2025 TIP Investment Analysis

A FOCUS ON LOW-INCOME POPULATIONS, PERSONS OF COLOR, SENIORS, AND PERSONS WITH DISABILITIES

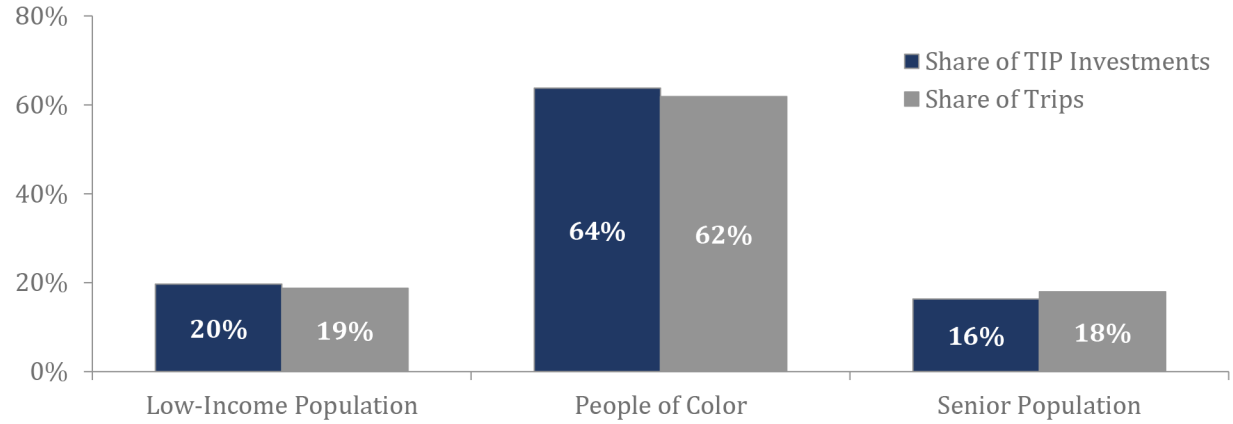
Executive Summary

The 2025 Transportation Improvement Program (TIP) Investment Analysis is an assessment of TIP investments through an equity lens, specifically focused on the Bay Area's disadvantaged populations. The purpose of the analysis is to understand if low-income populations, people of color, seniors, and persons with disabilities are sharing equitably in the region's near-term transportation investments.

Equitable distribution of investments overall

The results of the population use-based analysis (Figure 1) indicate that overall, the investments in the 2025 TIP direct an equitable proportion of investments to projects that support the transportation of residents of low-income households, people of color, and seniors.

Figure 1. 2025 TIP Investments and Trips by Population

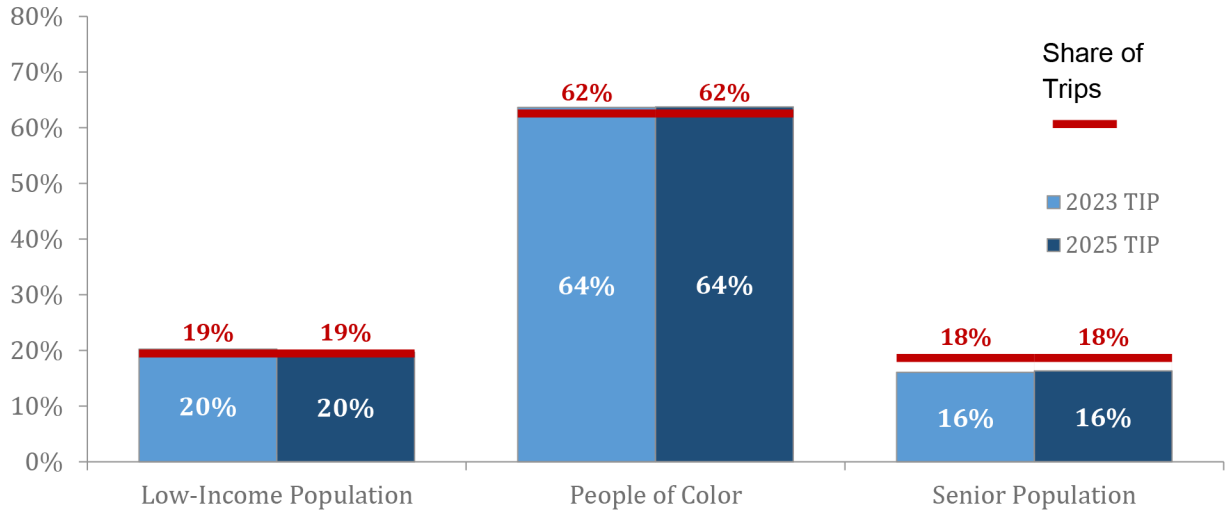


Sources: 2018/19 Bay Area Travel Survey, 2025 TIP

Comparison with Prior Analyses

The 2025 TIP maintains an overall equitable distribution of investments, consistent with the 2023 TIP investment analysis (Figure 2).

Figure 2. 2025 TIP Investments: Comparison with Prior TIP Period



Sources: 2018/19 Bay Area Travel Survey and 2023 TIP, 2010-12 California Household Travel Survey, 2023 and 2025 TIPs

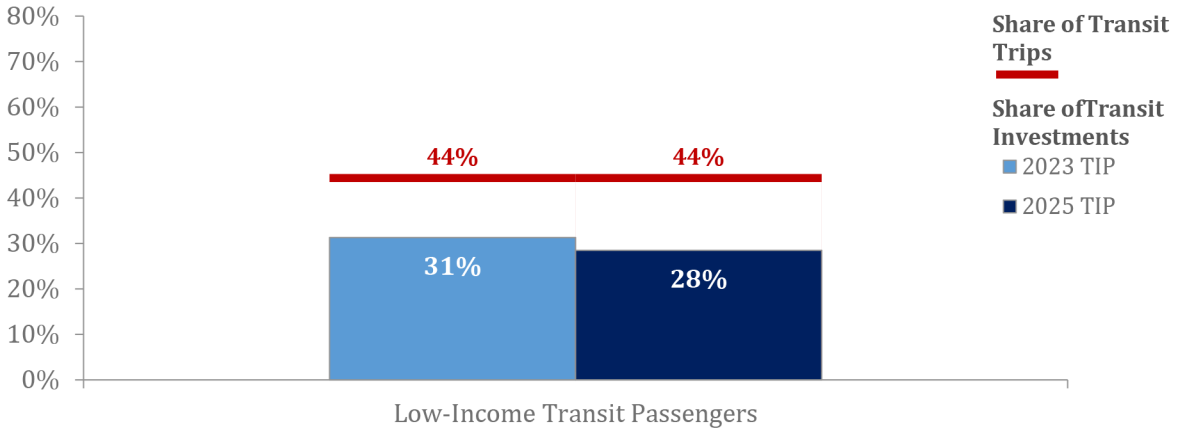
Variable results for transit

While the 2025 TIP continues an equitable distribution of investments overall, there is one variance worth noting, specifically related to transit.

The share of transit investments that support trips made by passengers in low-income households (28%) falls short of these passengers' relative share of the transit trips taken (44%) (Figure 3).

The divide between TIP investments supporting low-income transit riders and the proportion of trips by these riders are driven in part by the definition of low-income, which has remained static at $50,000 per household over the last several analyses. As a result, each subsequent TIP analysis of low-income transit riders captures a decreasing share of transit passengers due to steady increases in median income over time.

Figure 3. 2025 TIP Transit Investments, Low-Income: Comparison with Prior TIP Period



Sources: MTC Transit Passenger Demographic Survey, BART Customer Satisfaction Survey, 2023 and 2025 TIPs

The varied transit results in the 2025 TIP can also be attributed, in part, to a small number of very large projects, particularly the BART Berryessa to San Jose Extension. The share of BART riders from low-income households is less than the regional average, which is likely a significant driver of the disparity between transit investments that support low-income transit riders and the share of low-income transit riders.

With $3.6 billion programmed to the project, the BART extension alone accounts for 70% of all transit funding in the 2025 TIP. When focusing only on state and federal transit funds, this project accounts for approximately 74% of funding in the TIP period. For this analysis, ridership characteristics for the BART extension are assumed to mirror that of the existing BART system, even though the characteristics of transit riders benefiting from the extension may more closely reflect that of VTA, the service area of the project. The share of BART riders from low-income households is less than the regional average.

In addition, approximately $2.7 billion in FTA formula funding for the four-years of the 2025 TIP have not yet been reflected in the TIP. These funds will be amended into the TIP through the Transit Capital Priorities (TCP) program. The programming of these funds to transit operators throughout the region is anticipated to improve the estimated per transit passenger benefits for low-income riders and people of color.

It is also important to re-emphasize that the TIP does not reflect the full picture of transportation investments in the Bay Area. The TIP only includes four years of near-term fund programming and tends not to include operating and maintenance funds, particularly for transit.

Transportation equity measures and project mapping provide opportunity for better understanding of potential equity impacts

For the 2025 TIP, additional information is provided on projects that support transportation and equity-related regional goals from in PBA 2050: Build a Next-Generation Transit Network, Maintain and Optimize the Existing System, Create Healthy and Safe Streets, and Reduce Climate Emissions. Although the analysis does not identify direct benefits and burdens resulting from individual investments, it builds upon the population use-based and disparate impact analyses to better understand the nature of the projects included in the 2025 TIP and their anticipated effects on long-term regional goals.

Where possible, projects in the 2025 TIP are also mapped to illustrate the location of investments in relation to adopted Equity Priority Communities (EPCs) on the 2025 TIP Investment Analysis Web Map. The geographic display of projects allows for examination and identification of any apparent systematic exclusion of communities in the spatial distribution of benefits, or any apparent systematic imbalances between the distribution of projects between EPCs and the remainder of the region.

Introduction

The 2025 Transportation Improvement Program (TIP) Investment Analysis is an assessment of TIP investments through an equity lens, specifically focused on the Bay Area's disadvantaged populations. The purpose of the analysis is to understand if low-income populations, people of color, seniors, and persons with disabilities are sharing equitably in the region's near-term transportation investments. Although the project investment information is current as of development of the 2025 TIP, the demographic and travel data used in this analysis are from 2014 through 2019. As these data are pre-COVID-19, the recent demographic shifts in the Bay Area and long-term impacts to travel patterns due to COVID-19 will be reflected in the analysis of future TIPs.

2025 TIP

The Bay Area's 2025 TIP covers the four-year period of FY 2024-25 through FY 2027-28 and includes over 300 transportation projects with $11.8 billion in committed funding during the four-year period.

Projects in the TIP

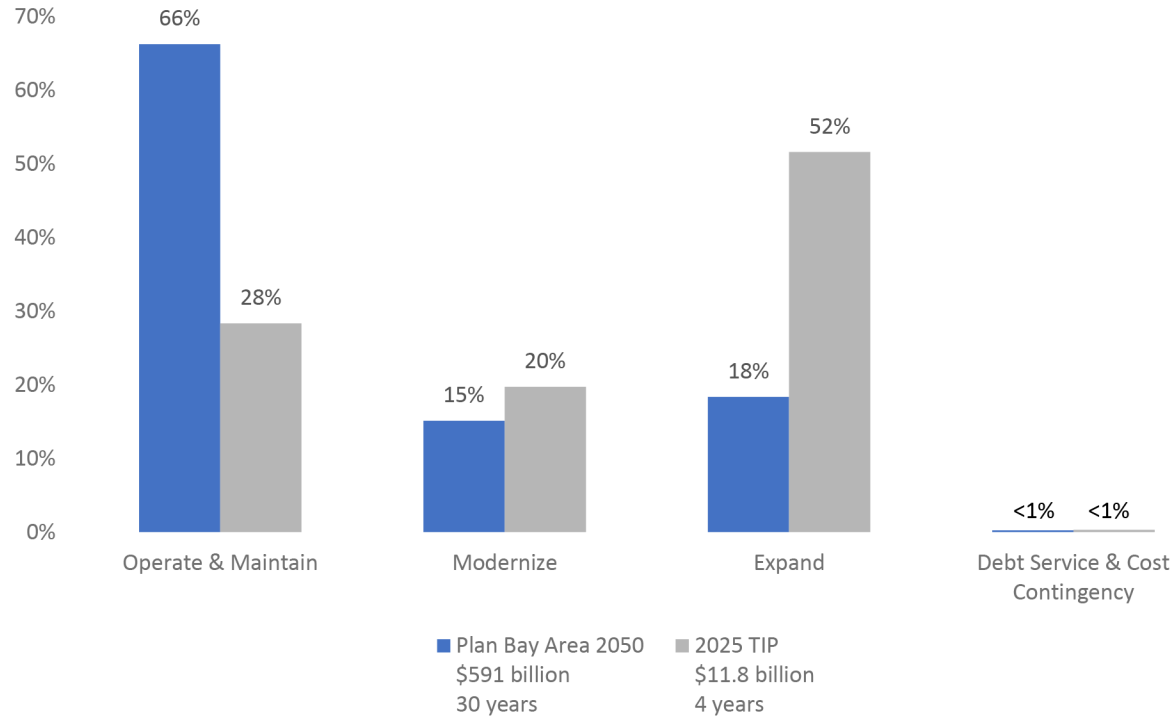
The TIP includes all transportation projects that are federally funded, require a federal action, or are considered regionally significant for air quality conformity purposes. Most projects in the TIP are federally funded, although some local or state-funded projects are also included, particularly those that are large in scale or impact travel patterns over a relatively large geographic area, such as a new carpool lane on a state highway. In reviewing TIP investments as a whole, it is important to keep in mind that most transportation projects are local, in both scale and funding, and these projects are typically not reflected in the TIP. These projects include roadway repaving, transit operations and maintenance, planning efforts, bicycle/pedestrian improvements, and minor intersection improvements.

All projects included in the TIP must be consistent with the region's long-range plan, *Plan Bay Area 2050* (PBA 2050). As such, the TIP represents a four-year snapshot that is a small part of the 30-year plan period.

In addition to the total investments captured in the TIP versus PBA 2050, there is an important difference between these two documents that complicates any side-by-side comparison. While PBA 2050 includes the universe of revenues reasonably expected to be available (federal, state, local, and private funds) to implement planned transportation projects, program, and strategies, the TIP is much more focused on projects with federal funding or that affect air quality conformity. This means that the TIP is more heavily weighted toward large capital projects, such as transit and highway expansions, that are more likely to require federal funds or action. The vast majority of funds that go to operate, maintain, and manage the region's existing transportation system—a top priority of the long-range plan—are not typically captured in a TIP as they tend to be locally funded. See Figure 4, on the following page, for an illustration of this distinction.

Note: The percentages shown on the tables and charts throughout this document may not sum to 100% due to rounding.

Figure 4. TIP and PBA 2050 Investments by Investment Strategy



The narrower focus of the TIP also means only a fraction of total regional transportation expenditures is captured in any given year. On average, one year of investments in the 2025 TIP accounts for less than a quarter of annual transportation expenditures across the region that support the regional long-range plan.

Another feature of the TIP that distinguishes it from the regional long-range plan is that it tends to be a more dynamic document; it is revised frequently to reflect the latest project cost and scope information.

Equity and Environmental Justice Considerations

As the federally designated Metropolitan Planning Organization (MPO) for the Bay Area, MTC is required to ensure that the region's transportation planning processes comply with applicable equity and environmental justice requirements. The legal, regulatory, and policy framework for addressing those issues is described in Appendix A and includes:

- **Title VI of the Civil Rights Act**: States that no person shall be subject to discrimination based on their race, color or national origin under any federally funded program.
- **Federal Guidance on Environmental Justice**: Requirement that federal programs and funds do not result in disproportionately high and adverse impacts to racial or ethnic minority populations and low-income populations.
- **MTC's Environmental Justice Principles**: Adopted principles that affirm MTC's ongoing commitments to:
    - Create an open and transparent public participation process that empowers disadvantaged communities to participate in decision making that affects them, and
    - Collect accurate and current data essential to defining and understanding the presence and extent of inequities, if any, in transportation funding based on race and income.

- **MTC's Equity Platform**: Aims to address equity challenges and inform how MTC approaches complex systems and environments. Adopted by MTC in January 2023, the Equity Platform is grounded by a set of Equity Pillars:
    - **Listen & Learn**: Recognizing both the rights and wrongs of the past can help chart the course for a better future. MTC's public engagement program emphasizes listening to residents, advisory committees, and local governments to identify challenges and deliver solutions.
    - **Define & Measure**: We value what we measure, and we measure what we value. Using success metrics advances transparency and accountability, and new data will signal whether or not our policies are succeeding.
    - **Focus & Deliver**: To advance equity, MTC works with partners across sectors such as health, social services, faith-based groups, and civic and community groups. MTC acknowledges that to solve the Bay Area's layered, multi-sector challenges, we must partner with experts in other fields. Together, we will share knowledge and make investment decisions based on that information.
    - **Train & Grow**: The MTC equity agenda requires "100% ownership throughout the agency," with ongoing training starting in two important areas:
        - Methods to evaluate equity (including data collection, measurement and analysis)
        - Ways to effectively communicate, build trusted relationships and partner with Equity Priority Communities

MTC's Equity Platform is designed for continual evolution and improvement — learning is always ongoing.

MTC satisfies its requirements for equity and environmental justice primarily through the PBA 2050 Equity Analysis, MTC's Public Participation Plan, and MTC's broader Title VI program. The TIP Investment Analysis provides stakeholders and interested members of the public an opportunity to assess the equity implications of the region's near-term transportation investments funded within the TIP.

Bay Area Community Context

Demographic Profile

An important first step of the investment analysis is to understand the demographic context and travel patterns for the Bay Area. Note: Although more recent demographic data is available, this analysis uses 2019 Census data in order to align the data with the latest available travel survey data.

Race and Ethnicity

The Bay Area is one of the most diverse regions in the country, with 65% of the population identifying as non-white (Table 1). Within the region, more than a quarter of the population identifies as Asian (29%), followed closely by Hispanic or Latino (24%), and then Black or African American (6%). Other populations of color, including those identifying as two or more races, account for the remaining 6% of the population.

Table 1. Population Distribution by Race/Ethnicity

Race	**Population** (in millions)	**Percentage of Population**
People of Color	4.8	62%
Asian	2.1	28%
Hispanic or Latino	1.8	24%
Black or African American	0.5	6%
Other populations of color	0.4	5%
White	3.0	38%
Total	7.7	100%

Notes: Tabulation prepared by MTC based on data from 2019 One-Year American Community Survey.

Income

Although the Bay Area's economy has shown strong growth over the past few decades, regional levels of poverty persist. For this analysis, a low-income household is defined as making an income less than $50,000 (approximately 17% of the Bay Area population). Of this 17%, approximately 8% of the population lives below the federal poverty level ($25,750 a year for a family of four in 2019) (Table 2). Another 9% of the region's households fall between the federal poverty level and the $50,000 threshold.

Table 2. Population Distribution by Household Income

Income	**Population** (in millions)	**Percentage of Population**
Low-Income	1.3	17%
<$25,000	0.6	8%
$25,000 - $49,999	0.7	9%
Not Low-Income	6.4	83%
$50,000 - $99,999	1.6	21%
$100,000 - $149,999	1.4	18%
$150,000+	3.4	44%
Total	7.7	100%

Notes: Tabulation prepared by MTC based on data from 2019 One-Year American Community Survey Public Use Microdata Samples. Income is calculated in 2019-denominated dollars. Note that the universe is persons in households and excludes persons living in group quarters.

Seniors and Persons with Disabilities

Nearly 16% of the Bay Area's population is aged 65 or older (Table 3). Persons reporting disabilities across six categories defined by the Census Bureau total more than 9% of the region's population. Note that there may be some overlap between these populations.

Table 3. Seniors and Persons with Disabilities

Population	**Population** (in millions)	**Percentage of Population**
Seniors	1.2	16%
Persons with Disabilities	0.7	9%
Total	N/A	N/A

Notes: Tabulation prepared by MTC based on data from 2019 One-Year American Community Survey. Note that the universe is civilian noninstitutionalized population counted in disability.

Travel Patterns

Note: Travel data used in this analysis are based on data collected before COVID-19. Travel patterns have changed significantly post-COVID, including a significant increase in telecommuting and decrease in the share of transit commute trips. Post-COVID travel data will be incorporated into future iterations of this analysis as soon as it is available.

Commute trips by Bay Area residents are overwhelmingly made by motor vehicle. Before COVID-19, three-quarters of commute trips (travel to/from work) were made in a car (74%), followed by transit (13%), telecommuting (6%), non-motorized trips, such as walking and bicycling (5%), and other modes (1%) (Table 4). Commuters from low-income households were more likely to walk or bike than the general population, and seniors were more likely to telecommute.

Table 4. Share of Commute Trips by Mode by Population

Commute Trip Type	**Low-Income**	**People of Color**	**Seniors**	**Total Population**
Roadway (Motorized)	67%	76%	71%	74%
Roadway (Non-motorized)	10%	4%	4%	5%
Transit	14%	14%	10%	13%
Telecommute	8%	5%	14%	6%
Other	2%	1%	1%	1%
Total	100%	100%	100%	100%

Notes: Tabulation prepared by MTC based on data from 2019 One-Year American Community Survey Public Use Microdata Samples. Income is calculated in 2019-denominated dollars. Note that the universe is persons in households and excludes persons living in group quarters.

The share of all trips (including both commute and non-commute trips) made by target population groups is provided in Table 5. While there are differences in the travel patterns of low-income populations, people of color, and seniors, the vast majority of all trips are categorized as roadway trips, which includes driving and carpooling as well as trips made by walking or biking.

Table 5. Share of Commute and Non-Commute Trips by Mode by Population

Trip Type	Low-Income	People of Color	Seniors	Total Population
Roadway	94%	95%	96%	95%
Transit	6%	5%	4%	5%
Total	100%	100%	100%	100%

Notes: Tabulation based on 2018/19 Bay Area Travel Survey. Tabulation does not include share of trips made by persons with disabilities due to sample size limitations.

Methodology

The 2025 TIP investment analysis is built on three components that work together to identify how low-income residents, people of color, seniors, and persons with disabilities may be affected by the investments in the 2025 TIP.

Population Use-Based Analysis	Disparate Impact Analysis	Transportation Equity Measures Analysis
Percent of investments that would likely be used by low-income populations, people of color, and seniors	Per capita and per rider transit investments likely benefiting racial or ethnic minorities	Maps and summary data on projects that support PBA 2050 transportation and equity focused strategies

The methodologies used in each analysis are described in more detail below. Appendix B includes definitions and data sources used in this analysis.

Population Use-Based Analysis

This portion of the analysis compares the estimated percent of investments included in the TIP that benefit low-income populations, people of color, as well as seniors, to the percent of these populations' relative usage of the transportation system, for both roadways and transit. The analysis measures transit and motor vehicle trips using the 2018/19 Bay Area Travel Survey (BATS).

For this analysis, investments in the TIP are first separated into two modes: transit and local streets and roads/highway (referred to as "roadway"). For simplicity, pedestrian and bicycle projects are assigned to local streets and roads and not evaluated as a separate mode of travel or investment type.

Next, to analyze what share of each mode (transit and roadway) low-income, people of color, and senior populations utilize, the following definitions are used to identify disadvantaged populations:

- ***Low-Income Households:*** Low-income households are defined as households earning $50,000 or less. This is roughly equivalent to 200% of the federal poverty level for a family of four.
- ***Households of Color:*** For this analysis, households of color are defined using U.S. Census Bureau definitions for racial and ethnic minorities, specifically the categories of Hispanic, Black or African American, Asian, and other or two or more races.
- ***Seniors:*** Seniors are defined as persons aged 65 and over.

The assignment of investments by usage is performed by multiplying the percent of use of the mode by the investment in that particular mode. For example, low-income populations take 19% of Alameda County's roadway trips. For a $50 million state highway project in that county, 19% or $9.5 million, would be assigned as a financial benefit to low-income populations and the remaining 81%, or $40.5 million, to the remaining population. This analysis is conducted at the county level for highways and roadways and at the transit-operator level for transit.

Finally, the amount of money spent on projects by mode are summed for low-income people, people of color, and seniors based on each groups' usage share of each mode. The percent of money spent on trips supporting each population is then compared to the percent of trips taken by that population.

Disparate Impact Analysis

This portion of the analysis compares 2025 TIP investments per capita for persons of color to per capita investments for white populations, to investigate whether people of color are receiving an equitable share of the benefits from TIP investments. Due to the similarities in the analysis required by the Federal Transit Administration (FTA) for the long-range transportation plan, this portion of the analysis is also referred to as the Title VI analysis. The disparate impact analysis is not a required component of the TIP and is provided for informational purposes only.

This portion of the analysis focuses on federal- and state-funded projects only. Some of the State and Federal fund sources included are FTA 5307, FTA 5309, FTA 5311, FTA 5337 funds, STP/CMAQ, Proposition 1B, and Senate Bill 1 (SB 1) funds. In addition, racial or ethnic minority groups (Asian, Black or African American, Hispanic or Latino and other minorities) are evaluated collectively in comparison to the investments per capita for white populations.

The disparate impact analysis incorporates the quantitative results produced by the population/use-based analysis for state and federally funded projects. Investments are first expressed in terms of investments per capita or per transit rider for both people of color and white populations as follows:

$$\text{Benefit per capita (or rider)} = \frac{\text{Total transit investments allocated to transit riders}}{\text{Total regional transit ridership or population}}$$

Next, per capita (or rider) benefit results for people of color and white populations are compared, expressing the benefit per capita (or rider) for people of color as a percentage of the benefit per capita (or rider) for white populations:

$$\text{Result (\%)} = \frac{\text{People of color benefit per capita (or rider)}}{\text{White populations benefit per capita (or rider)}}$$

Although FTA does not provide specific guidance or standard benchmarks for MPOs to use in the metropolitan planning process to determine whether any given result for a long-range plan represents a disparate impact, a general practice is to use the percentage result to determine whether any differences between benefits for people of color and white populations may be considered significant. If a disparate impact in the long-range plan is found to be significant, consideration must then be given to "whether there is a substantial legitimate justification for the policy that resulted in the disparate impacts, and if there are alternatives that could be employed that would have a less discriminatory impact."[1] As stated earlier, the disparate impact analysis is not a federal requirement for the TIP, and is included in the 2025 TIP Investment Analysis for informational purposes.

Transportation Equity Measures Analysis & Mapping

The third component of the analysis summarizes projects that support regional performance in four equity-related transportation strategies from PBA 2050, which are listed in Table 6 and further expanded on in the next sections. Additionally, 2025 TIP investments are mapped to provide a visual representation of the location of projects in relation to EPC.

[1] FTA Circular 4702.1B, Chapter VI-2.

Table 6. Plan Bay Area 2050 Equity-Related Transportation Strategies

Guiding Principle	Question to Describe Equity Outcomes	PBA 2050 Equity-related Transportation Strategies
Connected	Will Bay Area residents be able to access their destinations more easily?	• Build a Next-Generation Transit Network • Maintain and Optimize the Existing System
	Will Bay Area residents have a transportation system they can rely on?	
Healthy	Will Bay Area residents be healthier and safer?	• Create Healthy and Safe Streets • Reduce Climate Emissions
	Will the environment of the Bay Area be healthier and safer?	

Metrics to describe outcomes and disparities can be insightful in understanding the impacts of the 2025 TIP, but not every aspect of every PBA 2050 strategy can be simulated or captured in metrics, particularly for the limited focus and scope of the 2025 TIP. For a full description of the PBA 2050 strategies, refer to the Plan Bay Area 2050 Plan Document. For detailed tables on equity-focused components with Plan strategies, refer to the Plan Bay Area 2050 Equity Analysis Report.

The number and investment level of applicable project types in the 2025 TIP supporting each of the four PBA 2050 equity-related transportation strategies are summarized at the regional and county level.

Build a Next-Generation Transit Network

Projects that advance the goal of building a next-generation transit network will enable residents to access destinations more easily and ensure residents have a transportation system they can rely on. Projects supporting this strategy are defined by:

- Transit Service/Capacity: Transit projects with the primary purpose of expanding transit capacity.

Maintain and Optimize the Existing System

Projects that advance the goal of maintaining and optimizing the existing system enable residents to access destinations more easily and ensure residents have a transportation system they can rely on. Projects supporting this strategy are defined by:

- Pavement/Bridge Condition: Projects that preserve or rehabilitate existing bridges or roadways.
- Congestion/Reliability: Transit and roadway projects identified by the project sponsors as having a primary purpose of addressing congestion or system reliability, or projects anticipated as having a significant impact on congestion reduction or improved system reliability.
- Transit State of Good Repair: Projects that rehabilitate or replace existing transit assets.

This equity measure excludes projects that expand system capacity, as these projects do not contribute towards the regional strategy to maintain and optimize the existing system. Transit expansion projects are included under the next-generation transit network equity measure.

Create Healthy and Safe Streets

Projects that advance the goal of creating healthy and safe streets improve the health and safety of Bay Area residents and the environment. Projects supporting this strategy are defined by:

- Safety: Projects identified by the project sponsors as having a primary purpose of addressing safety, or as anticipated to have a significant impact on reducing fatalities and serious injuries for all users.

- Active Transportation: Projects identified by project sponsors as being focused primarily on people walking or bicycling (greater than 50% of the project's investment supports people walking or bicycling). This also measures the total investments included in the TIP that support bicycle or pedestrian travel, regardless of the project's primary purpose.

Reduce Climate Emissions

Projects that advance the goal of reducing climate emissions improve the health and safety of Bay Area residents and the environment. Projects supporting this strategy are defined by:

- Climate & Air Quality: Projects funded with federal Congestion Mitigation and Air Quality Improvement Program (CMAQ), Carbon Reduction Program (CRP), state California Air Resources Board (CARB) or regional Transportation for Clean Air (TFCA) grants, or are listed in MTC's Climate Initiatives Program.

Limitations

As a regional analysis, the methods used in the TIP investment analysis have several limitations. The most significant limitation is that the analysis does not directly assess the resulting benefit and burden of specific projects or programs, such as travel time savings or improved accessibility to jobs or other destinations. Other limitations are:

- ***TIP is a snapshot in time***: It is important to re-emphasize that the TIP does not reflect the full picture of transportation investments in the Bay Area over the long-term. As discussed in the introduction, the TIP only includes four years of near-term fund programming, compared to the 30 years forecast in PBA 2050. Also, funding shown in the TIP is included in the year that project phases begin or are obligated and does not reflect the actual expected completion dates of the project phase. While rehabilitation programs will typically have their funding spread across many years, large capital projects tend to have their funding lumped into a single year in the TIP, even if the funds will actually be spent over a number of years, some of which may be outside the 4-year period of the TIP.
- ***Notes on assumptions***: The analysis assumes that mode choice and system usage remain constant over time. System expansion, such as a new transit line or highway, and changing conditions, such as improvements to reliability and travel costs, tend to influence travel behavior over time. Notably, the substantial travel behavior impacts related to the COVID-19 pandemic are not included in this analysis due to data availability limitations. This analysis assumes that the usage derived in the recent travel survey and transit passenger surveys remains static over time. Any long-term impacts to travel patterns due to COVID-19 will be reflected in future TIP analyses once updated data becomes available.

  The classification of investments into either roadway or transit investments also presents some limitations. For example, classifying a pavement rehabilitation project as strictly roadway does not account for the benefit to the region's transit vehicles that share the street with private automobiles.
- ***Mapping limitations****:* Mapping projects provides a visual representation of the location of projects in relation to EPCs. However, project mapping presents certain limitations. First, not all significant regional investments are mappable. For example, a substantial share of total funding in the TIP is dedicated to transit operators for ongoing maintenance and rehabilitation of their entire system, which cannot be represented as a simple point or line on a map in relation to a specific community. Second, displaying investments on a map does not translate into a direct

benefit or burden for the surrounding communities. Given these limitations, the mapping analysis provides a qualitative, rather than quantitative, assessment of the spatial distribution of mappable projects included in the TIP.

- ***Funding and project types***: Given the document's federal focus, the investments reflected in the TIP represent less than a quarter of all transportation investments in the Bay Area in a given year. As a result, the investment analysis does not capture the equity implications of many locally funded projects. Local projects tend to be smaller, in both geography and scope, but collectively, these projects are expected to have a significant impact on travel behaviors and experiences throughout the region.
- ***Demographic data***: Although more recent demographic data is available, this analysis uses demographic data from the 2019 One-Year American Community Survey and Public Use Microdata Samples in order to better mirror the most up to date travel data. Travel pattern data sources used in the analysis include the Bay Area Travel Survey (BATS) (2018-19), the MTC Transit Passenger Demographic Survey (2014-19), and BART Customer Satisfaction Survey (2018). All data used in the analysis is pre-COVID. Any long-term impacts to the region's demographics and travel behavior will be reflected in future TIP analyses, once updated data becomes available across all datasets.

The 2025 TIP Investment Analysis includes an analysis of investments benefiting seniors. Unfortunately, a similar analysis for persons with disabilities is not included due to sample size limitations of the BATS, and lack of data from the transit passenger demographic survey. However, a qualitative discussion of regional transportation investments that benefit persons with disabilities is included in the following section.

Analysis Results & Discussion

Population Use-Based Results

The population use-based analysis is divided into three focus areas: income, race/ethnicity, and seniors. Additional information is also provided at the end of this section on regional efforts and initiatives to support and better understand the transportation needs of residents with transportation-related disabilities.

Investments by Income

Bay Area residents living in low-income households, earning less than $50,000 per year, account for about a fifth of all trips (19%) in the region.

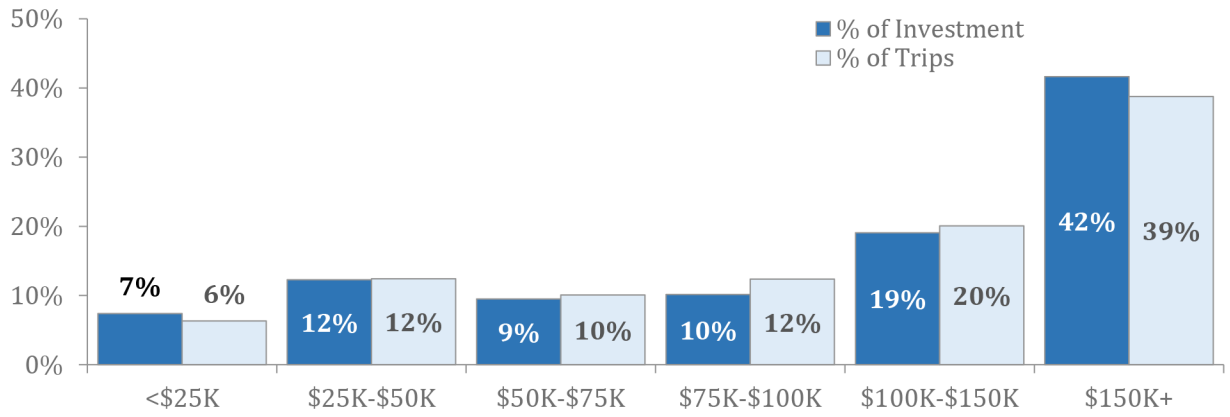
In the 2025 TIP, 20%, or more than $2.3 billion, is directed to projects supporting trips made by residents from low-income households. The share of these investments supporting low-income trips exceeds the share of trips made by persons from low-income households by approximately 1%. See Table 7 and Figure 5 for additional detail.

Table 7. 2025 TIP Investments and Trips by Income

Income	TIP Investments (in billions)	Percent of Investment	Percent of Trips
Low-Income	$2.3	20%	19%
<$25,000	$0.9	7%	6%
$25,000 - $49,999	$1.5	12%	12%
Not Low-Income	$9.5	80%	81%
$50,000 - $74,999	$1.1	9%	10%
$75,000 - $99,999	$1.2	10%	12%
$100,000 - $149,999	$2.3	19%	20%
$150,000+	$4.9	42%	39%
Total	$11.8	100%	100%

Sources: 2018-19 Bay Area Travel Survey, 2025 TIP

Figure 5. 2025 TIP Investments and Trips by Income Category



Sources: 2018-19 Bay Area Travel Survey, 2025 TIP

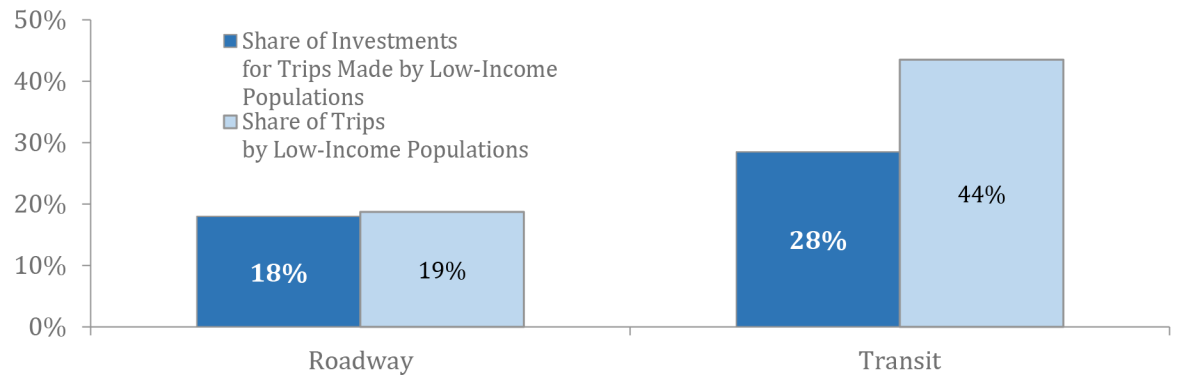
The share of investments directed to roadway projects supporting the travel of low-income populations is roughly equivalent to their share of roadway trips. However, the share of transit investments in the 2025 TIP supporting transit trips made by residents from low-income households (28%) falls significantly below the share of transit trips made by low-income households (44%). See Table 8 and Figure 6. This difference between transit ridership from low-income households and investments in the 2025 TIP are discussed in the Key Findings section of this report.

Table 8. 2025 TIP Investments and Low-Income Trips, by Mode

Income	Share of TIP Roadway Investments	Share of Roadway Trips	Share of TIP Transit Investments	Share of Transit Trips
Low-Income	18%	19%	28%	44%
Not Low-Income	82%	81%	72%	56%
Total	100%	100%	100%	100%

Sources: 2018-19 Bay Area Travel Survey, 2014-19 MTC Transit Passenger Demographic Survey, 2018 BART Customer Satisfaction Survey, 2025 TIP

Figure 6. 2025 TIP Investments and Low-Income Trips, by Mode



Sources: 2018-19 Bay Area Travel Survey, 2014-19 MTC Transit Passenger Demographic Survey, 2018 BART Customer Satisfaction Survey, 2025 TIP

Investments by Race/Ethnicity

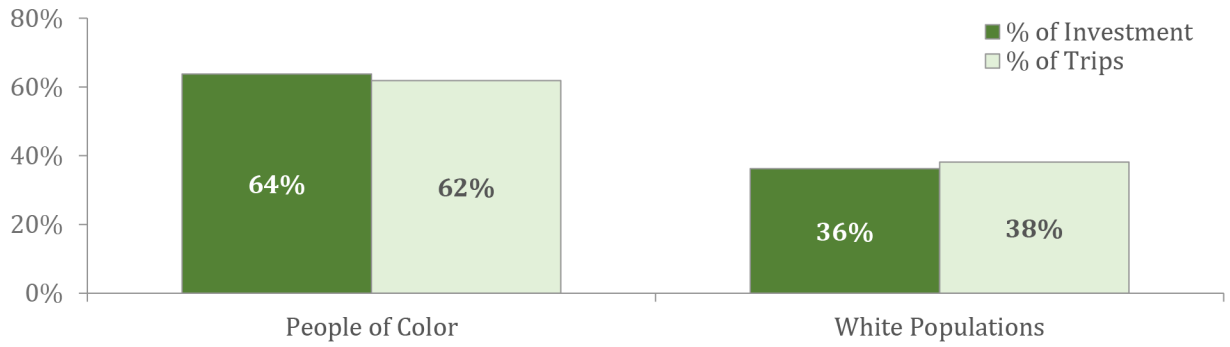
People of color account for 62% of all trips in the Bay Area. The share of transportation investments in the 2025 TIP that support trips made by people of color (64%) is greater than the share of trips taken by households of color. See Table 9 and Figure 7.

Table 9. 2025 TIP Investments and Trips by Race/Ethnicity

Race/Ethnicity	TIP Investments by Trips (in billions)	Percent of Investment	Percent of Trips
People of Color	$7.5	64%	62%
White Populations	$4.3	36%	38%
Total	$11.8	100%	100%

Sources: 2018-19 Bay Area Travel Survey, 2025 TIP

Figure 7. 2025 TIP Investments and Trips by Race/Ethnicity



Sources: 2018-19 Bay Area Travel Survey, 2025 TIP

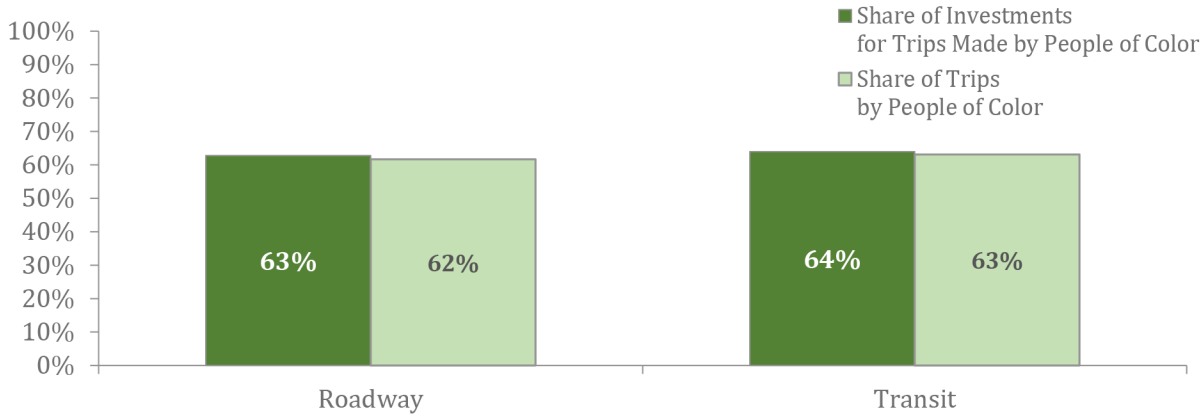
Nearly two-thirds of roadway trips (62%) and (63%) transit trips in the Bay Area are taken by people of color. The share of investments in the 2025 TIP that supports these trips exceed these shares. See Table 10 and Figure 8.

Table 10. 2025 TIP Investments and Trips by People of Color, by Mode

Race/Ethnicity	Share of TIP Transit Investments	Share of Transit Trips	Share of TIP Roadway Investments	Share of Roadway Trips
People of Color	64%	63%	63%	62%
White Populations	72%	56%	82%	81%
Total	100%	100%	100%	100%

Sources: 2018-19 Bay Area Travel Survey, 2014-19 MTC Transit Passenger Demographic Survey, 2018 BART Customer Satisfaction Survey, 2025 TIP

Figure 8. 2025 TIP Investments and Trips by People of Color, by Mode



Sources: 2018-19 Bay Area Travel Survey, 2014-19 MTC Transit Passenger Demographic Survey, 2018 BART Customer Satisfaction Survey, 2025 TIP

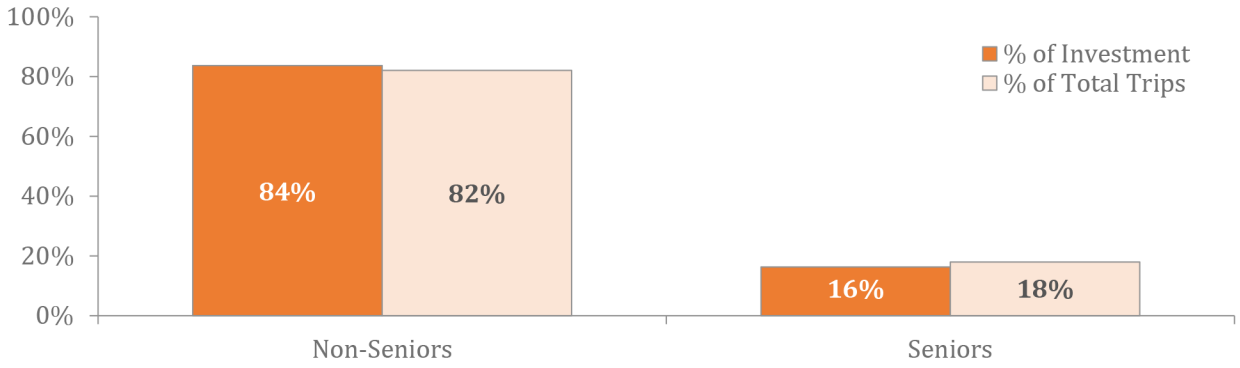
Seniors, defined for this analysis as persons over the age of 65, account for 16% of the region's population. The share of transportation investments that support trips taken by seniors (16%) is slightly less than their share of trips (18%) (Table 11, Figure 9).

Table 11. 2025 TIP Investments and Trips by Seniors

Population	TIP Investments by Trips (in billions)	Percent of Investment	Percent of Trips
Seniors	$1.9	16%	18%
Non-Seniors	$9.9	84%	82%
Total	$11.8	100%	100%

Sources: 2018/19 Bay Area Travel Survey, 2025 TIP

Figure 9. 2025 TIP Investments and Trips by Seniors



Sources: 2018/19 Bay Area Travel Survey, 2025 TIP

Given the limitations of the data available, a more detailed look at investments and trips by mode by age is not included in the population use-based analysis.

Persons with Transportation-Related Disabilities – Supplemental Information

Limitations in the data available make it difficult to quantify transportation system usage of persons with disabilities to the degree necessary for the population use-based analysis. However, transportation investments benefiting these populations are being made throughout the region. Below is an overview of regional investments and planning initiatives that support transportation for persons with disabilities. Appendix N to the 2025 TIP also includes a list of transit projects compliant with the Americans with Disabilities Act (ADA).

- Community-Based Transportation Plans (CBTPs) – A grant program that provides planning funds for developing transportation project recommendations for the region's Equity Priority Communities (EPCs). Persons with disabilities are one of eight factors that are used to determine EPC designations. Between 2004 and 2021, forty-eight CBTPs were completed in partnership with these communities, with roughly six CBTPs currently in production and several more to soon be underway. The current $3,000,000 funding cycle for CBTPs is set to last from Federal Fiscal Year (FFY) 2023 through FFY 2026.
- Community Action Resource and Empowerment (CARE) (formerly Lifeline Transportation Program) – Provides funds to address mobility needs of low-income residents, including seniors and individuals with disabilities. Funding is used to support projects from CBTPs and other

improvements to publicly available transportation projects. CARE funds projects serving EPCs to advance high priority project implementation through technical assistance, multi-sector partnership development, and capacity building. $26 million is proposed for CBTPs and CARE for 4-years through the One Bay Area Grant (OBAG 3) and Regional Early Action Planning (REAP) 2 programs.

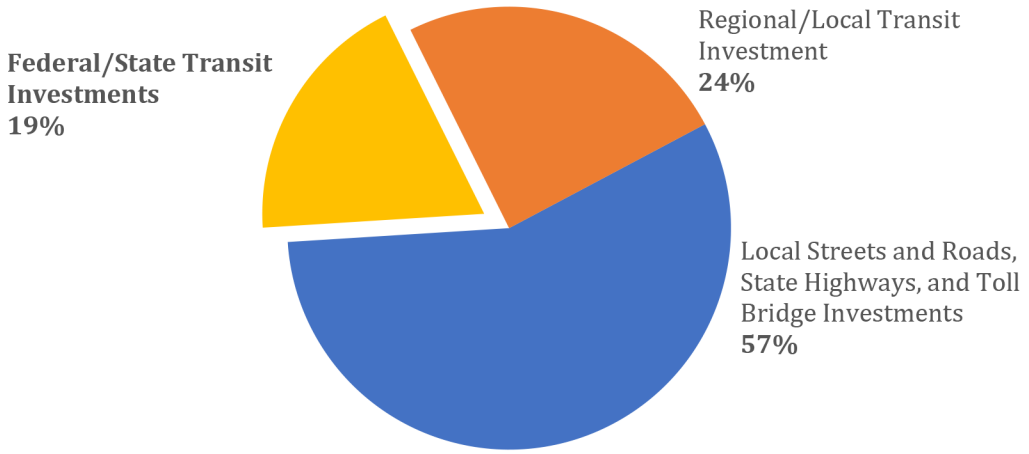
- FTA Section 5310 Enhanced Mobility of Seniors & Individuals with Disabilities – Provides capital and operating grants to private, nonprofit and public agencies to improve mobility for seniors and individuals with disabilities by removing barriers to and expanding services. In the last round of funding (FFY 2022 and 2023), $15 million in awards were made in the region's large urbanized areas. The region's small urbanized areas received $3.6 million in awards.
- Transit Capital Priorities – Provides an ADA set aside of 10% of the FTA Section 5307 urbanized area apportionment. Operators may use this funding to defray the operating costs of their paratransit systems. Annually, this amounts to approximately $30 million.
- State Transit Assistance (STA) – With the adoption of MTC Resolution No. 4321 in February 2018, 70% of all STA Population-Based funds now flow to each County Transportation Agency through the STA County Block Grant and 30% is directed to the Regional Program managed by MTC. Paratransit operations are an eligible use of the County Block Grant program.
- MTC's Coordinated Public Transit-Human Services Transportation Plan – Identifies the transportation needs of older adults, low-income populations and people with disabilities, and identifies funding priorities and coordination strategies for meeting these needs. The Coordinated Plan is intended to meet the federal planning requirements as well as to provide MTC and its regional partners with a "blueprint" for implementing a range of strategies to advance local efforts to improve transportation for transportation disadvantaged populations. MTC staff works with stakeholders throughout the region to gather input on transportation gaps, as well as solutions that are then eligible for federal funding through the Section 5310 program. The Coordinated Plan will be updated in 2024.
- Transformation Action Plan Accessibility Initiatives – Adopted in September 2021, MTC's Transit Transformation Action Plan includes several actions focused on improving accessibility for transit riders throughout the Bay Area. The Access & Mobility Work Plan includes the following action items:

Action	Action Description
21	Designate a Mobility Manager to coordinate rides and function as a liaison between transit agencies in each county, consistent with the 2018 Coordinated Plan.
22	Fund additional subregional one seat paratransit ride pilot projects and develop cost-sharing policies for cross jurisdictional paratransit trips.
23	Identify the next steps for the full integration of ADA-paratransit services on Clipper Next Generation.
24	Identify key paratransit challenges and recommend reforms through the Coordinated Plan update.
25	Adopt standardized eligibility practices for programs that benefit people with disabilities (paratransit and Clipper RTC).

Disparate Impact Analysis

The second component of the investment analysis includes a closer look at federal and state investments in public transportation. The federal and state funding sources for transit account for only a small portion (19%) of funding in the 2025 TIP, as illustrated in Figure 7.

Figure 7. 2025 TIP Transit Investments from Federal/State Sources as a Share of All Investments



Source: 2025 TIP

Although only 24% of the TIP is made up of regional or local investments in public transit, it is important to note that a substantial share of total funding dedicated to transit operators for ongoing operations and maintenance is not included in the TIP. This funding comes from state, regional and local sources and may not be captured in the TIP as these projects and programs do not typically require a federal action.

The disparate impact analysis indicates that the share of federal and state transit investments distributed to transit service supporting people of color (63%) is equivalent to their respective share of regional transit ridership (63%) (Table 12).

Table 12. 2025 TIP Federal/State Transit Investments by Race/Ethnicity

Race/Ethnicity	Federal/State Transit Investments (in millions)	Percent of Total Federal/State Transit Funding	Percent of Regional Ridership
People of Color	$1,386	63%	63%
White Populations	$801	37%	37%
Total	$2,188	100%	100%

Sources: 2014-19 MTC Transit Passenger Demographic Survey, 2018 BART Customer Satisfaction Survey, 2025 TIP

Investments distributed on a per transit rider basis indicate that people of color in the region are attributed $1,313 in benefits per rider, slightly exceeding the $1,298 in benefits per transit rider for white populations (or 101% of the benefits received by white populations) (Table 13).

Table 13. 2025 TIP Federal/State Transit Investments, Disparate Impact Analysis by Boardings

Race/Ethnicity	Federal/State Transit Investments (in millions)	Average Daily Transit Ridership (2014-19)	Per-Rider Benefit	Per Rider Benefit for People of Color as a % of Per Rider Benefit for White Populations
People of Color	$1,386	1,056,083	$1,313	101%
White Populations	$801	617,342	$1,298	N/A
Total	$2,188	1,673,425	$6,195	N/A

Sources: 2014-19 MTC Transit Passenger Demographic Survey, 2018 BART Customer Satisfaction Survey, 2025 TIP

Transportation Equity Measures

Build a Next-Generation Transit Network

Projects in the 2025 TIP that contribute towards the region's next-generation transit network are identified in this analysis as transit system expansion projects.

Approximately $5.3 billion in 2025 TIP investments support the regional goal to build a next-generation transit network (Table 14). These funds span just 16 projects, with two large rail projects representing a majority of the investment:

- $3.6 billion for VTA's BART Berryessa to San Jose Extension
- $364 million for TBJPA's Transbay Terminal and Caltrain Downtown Extension Phase 2

Table 14. 2025 TIP Transit System Expansion

Operator	Projects	Investment (in millions)
ACE/SJRC	2	$23
BART	3	$3,890
Caltrain	1	$2
ECCTA	1	$4
SFMTA	2	$26
SMART	1	$10
VTA	1	$115
WETA	2	$28
Regional/Other	6	$373
Total	16	$5,312

Maintain and Optimize the Existing System

Projects that support the regional strategy to maintain and optimize the existing system include projects which improve pavement and bridge conditions, maintain transit state of good repair, reduce congestion, and increase system reliability. This equity measure excludes projects with the primary purpose of expanding capacity.

- **Pavement and Bridge Rehabilitation:** In the 2025 TIP, more than $2.9 billion is invested in 31 projects to rehabilitate and preserve existing roads and bridges (Table 15). The majority of these investments are captured within three consolidated regional listings:
  - $1.4 billion for various State Highway Operation and Protection Program (SHOPP) roadway preservation projects
  - $540 million for various SHOPP bridge rehabilitation and reconstruction projects
  - $415 million for various local bridge rehabilitation and reconstruction projects within the Local Highway Bridge Program

Table 15. 2025 TIP Pavement & Bridge Rehabilitation

County	Projects	Investment (in millions)
Alameda	14	$53
Contra Costa	0	$0
Marin	1	$51
Napa	1	$2
San Francisco	2	$128
San Mateo	1	<$1
Santa Clara	1	$4
Solano	1	$189
Sonoma	1	$3
Regional	9	$2,517
Total	31	$2,947

- **Transit Asset Management:** The 2025 TIP include 18 projects, totaling over $400 million, to maintain transit assets in a state of good repair (Table 16). Note: Additional Transit Capital Program revenues are anticipated to be reflected in the 2025 TIP in the coming months, which will have a substantial effect on the total number of projects and the investment levels for transit asset management.

Table 16. 2025 TIP Transit Asset Management

Transit Operator	Projects	Investment (in millions)
ACE/SJRC	1	<$1
BART	8	$321
GGBHTD	1	$8
MCTD	3	<$1
SFMTA	2	$84
WETA	3	$22
Total	18	$434

- **Congestion Reduction/System Reliability Improvements:** More than $750 million in the 2025 TIP is devoted to 45 projects that reduce congestion and improve system reliability (Table 17). Major investments within this category include:
  - $148 million for various SHOPP Mobility Program projects
  - $119 million for ACTC's Oakland/Alameda Access project
  - $84 million for VTA's I-280/Wolfe Road Interchange Improvement
  - 44 million for SFCTA's Yerba Buena Island (YBI) Ramp Improvements
  - $25 million for CCTA's Innovate 680: Coordinated Adaptive Ramp Metering, Phase 1

Table 17. 2025 TIP Congestion Reduction/System Reliability Improvements

County	Projects	Investment (in millions)
Alameda	11	$213
Contra Costa	11	$70
Marin	0	$0
Napa	2	$9
San Francisco	2	$45
San Mateo	2	$26
Santa Clara	6	$116
Solano	1	<$1
Sonoma	0	$0
Regional	10	$277
Total	45	$757

Create Healthy and Safe Streets

Projects with the primary purpose of improving transit or roadway safety, as well as projects anticipated to result in significant reductions in serious injuries and/or fatalities on the transportation system, are expected to support the region strategy to create healthy and safe streets. In addition, projects that support active transportation through bicycle and/or pedestrian elements also advance this strategy.

- **Roadway Safety Improvements:** The 2025 TIP includes more than $2.2 billion in funding for 139 roadway safety projects (Table 18). It is important to note that many other projects in the 2025 TIP are anticipated to have a moderate or slight positive impact on transportation safety. However, this analysis focused on projects that are identified by project sponsors as having the primary purpose of improving roadway safety or are otherwise anticipated to significantly reduce fatalities and serious injuries due to traffic collisions.

Major roadway safety investments in the 2025 TIP include:

- $372 million for San Francisco's Hunters Point Shipyard and Candlestick Pt Local Roads
- $141 million for various SHOPP Collision Reduction projects
- $93 million for Oakland's West Oakland Howard Terminal Downtown project
- $80 million for Mountain View's Rengstorff Ave Grade Separation project

Table 18. 2025 TIP Roadway Safety Improvements

County	Projects	Investment (in millions)
Alameda	53	$836
Contra Costa	25	$150
Marin	1	$5
Napa	4	$10
San Francisco	7	$503
San Mateo	10	$62
Santa Clara	21	$233
Solano	7	$46
Sonoma	7	$60
Regional	4	$383
Total	139	$2,288

The majority of roadway safety investments in the 2025 TIP are anticipated to significantly reduce fatalities and serious injuries specifically for people walking and bicycling, including over $1.3 billion towards 90 projects across all nine Bay Area counties (Table 19). In addition to projects previously mentioned, other large bicycle/pedestrian safety projects include:

- $89 million for ACTC's East Bay Greenway, Phase 1 Lake Merritt-Bayfair
- $44 million for San Francisco's Howard Streetscape Improvement project
- $17 million for various local projects within the Highway Safety Improvement Program (HSIP)

Table 19. 2025 TIP Bicyclist/ Pedestrian Safety Improvements

County	Projects	Investment (in millions)
Alameda	47	$673
Contra Costa	10	$61
Marin	1	$2
Napa	3	$8
San Francisco	4	$463
San Mateo	8	$33
Santa Clara	12	$50
Solano	1	$10
Sonoma	2	$5
Regional	2	$28
Total	90	$1,333

- **Bicycle and Pedestrian Investments:** Approximately $980 million is dedicated to active transportation projects in the 2025 TIP, comprised of 113 projects primarily focused on bicycle and/or pedestrian elements (Table 20). Some of the larger bicycle and pedestrian projects include:

  - $45 million for San Jose's Story Keyes Complete Streets
  - $39 million for VTA's Bascom Avenue Complete Streets
  - $34 million for ACTC's San Pablo Ave Safety Enhancements
  - $30 million for MTC's West Oakland Link project
  - $27 million for Napa Valley Vine Trail Coalition's Napa Valley Vine Trail -Yountville to St Helena

Many projects in the TIP that are focused on other modes or purposes also include improvements that benefit bicyclists or pedestrians, such as a pavement rehabilitation project that includes adding a new bike lane. Project sponsors report the share of each project's total project cost that can be attributed to the various modes that will benefit from the project. Table 20 displays county and regional investments in bike/pedestrian projects as well as the total dollars invested on all projects that are anticipated to benefit bicyclists and pedestrians over the four-year TIP period.

Table 20. 2025 TIP Bicyclist/ Pedestrian Safety Improvements

County	Bicycle & Pedestrian Projects	Investment (in millions)	Projects with Bike/Ped Elements	Investment (in millions)
Alameda	33	$469	68	$466
Contra Costa	22	$100	32	$115
Marin	4	$14	4	$10
Napa	4	$31	6	$32
San Francisco	5	$86	9	$255
San Mateo	10	$39	12	$52
Santa Clara	22	$190	35	$204
Solano	5	$19	8	$23
Sonoma	7	$26	10	$30
Regional	1	$4	5	$12
Total	113	$977	189	$1,200

Reduce Climate Emissions

Projects funded with air quality funds and projects prioritized in MTC's One Bay Area Grant (OBAG) Climate Initiatives Program are expected to improve air quality and reduce greenhouse gas emissions through promoting cleaner technologies, alternative modes of transportation, or compact development.

Over $200 million in air quality and climate specific funding is included in the 2025 TIP, contributing to 49 projects (Table 21) distributed over all nine Bay Area counties. The largest climate specific funds programmed to projects in this category include:

- $28 million for CCTA's Countywide Smart Signals program
- $30 million for various projects within the Bus Accelerated Infrastructure Delivery (BusAID) program
- $14 million for MTC's 511 Next Gen Traveler Information
- $10 million for MTC's Regional Transit Mapping and Wayfinding project

Table 21. 2025 TIP Climate & Air Quality Investments

County	Projects	Investment (in millions)
Alameda	12	$50
Contra Costa	6	$34
Marin	1	$3
Napa	3	$4
San Francisco	6	$26
San Mateo	1	$3
Santa Clara	8	$33
Solano	4	$5
Sonoma	1	$3
Regional	7	$57
Total	49	$219