery

Starting on October 8, 2017, dry weather and strong winds caused a series of wildfires in northern California to spread rapidly, triggering mass evacuations, burning nearly 230,000 acres, destroying 8,600 structures and, tragically, killing 44 people before the fires were fully contained. Statewide, the October 2017 wildfires caused an estimated \$9.4 billion in damages. The North Bay wildfires alone — affecting Napa, Sonoma and Solano counties — account for more than 95 percent of the claimed losses. The deadliest wildfires in state history, the blazes triggered a national disaster declaration on October 10.



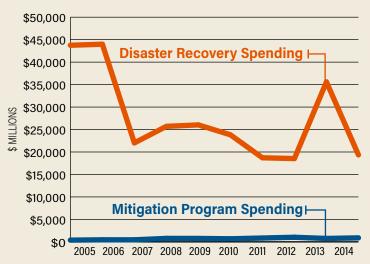
Santa Rosa lost more than 3,000 homes – five percent of the city's housing stock – to the Tubbs Fire. (Photo: ©Noah Berger)

MTC and ABAG thank Congress for approving California's request for \$4.4 billion in wildfire recovery funding and urge continued support for rebuilding efforts. Additionally, as natural disasters increase in frequency and severity, it is more important than ever for our federal partners to increase upfront investments in resilient infrastructure and mitigation programs, like the Federal Emergency Management Association's (FEMA) Hazard Mitigation Grant Program and Pre-Disaster Mitigation Program. This upfront investment not only delivers monetary returns — every \$1 invested in mitigation saves \$6, according to a National Institute of Building Sciences 2017 report — but also saves lives.

### **More Federal Funding Needed for Mitigation**

Of the \$278 billion that the federal government spent on disaster assistance from 2005–2014, very little went to reducing communities' risks before major disasters hit. As shown here, spending on FEMA's mitigation programs — including Flood Mitigation Assistance, Hazard Mitigation Grant Program, Pre-Disaster Mitigation Grants and other assistance — is minuscule in comparison to what was spent on disaster recovery costs over the same time period.

Source: Government Accountability Office, "Federal Disaster Assistance" (September 2016), http://www.gao.gov/products/GAO-16-797.



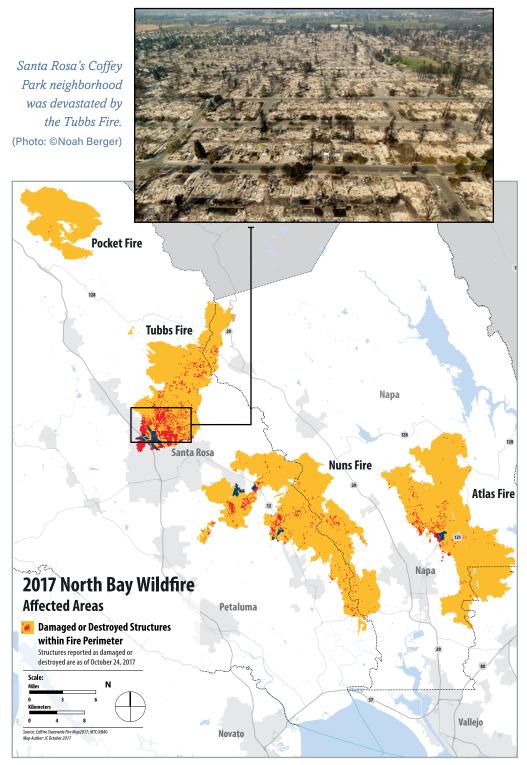
#### Federal Disaster Spending, 2005 – 2014

### Bay Area Mitigation and Resilience Efforts

ABAG has provided assistance to jurisdictions for natural disaster research, mitigation and recovery since the 1970s. ABAG relies on grants from FEMA, the U.S. Geological Survey and philanthropic organizations to help jurisdictions prepare Local Hazard Mitigation Plans, enact seismic retrofit policies and minimize risks of natural hazards.

ABAG also works closely with the Bay Conservation and Development Commission and the Bay Area Regional Collaborative on regional approaches to climate change adaptation. ABAG and MTC plan to more fully incorporate resilience into the next long-range transportation and land-use plan update in 2021.

After the 2017 wildfires, ABAG worked with our local North Bay partners to share expertise on long-term disaster recovery and provide direct, in-house consulting for the city of Santa Rosa the Bay Area's fifth largest city — which suffered the greatest structural damage from the fires.



2017 had the most damaging wildfire season on record, with total costs of \$18 billion nationwide. The North Bay fires in Sonoma, Napa and Solano counties comprise half the national cost. (Map: MTC)

### Housing Crisis Spurs Action

CASA – the Committee to House the Bay Area – is a blue-ribbon panel of housing experts, the business community, labor and affordable housing representatives, as well as local elected officials, including Oakland Mayor Libby Schaaf and San Jose Mayor Sam Liccardo. CASA was convened by MTC in 2017 to identify and act upon game-changing regional solutions to the Bay Area's chronic housing affordability crisis. By setting ambitious goals and gathering key players in one room, consensus will hopefully emerge on a few bold initiatives.



The devastating 2016 Ghost Ship warehouse fire in Oakland killed 36 people, remembered by this vigil. The tragedy shined a harsh light on the Bay Area's housing crisis and its consequences for artists and other low-income residents. (Photo: Jim Wilson/New York Times/Redux)

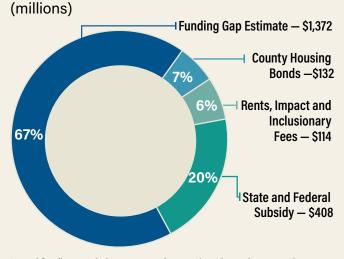
With the Bay Area's economy growing at three times the national average, the region's continued vitality is critical to continued state and national prosperity. Yet, high housing costs in the Bay Area are a major burden for many residents and are threatening the Bay Area's future growth. Many workers can no longer afford to live near the region's major employment centers, and businesses are losing workers to out-of-state metro areas like Seattle, Washington; Portland, Oregon; and Austin, Texas. This lack of affordable shelter is jeopardizing the future of California's working class and limiting our ability to remain globally competitive.

In the face of this challenge, leaders from across the Bay Area have come together through CASA to build political

**Bay Area's Annual Housing Funding Gap** 

### **Federal Funding Request**

MTC and ABAG urge Congress to reinvest in housing programs and expand the state's most important housing financing tool, the Low Income Housing Tax Credit. Far too many Bay Area families are struggling with high housing costs. In Richmond, for example, a person earning minimum wage must work three full-time jobs to afford rent for a two-bedroom unit. Bay Area residents continue to do their part, taxing themselves to invest in affordable housing (see page 20 for another housing measure slated for the November 2018 ballot). But a steep decline in federal resources and the 2017 tax bill have left housing programs underfunded, limiting new production of affordable shelters.



Annual funding needed to construct low- and moderate-income units, as determined in the 2015-2022 Regional Housing Needs Allocation. Note: This chart does not include revenues anticipated from the state housing bills enacted in 2017.

consensus around increasing housing production at all levels of affordability, preserving existing affordable housing and protecting vulnerable populations from displacement.

CASA will develop a suite of policy and funding recommendations that together will form an action plan for state and local legislative change.

A final report is slated for release in late 2018. For more information, visit https://mtc.ca.gov/casa.



*Gish Apartments is a transit-accessible, LEED certified affordable housing development in downtown San Jose.* (Photo: Bernard Andre, courtesy of First Community Housing)

### **Performance Metrics at Work**

CASA was convened following the release of the draft Plan Bay Area 2040 (Plan) the region's federally-required long-range transportation plan — which projects the Bay Area will see 2.4 million more people, 820,000 new households and 1.3 million new jobs by the year 2040. The Plan makes bold assumptions about policy interventions and strategies to help accommodate this growth, but falls short on a number of key performance targets,



including low-income housing production, access to jobs, displacement risk, and housing and transportation affordability.

This performance-based approach spotlighted the risk that the housing crisis poses to low- and moderate-income Bay Area households and the region's continued dynamism and diversity.

	Goal	Plan Bay Area 2040 Performance	
Reduce congested delay on goods movement corridors	-20%	-29%	BEST
Increase number of middle-wage jobs	+38%	+43%	
Reduce per-capita greenhouse gas emissions	-15%	-16%	
Preserve open space and agricultural lands	100%	100%	
Accommodate region's housing needs	100%	100%	
Reduce delays from aging transit infrastructure	-100%	-75%	
Increase non-auto mode share	+10%	+3%	
Increase share of affordable housing	+15%	+3%	
Reduce adverse health impacts	-10%	-1%	
Increase access to jobs	+20%	-0%	
Reduce vehicle costs from aging road infrastructure	-100%	+6%	
Do not increase risk of displacement	+0%	+5%	
Reduce share of income spent on housing + transportation	-10%	+13%	WORST

# Transportation and Housing Measures Head to the Ballot \_\_\_\_\_

Voters will be making big decisions in 2018 to either approve or reject tens of billions of dollars in new transportation and housing investments authorized by the California Legislature in 2017.



*SB 1 is expected to generate more than \$5 billion for transportation investments in the Bay Area over the next 10 years.* (Photo: iStock)

### Senate Bill 1

Last year, Governor Jerry Brown signed Senate Bill 1 (Beall), a historic transportation package investing \$52 billion over 10 years in the state's deteriorating roads, bridges, culverts and transit systems. However, an initiative is being pursued for the November 2018 ballot to not only repeal SB 1 funds but also put in place draconian provisions prohibiting state leaders from funding future transportation investments.

### **Statewide Housing Bond**

The state legislature also approved a suite of housing bills in 2017, which are intended to begin addressing the state's chronic housing shortage. These bills include new ongoing revenue, various proposals designed to expedite housing construction and a \$4 billion state housing bond — Senate Bill 3 (Beall) — which California voters will consider at the November 2018 election.

### **Regional Measure 3**

In 2018, Bay Area residents will also be voting on Regional Measure 3, a \$4.5 billion capital investment package to improve commutes and reduce congestion in Bay Area bridge corridors paid for by increased tolls on the Bay Area's seven state-owned toll bridges. MTC has placed Regional Measure 3 on the June 5, 2018 ballot. The map at right shows projects that will be funded with new bridge toll revenues, should Bay Area voters approve the measure by a simple majority vote.



Governor Brown and state legislators, housing leaders and local elected officials celebrate at the housing package signing ceremony in San Francisco. Oakland Mayor and MTC Commissioner Libby Schaaf and the late San Francisco Mayor and ABAG Executive Board Member Ed Lee are pictured on the left. (Photo: Jeff Walters, California Assembly Democratic Caucus)



#### **Regional Measure 3 Project Map**

ASSOCIATION OF BAY AREA GOVERNMENTS & METROPOLITAN TRANSPORTATION COMMISSION

## Future Mobility in the Bay Area\_

The Bay Area is one of the nation's leaders in the development of autonomous vehicle (AV) and connected vehicle (CV) technologies, which have the potential to deliver significant safety, mobility, environmental, equity and economic benefits. MTC is engaging on a variety of fronts — including research, planning and funding — to maximize the benefits of these technologies.

#### **Grants and Pilots**

MTC recently launched a new initiative called Innovative Deployments to Enhance Arterials (IDEA). The grant program will award \$13 million in federal funds to help cities, counties and transit agencies improve the operation of major arterial roadways and prepare them for connected and automated vehicle technologies. IDEA funds may be used to deploy existing congestion reduction technologies or to support regional readiness for future AV/CV fleets by deploying pilot concept projects.

A variety of AV projects are already underway in the Bay Area to pilot driverless technologies, many of them building off of work being done at the Contra Costa Transportation Authority's (CCTA) GoMentum Station, a U.S. Department of Transportation (USDOT) designated proving ground. GoMentum Station is bringing together automobile manufacturers, technology companies and others to advance transportation technologies.

Following trial runs at GoMentum Station, electric driverless shuttles — or shared autonomous vehicles (SAVs) — are undergoing prototype testing at Bishop Ranch, a 585-acre office park in San Ramon, California. CCTA is leading this pilot demonstration project which will shuttle workers on the 12-passenger SAVs between transit and parking facilities to offices.

Similarly, San Francisco anticipates testing and deploying three electric SAVs on Treasure Island to provide on-demand last-mile transit connections. This autonomous shuttle will be partially funded with an \$11 million USDOT technology deployment grant.



GoMentum Station, one of the largest secure AV test facilities in the United States, is located in the City of Concord in Contra Costa County. (Photo: Honda; Courtesy of CCTA)



The City of Dublin received an IDEA grant to help fund a project to test, and later place into service, the use of SAVs on public roads near the Dublin/Pleasanton BART station (pictured above). The project is a collaboration between the Livermore Amador Valley Transit Authority, the City of Dublin, CCTA, Stantec and GoMentum Station. (Photo: MTC Archives)

### **Research and Planning**

In 2015, MTC partnered with metropolitan planning organizations throughout California to form the Future Mobility Research Program (Future Mobility). Future Mobility supports research on emerging technologies, including AV/CVs, to inform the travel demand models that are the foundation for long-range transportation plans. These simulation models, combined with guidance from futurists and industry experts, will serve as the backbone for a new effort to plan for, and help shape, a range of possible AV/CV futures.

This effort will inform big questions facing the transportation industry, such as:

- Will AV/CVs substantially increase the vehicle capacity of existing highway lanes? If so, does it make sense to add additional physical capacity today?
- What roadway investments could incentivize the shift to AV/CVs and expedite short-term safety benefits?



An EasyMile SAV at Bishop Ranch business park during a deployment demonstration in 2017. (Photo: CCTA)

How might automation help solve the first-mile/lastmile transit challenge, reducing barriers to growing transit ridership? What types of investments are needed to get us there?

# Express Lanes Expand Motorists' Choices

The Bay Area's growing network of express lanes help improve freeway efficiency and offer drivers more choices. Potential new funding sources – a federal infrastructure package, new state transportation dollars and Regional Measure 3 to be considered by Bay Area voters in June 2018 – could each speed buildout of the planned 550-mile 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. MTC and its partners are developing a Bay Area Express Lanes network that will:

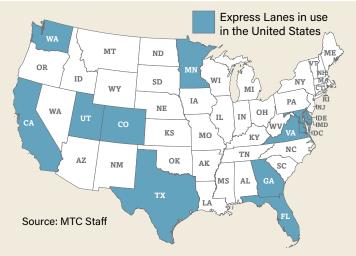
- create a seamless network of express lanes to encourage carpools and transit use;
- maximize efficiency by making use of open space in existing lanes to move more people; and
- deliver more reliable travel times for drivers when they cannot afford to be late.

### Federal Rules Penalize Transit for Express Lanes

Though the Federal Highway Administration has been supportive of the Bay Area's efforts to build express lanes, federal transit policy penalizes regions that are maximizing the efficiency of the roadway system through pricing by cutting their share of transit funds. This inconsistency is the result of an interpretation made by the Federal Transit Administration (FTA) in the January 2015 Final Circular for the State of Good Repair (SGR) Grants Program.

Within the SGR program, which largely focuses on rail, three percent of the funds are apportioned based on high-intensity bus service levels. In the final circular, FTA provided that bus service on express lanes would no longer count toward the formula, while bus service in With the October 2017 opening of express lanes on I-680 between Walnut Creek and San Ramon, the Bay Area now has 70 miles of express lanes in operation. These lanes are delivering travel time savings for transit riders and drivers along some of the most heavily-trafficked commute corridors in the Bay Area.

In Alameda County, for example, express lane customers on southbound I-680 enjoy travel speeds 10 to 14 miles per hour (mph) faster than those in the adjacent lanes, while on I-580 the express lane time savings advantage is up to 26 mph for eastbound afternoon drivers. In fiscal year 2017, the I-580 express lane generated more



carpool lanes would remain eligible. Given that both carpool lanes and express lanes provide the same speed and reliability benefits for bus riders, the two should not be treated differently.

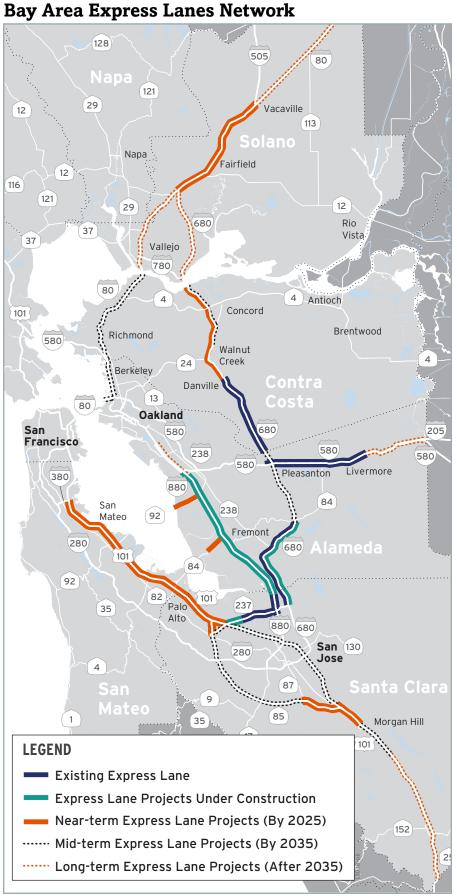
MTC urges Congress to reverse FTA's policy as soon as possible so as to minimize the negative financial impact on the Bay Area and other transit systems nationwide.



Road pricing is one of many strategies MTC is pursuing to move people more efficiently within the Bay Area's existing freeway system. (Photo: Noah Berger)

than \$10 million in revenue, which will be reinvested in maintaining the lanes and additional transportation improvements in Alameda County.

In 2018, construction is planned for an additional 80 miles of express lanes in Alameda, Contra Costa and Santa Clara counties, as shown at right.



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Front Cover Photo Credits (left to right): Courtesy of Port of Oakland; Noah Berger; Noah Berger; Karl Nielsen; Jim Maurer; Noah Berger; Pelli Clarke Pelli (courtesy of Transbay Joint Powers Authority [TJPA]); Noah Berger.




#### In Memoriam: San Francisco Mayor Edwin "Ed" Mah Lee

ABAG and MTC are mourning the untimely passing of San Francisco Mayor Ed Lee, who died early on December 12, 2017, after suffering a heart attack. He was 65 years old.

During his tenure as mayor, Lee was a tireless advocate for housing, transportation and regional cooperation who stayed focused on the nuts and bolts of improving quality of life for residents of San Francisco and beyond. He was a booster of San Francisco's Central Subway Project and of the Vision Zero campaign to reduce pedestrian-motorist accidents, along with many regionally significant transportation and bicycle/pedestrian initiatives, including the Caltrain electrification project, the expansion of the ferry network, bike share and Bike to Work Day.

Lee also will be remembered for his commitment to finding solutions to the Bay Area's housing crisis. Under his leadership, San Francisco created an affordable housing trust fund and set an aggressive goal to build 5,000 new housing units per year. At his death, Mayor Lee was serving as a member of the Steering Committee for CASA — the Committee to House the Bay Area — which was convened to address the region's chronic housing affordability challenges. May he rest in peace.



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