



BART's Role in the Region

**BART IS INTEGRAL TO THE SAN FRANCISCO BAY AREA'S
TRAVEL. ECONOMY. CLIMATE. HOUSING. EQUITY. CULTURE.
HEALTH. SUSTAINABILITY. AFFORDABILITY.**

June 2024



KEY TAKEAWAYS

BART connects the Bay Area.

1.

BART needs a new funding model as regional travel has changed.

2.

BART lowers the cost of living for many who need it most.

3.

BART helps meet state and regional housing goals, and stations are a focal point for the region's housing supply.

4.

For many trips in the Bay Area, BART is faster and more reliable than driving.

5.

BART helps keep cars off the road. Without BART, congestion would get a lot worse.

6.

BART connects to hundreds of destinations that enhance quality of life.

This report reads like a book.

For best results in Adobe Acrobat:

1. Go to **View » Page Display**
2. Select **Two Page View**
3. Make sure the option to **Show Cover Page in Two Page View** is selected.



7.

BART is critical to the regional economy, downtown recovery, and East Bay growth.

8.

BART provides access to a leading region for innovation and investment.

9.

Investing in BART advances a diverse and valuable workforce.

10.

BART helps meet state and regional climate goals and improves health and safety.

11.

A future with reduced or no BART is not sustainable nor equitable.

12.

BART is ready for the future and is critical to the region's vision of seamless transit.



Table of Contents

1. BART is Adapting to Changes in Travel and Funding 1

1.1. Travel Changes in the Region.....3

1.2. BART’s Response to Changing Travel.....9

1.3. Why BART Needs New Funding Now 11

2. BART Benefits Everyone..... 13

2.1. Keeping the Region Affordable 15

2.2. Getting Around the Region 19

2.3. Growing the Economy27

2.4. Protecting Health, Climate, and Resilience.....35

2.5. Connecting to a Vibrant Culture41

3. The Future of BART..... 43

3.1. The Consequences of Less BART Service45

3.2. BART’s Stewardship of Public Resources.....49

3.3. BART’s Vision for the Future 51

Acknowledgements

BART Staff

Hannah Lindelof, Group Manager,
Strategic and Policy Planning
Daniel Wu, Senior Planner

Alicia Trost, Chief Communications Officer
Alex Walker, Manager of Government
Relations and Legislative Affairs
Carli Paine, Group Manager, Transit-Oriented
Development
Dennis Lee, Principal Financial Analyst
Michael Cox, Principal Sustainability Analyst
Michelle Robertson, BART Storyteller
Pam Herhold, Assistant General Manager,
Performance and Budget
Roderick McFarland, Manager of Marketing
Sabrina Baptiste, Senior Manager
of Workforce Policy and Compliance
Val Menotti, Chief Planning &
Development Officer

Consultant Staff

Fehr & Peers

Andy Kosinski
Nate Conable
Gaby Picado Aguilar
Amy Deng
Cullen McCormick
Ken Der
Jess Sandoval
Molly Sun
Mackenzie Watten
Jennifer Ziebarth
Jerry Walters

Infragarden

Ratna Amin

Strategic Economics

Dena Belzer
Ryan Haight

CHAPTER 1

BART is Adapting to Changes in Travel and Funding

IN THIS CHAPTER

1.1. TRAVEL CHANGES IN THE REGION

1.2. BART'S RESPONSE TO CHANGING TRAVEL

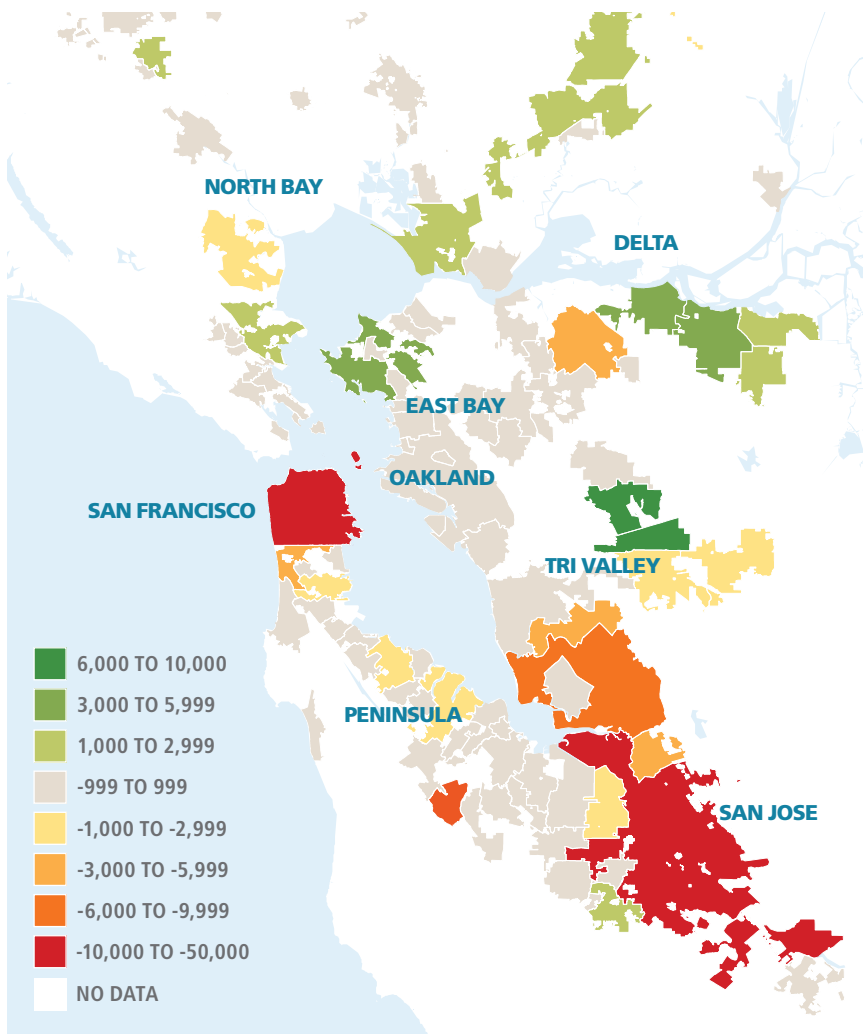
1.3. WHY BART NEEDS NEW FUNDING NOW



REMOTE WORK HAS FUNDAMENTALLY REORIENTED PEOPLE'S WAYS OF LIFE, INCLUDING THEIR TRAVEL.

The COVID-19 pandemic led people to relocate outside of the region's inner core.

FIGURE 1.1. POPULATION CHANGE SINCE THE PANDEMIC



San Francisco, the Peninsula, and the South Bay generally lost population, while outer parts of the Bay Area gained population.

More jobs now accommodate remote work, for some or even all days of the week. Less frequent commuting means people may accept longer commutes, while working from home makes people value larger homes.

Figure 1.1 shows that these trends have led to a population shift from the inner core to places in the outer rings of the Bay Area that are not as well served by BART.

Map shows population change in incorporated areas from 2019 to 2022. Source: U.S. Census Bureau, City and Town Population Estimates, 2019 & 2022.

BART ridership is closely linked to office occupancy rates. As workers returned to the office, BART ridership climbed in parallel.

The recovery of unique BART riders has outpaced the recovery of BART trips.

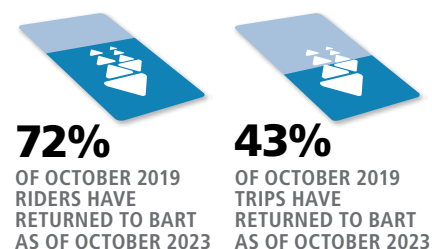
Comparing October 2023 with October 2019, the number of unique BART riders has recovered by 72 percent, whereas their trips have only recovered by 43 percent (Figure 1.2). This shows that while people are returning to transit, they are not riding as often. Most riders

are taking fewer trips per week—down to an average of 1.4 trips per week in October 2023 from 2.4 trips per week in October 2019.¹

Figure 1.3 shows that BART ridership, as a percentage of 2019 ridership, tracks closely with return-to-office rates in the Bay Area.

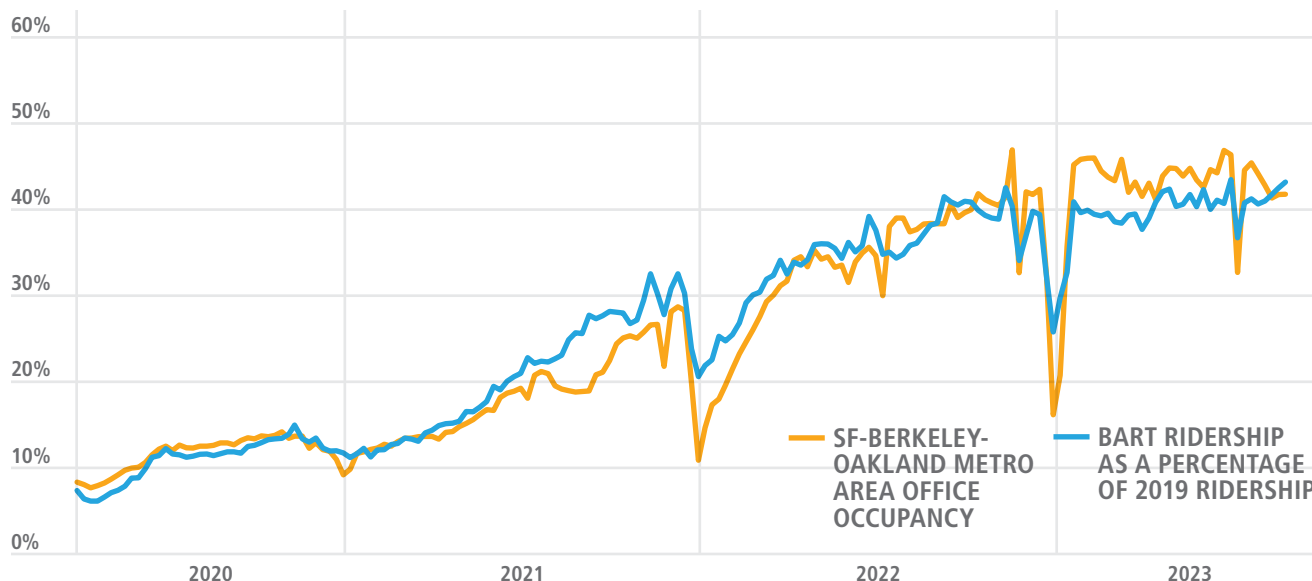
1. BART, 2023; MTC Clipper, 2019 & 2023.

FIGURE 1.2. CHANGE IN BART RIDERSHIP



This analysis imputed magnetic strip ticket users and the distribution of their trips based on the trips made by Clipper Card users during the same periods. BART, 2023.

FIGURE 1.3. BAY AREA RETURN-TO-OFFICE RATES



Source: BART, 2023; San Francisco Chamber of Commerce, 2023.

TRAFFIC IS BACK, BUT PEOPLE ARE TRAVELING IN WAYS THAT RESULT IN UNEVEN RIDERSHIP RETENTION ACROSS THE BART SYSTEM.

Transbay traffic has fully returned despite a significant drop in travel to Downtown San Francisco, historically BART's biggest travel market.

Regional demand for driving has largely recovered to pre-COVID levels.

Most notably, there were 2,000 more trips on the westbound Bay Bridge in the morning peak in 2022 compared to 2019.¹

While transbay travel is fully restored on the roads, trip destinations have changed. For example, between 2019 and 2022, westbound morning peak driving trips on the Bay Bridge to Downtown San

Francisco decreased by 5,400. During the same period, westbound morning peak driving trips to other parts of San Francisco and the Peninsula near BART increased by 2,900, and trips to places not near BART have increased by 4,500.²

The shift in travel from places well served by BART to places not well served by BART is making some travelers less likely to choose BART. This helps explain why transbay traffic has returned while BART's transbay ridership has not.

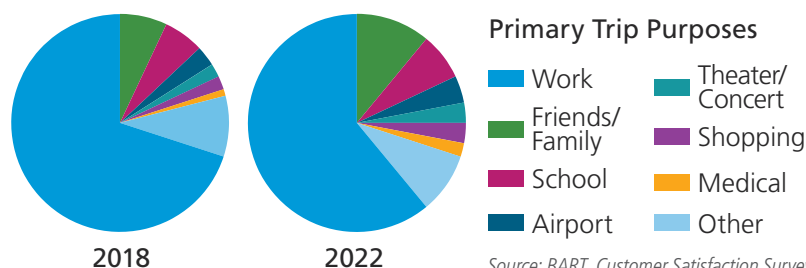
While the proportion of people driving across the Bay Bridge to places not near BART has increased, it is still only 40% of all drivers. This means that the majority of transbay driving trips to San Francisco and the Peninsula end near a BART station.²

1. Westbound travel is Tuesday-Thursday, 6 AM-10AM. PM eastbound travel shows similar patterns. Weekend Bay Bridge trips have increased by about 8 percent between 2019 and 2022 and trip distribution is more similar to pre-pandemic patterns. Streetlight Data, 2019 & 2022; Fehr & Peers, 2023.
2. Destinations near BART are within one mile of a BART station. Streetlight Data, 2019 & 2022; Fehr & Peers, 2023.



Evening, weekend, and airport service have retained ridership more strongly than commuting.

FIGURE 1.4. CHANGE IN PRIMARY TRIP PURPOSE



Source: BART, Customer Satisfaction Survey, 2022.

Since the pandemic, riders are using the BART system more for personal needs.

Work trips are now 61 percent of BART trips compared to 70 percent in 2018, as shown in Figure 1.4. In their place, trips to visit friends and family have grown by 4 percent, and school, airport, concert, and medical trips have slightly increased their shares. These visits, appointments, and leisure trips connect people and strengthen the community.

FIGURE 1.5. BART RIDERSHIP RETENTION BY LOCATION, DESTINATION, AND TIME

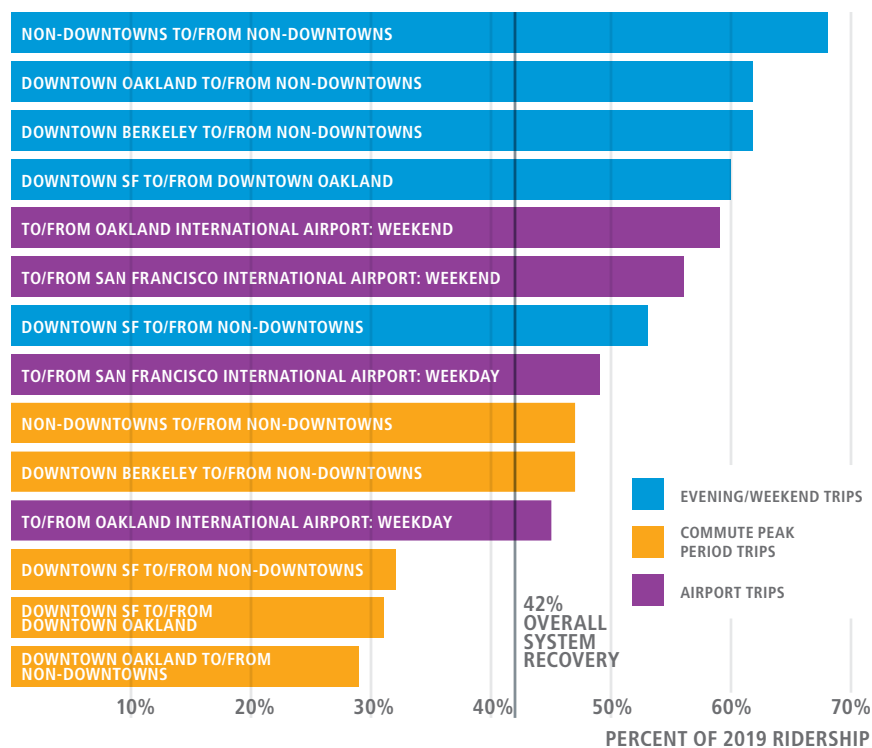


Figure 1.5 shows that trips on evenings and weekends have recovered at a higher rate than commute peak period trips. This supports the finding that people are choosing BART for personal and leisure trips at a higher rate than commute trips, as compared to 2019. Trips to and from San Francisco International Airport and Oakland International Airport have also recovered at a higher rate than commute trips.

BART ridership retention calculated based on April 2019 and April 2023 data: commute peak period trips are AM (6AM – 10AM) and PM (3PM – 7PM) peak period weekday average; evening/weekend trips are weekday after 7PM and weekend average; Oakland International Airport and San Francisco International Airport trips use average weekday and weekend ridership. Overall system recovery is weighted by trip type ridership as actual ridership for each bar is not the same. Trip types with less overall ridership (Downtown Berkeley to/from Downtown SF, Downtown Berkeley to/from Downtown Oakland) are omitted. Source: BART, 2022.

RIDERSHIP UPSIDE IS FOUND WITHIN THE YOUNG ADULT DEMOGRAPHIC AND EQUITY PRIORITY COMMUNITIES.

Several trends highlight the importance of young people to the future of transit.

Young people make up a large portion of the Bay Area's population and are showing a preference for living near transit.

As of 2021, both San Francisco and Alameda counties have a higher share of young adults aged 25 to 34 than the country as a whole.¹ Within the BART service area, young adults are disproportionately represented in activity centers served by BART. San Francisco, Oakland, Fremont, Hayward, and Concord combined account for more than 60 percent of all workers younger than 30 years old in the three counties with the highest levels of BART service (San Francisco, Alameda, and Contra Costa).²

Young adults want to use and live near transit. Gen Z prefers to live in urban settings accessible to transit, while driving less often. In a 2023 survey, over 40 percent of Gen Z and Millennial potential homeowners listed having transit nearby as a very important factor in deciding where to live.³ In addition,

a 2021 survey on San Francisco commute patterns shows young adults aged 18 to 34 are more likely than those aged 35 or older to use transit for their trips.⁴

People younger than 30 years old have lower rates of car ownership and are less likely to have a driver's license.⁵ This suggests the age group is more willing to embrace public transit as their primary source of travel as compared to older generations.

Because key job, recreational, social, and cultural destinations will likely remain clustered in major activity centers across the Bay Area, young adults can travel to these places via transit when they do commute or make a non-work-related trip.

The youngest workforce cohort has a general interest in working in-office, at least in a part-time capacity, suggesting ongoing demand for transit to support commute trips, even if these trips are not being made five days a week.⁶



BART opened the Bay to me. I had no idea it was so easy to get to all these great places."

— KASSANDRA SANTILLAN, OAKLAND

1. U.S. Census ACS 2021 5-Year Estimates, 2021.

2. U.S. Census LEHD OnTheMap Tool, 2019.

3. Gen Z is defined as born after 1997, with survey results limited to adults. Millennial is defined as born between 1981-1996, ages 28-43. National Association of Realtors, [National Community and Transportation Preferences Survey](#), 2023.

4. SFMTA, [Travel Decisions Survey](#), 2021.

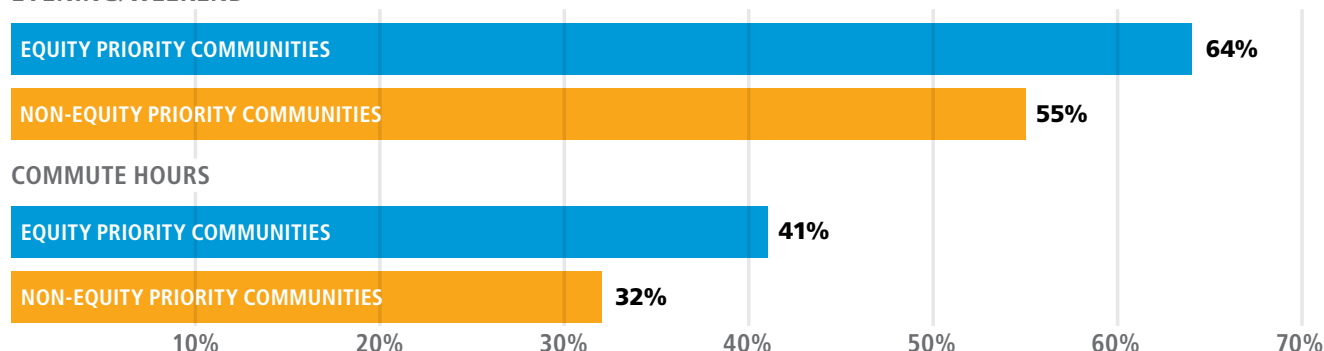
5. The Washington Post, [The Oldest \(and Youngest\) States and the Shrinking Number of Teenagers with Licenses](#), 2023.

6. Joblist, [United States Job Market Trends Report](#), 2023.

BART stations serving Equity Priority Communities have higher ridership recovery.

FIGURE 1.6. RIDERSHIP RETENTION FOR BART STATIONS SERVING EQUITY PRIORITY COMMUNITIES VERSUS NON-EQUITY PRIORITY COMMUNITIES

EVENING/WEEKEND



Equity Priority Communities are defined as stations within a half-mile of an Equity Priority Community (EPC) as defined by the Metropolitan Transportation Commission (MTC). Non-Equity Priority Communities are defined as stations more than a half-mile from an EPC. Source: BART, 2023.

BART has retained more ridership to and from stations within a half-mile of Equity Priority Communities (EPCs).

EPCs are census tracts that have a significant concentration of underserved populations, such as households with low incomes, people of color, seniors, and those with less access to vehicles.⁷

Ridership retention to and from EPCs is about 9 to 12 percentage points higher than to stations not serving EPCs (Figure 1.6). Out of the ten BART stations with the highest ridership recovery rates since COVID, nine serve racial-ethnic minority and low-income communities.^{8,9} Investments in BART service to EPCs would be doubling down on a comparably strong ridership rebound.



"I'd have much less money and a lot more stress due to needing a car to get around. I also would love San Francisco less if it didn't have BART."

— BART RIDER FROM SAN FRANCISCO

7. Metropolitan Transportation Commission (MTC) determines [Equity Priority Communities](#) using the following variables by census tract: minority population, low-income (<200 percent Federal Poverty Level) population, limited English proficiency population, zero-vehicle households, seniors 75 years and over, people with disabilities, single-parent households, and severely rent-burdened households. MTC, 2023.

8. U.S. Census ACS 2021 5-Year Estimates.

9. BART, 2023.

BART HAS AND WILL CONTINUE TO ADAPT TO CHANGING TRAVEL NEEDS WHILE SERVING THOSE WHO COUNT ON IT MOST.

In response to new travel trends in the Bay Area, BART has adjusted service to meet off-peak demand and will continue to evaluate service to emerging key markets.



Evening and weekend trips



BART to me means independence and security. I don't rely on someone else to drive me anywhere; I can get everywhere I need to go by myself thanks to BART. [It's] always there, seven days a week/365 days a year."

— BART RIDER FROM SAN FRANCISCO



Suburb-to-suburb trips



Without BART, the San Francisco Bay Area wouldn't be so integrated as a community of cities. Transportation is vital to a city – it is what makes it a metropolis. BART is a way of life here in the Bay Area."

— BART RIDER FROM WALNUT CREEK



Equity Priority Community trips

“

Having grown up poor, BART was like a getaway from my life, to go somewhere fun, exciting, fulfilling. As I'm entering my adolescent years, I can see BART being an even bigger part of my life in terms of commuting to a job.”

— BART RIDER FROM BRENTWOOD



Young adult trips

“

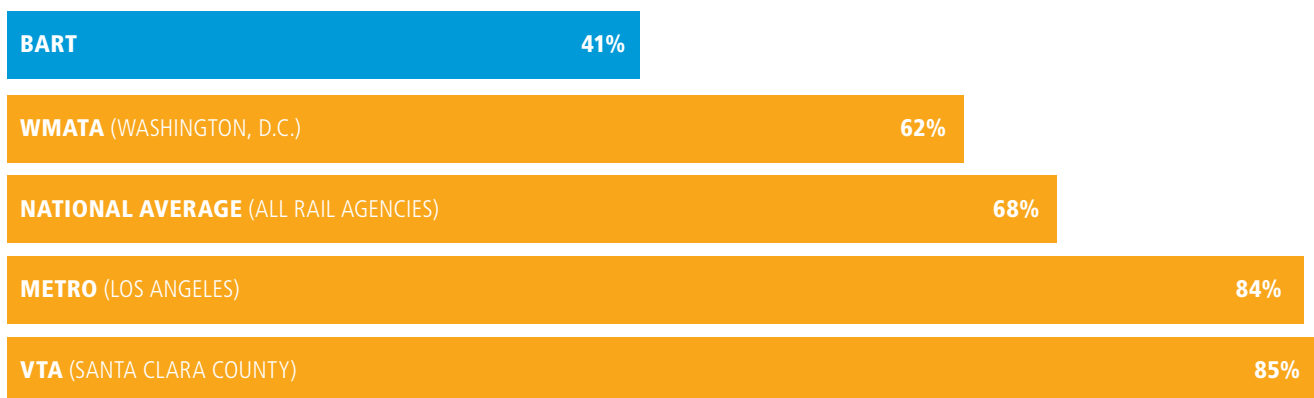
[If BART didn't exist] I would feel trapped in one town without any options to really get anywhere without putting in a lot of effort, such as planning, mapping, research, and risk.”

— BART RIDER FROM FAIRFIELD

BART NEEDS A NEW FUNDING MODEL TO KEEP SERVING THE BAY AREA.

Since the pandemic, decreased ridership has eroded BART revenue.

FIGURE 1.7. BART PRE-PANDEMIC FINANCIAL ASSISTANCE COMPARED TO OTHER AGENCIES



PERCENT OF OPERATING COSTS FROM FINANCIAL ASSISTANCE (2019)

Source: National Transit Database (NTD) and BART internal data, 2019. According to NTD, BART has a 70% farebox recovery. BART's internal data includes expense categories not included by NTD.

Before the pandemic, BART covered about 60 percent of its operating costs through passenger fares.

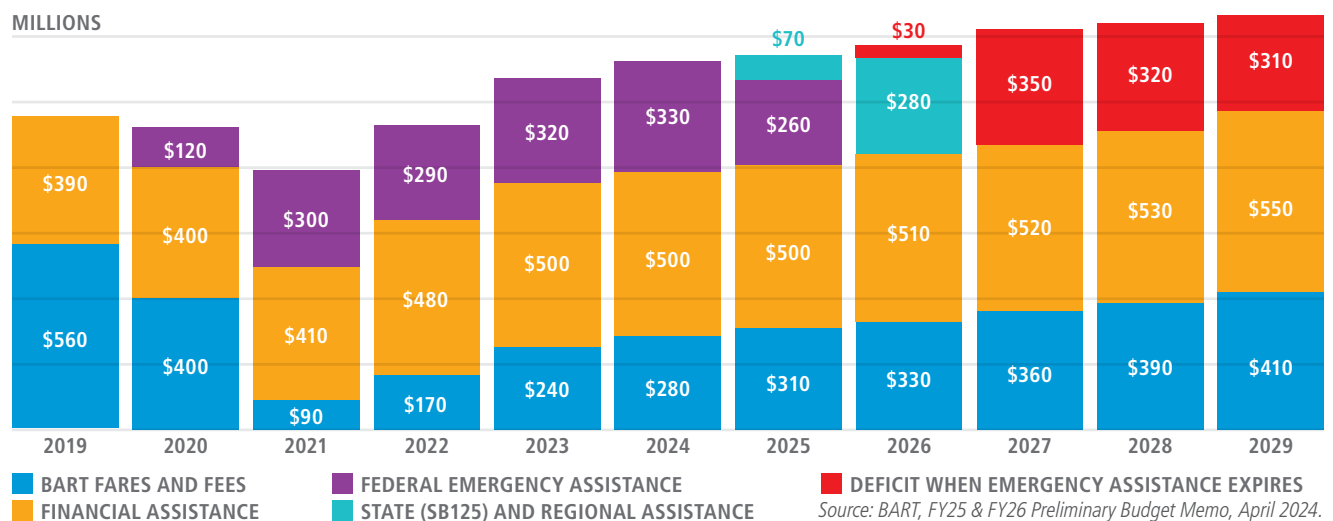
As shown in Figure 1.7, BART relied very little on financial assistance from regional, state, and federal governments. Its farebox recovery was the second best out of 14 peer agencies across the nation.¹ BART also did not receive as much support from various regional sources that it is eligible for, such as the Transportation Development Act (TDA) and State Transit Assistance (STA) that were directed to other

regional uses and operators; as a result, BART relied on its fare revenues to cover operating costs. This all changed during the pandemic lockdown, when BART ridership, like transit ridership nationwide, plummeted. Without fares to cover operating costs, BART turned to emergency assistance from the state and federal government. While people are returning to BART, remote work has reduced ridership, eroding fare revenue substantially. In the coming years, BART will require financial assistance to cover around 70% of operating costs which is consistent with the national average pre-pandemic shown in Figure 1.7.

1. Peer agencies are defined as directly-operated heavy rail agencies. National Transit Database, 2019.



FIGURE 1.8. HISTORIC AND FORECAST SOURCES OF BART FUNDING (BY FISCAL YEAR)



With emergency assistance coming to an end, BART needs a new source of investment.

BART needs new, sustainable, long-term funding, coupled with safety and efficiency measures, and efforts to grow ridership.

The pandemic revealed that BART is vulnerable to sudden declines in ridership. To shore up the current operating deficit and mitigate this vulnerability, BART needs a dedicated, new funding source. This new funding could come from the state, the region, or a combination of both.

CHAPTER 2

BART Benefits Everyone

IN THIS CHAPTER

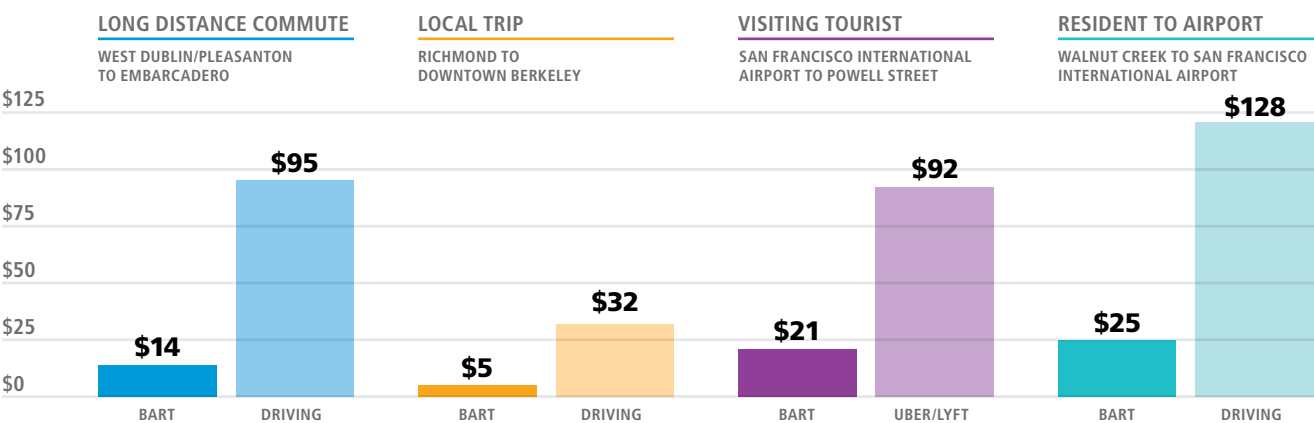
- 2.1. KEEPING THE REGION AFFORDABLE**
- 2.2. GETTING AROUND THE REGION**
- 2.3. GROWING THE ECONOMY**
- 2.4. PROTECTING HEALTH, CLIMATE, AND RESILIENCE**
- 2.5. CONNECTING TO A VIBRANT CULTURE**





BART LOWERS THE COST OF LIVING AND INCREASES ACCESS TO OPPORTUNITY.

FIGURE 2.1. FULL ROUNTRIP BART AND DRIVING COSTS FOR COMMON TRIP TYPES



2023 roundtrip travel costs, Uber/Lyft cost for visiting tourists, and gas, insurance, maintenance and parking for driving. BART roundtrip cost reflects 2024 fares. Visiting tourist cost assumes the tourist will be taking an Uber/Lyft in each direction. Resident to airport cost assumes the resident will be parking at the airport for 5 days. Sources: AAA Your Driving Costs, 2023; DriverSeat, 2019-2022; FasTrak, 2023; Parkopedia, 2023; San Francisco International Airport, 2023; SpotAngels, 2023; U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers, 2023; U.S. EIA, California All Grades All Formulations Retail Gasoline Prices, 2023.

BART helps people get by in the Bay Area, where the cost of living is high, by connecting them to jobs and helping them save money compared to driving.

BART trips are cheaper than driving, and people who live near BART stations have lower transportation costs than those in other parts of the region.

Figure 2.1 shows that the cost to take BART is lower than driving for many common trip types. Households within a half-mile of a BART station have, on average, 30 percent fewer vehicles than households beyond a half-mile

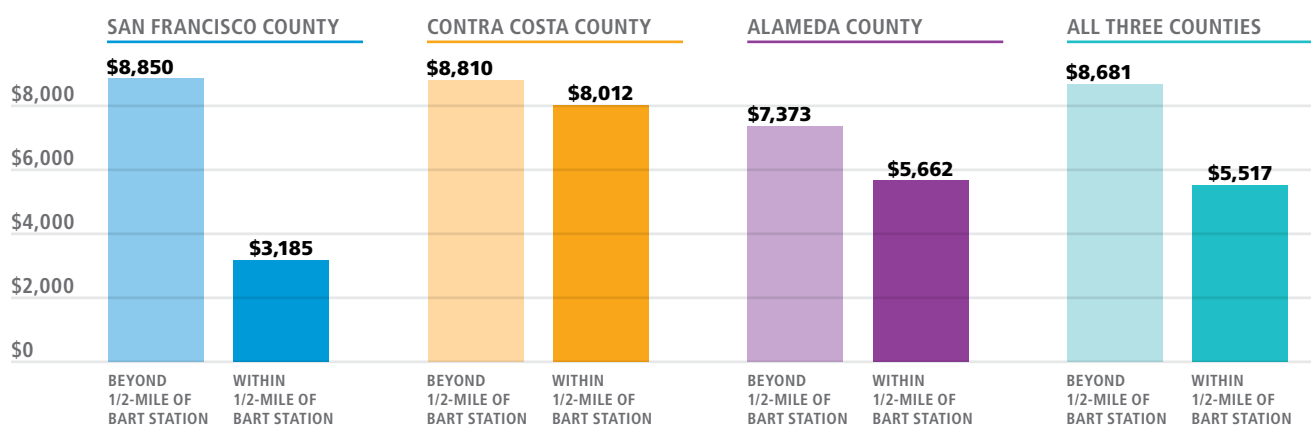
from a BART station.¹ Annually, these households drive 16 percent fewer miles, which also translates to lower transportation costs.¹

Figure 2.2 shows that in Contra Costa, Alameda, and particularly San Francisco County—the three counties where most BART stations are located—very low-income households within a half-mile of a BART station have lower average transportation costs. BART also offers a 50% discount to low-income adults earning 200 percent

or less of the federal poverty level through the regional Clipper START program, which helps to keep costs low for these riders.

Within San Francisco, Contra Costa, and Alameda counties, over 50 percent of census tracts with high segregation and poverty levels and nearly 40 percent of census tracts defined as low-resource are within a half-mile of a BART station.² BART is providing these communities a vital lifeline and access to resources.

FIGURE 2.2. AVERAGE TRANSPORTATION COSTS FOR VERY LOW-INCOME HOUSEHOLDS



Annual transportation costs (shown in constant 2022 dollars) are the sum of auto ownership costs (depreciation, finance, insurance, license, registration, and tax costs per auto), auto use costs (gas, maintenance, and repair costs per mile), and transit use costs. Source: U.S. Department of Housing and Urban Development (HUD) Location Affordability Index Tool. HUD defines very low-income as 50 percent of the state's median family income.

BART increases job access.

Within San Francisco, Contra Costa, and Alameda counties, census tracts within a half-mile of a BART station have a 13 percent higher average job access score, which considers the number, overall mix, and types of jobs.³ People who live in census tracts within a half-mile of a BART station commute, on average, 16 percent fewer minutes than people who live farther away.⁴

The BART Yellow and Orange lines serve a high proportion of people without a college degree.⁵ A clear example of the access and benefit that BART provides is seen in the cities of Antioch and Pittsburg, which are both lower-income and more diverse than the Bay Area as a whole.⁴ Residents of these cities

can use BART to reach jobs in larger Bay Area cities like San Francisco and Oakland in an affordable and timely manner. In eastern Contra Costa and Alameda counties, areas surrounding BART stations are the primary locations identified for housing and job growth in Plan Bay Area 2050, making it easier to access jobs and housing by transit for future generations.⁶ Plan Bay Area 2050 is the Bay Area's long-range plan covering the four interrelated elements of housing, the economy, transportation, and the environment.

With some 794,000 jobs (21% of the region's total) within a 15-minute walk of a BART station,⁷ BART helps people conveniently access a large pool of economic opportunities across the Bay Area.

By linking people to jobs, BART helps put money in people's pockets, which increases their ability to thrive in the expensive region.

“The equitable access to cheap public transportation allows for so many opportunities for travel.”

— BART RIDER FROM OAKLAND

1. U.S. Department of Housing and Urban Development, 2019; U.S. Census ACS 2019 5-Year Estimates.
2. Terminology and data from California Department of Housing and Community Development, Opportunity Map, 2023.
3. The Center for Neighborhood Technology, The Housing and Transportation Affordability Index, 2019.
4. U.S. Department of Housing and Urban Development, Location Affordability Index, 2016.
5. U.S. Census Bureau, 2019; U.S. Census ACS 2021 5-Year Estimates.
6. ABAG MTC, [Plan Bay Area 2050](#), 2021.
7. Fehr & Peers, 2023.

BART HELPS MEET STATE AND REGIONAL HOUSING GOALS.

By reducing the need for parking, BART frees up land for housing.



PEOPLE ON BART

5,600

People ride BART to a typical Warriors game.



PARKING SPACES

1,100

Extra parking spaces would be needed if those fans drove to the game instead.¹



NEW HOMES

680

Homes could be built with that same land that would be used for parking.²

BART stations are a focal point for the region's existing and future housing supply.

BART creates new housing on land it owns near stations.

BART's Transit-Oriented Development (TOD) program sets goals for the amount and affordability of housing that BART develops on land it owns or operates.³ As of 2023, almost 4,100 housing units have been built.⁴ Nearly 200 more units are currently under construction, and BART has another 4,000 units in the pre-development phase, amounting to over 8,000 units.⁴ BART expects that over 35 percent

of this housing will be affordable, which exceeds BART's affordable housing performance target.⁴

BART station areas catalyze new housing development.

Many dense transit-oriented neighborhoods are located around BART stations. Census tracts near BART have, on average, nearly two times as many households per acre than those farther away.⁵ Many East Bay cities prioritize housing growth within walking distance of BART since these areas offer high-quality transit service.⁶

BART station areas support housing affordability.

Housing is more affordable and more likely to be rentals near BART.⁷ Within Alameda, San Francisco and Contra Costa counties, rental housing is more affordable than owner-occupied housing based on median monthly housing costs.

In Berkeley, Oakland, and San Francisco, 40-50 percent of affordable multi-family properties are within a half-mile of a BART station.⁸ As shown in Figure 2.3, the majority of existing and under-construction regional affordable rental housing sites are near BART stations or other rail services.

Reduced transportation costs can also contribute to greater housing affordability as transportation cost savings may help pay housing costs.

1. Number of parking spaces estimated based on round-trip gameday ridership divided by 2.58, the midpoint of the range of average vehicle occupancy at arenas in urban settings (San Francisco Office of Community Investment and Infrastructure, [Event Center and Mixed-Use Development at Mission Blocks 29-32](#), 2015).

2. Acres of land is number of parking spaces required divided by 120 parking spaces per acre of parking lot ([Parking Requirement Impacts on Housing Affordability](#)), and multiplied by 75 residential units per acre of land (BART TOD Guidelines' minimum density of residential units per acre).

3. BART, [Transit-Oriented Development Policy](#), 2020.

4. BART, [Transit-Oriented Development Policy Performance Measures and Targets](#), 2016; BART, [Transit-Oriented Development](#), 2023.

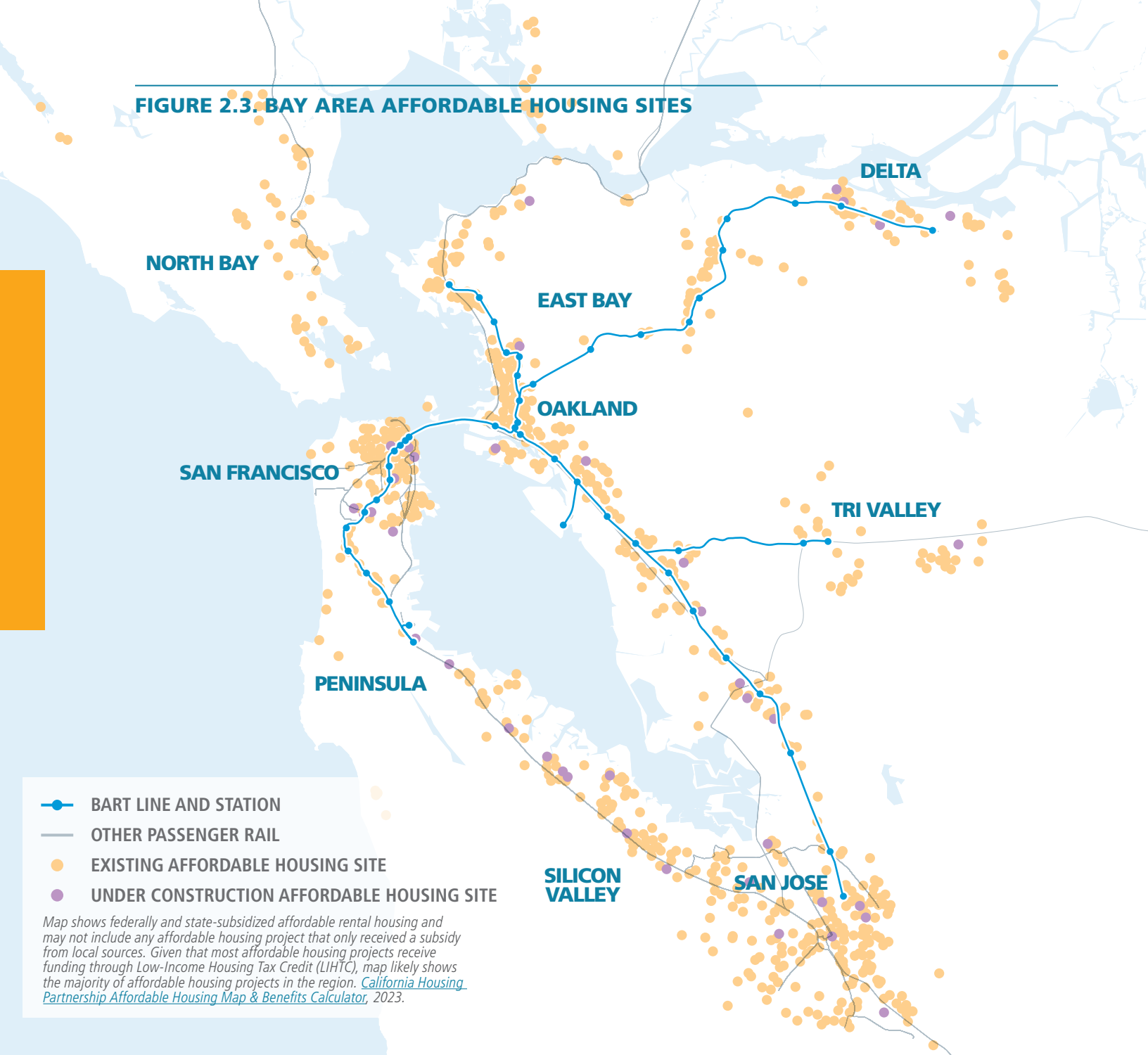
5. Census tracts near BART are within a half-mile of a BART station. U.S. Department of Housing and Urban Development, 2019; U.S. Census ACS 2019 5-Year Estimates.

6. California Department of General Services, [Housing and Local Land Development Opportunities](#), 2023.

7. Census tracts near BART are within a half-mile of a BART station. The Center for Neighborhood Technology, [The Housing and Transportation Affordability Index](#), 2019; U.S. Department of Housing and Urban Development, 2019; U.S. Census ACS 2019 5-Year Estimates.

8. U.S. Department of Housing and Urban Development, [HUD Resource Locator](#), 2023.

FIGURE 2.3. BAY AREA AFFORDABLE HOUSING SITES



Housing is more affordable near BART stations.



WITHIN 1/2-MILE OF A BART STATION COMPARED TO BEYOND

8%

Less annual household income spent on housing and transportation costs.⁹

15%

Higher share of rental housing units.¹⁰

500

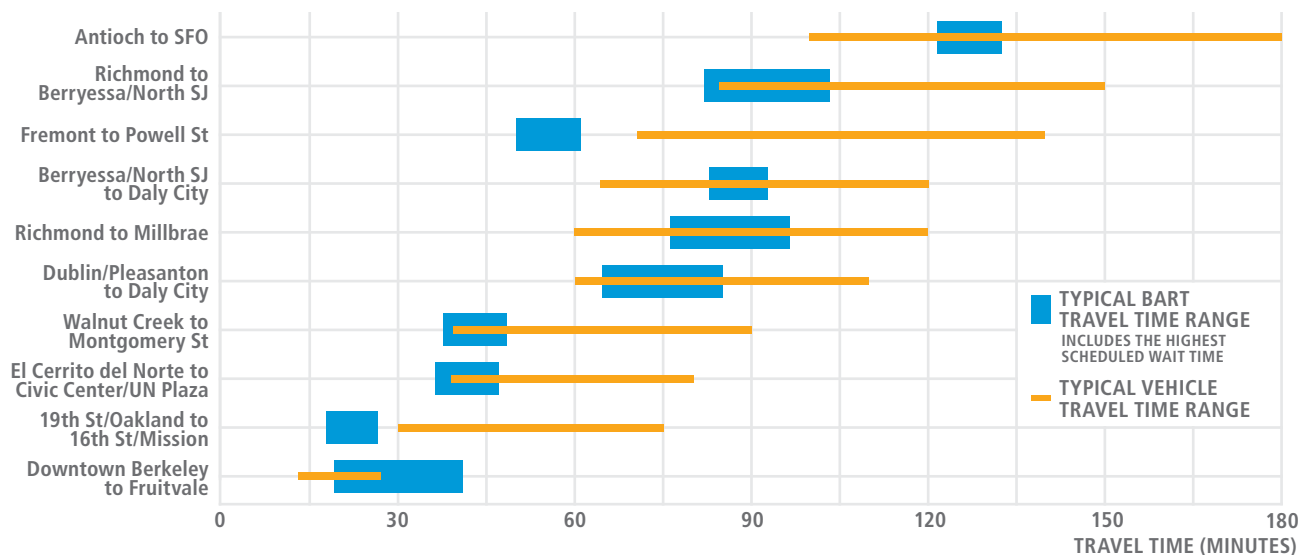
Dollars, on average, saved on monthly housing costs.¹⁰

9. The Center for Neighborhood Technology, *The Housing and Transportation Affordability Index*, 2019.
10. U.S. Department of Housing and Urban Development, 2019; U.S. Census ACS 2019 5-Year Estimates.

BART HELPS YOU GET AROUND, EVEN IF YOU DON'T RIDE TRANSIT.

For many trips in the Bay Area, BART is faster and more reliable than driving.

FIGURE 2.4. BART AND DRIVING TRAVEL TIME COMPARISON – AM PEAK PERIOD



Vehicle trips begin at Wednesday at 7:30 AM to represent AM peak travel and do not include time spent finding parking. BART trips refer to weekday schedule during the 7 AM – 9 AM period, and travel time assumes a one-seat ride but does not include time spent accessing BART. The lower bound of typical BART travel time assumes zero wait time for a train, while the upper bound assumes a wait time of a full headway. Sources: BART, 2023; Google Maps, 2023.

Driving times vary greatly on the region's roads—up to 150 percent in some cases.

Congestion, weather, crashes, and special events all add up to make driving time highly variable. It's not uncommon for a trip that takes just 30 minutes one day to take twice as long on another day. What this means is that drivers who need to arrive at their destination exactly on time—for example, people whose jobs require them to clock in or people heading to a doctor's

appointment—need to budget the longest time it would take to drive their trip in order to not be late.

In contrast, BART offers fast, frequent service.

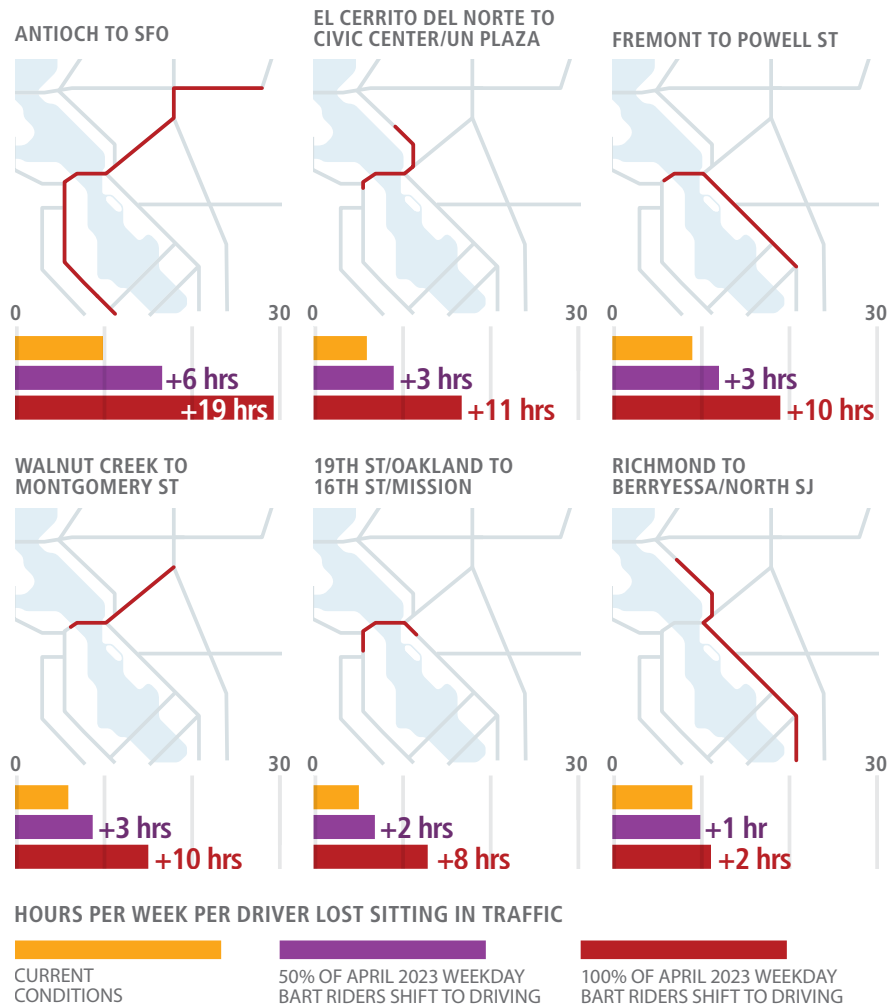
Figure 2.4 shows ten example trips throughout the Bay Area during the AM Peak Period that can be made using BART or a parallel driving route. In most cases, the BART travel time is at the low end of the driving time, meaning that BART is a faster

option. The BART travel time ranges are also narrower, meaning BART riders need to build less buffer time into their schedules since BART trips are more predictable. This is particularly meaningful for people traveling from more affordable outer portions of the Bay Area, like Antioch, to destinations in San Francisco or the Peninsula: A driving trip could range from an hour and a half to three hours, while a BART trip would take between two and two and a quarter hours.



BART helps keep cars off the road. Without BART, traffic congestion would get a lot worse.

FIGURE 2.5. WEEKLY HOURS LOST TO CONGESTION FOR DRIVERS: WITH AND WITHOUT BART



Analysis assumes 1.52 passengers per vehicle driven (FHWA), 50 work weeks in a year (Fehr & Peers), 4 days of commuting per week (SFMTA), and 2 trips per day (Fehr & Peers). This is in addition to the time it takes just to drive the trip. Source: Fehr & Peers, 2023; FHWA, [National Household Travel Survey, 2022](#); SFMTA, [Travel Decisions Survey, 2021](#).

BART reduces time lost to traffic congestion, which improves quality of life and the economy—even for people who don’t use transit.

Figure 2.5 shows that drivers can expect to spend an extra one to nineteen hours a week stuck in traffic in a world where BART service no longer exists.

Spending hours delayed by traffic means less time spent with family and friends or for recreation, which degrades quality of life for everyone, regardless of whether they use transit. Time spent in congestion is also less productive time than working and shopping, which results in less economic activity across the region.

Heavy congestion may deter people from taking trips. Since there are no viable alternatives aside from BART and driving between Eastern Contra Costa/Alameda counties and Inner East Bay/West Bay areas, increased congestion may lead to less regional mobility.

BART CONNECTS YOU TO DESTINATIONS THAT MATTER.

Within a 15-minute walk of all BART stations, there are...



JOBS

794k

Jobs, or 21% of Bay Area jobs.



PEOPLE

665k

Residents, or 9% of Bay Area residents.



EQUITY

262k

Residents who live within an equity priority community, or 21% of total Bay Area equity priority community residents.¹

Within a 15-minute walk of all BART stations or a connecting transit route, there are...



JOBS

2.5M

Jobs, or 67% of Bay Area jobs.



PEOPLE

4.6M

Residents, or 61% of Bay Area residents.



SCHOOLS, PARKS, AND LIBRARIES

3.4k

Schools, parks, and libraries, or about 60% of Bay Area schools, parks, and libraries.

Across the Bay Area, BART can get you within a mile of...



900

PARKS



300

PLACES OF WORSHIP



100

MUSEUMS & GALLERIES



100

HISTORIC SITES



50

LIVE VENUES



30

COLLEGES & UNIVERSITIES



10

FARMERS MARKETS



10

AMUSEMENT PARKS

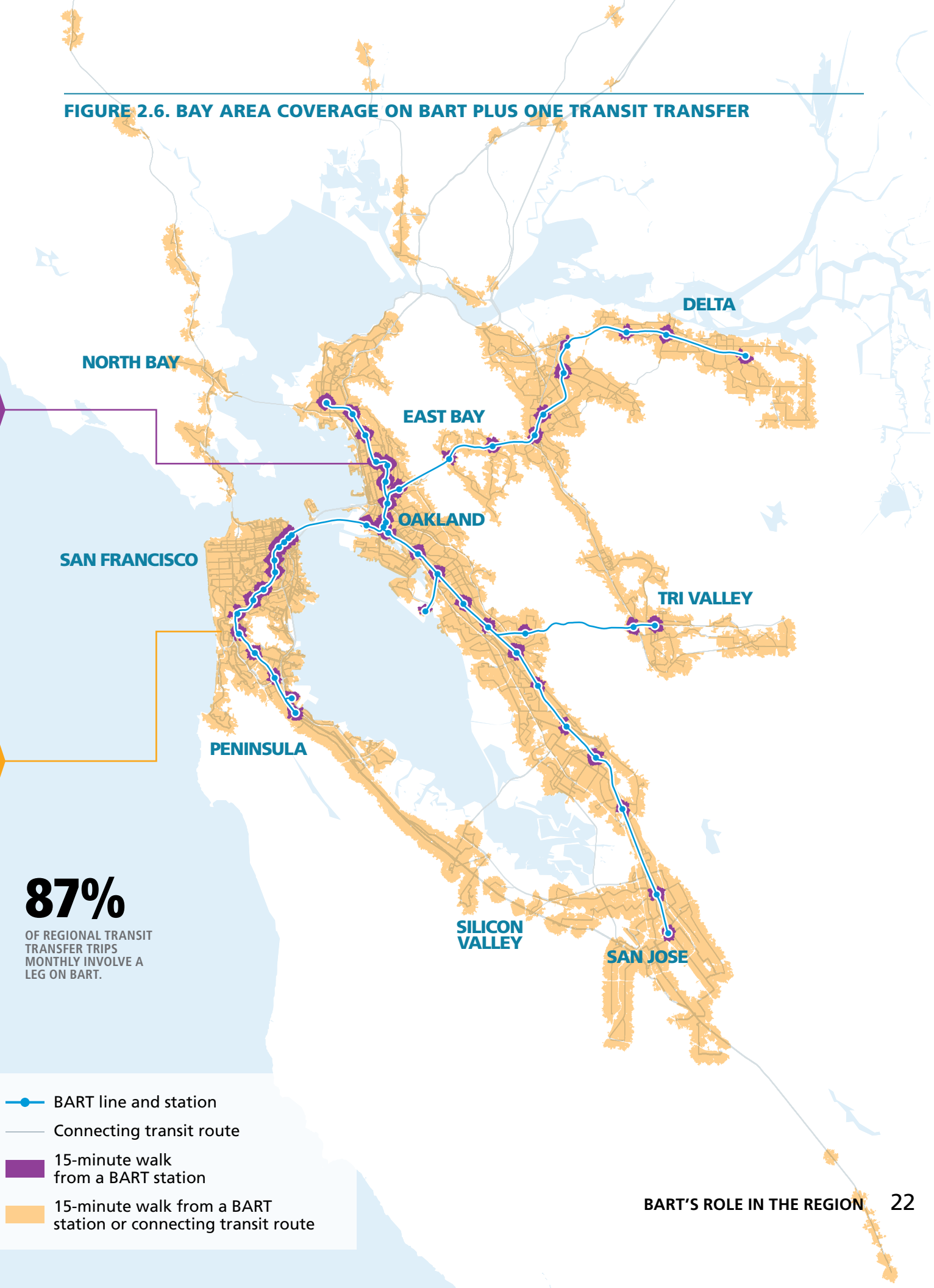


10

SPORTS VENUES

1. Equity priority communities (tract geography) are identified in MTC's Plan Bay Area 2050 based on eight ACS 2014-2018 (ACS 2018) tract-level variables and thresholds. These variables include people of color, low-income, level of English proficiency, seniors 75 years and over, zero-vehicle households, single parent households, people with disabilities, and rent-burdened households. Sources (this page and next): ACS 5-Year Estimates (2017-2021), 2021; U.S. Census LEHD, 2020; MTC Plan Bay Area, 2021; Trust for Public Lands, 2016-2018; California Department of Education, 2019-2020; Overpass Turbo OSM POI, October 2023. Source: Fehr & Peers, 2023.

FIGURE 2.6. BAY AREA COVERAGE ON BART PLUS ONE TRANSIT TRANSFER



BART OFFERS ACCESS TO OPPORTUNITIES AND CONNECTS COMMUNITIES.



Ed Cabrera takes his daughter on BART to acclimate her to city living.

OAKLAND

Ed Cabrera frequently travels into San Francisco to hang out with his teenaged daughter, Elyse. When Elyse was young, her parents mostly shuttled her by car to school, social activities, and extracurriculars. But Cabrera wanted Elyse to feel comfortable navigating the city independently, so he made a point to “transition her out of the family car” and get her on public transportation to explore the neighborhoods beyond her own. Soon, Elyse was taking BART and Muni to meet friends at Dolores Park, to hang around the Castro, and to play mini golf at the course in the Mission. “It exposed her to different types of people,” Cabrera said. “What better place than BART to get to know the people around you. It’s the great equalizer!”



Orion Academy relocated in 2022 to be closer to a BART station.

CONCORD

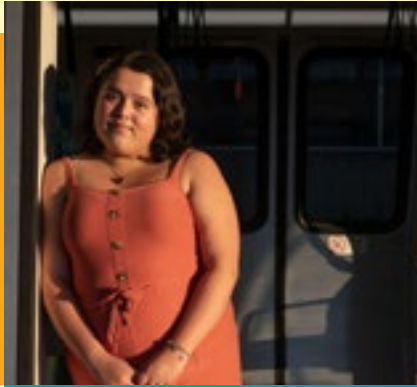
Orion Academy, a high school for gifted youth who are neurodivergent, relocated in 2022 to be closer to the Concord station. The majority of the school’s students now take BART to school, which is located less than a half-mile from the station. Locating near BART makes the academy’s resources accessible to a broader community and teaches students how to independently navigate urban environments, where many will live and work after graduating. Orion Academy’s students sometimes have trouble with visual-spatial processing, and driving a car can be overwhelming. “So, what is your alternative? Taking public transportation!” said Dr. Kathryn Stewart, the founder and Executive Director of the academy.



BART helped Giovanna Lomanto stay connected to the Bay Area.

OAKLAND

When Giovanna Lomanto was young, her family moved from Daly City to Sacramento. After the move, she always looked forward to her family’s trips back to the Bay Area. From Sacramento, Lomanto and her sister would drive with their grandparents to Pittsburg/Bay Point Station, where they’d catch a BART train to 12th Street/Oakland City Center Station. Their destination was Oakland Chinatown, where Lomanto’s grandma and grandpa would visit their old church friends and the traditional Chinese medicine practitioners they’d been seeing for years. They’d take BART because it was fun—a remnant of a previous life. “BART kept us connected to the Bay Area,” Lomanto said.



Kassandra Santillan takes BART so she can attend San Francisco State.

OAKLAND

In August, Kassandra Santillan started her second year at San Francisco State University, her dream college where she studies microbiology, her dream major. If she couldn't take BART to school, she wouldn't be able to attend. "BART made it happen for me," she said. "I can't afford to live near campus, so I'd probably be at a community college instead."

"It's pretty crazy to be studying the field now," she continued. "It feels unreal sometimes. I know a lot of people who don't get this opportunity." Sometimes, she has to remind herself: "I'm really here, and I'm really doing this thing I've been trying to do all my life."



Riding BART informs Howard Wong's urban design practice.

SAN FRANCISCO

Howard Wong grew up riding public transportation around San Francisco. He remembers well when BART opened for service in 1972; the experience of riding the "Space Age" trains left a lasting impact on him. Around the time of the system's opening, Wong was studying architecture and design at UC Berkeley. He said BART helped inform his "democratic sensibilities on urban design."

"No matter your class, you had a sense that you were getting special treatment when you rode the trains," he said. "You really felt like you were a part of this democracy of benefits. You're sitting on a train with all the commuters who seemed much more affluent with their suits and ties and briefcases, but you're right there on that train with them."



BART runs like a thread through every stage of Erica Mitchell's life.

SAN FRANCISCO

You might say the system map is a tapestry of her life, woven with memories that stretch from her childhood to maturity. Mitchell, now 27 and living in San Francisco, grew up in East Oakland, and the nearest BART station to her house was the Coliseum. The trains that departed every which way from the station were "lifelines," she said, that carried her to novel places, experiences, and possibilities. "At different points in my life, BART has meant different things to me," she said. "I wouldn't have been as independent as I was as a kid without BART, I wouldn't have been able to survive here, and I wouldn't be where I am today."

BART TRANSFORMS MOBILITY FOR THE YOUNG, ELDERLY, AND PEOPLE WITH DISABILITIES.



Youth and senior riders

BART helps the youth and elderly unlock freedom of mobility—especially for those who choose not to or cannot drive. BART offers discounts to riders aged 5-18 and 65+, keeping travel costs low for these groups.

Riders aged 13-24 and 55 and older have expressed the highest satisfaction with BART among all age groups in BART's 2022 Customer Satisfaction Survey.¹ The proportion of older riders is also growing. BART riders paying the Senior Discount (ages 65+) fare increased from 4 percent to 6 percent between 2018 and 2022.¹ To encourage senior ridership, BART recently launched a video series called Grandparents on BART, which features pairs of grandparents and their grandchildren taking a BART ride and interviewing each other. Accessible design features, described in the next section on riders with disabilities, help make BART trains and stations easier for seniors to use.

The youngest and oldest BART riders are likely to be using BART for non-work trips to school, recreation, and healthcare. In the United States, nearly 1 in 10 urban-dwelling adults 65 and older use public transit, and more than 20 percent of these users rely on public transit to access medical care.² Serving non-work travel is a potential growth area for BART, as these types of trips have proven to be less affected by the pandemic and remote work trends.

1. BART, [2022 BART Customer Satisfaction Survey](#), 2022.

2. Gimie et. al., [Epidemiology of public transportation use among older adults in the United States](#), 2022.

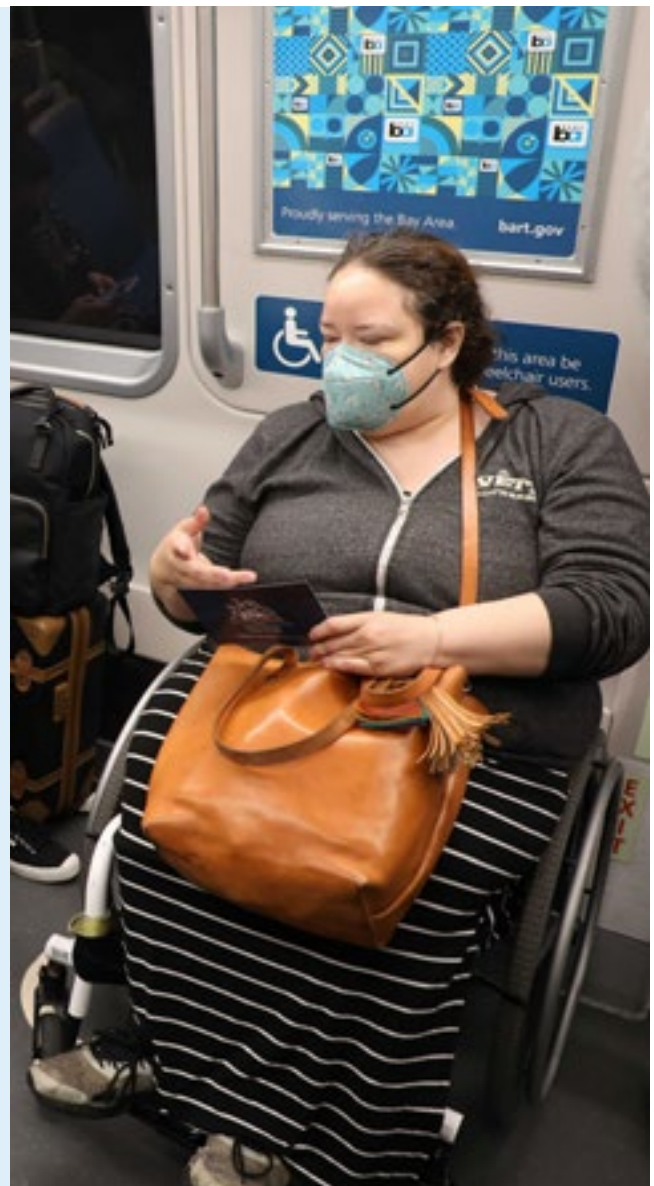
3. BART, [Blind and Low-Vision Riders Gather at 19th St Oakland Station to Learn How to Navigate BART](#), 2023.

Riders with disabilities

BART is committed to operating a system that is safe and easy to use for people of all abilities. BART trains offer priority seating for seniors and people with disabilities, all trains can accommodate wheelchair users, and passengers with disabilities may ride with their trained service animals.

In stations, textured tiles mark the edge of train platforms for people who are blind or low vision. Train Operators and BART's public address system make announcements like station names, train destinations, and transfer instructions, and changeable message signs on the platform display train destinations and other important information. All BART stations have accessible elevators, and each station has at least one Telecommunications Device for the Deaf (TDD). BART also provides paratransit service for people whose disability prevents them from using BART trains.

BART offers discounts to riders with disabilities through the Regional Transit Connection (RTC) Clipper card. BART holds community events, like safety orientations for the blind and low-vision community, as part of its commitment to supporting riders of all abilities and increasing their ease in navigating the system.³ In BART's 2022 Customer Satisfaction Survey, seven percent of riders indicated that they had a disability.¹ BART's Accessibility Task Force advises on disability-related issues to make the BART system usable for people regardless of disability or age.



BART PROVIDES ACCESS TO A REGION AT THE LEADING EDGE OF TECHNOLOGICAL INNOVATION AND ECONOMIC INVESTMENT.

The Bay Area has...



INNOVATION

80%

Of Forbes' 2023 top 5 innovative companies.¹



VENTURE CAPITAL

50%

Of venture capital investments in innovative sectors since 2021.²

50+%

Of the country's venture capital deal value—triple the next highest region.³

Fueled by unparalleled venture capital funding, a resilient technology sector, and a growing cluster of artificial intelligence (AI) companies, the Bay Area economy remains hot.

The Bay Area is a haven for innovative technology-focused businesses, and many firms cluster in BART-adjacent neighborhoods like SoMa and Hayes Valley.

The Bay Area headquarters four of the top five companies in Forbes' 2023 list of innovators, 31 of the top 50 firms on Forbes' list of promising AI businesses, and 25 of the top 100 cybersecurity companies.^{1,4,5} These rapidly growing industries are driving demand for office space in Downtown San Francisco and SoMa.

Since 2021, the Bay Area has regularly attracted at least 50 percent of the total venture capital investment in innovative sectors like information technology.²

Venture capital investment in the Bay Area was triple the value in the next highest U.S. region in the first quarter of 2023. In this same quarter, the total investments in the Bay Area constituted more than half of the total venture capital invested in the entire country.³

The Bay Area continues to be the most desirable location in the U.S. for startups.⁶

The sheer number of startups, the quality and success of local startups, and the overall business ecosystem available to support startups as they scale are all factors that contribute to the Bay Area's desirability for startups.⁶ Many technology-related startups consider in-office work crucial to their success, with AI businesses specifically emphasizing the need for in-office work to spur creativity.^{7,8}



Source: Wikimedia Commons.



ARTIFICIAL INTELLIGENCE (AI)

60%

Of the Forbes top 50 AI companies in 2023.⁴

30+%

Of US AI office space and AI funding.⁸



CYBERSECURITY

25%

Of the global top 100 cybersecurity companies.⁵

AI companies are highly concentrated in the Bay Area.⁸

The region represents more than 20 percent of the current national AI talent. It has been identified as a superhub in AI talent, along with New York, Seattle and Boston.⁸ San Francisco alone has accounted for close to a third of national VC funding for AI companies since 2021.⁸

Over a third of the total AI office space in the country is located in the Bay Area.⁸ The booming sector is quickly absorbing office space in San Francisco's core and industrial

neighborhoods, currently accounting for about two million square feet of space.⁹ Although not all AI companies are accessible by BART, more than 50 companies have chosen to locate within a half-mile of a BART station, with the majority of these being in San Francisco.⁸

Many technology jobs are also in Silicon Valley, which BART is extending to through the Silicon Valley Extension. Phase I to Berryessa was completed in 2020, and the second phase will connect to Downtown San José.

3. Venture capital deal value is the total monetary worth of a venture capital investment transaction, or the amount of capital invested by venture capitalists in a startup or emerging company in exchange for equity or ownership stakes. Pitchbook, *Venture Monitor Q1 2023*, 2023.

4. Forbes, *AI 50*, 2023.

5. University of San Diego Online, *The Cyber 100: Cybersecurity Companies you Should Know*, 2023.

6. Statista, *Leading Cities for Startup Business in the United States*, 2023.

Despite the prevalence of the technology sector, the region's economy remains diverse.

The Bay Area's top performing companies are diversified compared to peer urban areas. Top companies in the Bay Area extend across numerous industry sectors such as Apparel/Retailing, Energy, Financial Services, and Technology.¹⁰ This diversity also makes the Bay Area more resilient during economic downturns.

7. Reach Capital, *Work Configuration & Culture Survey*, 2022.

8. Jones Lang LaSalle, *Transforming CRE: Commercial Real Estate Demand Drivers for AI and Their Footprint*, 2023.

9. Jones Lang LaSalle, *Pulse of the Market Q3 2023 San Francisco*, 2023.

10. Bay Area Council Economic Institute, *Economic Profile 2020: The Future of the Bay Area's Innovation Ecosystem*, 2020.

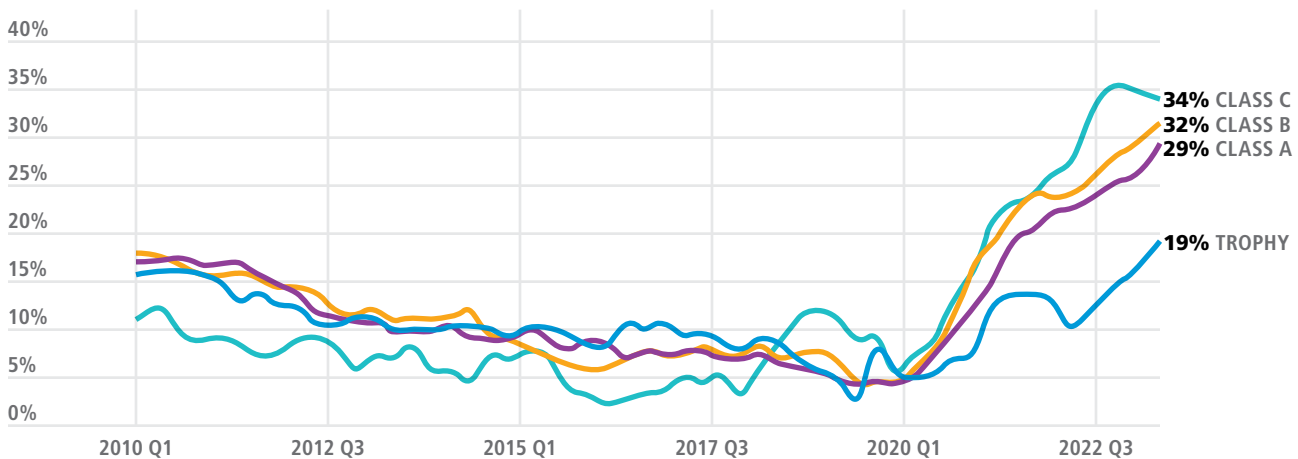
1. Forbes, *The World's Most Innovative Companies*, 2023.

2. Ernst & Young, Crunchbase, *Venture Capital Investment*, 2023.

BART IS CRITICAL TO THE RECOVERY OF THE REGION'S DOWNTOWNS AND THE PENINSULA.

There is over 105 million total square feet of office space in Downtown San Francisco, Oakland, and Berkeley alone. The 25 million vacant square feet in these cities represents significant opportunities for future employment growth.¹

FIGURE 2.7. SAN FRANCISCO OFFICE BUILDING VACANCY RATES



Source: Jones Lang LaSalle, 2023.

Proximity to BART is a must-have for San Francisco's downtown office market.

Historically, office buildings near BART have outperformed non-BART accessible buildings based on market rents.² Downtown San Francisco also has multiple "trophy" office buildings, which are commanding Downtown San Francisco's highest rents and have the lowest vacancy rates (Figure 2.7).³ These buildings are all within a 15-minute walk of a BART station (Figure 2.8).

Downtown San Francisco will rebound as an employment center once real estate market prices readjust.

The office market will start to improve as investors purchase buildings for pennies on the dollar and reinvest in the space to create more "trophy buildings." Current examples of this are already occurring at 60 Spear Street and 350 California Street in San Francisco.⁴ In addition, real estate transactions are already occurring

more rapidly in San Francisco than in recent years as prices drop to more desirable levels.³

1. CoStar, *San Francisco and East Bay Market Reports*, 2023.
2. Jones Lang LaSalle, *Demand for Transit-Accessible Offices Remains Strong*, 2023.
3. Jones Lang LaSalle, *Pulse of the Market Q3 2023 San Francisco*, 2023.
4. San Francisco Chronicle, *"The Recovery is Absolutely Starting." Why One Contrarian Office Investor is Buying in Downtown SF*, 2023.



FIGURE 2.8. TOP 15 SAN FRANCISCO OFFICE BUILDINGS BY MONTHLY RENT



Purple shading indicates 15 minute walkshed from BART stations.
Source: Jones Lang LaSalle, 2023; Google Earth, 2023.

Along the Peninsula, mutual growth in development and BART ridership is expected.

Development projects around BART stations will increase ridership as more people start to make new leisure, work, and tourism trips. At Millbrae Station, the newly opened Gateway Transit-Oriented Development has over 157,000 square feet of office

space, ground floor retail, 164-room hotel, and 400 residential units. The San Mateo County Transit District headquarters will move into the entire office space, adjacent to a transit center served by SamTrans, Caltrain, and BART.⁵

At San Bruno Station, the Southline project is slated for occupancy by the end of 2024 and is made up of 2.8 million square feet of office,

research and development.⁶ The existing Tanforan Mall is also in the progress of planning to transform into a transit-oriented mixed-use village with 2 million square feet of life science, 1,014 housing units, and 86,000 square feet of retail space.⁷

Transportation options along the Peninsula are improving.

In September 2024, Caltrain is expected to begin its electrified service plan that will reduce corridor travel time and increase the number of trains per hour. This will likely result in more BART ridership transferring from Caltrain.⁸

Airport trips are also rebounding, necessitating the need for robust connecting transit service. San Francisco International Airport has seen an 87-percent recovery in passengers and has exceeded pre-pandemic passenger levels on many days.⁹ Higher passenger travel days are forecasted going forward.¹⁰

5. SamTrans, [Board of Directors greenlights acquisition of new headquarters building](#), 2023.
6. [Southline](#), 2024.

7. [Tanforan for San Bruno](#), 2024.

8. Caltrain, [Electrified Service Plan](#), 2024.

9. San Francisco International Airport, [Air Traffic Summary](#), 2019 & 2023.

10. San Francisco International Airport, [SFO Reaches Post-pandemic Milestone](#), 2023.

THE EAST BAY'S ECONOMY CONTINUES TO UNIQUELY LEVERAGE BART.

The East Bay has...



LIFE SCIENCES

34%

Growth in life science jobs from 2011-2021.¹



VENTURE CAPITAL

6%

Of total California venture capital funding in 2020.¹



MANUFACTURING AND R&D

20%

Of new manufacturing and R&D space in the Bay Area over the past 10 years.²

Employment centers in the East Bay, which has the greatest concentration of BART stations in the system, represent tremendous regional growth potential.

Many East Bay cities are responding to changing economic trends by adding jobs and housing.

East Bay cities are leveraging access to BART to help shift market momentum towards their downtowns and prime infill locations. Downtown Fremont and the Centro Callan Project in San Leandro illustrate increased downtown development activity, the Warm Springs Innovation District encompassing Warm Springs/South Fremont Station

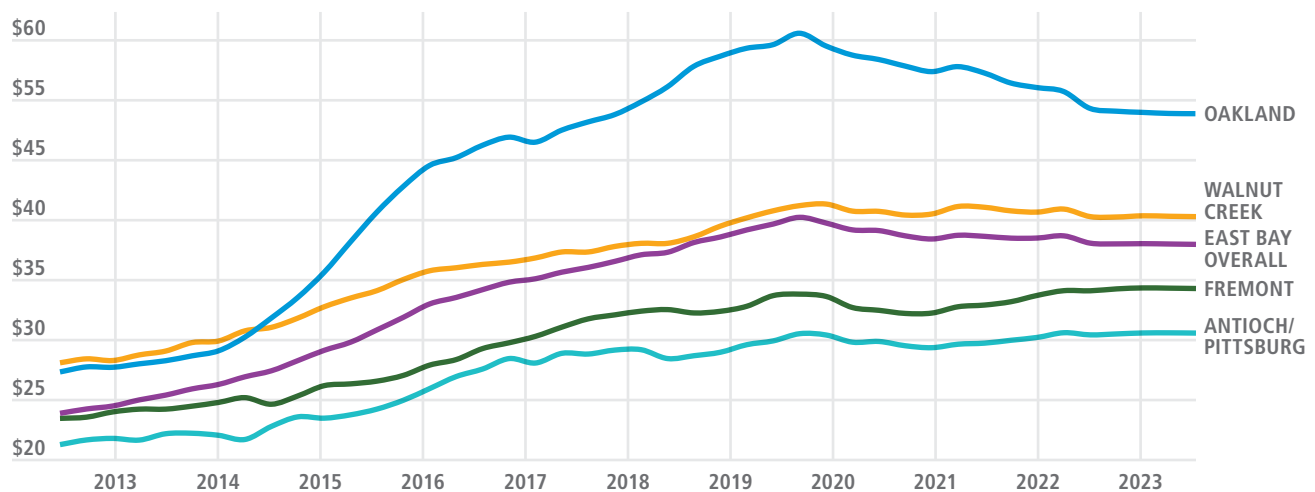
area has added hundreds of new housing units in the last few years, and there is renewed long-term interest in reinvestment near the Bay Fair and Coliseum station areas.⁵

Demand and rents for East Bay commercial and industrial space remain high.

Figure 2.9 shows that BART-served cities like Fremont and Walnut Creek continue to see increased rent for office space, and East Bay office rents have increased 59

percent overall since 2013. The East Bay industrial market continues to see high demand for warehouse and manufacturing space, with 11 consecutive quarters of net positive square footage leased as of 2023's first quarter, with brokers and developers reporting an increased interest in transit accessibility for industrial tenants.³

FIGURE 2.9. EAST BAY OFFICE SPACE RENT PER SQUARE FOOT



Berkeley data not available. Source: CoStar, 2023.

First/last mile shuttles extend BART's reach into job-rich parts of the East Bay.

The Emery Go-Round, a shuttle system providing access to Emeryville from MacArthur Station, has continued to build back its ridership since the pandemic lockdown, with ridership increasing nearly 50 percent from 2021 to 2022.⁴ While the Emery Go-Round is not the only employment-serving shuttle in the East Bay, its success demonstrates that there is demand for shuttles between BART stations and dense employment areas. In fact, in recent years, two similar shuttles have started in San Leandro and Union City with stops at their respective BART stations.

Emerging industries are choosing to locate in BART-served parts of the East Bay.

Emerging industries include creative technology and design—like software publishing, data processing, and advanced manufacturing. East Bay life science-related jobs grew by 34 percent, compared to a 16 percent growth for all types of jobs, from 2011-2021.¹ In addition, there are emerging industry-specific job hubs for manufacturing in Fremont and wholesale trade in Union City.⁵

While most AI investment has gone to companies in San Francisco or the Peninsula, the East Bay has its own innovation industries, including biomedical

device manufacturing, computer technology, food innovation, and clean tech. These industries and others have driven demand for almost one million square feet of R&D and manufacturing space in the last ten years and attracted \$5.5 billion in venture capital in 2021.^{1,5}

1. East Bay had \$5.5B of the \$60.0B in regional (East Bay, San Francisco, and Silicon Valley) VC, or 6 percent of California VC in 2020. Sources: EBEDA, [East Bay Forward](#), 2021; EBEDA, [East Bay Industrial Land Industrial Market Insights & Subarea Profiles](#), 2023.

2. East Bay (Alameda and Contra Costa) has 1M of the 5.5M total new R&D and Manufacturing space in four-county Bay Area (Alameda, Contra Costa, San Francisco, and San Mateo counties) from 2013-2023, so the East Bay has nearly 20 percent of the regional total. Source: CoStar, 2023.

3. Cushman & Wakefield, Marketbeat: [East Bay Oakland Industrial Q1 2023](#), 2023.

4. Emeryville Transportation Management Association, [Ridership Report](#), 2022.

5. BART, 2023.

INVESTING IN BART ADVANCES A DIVERSE AND VALUABLE WORKFORCE.

BART supplies the region with...



BART'S ECONOMIC IMPACT

\$1.2B

In economic contributions in 2023 through more than 5,000 jobs.¹



BART CONSTRUCTION

\$3.7B

In total economic impact from construction spending since 2019.¹



BART CONSTRUCTION

\$1.7B

In construction labor income since 2019.¹

BART is more than a transit service. It's also a large employer, a major consumer of construction services, and a supporter of small businesses.

Operating, maintaining, and expanding BART contributes billions to the region's economy each year.

Based on employment, in 2023, BART contributes \$1.2 billion to the regional economy and supports over 5,000 jobs. This includes impacts from BART's direct payroll expenditures, local vendor spending, and employee expenditures.¹

Between 2019 and 2023, BART's annual construction expenditures created an economic impact of \$3.7

billion in the regional economy and an additional \$1.7 billion in labor income—in addition to over 16,000 jobs to the region through direct, indirect, and induced impacts.¹

BART creates living-wage jobs that support workforce development.

Middle-wage job growth in San Francisco and Alameda counties has lagged over the past twenty years compared to every other county in the Bay Area. Access

to middle-wage jobs is essential in combating racial disparities by providing workers of color the opportunity to get and keep higher-paying jobs that hold more potential for advancement.² As an employer, BART serves as a vital source of these kinds of jobs. Nearly 75 percent of BART's workforce identify as people of color. They live throughout all 9 counties of the Bay Area and beyond.³

BART also supports workforce development and pathways to opportunity, by running



BART CONSTRUCTION

16k

Total construction-related jobs since 2019.¹



SMALL BUSINESSES

\$274M

In small business investments through BART's Measure RR in 2022.³



BART'S WORKFORCE

75%

Of BART employees identify as people of color.³

programs that support and encourage employees to move up the professional ladder to find new opportunities and benefits within the BART organization. Over 60 percent of current BART employees have been promoted within the organization at least once during their BART career.³

1. *Strategic Economics*, 2023.

2. *ReWork the Bay*, [The State of Bay Area Workers Data Tool](#), 2021.

3. BART, 2023.

4. BART, [BART's Small Business Support Services Provide Assistance to Local Entrepreneurs](#), 2023.



BART's procurement policies support small business like Mitchells Transport.

BART's Small Business Support Services program (SBSS) has assisted more than a thousand small business owners in identifying BART construction opportunities and helping them bid on projects.⁴ The SBSS program provides no-cost assistance to small businesses like Mitchells Transport—an Oakland-based, minority women-owned trucking company—in the form of one-on-one support, interactive training, workshops, and marketing services. BART has awarded a quarter of all Measure RR funds to small businesses.³

Source: Mitchells Transport.

BART HELPS MEET STATE AND REGIONAL CLIMATE GOALS.

Transportation accounts for 38 percent of the state’s greenhouse gas emissions.¹ BART represented 25 percent of statewide transit passenger miles pre-pandemic, underscoring the scale of BART’s role in reducing emissions.

The transition to zero-emission vehicles alone will not happen fast enough to meet state and regional climate goals.² The region needs to rely more heavily on public transit.

California has a 2045 target date to achieve carbon neutrality and help prevent the worst impacts of climate change. Even if new gas-powered vehicles are banned from sale by 2035, about 30 percent of passenger vehicles on the road will still be gas-powered in 2045 under the most aggressive assumptions for zero-emission vehicle adoption.²

Driving alone remains the primary mode of travel in California—accounting for about 75 percent of daily commutes—and electric cars promote low-density development patterns and vehicle miles traveled even more so than gas-powered vehicles due to their lower fuel and maintenance costs.³

By contrast, 100 percent of BART’s contracted electricity supply has been greenhouse gas emission-free in recent years, and BART is helping transit agencies operating buses achieve their electrification goals with battery charging at BART stations.⁴ Additionally, a strong transit system more than doubles

the effectiveness of compact, dense development in reducing travel distances and driving.⁵

In a future where new investment in transit yields ridership gains, the region would make substantial progress towards meeting climate goals because every BART train car moves as many people as 76 automobiles, resulting in lower emissions.⁶ Figure 2.10 illustrates this point by showing that the emissions per passenger for BART are minimal compared to driving for an example roundtrip between Pittsburg/Bay Point and SFO. Every mile driven emits 42 times the greenhouse gases of a BART trip.

1. California Air Resources Board (CARB), [California Greenhouse Gas Emissions from 2000 to 2021: Trends of Emissions and Other Indicators](#), 2023.

2. California State Transportation Agency (CalSTA), [Climate Action Plan for Transportation Infrastructure \(CAPTI\)](#), 2021.

3. CARB, [2022 Scoping Plan for Achieving Carbon Neutrality](#), 2022.

4. BART, [2022 Annual Sustainability Report](#), 2023.

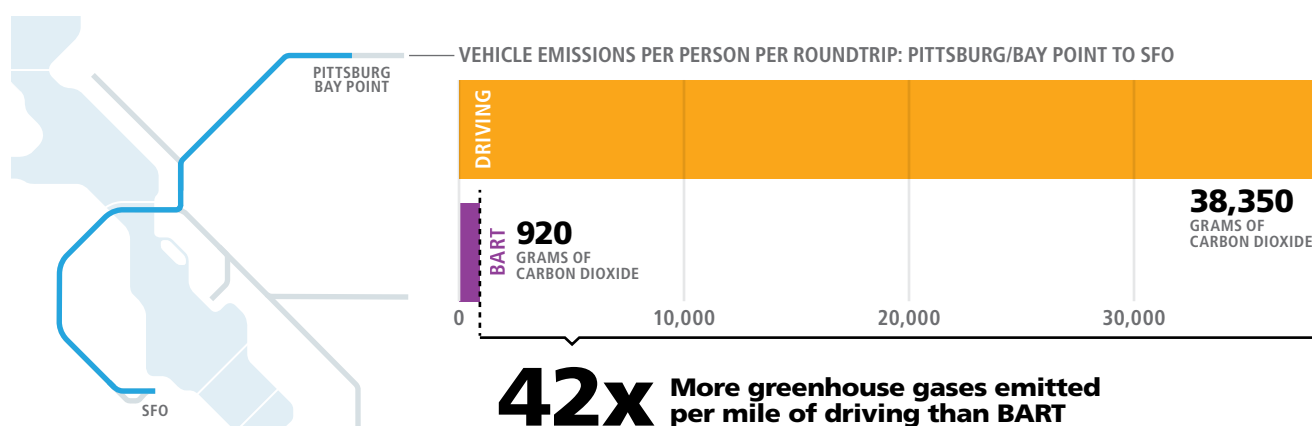
5. Public Policy Institute of California, [Making the Most of Transit: Density, Employment Growth, and Ridership Around New Stations](#), 2011.

6. BART train car to automobile conversion assumes the BART max car capacity of 115 people divided by 1.52 passengers per vehicle driven. Source: Fehr & Peers, 2023.





FIGURE 2.10. GREENHOUSE GAS EMISSIONS, DRIVING VS. BART



Vehicle emissions estimated based on 397 g/mi of CO₂ equivalent (EPA, 2022) and BART emissions estimated based on 0.021 CO₂ eq (lb/passenger-mile) (BART, 2023). One-way trip distance between SFO and Pittsburg Bay Point is 48.3 miles. Source: Fehr & Peers, 2023.

Without BART, there would be a daily increase of...

780,000 to 1,560,000

Miles driven, or 2,000 to 4,000 cars driving from San Francisco to Los Angeles⁷

...resulting in...

35,000 to 70,000

Gallons of gasoline burned⁷

...which would require...

5,100 to 10,200

Tree seedlings grown and sequestering carbon for 10 years to remove an equivalent amount of greenhouse gas emissions⁷

7. GHG equivalencies taken from the US EPA's Greenhouse Gas Equivalencies Calculator. GHG emissions estimated based on an average BART trip length of 14.8 miles (2020) multiplied by an emissions rate of 397 grams of CO₂ equivalent per mile (EPA, [Automotive Trends Report](#), 2022). Ranges based on a 50% to 100% BART mode shift to driving. Source: Fehr & Peers, 2023.

BART IS A CRITICAL LINK IN A RESILIENT TRANSPORTATION SYSTEM.

The Bay Area faces many potential disruptions and risks, from earthquakes to sea level rise to aging infrastructure. BART provides regional infrastructure redundancy so we are not overly reliant on any one travel mode.

BART is responsibly managing its infrastructure to ensure that it is prepared to handle disruptions and support the region.

BART provides regional infrastructure resilience and supports regional emergency preparedness. BART provides an alternative to several major regional corridors, including the Bay Bridge, I-80, I-580, I-880, SR-4, SR-24, and US-101. BART has invested in upgrades to keep the system running and provide redundancy to these highways for events ranging from a major traffic collision to a natural disaster.

Unlike BART, many Bay Area freeways have not been seismically retrofitted, meaning they could become non-operational in the event of a major earthquake. Many freeways also follow coastlines and have an increased risk of flooding with sea level rise. In the event of a large-scale evacuation, freeways

can quickly get congested and grind to a halt, whereas BART is highly effective at carrying large numbers of people.

BART continues to use technology to improve its own resilience. It has redundancy through different power supply systems, a recently completed a seismic upgrade of the Transbay Tube, a system to monitor track heat, many upgraded traction power substations and power cables, and high-quality air filters in train cars. BART has also introduced a new rail inspection car that can spot problem areas on the track to focus maintenance efforts and keep the system moving efficiently.

While BART has its own vulnerabilities—such as storm surges and human disruption that can shut down critical parts of the system—BART is an additional travel option available in the regional network. The region benefits from having these redundant layers: when one link in the network goes out, there are others to fill the role.





Top photo: Overturned big rig on lower deck of Bay Bridge. Announcement from the San Francisco Fire Department Public Information Officer (SFFD PIO): "Crews are working to mitigate this rollover EB 80 Bay Bridge -- expect delays." Source: SFFD PIO, X social media post, 2023.

Right photo: Traffic stopped by protestors on northbound Interstate 880 in Oakland to San Francisco. Source: Caltrans, April 2024.



Major incidents like crashes or protests can bring traffic to a standstill on key regional roadways. BART service provides critical redundancy during these times.

In the last five years, there have been at least eight major incidents on the Bay Bridge that have closed two or more of the bridge's lanes.¹ These incidents tend to be major vehicle collisions or jackknifed big rigs caused by inclement weather, but also include protests which result in severe backups on Bay Bridge approaches and the bridge itself. One 2020 crash closed three

lanes, slowing the time to cross the bridge to an hour and a half.² In March 2023, powerful winds toppled a big rig traveling on the Bay Bridge toward the East Bay, closing all lanes during the entire evening commute.³ With the bridge shut down, AC Transit Transbay Bus service canceled, and WETA ferry service halted due to high winds on the water, BART was there providing essential service to help people get home safely.

1. Fehr & Peers, 2023.

2. ABC 7 News, [Multi-Vehicle Crash Snarls Morning Commute on Bay Bridge](#), 2020.

3. San Francisco Chronicle, [Big Rig Overturns on Bay Bridge, Snarling Commute for Hours as Storm Pounds Bay Area](#), 2023.

BART IMPROVES HEALTH AND SAFETY.

Staying active has many benefits.



ACTIVE TRANSPORTATION

11%

Reduction in cardiovascular health risk associated with active commuting.¹



ACTIVE TRANSPORTATION

19%

Of coronary heart disease diagnoses could be prevented by walking 30 minutes/day, 5 days/week.¹



HEALTHCARE COSTS

9%

Of total healthcare costs in the US are caused by physical inactivity.¹

Walking or biking to BART provides a convenient way to build physical activity into daily routines, boosting public health.

People who ride transit walk an additional eight to 30 minutes every day, which improves physical health in many ways.²

Physical activity while riding transit takes many forms: trips to/from the station, transferring between routes, and, for those who park-and-ride, traveling between their car and the train platform. This type of regular physical activity increases heart health, builds muscle, and reduces the risk of heart disease so much that commutes that include walking and biking are linked with an 11-percent reduction in cardiovascular

health risks.^{1,3} For those commuters who walk at least 30 minutes a day for five days a week, their risk of coronary heart disease is reduced by even more (19 percent).¹ Simply standing on transit will burn around ten calories an hour.⁴

When people stop riding BART, the health benefits of walking and biking to transit dissipate.

As BART ridership goes down, fewer people walk and bike to and from stations. Without any BART service, over 100,000 walking or biking trips to/from BART each day would

cease to exist.⁵ This loss in physical activity has serious health and economic impacts. Physical inactivity leads to 234,000 premature deaths annually and increased risk of type 2 diabetes, cardiovascular disease, and colon cancer.¹ Almost one of every ten dollars spent on healthcare in the United States is the result of physical inactivity.¹

1. Conor Reynolds, Meghan Winters, Francis Ries, and Brian Gouge, [Active Transportation in Urban Areas: Exploring Health Benefits and Risks](#), 2010.

2. Chris Rissel, Nada Curac, Mark Greenaway, and Adrian Bauman, [Physical Activity Associated with Public Transport Use—A Review and Modelling of Potential Benefits](#), 2012.

3. State Government of Victoria, Australia, [Walking for Good Health](#), 2023.

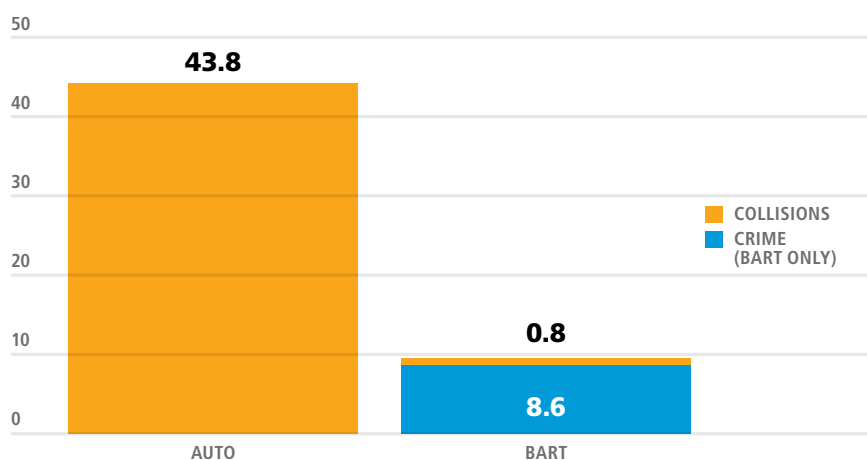
4. Jim Dwyer, [If a Standing Desk Is Good, What About a Standing Commute?](#), 2017.

5. April 2023 average weekday ridership multiplied by the percentage of active mode of access trips to BART in 2015 survey (which did not survey these stations: Warm Springs, Pittsburg Center, Antioch, Milpitas, Berryessa). Source: Fehr & Peers, 2023.



FIGURE 2.11. SERIOUS INJURY AND FATALITY RATES FOR DRIVERS VERSUS BART PASSENGERS, 2022

PER 100 MILLION MILES TRAVELED



Injury and fatality rate is for every 100 million vehicle miles traveled or passenger miles traveled. Sources: BART, 2023; California Statewide Integrated Traffic Records System (SWITRS), 2023.

In 2022, BART was 5 times safer than driving.

Even after accounting for personal safety incidents, BART is safer than driving.

Figure 2.11 compares how safe it is to drive a vehicle versus riding BART. For driving, this only considers traffic collisions, as data on crimes like carjackings that result in serious injury and fatality are not readily available across the communities BART serves. For BART, this considers crimes like robberies and assaults, as well as mainline derailments that are extremely uncommon.

Compared to driving, BART is much safer. For every 100 million passenger miles traveled on BART in 2022, there were fewer than nine crimes resulting in serious injuries or fatalities. In comparison, for every 100 million vehicle miles driven in the counties BART serves in the same year, there were almost 44 serious or fatal vehicle crashes.

BART's safety becomes even more evident when ridership is high. In 2018, there were under three crimes (resulting in serious injuries or fatalities) per 100 million passenger

miles traveled, suggesting that larger crowds on BART deter crime. There is also a safety-in-numbers effect for walking and biking, so as BART ridership continues to recover, getting to BART stations by foot or bike becomes safer as well. Since a large portion of BART's ridership recovery is happening between stations serving Equity Priority Communities,⁶ BART's safety benefits accrue particularly for people living and working in these communities.

6. Fehr & Peers, 2023.

BART IS A VITAL PART OF BAY AREA CULTURE.



“

BART symbolizes everything I love about the Bay Area and keeps me connected to it.”

— BART RIDER FROM BERKELEY

“

BART means connection. Riding BART keeps me connected to my community.”

— JOSIE DOMINGUEZ-CHAND, SAN FRANCISCO

BART’s iconic brand is synonymous with the Bay Area.

People love to rep BART.

BART is a common theme in Bay Area murals, songs, books, art, and clothing. Trains have been the backdrop for H.E.R. music videos, Will Smith movies, and viral punk shows, and BART has had a roaming “BART Basel” pop-up art show on station platforms. BART’s social media posts have gone viral, and BART sells \$275,000 each year in branded merchandise at its retail Customer Services Center and through the e-commerce site railgoods.com.¹ While people love BART’s minimalist, mid-century logo, BART has also turned heads three years in a row with a sold-out ugly holiday sweater, garnering extensive earned media headlines for their designs.

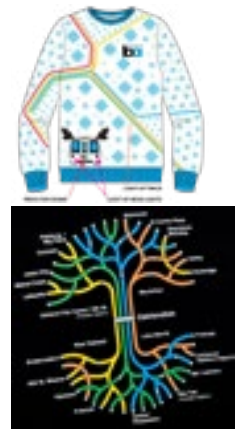


Image sources: BART, 2023; Oaklandish [BART tree tee](#), 2024.



BART even has its own word: "BARTable".

BART leverages its brand familiarity to support BART-accessible events and businesses, offering deals to customers.

Through the website [BARTable](#), BART maintains an average of more than 200 co-marketing agreements each year with partnering venues and events.¹ These partnerships encourage people to use BART by offering guides, tips, and customer discounts on destinations for recreation, arts, dining, and other activities to BARTable businesses and events. From BART-sponsored anime mascots at FanimeCon to the One Book One BART book club, BART directly connects people young and old to culture and community events.²

Other businesses also leverage BART's brand. According to a San Francisco Chronicle analysis, the word "BART" is in 42 percent of Oakland Airbnb listings, making it the most common word used in listing descriptions.³



BART helps the Bay Area celebrate special events.



80k

Additional BART riders for Warriors Championship Parade on June 20, 2022.



75k

Additional BART riders for San Francisco Pride Parade on June 25, 2023.

1. BART, 2023.

2. BART, [Anime Mascots](#), 2023; BART, [One Book, One BART: BART launches first book club for riders](#), 2023.

3. San Francisco Chronicle, [Here's the Word That Best Describes Each Bay Area City, According to Airbnb](#), 2023.

CHAPTER 3

The Future of BART

IN THIS CHAPTER

3.1. THE CONSEQUENCES OF LESS BART SERVICE

3.2. BART'S STEWARDSHIP OF PUBLIC RESOURCES

3.3. BART'S VISION FOR THE FUTURE



A FUTURE WITH REDUCED BART SERVICE IS NEITHER SUSTAINABLE NOR EQUITABLE.

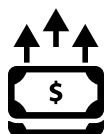
A future without BART as we know it would be disastrous.

A world without BART could result in over 100,000 additional vehicle trips per day,¹ assuming all riders at current levels shifted to driving. Here are just some of the ways that reducing BART service would harm the Bay Area.

1. Additional vehicle trips calculated based on average April 2023 weekday BART ridership, assuming 100% vehicle mode shift and a 1.52 vehicle occupancy (NHTS, 2022). Fehr & Peers, 2023.

Transportation costs for BART riders would increase.

PER TRIP COST FOR THOSE WHO HAVE TO DRIVE INSTEAD WOULD MULTIPLY



MANY HOUSEHOLDS WOULD HAVE NO CHOICE BUT TO OWN MORE VEHICLES



Massive traffic congestion would form across critical regional roadways, especially during peak hours.

BART RIDERS WOULD SWITCH TO DRIVING OVER THE BAY BRIDGE

5,400

Additional vehicles (73% increase), or 2.7 additional lanes of traffic on the Bay Bridge when all BART transbay riders shift to driving.

BART RIDERS WOULD SWITCH TO DRIVING THROUGH THE CALDECOTT TUNNEL

1,600

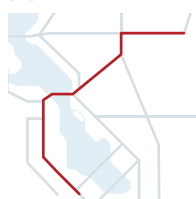
Additional vehicles (22% increase), or 0.8 additional lanes of traffic through the Caldecott Tunnel when all BART Yellow Line riders shift to driving.

Additional volume calculated based on average weekday westbound AM peak hour BART ridership through the Transbay Tube and the Yellow Line near the Caldecott Tunnel, assuming 100% vehicle mode shift and a 1.52 vehicle occupancy (NHTS, 2022). Additional lanes estimated based on a 2,000 vehicle/lane freeway capacity.

More time would be lost sitting in traffic, slowing the economy and reducing quality of life.

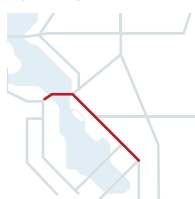
+19 hours

ANTIOCH TO SFO



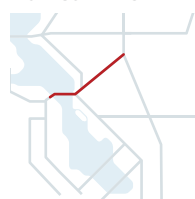
+10 hours

FREMONT TO POWELL ST



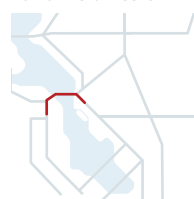
+10 hours

WALNUT CREEK TO MONTGOMERY ST



+8 hours

19TH ST/OAKLAND TO 16TH ST/MISSION



Hours per week per driver. From page 20, Figure 2.5.

Businesses and institutions would lose access to people, which would have grave economic consequences.



Businesses and institutions near BART would lose access to the workforce, customers, students, and visitors they rely on to stay vital. The “trophy” office buildings that house globally innovative and important

companies, and which command the highest rents in Downtown San Francisco, are the most prominent example of workplaces near BART that would suffer.

From page 29.

Additional driving would increase greenhouse gas emissions, making it impossible to meet state and regional climate goals.



DRIVING EMISSIONS EQUIVALENT

1.6M

Miles driven, or 4,000 cars driving from San Francisco to Los Angeles daily.



GASOLINE EMISSIONS EQUIVALENT

70,000

Gallons of gasoline burned daily.

Assumes all existing BART riders shift to driving. From page 36.

People across the Bay Area would have a harder time getting to key regional destinations.

Bay Area residents would lose BART access to:



900

PARKS



300

PLACES OF WORSHIP



100

MUSEUMS & GALLERIES



100

HISTORIC SITES



50

LIVE VENUES



30

COLLEGES & UNIVERSITIES



10

FARMERS MARKETS



10

AMUSEMENT PARKS



10

SPORTS VENUES

From pages 21-22.

The regional transit network would fail to function with cascading effects across operators.

THE MAJORITY OF REGIONAL TRANSIT TRANSFERS INVOLVE BART

87%

Of transfers include a leg on BART, with more than 300 unique bus, light rail, ferry, private shuttle, and inter-regional carrier routes connecting to BART.

THE REGION'S INVESTMENT IN TRANSIT INFRASTRUCTURE WOULD BE LOST

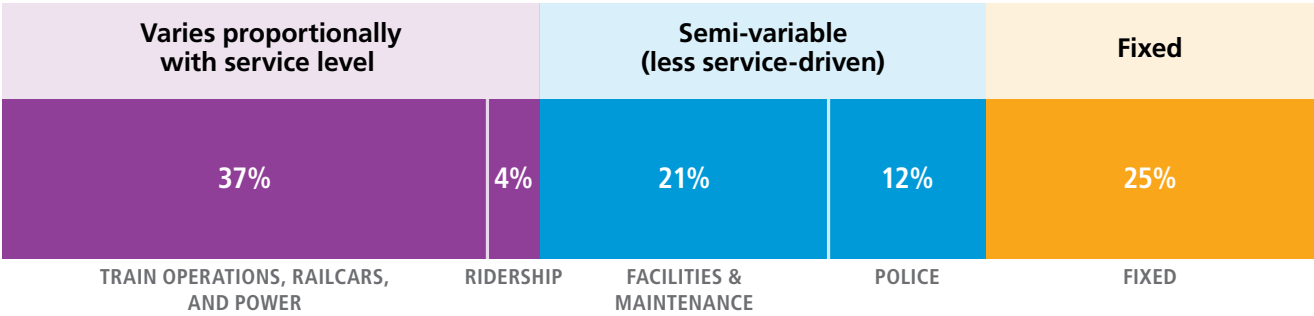


Billions of dollars in planned regional transit investments, such as the Silicon Valley Extension Phase II, require the existing BART system to achieve improved regional mobility.

CUTTING BART COSTS REQUIRES A DISPROPORTIONATE SERVICE REDUCTION AND HARMS EQUITY GOALS.

Cutting BART operating expenses by 30 percent reduces BART service by 85 percent.

FIGURE 3.1. BART’S FIXED AND VARIABLE ANNUAL OPERATING COSTS



Ridership as a variable cost includes a portion of the region’s Clipper fees based on the number of Clipper trips made on BART, and fees to banks for the ticket vending machines and parking. A small share is also Automatic Fare Collection (AFC) maintenance, elevator/escalator maintenance, car cleaning, and station cleaning.

Moderate reductions in operating expenses require massive service cuts.

As with all rail operators, BART has lots of trains, tracks, stations, and other infrastructure that need to be maintained to operate service. These are known as “fixed” costs because they must be paid to run even the most basic service.

Figure 3.1 shows that only about 40 percent of BART’s operating costs scale proportionally with service levels. This means that even massive reductions to

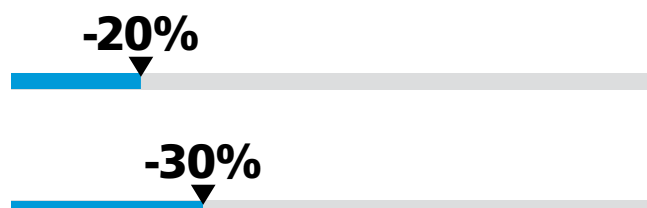
service hours and frequency would not produce enough cost savings to cover the expected funding gap. As Figure 3.2 shows, even if BART were to cut 85 percent of all service, this would only generate a 30-percent cost reduction which would still not close the gap. In this cost-cutting scenario, BART’s savings come at a large expense to the region—both to the people who rely directly on BART service and to those who benefit indirectly from less congestion, reduced emissions, BART’s construction spending, and other benefits that BART service brings.



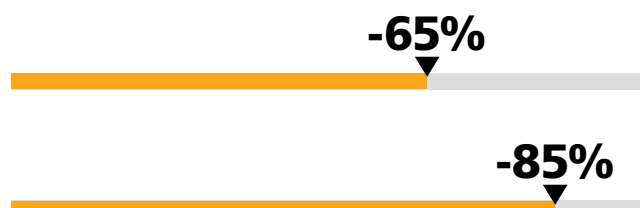
Service reductions on BART are inequitable and are contrary to BART's mission.

FIGURE 3.2. SERVICE REDUCTIONS REQUIRED FOR OPERATING COST REDUCTIONS

AN OPERATING COST REDUCTION OF:



REQUIRES A BART SERVICE REDUCTION OF:



BART, *FY23 Reimagined Short Range Transit Plan*, November 2022.

Cutting BART service disproportionately impacts disadvantaged communities and ripples across the regional transit network.

BART riders disproportionately have incomes below the regional average. In 2022, 47 percent of BART riders reported household incomes of less than \$75,000, compared to 31 percent of all households in BART's service area.¹ Reductions to BART service also hurt the financial viability of smaller transit agencies that serve critical local needs, as nearly 90 percent

of all regional transit transfer trips involve a leg on BART.² Running fewer trains hinders BART's ability to provide safe, reliable, clean, and quality service for the 60 percent of regional residents; 60 percent of schools, parks, and libraries; and almost two-thirds of regional jobs located within a 15-minute walk of a BART station or connecting transit route.

1. BART Customer Satisfaction Survey, 2022.
2. MTC Clipper, 2023.

A world without BART would make it harder to find housing, forcing people out of the Bay Area.

Slashing BART service would undermine the effectiveness of more than 8,000 existing and planned housing units on BART land to address the regional affordability, housing, and climate crises.

Many people would lose an essential travel option, including: children, the elderly, people with disabilities, zero car households, low-income people, and people in Equity Priority Communities, who make up 41 percent of all people living within a 15-minute walk of BART stations. As a result, they may need to relocate to a different neighborhood, quit their job, or even leave the region.

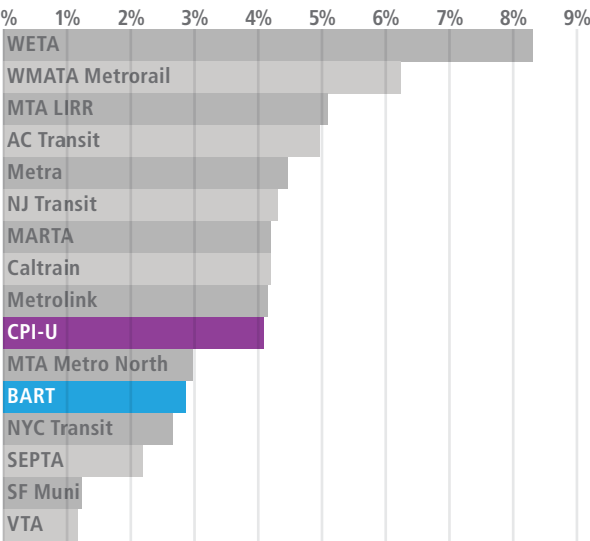
From pages 17, 21-22.

BART IS AN EFFECTIVE AND ACCOUNTABLE PUBLIC INVESTMENT.

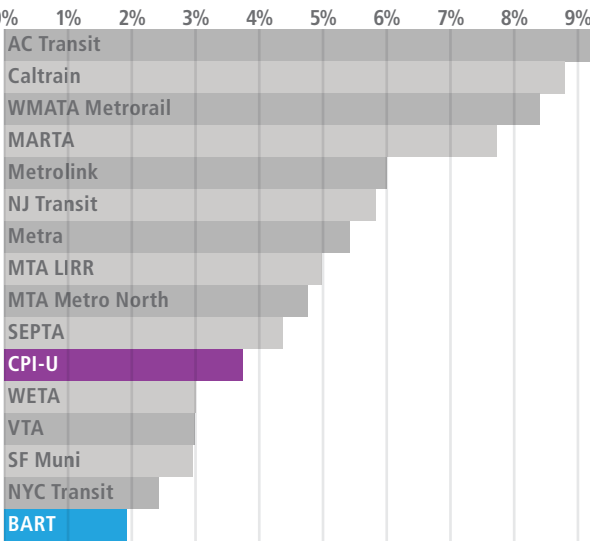
On a national scale, BART is an efficient manager of expenses and service delivery.

FIGURE 3.3. OPERATING EXPENSE GROWTH FOR BART AND PEER TRANSIT AGENCIES

2019 vs. 2023 Average Annual Operating Budget Growth



2019 vs. 2023 Growth in Cost Per Service Hour



All Urban Consumers (CPI-U) represent about 87 percent of the total U.S. population and is based on the expenditures of all families living in urban areas. Source: BART FY23 Budget Performance Report (BPR), 2023; Agency Budgets, 2023; Bureau of Labor Statistics, 2023; National Transit Database, 2023; U.S. Department of Labor, [Frequently Asked Questions](#), 2024.

BART keeps costs under control.

BART’s operating expenses have increased more slowly than the consumer price index (CPI) since 2019, despite opening the extension to Berryessa/North San José.

Figure 3.3 shows that BART’s operating expenses have grown more slowly than most peer transit agencies, both in terms of overall operating budget and in the amount it costs to operate an hour of service.



BART has succeeded in meeting accountability measures for public funds.

BART is delivering Measure RR projects in a timely manner.

The BART Board established an independent Bond Oversight Committee in 2017 to verify that BART spends Measure RR bond revenues as promised. The committee reports that BART is delivering rebuilding projects in a timely manner, in accordance with industry best practices, and that the work is improving the reliability and safety of the system.

Measure RR is more than 6 years into its expected 20-year lifespan of work, and 52 percent of all anticipated Measure RR work has already been completed, with 48 projects successfully completed and a further 104 now in planning, design, or construction.

BART has also successfully delivered its Earthquake Safety Program, which upgraded vulnerable portions of the original BART system to ensure safety for the public and BART employees. The program upgrades used the latest seismic standards to ensure that operation can resume shortly after a major earthquake. The program was funded primarily by Regional Measure AA, which was passed by voters in Alameda, Contra Costa, and San Francisco counties in 2004 and established a Citizens' Oversight Committee to monitor the progress and effective use of funding.

Furthermore, the Office of the Inspector General (OIG) was created in 2018 to provide independent oversight of BART's use of revenue. The OIG conducts performance audits that objectively analyze the efficiency and effectiveness of BART operations and conducts investigations that uncover fraud, waste, or abuse. In 2023, the OIG's budget was nearly tripled, so that it can expand and perform even more audits and investigations to identify waste, fraud, and abuse and ensure BART is maximizing its efficiency.

Measure RR progress



52%

Of Measure RR work completed.

48

Projects completed.

104

Projects in planning, design, or construction.

BART IS MAKING INVESTMENTS TO IMPROVE THE RIDER EXPERIENCE, WITH PROMISING RESULTS TO DATE.



Safety and security

BART is keeping riders safe by doubling BART Police officer presence systemwide. The new safety initiatives are already improving rider experience through faster response times and increased deterrence and apprehensions, and the number of trains with incidents fell by 40 percent between May and October of 2023. BART is also utilizing unarmed experts in de-escalation to connect people in crisis with support services while enforcing rules banning drug use and smoking. Additional security efforts include Transit Ambassadors on trains, better lighting, use of over 4,000 security cameras, and the elimination of near-empty train cars by the strategic shortening of trains.



New fare gates

BART's Next Generation Fare Gates program improves station security and combats fare evasion by installing taller, stronger fare gates. Pilot fare gates were installed at West Oakland Station at the end of 2023, and the complete installation of 700+ new fare gates will be completed systemwide by the end of 2025. Additionally, fare gates have been added to enclosed elevators to further reduce fare evasion. These new fare gates also improve access to the station by streamlining the path to tag in or out of the station, which was previously difficult and cumbersome for elevator users. The elevator fare gates at Downtown San Francisco stations also speed up transfers to Muni. BART riders arriving by train in Downtown San Francisco can now tag out at the platform and take the elevator to the Muni platform. Previously, BART riders had to travel up two levels to the concourse, reach around to tag out of BART at the fare gate, travel to the Muni entrance, tag in at their fare gate, and travel down one level.



Clean rides

BART is committed to ensuring a high-quality and clean experience in BART facilities, including on trains and within stations. Beginning in Fall 2022, BART began doubling the rate of deep cleaning on new Fleet of the Future train cars and retired all old train cars as of 2023. In Spring 2023, BART added nearly 66 percent more dedicated crews to keep stations clean. Staffing increases are helping facilitate reopening restrooms to better service riders and allow staffing restrooms at high-volume stations with attendants to increase cleanliness and safety. Inside station elevators, attendants greet riders, operate buttons, and curb unwanted behaviors, such as drug use or graffiti.



Service adaptations

The September 2023 schedule change increased emphasis on ridership growth opportunities and relied less on outdated commuting models, providing substantial improvements to mid-day, evening, and weekend service while also increasing daytime frequencies on BART's busiest weekday line, the Yellow Line, to get drivers off congested highways. The new schedule also improved efficiency through reduced platform wait times due to new scheduled transfers. Reliability substantially improved after implementation of the new schedule, with on-time performance improving to 92 percent and canceled trips nearly eliminated as of Fall 2023.

BART IS READY FOR THE FUTURE.

BART is modernizing its infrastructure to improve service, reliability, and rider experience.

BART's Communications-Based Train Control (CBTC) project will allow trains to safely operate closer together.

This enhancement will enable BART to operate up to 30 peak hour trains per direction through the Transbay Tube, an increase of 25 percent over the current limitation of 24 trains per hour per direction. CBTC also facilitates better recovery from delays and a smoother ride, meaning more comfortable, more reliable BART service overall.

BART is upgrading trains and safeguarding against earthquakes.

BART has replaced all 669 legacy trains with new Fleet of the Future cars that provide a quieter, cooler, more comfortable, easier to use, and more accessible rider experience. As of March 2024, 701 of 775 cars have been received. BART has completed the Earthquake Safety Program to upgrade vulnerable portions of the original BART system as well as a seismic upgrade of the Transbay Tube. These upgrades enhance safety and futureproof BART in the event of a major earthquake.

Service improvements for transbay peak trips facilitated by the CBTC project

LEGACY TRAIN CONTROL

24

Trains per hour per direction.

CBTC TRAIN CONTROL

30

Trains per hour per direction.

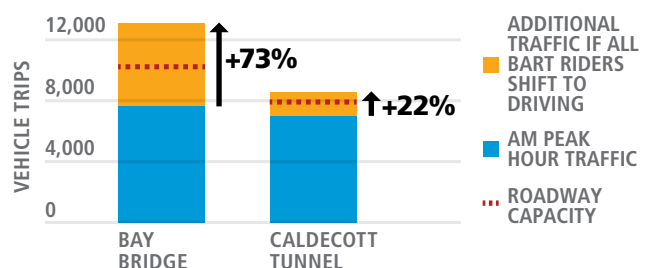


BART is keeping traffic congestion from getting worse.

BART is reducing the number of cars on key regional roadways.

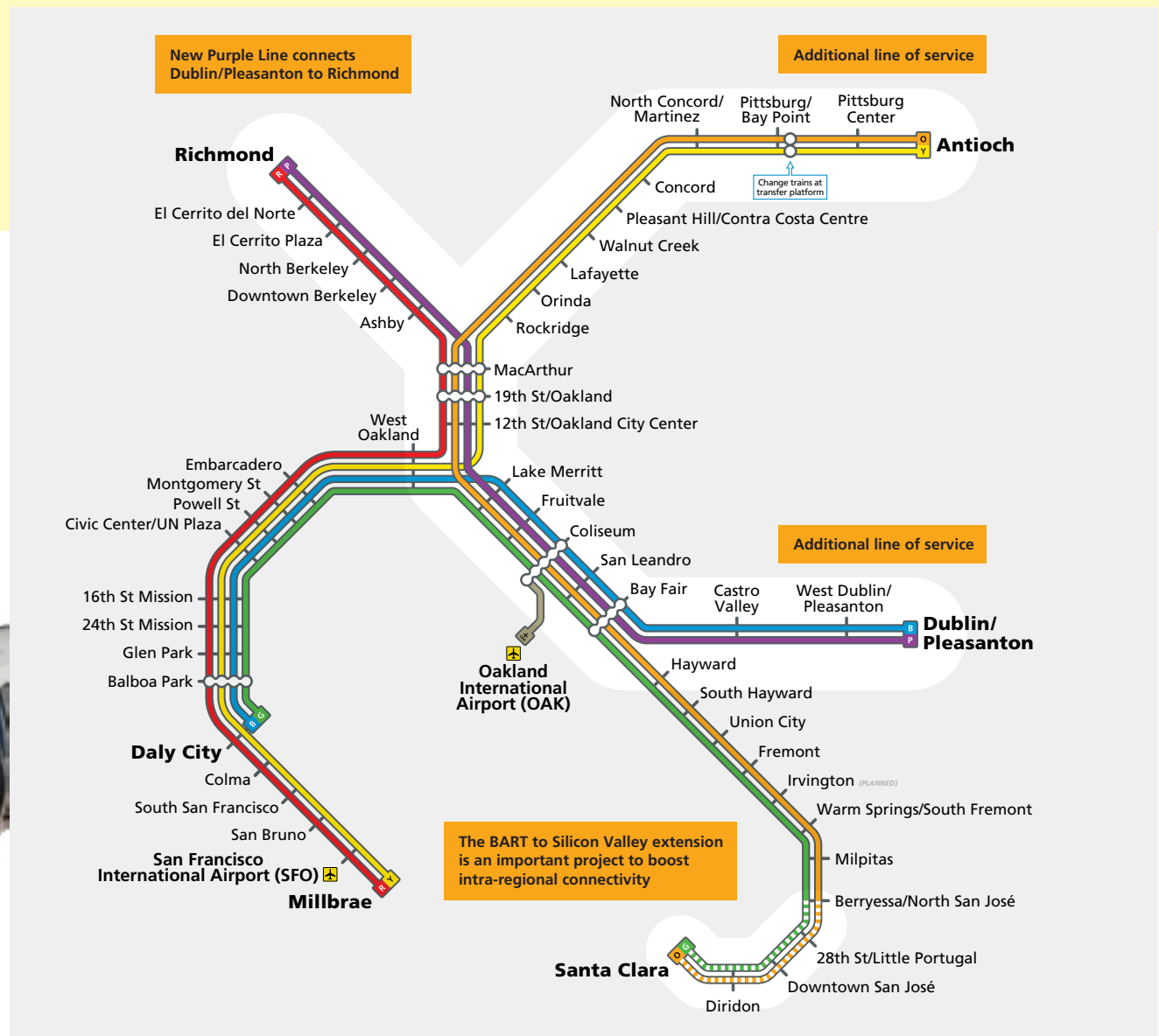
Figure 3.4 illustrates that, without BART, the number of riders shifting to driving would overload the current roadway capacity of the Bay Bridge and Caldecott Tunnel at 2024 service levels. BART helps reduce congestion on the Bay Bridge and Caldecott Tunnel, improving quality of life for even people who don't use transit.

FIGURE 3.4. TRAFFIC WITHOUT BART



Additional volume calculated based on average weekday westbound AM peak hour BART ridership through the Transbay Tube and the Yellow Line near the Caldecott Tunnel, assuming 100% vehicle mode shift and a 1.52 vehicle occupancy (NHTS, 2022).

FIGURE 3.5. BART METRO 2030 AND BEYOND: ENHANCED EAST BAY SERVICE



BART is evolving service patterns and building needed housing at stations to shape a stronger and more affordable region.

BART is updating service in response to evolving customer needs.

In 2022, the BART Metro 2030 and Beyond study developed new service concepts in response to emerging travel patterns and rider feedback designed to provide more direct intra-East Bay travel and provide additional service during the evening hours, along with improvements to support implementation (Figure 3.5).

BART is focusing on residential and commercial development at its stations.

BART's Transit-Oriented Development (TOD) Program helps to address the regional housing crisis and increase ridership. BART's TOD Program includes a 2040 target of 20,000 residential units, including 7,000 affordable homes and 4.5 million office/commercial square feet on BART property.

A SEAMLESS TRANSIT NETWORK, WITH BART AT ITS CORE, WILL TRANSFORM THE REGION.

BART is taking a leading role in regionally advancing a more user-friendly and unified rider experience.

BART is a key partner in the implementation of the Transit Transformation Action Plan (TTAP), which will deliver a much more user-friendly and unified rider experience across Bay Area transit agencies.

Transit operators have been coordinating more than ever before, advancing activities to better align schedules, coordinate around key issues, and share best practices. In addition, operators are working closely with the Metropolitan Transportation Commission (MTC) to deliver the TTAP, which outlines actions to improve the Bay Area's public transportation network and identifies five outcome areas that are central to achieving this: fares & payment, customer information, transit network, accessibility, and funding.

In 2023, MTC launched the Regional Network Management (RNM) structure to drive transformative improvements in the customer experience by improving coordination of the regional transit network and developing a more unified regional transit system. This structure includes an RNM Council comprised of transit agency general managers and the MTC Executive Director. The council's work plan includes advancement of TTAP initiatives as well as development of a regional rider survey and regional transit performance measures.

In addition, the state has initiated a Transit Transformation Task Force led by the California State Transportation Agency (CalSTA), which is required to solicit and develop a structured and coordinated process for engaging local agencies, academic institutions, nongovernmental organizations,

and other stakeholders to develop policy recommendations to grow transit ridership and improve the transit rider experience. CalSTA, in consultation with the task force, is required to prepare and submit a report of findings and policy recommendations based on the task force's efforts to the appropriate policy and fiscal committees of the California State Legislature on or before October 31, 2025. The report must include a detailed analysis of specified issues and recommendations on specified topics, including, among others, reforming the Transportation Development Act.

BART has a leadership role in these efforts through its ex officio board representation on the RNM Committee, general manager participation on the RNM Council, and general manager participation on the State Task Force.



The region is already making strides on two critical efforts.

MTC is partnering with BART and other regional operators to make fares more affordable and integrated.

In fall 2022, MTC teamed with BART and more than 20 other transit operators to launch Phase 1 of the Clipper BayPass pilot, which provides unlimited transit passes for all bus, rail, and ferry services in the 9-county region. The pilot launched with nearly 50,000 eligible residents, including residents of several affordable housing complexes and students at four educational institutions. In 2024, this pilot expanded to allow up to 10 different employers to purchase



*Clipper BayPass logo.
Image source:
MTC, 2024.*

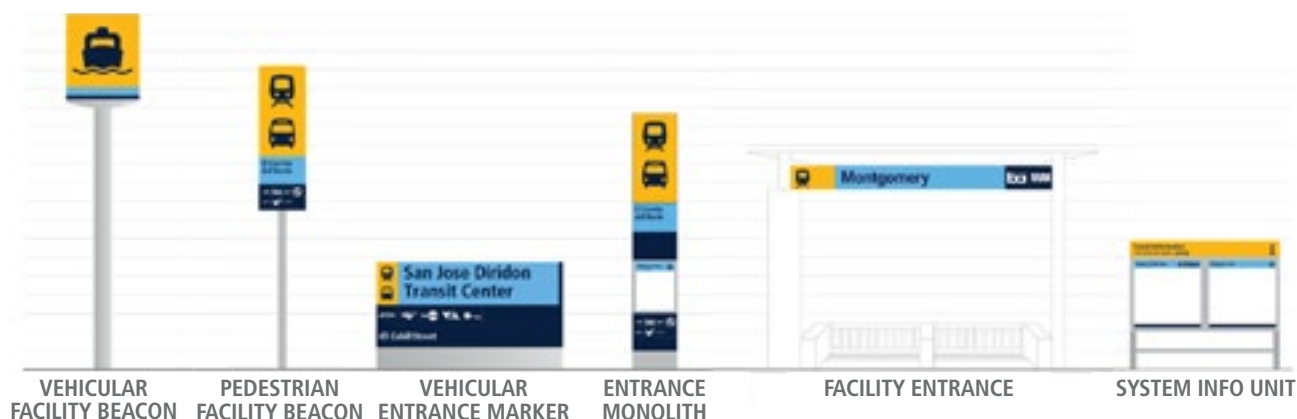
a similar pass for as many as 20,000 employees for a two-year period.

With the Next Generation Clipper rollout scheduled to launch soon, riders will be able to simply tap a credit or debit card at the fare gate to pay for BART, and the No-Cost & Reduced Cost Interagency Transfer Policy Pilot will launch at the same time. Following the Transit Fare Policy Vision Statement endorsed by the Fare Integration Task Force in fall 2021, future fare integration initiatives include evaluating an integrated fare structure for regional transit services as well as all-agency individual passes or fare capping policies. In addition to the fare integration work, all transit agencies acted to participate in and increase the Clipper START fare discount for low-income riders to 50 percent on January 1, 2024.

The Regional Mapping and Wayfinding Project is underway and will make transit easier to identify and wayfinding at hubs more consistent.

The Regional Mapping and Wayfinding Project will update signage, wayfinding, and mapping standards for transit throughout the Bay Area. It will provide consistent and intuitive information to make navigating across transit operators, transit operator service areas, and transit services easier and more convenient for passengers. Design prototypes for this project are illustrated in Figure 3.6. BART has started implementing bus bay numbering, which will help passengers find their bus and report maintenance or security issues.

FIGURE 3.6. REGIONAL MAPPING AND WAYFINDING DESIGN PROTOTYPES



BART is as essential to the Bay Area as ever

The Bay Area faces major challenges. In Spring 2020, we witnessed an upending of travel patterns that turned our longtime funding model on its head. BART is continuously adapting to these obstacles.

We recognize that our system is essential to the region's long-term success. BART connects communities. Our trains take cars off gridlocked roadways and crossings, reduce emissions that pollute the air and contribute

to climate change, and carry millions of people to their jobs, appointments, interviews, cultural happenings, families, and friends.

