Appendix J. Performance Evaluation Memo

Fehr & Peers

Memo

Date: June 19, 2026

To: Matt Kelly, CCTA

From: Gaby-Picado Aguilar, and Rey Hosseinzade, Fehr & Peers

Subject: 2050 Countywide Transportation Plan (CTP2050) – Plan Performance Evaluation

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This memorandum presents the results of Contra Costa County Transportation Authority's (CCTA) 2050 Countywide Transportation Plan (CTP2050) performance evaluation. It includes the methodology, assumptions, and results. The evaluation was conducted using the Alameda-Contra Costa (AlaCC) Travel Demand Model runs, off-model GIS tools, and Excel-based analyses. The performance measures align with the four CTP2050 principles and fulfill Metropolitan Transportation Commission (MTC) requirements related to assessments of VMT and equity.

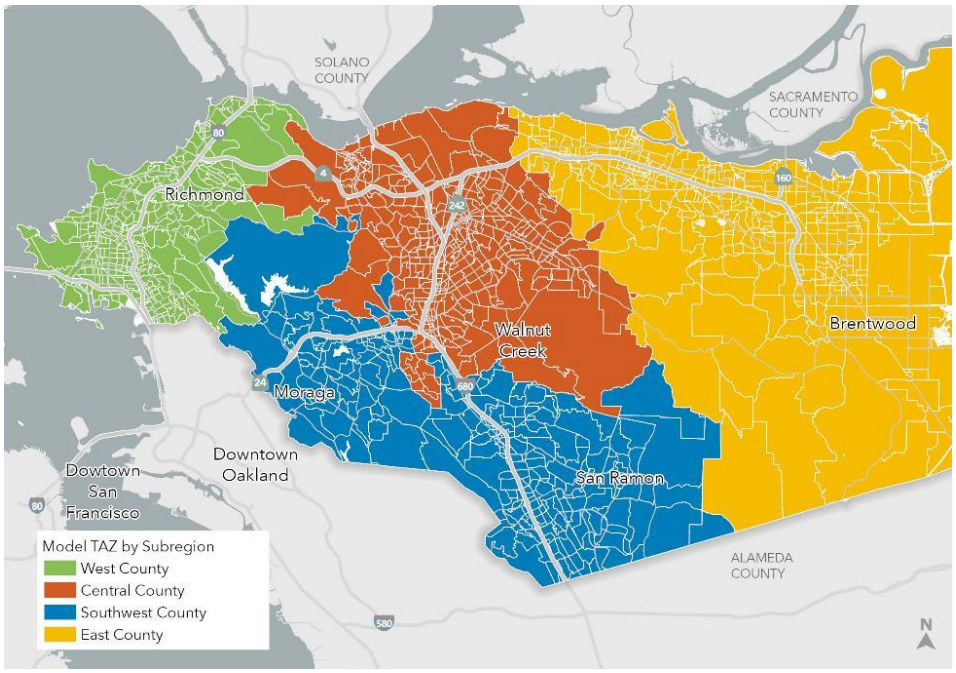
Memorandum Organization

The purpose of this memo is to provide an overall picture of how the CTP2050 Scenario performs against the plan's principles in the context of long-range population and employment growth in Contra Costa. First, the memo summarizes the evaluation methodology, including the performance measures, modeling scenarios, and the GIS and Excel-based analyses. It also describes how each performance measure relates to the Plan's four principles of Safe Travel, Livable and Connected Neighborhoods, Access for All, and Growing Sustainably. Then it presents the results of the evaluation for each performance measure, and summarizes them together.

Evaluation Methodology

The AlaCC Travel Demand Model and GIS-based off-model analysis were the primary tools used to evaluate the metrics described in this memorandum. The AlaCC Model is an activity-based model (ABM) that simulates individual persons and their activities, travel choices, and trips throughout an entire simulated weekday. It is based on MTC's Travel Model 1.5 (TM 1.5) and is validated against pre-COVID year 2020 data, incorporating land use and transportation network assumptions consistent with MTC's Plan Bay Area 2050. The Model includes the base year 2020 and the horizon years 2035 and 2050. While the model base year is 2020, it was validated against 2019 data to reflect pre-COVID conditions and covers the nine-county Bay Area, plus San Joaquin County. The latest version of the model (released in Spring 2025) was used for this analysis. **Figure 1** shows the AlaCC Model Traffic Analysis Zones (TAZ) associated with each of the four subregions within the county (West County, East County, Central County, and Southwest County).

Figure 1. AlaCC Model TAZ by Subregion in Contra Costa County



Source: Fehr & Peers, 2026

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Performance Measures

Plan performance was assessed using the quantitative and qualitative performance measures identified in **Table 1.** These were derived based on the level of detail available at the project and policy level and are aligned with CTP2050 principles. Metrics related to VMT and equity address MTC's requirements for CTP evaluation. While each selected performance measure assesses the CTP2050's performance against multiple goals, the primary goal addressed by the performance measure is **bolded and highlighted.**

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Table 1. Performance Measures Against CTP2050 Principles and Project Categories

Performance Measure	Principles				Project Category
	Safe Travel	Livable and Connected Neighborhoods	Access for All	Growing Sustainably	
1. Percent change in network VMT[1]				X	Freeways, Local Roadways, Complete Streets
2. Percent change in systemwide freeway delay		X		X	Freeways
3. Change in average multimodal travel times between key O-D pairs		X	X	X	Freeways, Local Roadways, Complete Streets
4. Percent change in daily transit ridership by mode (bus, rail, and ferry)		X	X	X	Transit Service and Access Complete Streets
5. Mileage of multimodal improvements in Access Improvement Zones[1]		X	X	X	Transit Service and Access Complete Streets
6. Percentage of HIN miles with safety improvements[1]	X				Freeways, Local Roadways, Complete Streets, Trails and Greenways
7. Percent of the backbone bicycle network with bike infrastructure improvements[1]	X	X	X		Complete Streets, Trails and Greenways
8. Proportional investment (share of project dollars in EPCs vs share of population countywide) for complete streets projects, improved freeway access, and improved transit connectivity	X	X	X		All

Notes:
1. These performance metrics will be calculated for each subregion, as well as countywide.

Source: Fehr & Peers, 2025

Evaluation Assumptions and Inputs

Plan evaluation was based on projects within CTP2050 that cost greater than $10 million to focus the analysis on the investments with the most significant level of impact on the transportation network. For the model-based and off-model GIS evaluations, projects were identified as follows:

- 67 projects were included in the travel demand model portion of the evaluation. They were identified through a two-step screening process. First, projects whose effects are not captured by the travel demand model due to their definition were excluded, including operations and maintenance facilities, safety and security improvements, seismic retrofits, roadway rehabilitation, bus fleet replacement, zero-emission infrastructure, and programmatic improvements. Second, projects whose impacts on the network are too small for the model to measure were excluded, including intersection-level projects and bike and pedestrian infrastructure projects. The list of projects is included as Attachment A.
- 131 projects were included in the off-model analysis. These were selected solely based on whether they were able to be mapped with the information available from project sponsors. This list of projects is included as Attachment A.

Error! Reference source not found. presents a summary of the projects included in the evaluation by p roject type including the count of projects included in the modeling analysis, and projects included in the off-model GIS assessment. Note that the number of mapped projects and the number of modeled projects is not mutually exclusive.

Table 2. Summary of Categories and the Number of Projects Included in the Evaluation

Project Type	Projects Greater than $10 M in CTP2050 List	Modeled Projects	Mapped Projects
Trails and greenways	16	-	15
Transit service and access	30	16	13
Freeways	34	17	30
Local roadways	44	22	38
Complete streets	39	9	29
Goods movement	6	3	5
Resilience	2	-	1
Total	171	67	131

Source: Fehr and Peers, 2026

Since the mapped projects do not include 50 of the projects greater than $10M in cost, as shown in the table above, the off-model analysis is limited in its ability to fully describe the effects of the CTP2050 on the performance measures. These limitations are discussed in more detail in the relevant sections.

The result of this performance evaluation may inform analysis included in the CTP2050's Environmental Impact Report (EIR) but is not intended to reflect a comprehensive analysis of

transportation impacts under the California Environmental Quality Act (CEQA), which will occur through the EIR process.

Modeling Scenarios

The analysis conducted using the AlaCC Model included three modeling scenarios, as summarized in the bullets below.

- **Existing:** pre-pandemic 2020 existing conditions.
- **Baseline Scenario:** future 2050 conditions, and is consistent with transportation projects, policies, and land use growth assumptions included in PBA 2050, but excludes all CTP2050 projects. Regionwide policies in PBA 2050, such as All Lane Tolling, 55 mph speed limit on freeways, and work-from-home rates were included in this scenario, since implementation of these policies would be at the regional level, independent of CTP2050.
- **CTP2050 Scenario:** future 2050 conditions as described under the Baseline Scenario with the addition of CTP2050 projects.

Table 3 provides an overview of policies and projects included in the future scenarios, as well as the programs that were excluded from this analysis.

Table 3. Policies and Projects in the Future Scenarios Evaluation

Type	Description
Baseline Scenario	
MTC-funded policies and projects	**Regional Transit Fare Policy:** Implement a streamlined fare structure across the Bay Area's transit operators and replace operator-specific fare programs with an integrated regional fare structure and means-based fare discount. **Congestion Pricing:** Implement cordon-based congestion pricing for vehicles leaving and entering downtown San Francisco and Treasure Island. Improvements include street improvements to support transit operations and cycling and pedestrian safety. **Complete Streets Network:** Increase the AlaCC Model's bicycle mode choice constant to represent improvement in several unmeasured characteristics of the mode such as perceived safety, comfort and convenience resulting from the bike infrastructure expansion. Based on literature-based estimates of increased bicycle-trip making, the bicycle mode choice constant was calibrated to result in a cycling mode share of approximately 8% in 2050 for the AlaCC Model area. **Regional Vision Zero Policy:** Advance a regional Vision Zero policy, which includes implementation of slower streets through street design and automated enforcement, and other programmatic investments to advance Vision Zero policies. **Silicon Valley Phase II:** Extend BART's existing Green Line and Orange Line rail services from Berryessa to Santa Clara, including four new stations and park-and-ride facilities. **Valley Link:** Implement new rail service between San Joaquin Valley and the Dublin/Pleasanton BART station, including three new stations within Alameda County (and one station in San Joaquin) and three-car trains (12 minute peak headways).
Exogenous factors	**Autonomous Vehicles (AV) Penetration Rates:** Incorporate expected AV penetration rate of 20% by 2050, and other factors such as AV ownership by household types and deadheading miles (resulting in increased VMT). **Expand commute trip reduction programs at major employers:** Set a sustainable commute target for all major employers by adjusting the telecommute rates, such that by the year 2035, no more than 40% of each modeled super district's workforce would be eligible to commute by auto on an average workday.
CTP2050 Scenario	
CTP2050 projects included in PBA2050+ (non-exhaustive list)	**BART Core Capacity:** Implement improvements to existing BART service, including frequency upgrades (12 minute peak headways). **BART Station Modernization and Access:** Implement improvements to support improved access, safety and security, and customer experience. **23rd Street Multimodal Corridor:** Implement a BRT service on 23rd Street **Crow Canyon Road Widening:** Widen Crow Canyon from 4 to 6 lanes Alcosta Boulevard and the West Branch subdivision **I-80 Express Lane Conversion:** Convert I-80 HOV lanes to express lanes between SR-4 and the Bay Bridge.

Type	Description
Other CTP2050 Projects (non-exhaustive list)	**Transit Priority Corridors:** Implement Transit Priority Corridors (TPC) on I-680, SR 4, San Pablo Avenue, Ygnacio Valley Road, Clayton Road, Pacheco Boulevard, Monument Boulevard, Treat Boulevard, Balfour Road, Railroad Ave. **Kirker Pass Road Southbound Truck Lanes:** Construct a southbound truck-climbing lane on Kirker Pass Road. **Road Widening Projects:** Increase travel lanes on Brentwood Boulevard, Vasco Road, Lone Tree Way, Oakley Main Street, Walnut Boulevard, West Tregallas Road, Wilbur Avenue and Willow Pass Road. **Road Extension Projects:** Close existing gap on San Creek Road, Slatten Ranch Road, San Marcos Boulevard, Laurel Road, Oakley Road, and Range Road. **BART to Hercules:** Extend existing BART service from Richmond to Hercules
Baseline Scenario and CTP2050 Scenario	
MTC-funded policies with a CTP2050 component	**Seamless Mobility:** Reduce transfer times to 5 minutes at regional-to-local seamless nodes, and to 3 minutes at regional-to-regional nodes. Existing PBA2050+ seamless nodes outside of Alameda County are included in the *Baseline* Scenario, while existing PBA2050+ seamless nodes in Alameda County and other CTP2050-identified hubs are included in the *CTP2050 Scenario*. **Express Lanes (within Contra Costa County):** Implement express lanes through HOV lane conversions and new lanes, per PBA2050 within Contra Costa in the CTP2050 Scenario.
Excluded from Scenarios	
Regional Policies Deprioritized in PBA2050+	**Per-Mile Tolling:** Exclude from CTP2050 evaluation. While this was maintained as a placeholder strategy in PBA2050+, MTC staff acknowledge that the next plan cycle will need to reconfirm that this strategy meets the moment given complex tradeoffs as well as changes in the policy, funding, and mobility landscape. **Link21:** Exclude from CTP2050 evaluation. This project was downgraded to a planning study in PBA2050+.
Regional Policies	**Bay Area Forward:** Excluded from CTP2050 evaluation. Not included in the AlaCC Model coding.

Source: Fehr & Peers, 2026.

Off-Model Analysis

A GIS-based analysis was conducted to assess impacts on the CTP2050's principles of Safe Travel and Access for All including MTC's required equity evaluation. The analysis identified CTP2050 benefits based on a review of major projects that would improve facilities in Access Improvement Zones and Equity Priority Communities and on the High-Injury Network and the Backbone Bicycle Network. For linear projects, such as new bicycle facilities, mapped project extents were used to calculate improvement mileage. For point-based projects, such as mobility hubs, a "sphere of influence" was applied to estimate the area of impact. The assumed radii for point project spheres of influence are as follows:

- Mobility Hub / Transit-Oriented Development: 0.5 miles
- Overcrossing / Bridge: 1,000 feet
- Intersection Improvement: 500 feet

Model-based Performance Results

The AlaCC Model was used to estimate network VMT, residential VMT per resident, total VMT per employee, freeway delay, and transit boardings across the three scenarios. Countywide, the CTP2050 has a modest but targeted effect on travel behavior. The plan's mix of transit capital investments, including BART Core Capacity improvements, the I-80 Express Lane conversion, and expanded Mobility Hubs in Contra Costa County, alongside multimodal corridor improvements such as the 23rd Street BRT corridor and Crow Canyon Road widening, works to improve system efficiency and support alternatives to driving in select corridors. The effects of these investments are reflected across the key performance measures, including reductions in VMT in most subregions, localized freeway delay reductions on I-580, SR 4, and SR 242, and increased transit boardings across all modes countywide.

Population and Employment Growth in Contra Costa County

Contra Costa County is expected to see a 24 percent increase in employment and a 23 percent increase in population from 2020 to 2050, as shown in **Table 4.** The growth is in accordance with Plan Bay Area 2050 assumptions. All subregions are expected to experience population and employment growth by 2050 except for Southwest County, which is projected to see a decline in employment by 2050.

Growth is not distributed evenly across the county. Central County is estimated to see the largest population increase, adding 120,000 residents (37 percent), with continued development in and around the Walnut Creek and Concord corridors. East County follows at 23 percent population growth, and alongside West County, is estimated to see the largest employment growth in the county at 36 percent each. East County's employment base, which is currently largely industrial and goods-movement oriented, is estimated to expand from 64,000 to 87,000 jobs, potentially placing new demands on freight corridors and local roadways.

Southwest County, by contrast, is estimated to grow modestly in population, and is the only area expected to see a slight employment decline by 2050. This area largely consists of built-out communities with limited room for new development, so their transportation needs are oriented more toward maintaining connectivity to regional job centers than accommodating internal growth.

Table 4. Population and Employment Growth Assumptions

Subregion	2020		2050		2020–2050 Growth Rate	
	Population	Employment	Population	Employment	Population	Employment
West County	272,000	96,000	325,000	131,000	19%	36%
Central County	327,000	188,000	447,000	237,000	37%	26%
East County	342,000	64,000	421,000	87,000	23%	36%
Southwest County	233,000	84,000	254,000	81,000	9%	-4%
Countywide	1,174,000	432,000	1,447,000	536,000	23%	24%

Notes:
Values are rounded to the nearest 1000.
Source: Fehr & Peers, 2026.

This geographic pattern of growth shapes both the need for and the makeup of the CTP2050. The areas absorbing the most growth (Central and East County) are also the areas where transportation infrastructure is under the greatest strain. Rising vehicle travel in these corridors is reflected in the VMT and freeway delay results discussed below, where East County shows the fastest rate of VMT growth between 2020 and 2050. CTP2050 responds to this pressure through investments in SR 4, freight corridors, roadway capacity, and transit access improvements targeted at these high-growth areas.

Daily Network Vehicle Miles Traveled (VMT)

The primary VMT metric for CTP2050 performance is daily VMT, estimated for personal automobiles only (commercial vehicles are excluded). Results are summarized countywide and at the subregion level across all scenarios. To remain consistent with MTC's approach, VMT is calculated using the following metrics:

- **Network VMT:** all personal automobile vehicle trips traveling along roadways in the geography multiplied by the length of the trip.
- **Residential VMT per resident:** total VMT generated by all residents of a TAZ, divided by the population of the TAZ. All passenger vehicle trips are traced back to the residence of the trip-maker, including non-home-based trips.
- **Total VMT per employee:** total VMT generated by employees divided by the number of workers in that TAZ. All automobile vehicle trips made by employed people are traced back to the workplace of the trip-maker, even trips that are not part of the work tour (i.e., recreational trips, school pick-up and drop-off, and other non-work-related trips).

As shown in **Table 5**, under the Baseline Scenario, all subregions see positive annual growth in total VMT from 2020 to 2050. East County shows the fastest rate of annual VMT growth from 2020 to 2050 Baseline Scenario. This growth is tied to the population and employment increases described above. East County, which is estimated to see the largest employment growth in the county, also shows the fastest rate of VMT growth at 1.3 percent annually, which reflects its expanding travel

demand and continued auto dependence in a part of the county with limited transit access. CTP2050 has a nearly neutral effect at the countywide level of VMT; however, it reduces VMT relative to the Baseline Scenario in all but the Central County.

The projects in CTP2050 that likely increase VMT include SR-24 EB Auxiliary Lane, (adding freeway capacity connecting Lamorinda to Walnut Creek), I-680 NB Express Lane (from Livorna to SR-242, which adds capacity on I-680 NB through Central County), Laurel Rd Extension (adding new connectivity in east Central County). Although these projects increase mobility of the network, they would generate induced vehicle travel due to the additional network capacity.

Table 5. Total VMT by subregion and Countywide

Subregion	Existing	Baseline Scenario	CAGR (Existing-Baseline Scenario)	CTP2050	CTP2050 vs Baseline (Percent Change)
West County	4,726,600	5,933,200	0.8%	5,934,700	0.0%
Central County	6,818,200	8,743,000	0.8%	8,882,400	1.6%
East County	4,726,600	6,896,700	1.3%	6,876,700	-0.3%
Southwest County	5,450,000	6,600,000	0.6%	6,510,000	-1.5%
Countywide	21,720,200	28,177,700	0.9%	28,198,900	0.1%

Notes:
CAGR: Compound annual growth rate. CAGR= (Baseline Scenario/2020)^(1/30)-1
Values are rounded up to the nearest 100.
Source: Fehr & Peers, 2026.

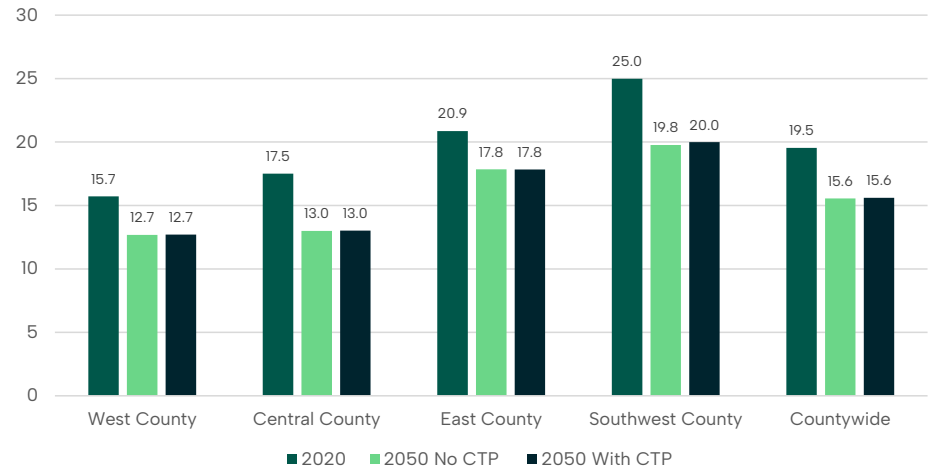
While the VMT results presented above reflect modeled transportation improvements, they do not capture the full range of CTP2050 investments. The model-based analysis focused on projects with measurable network-level effects, such as changes in freeway capacity and improvements in transit service. A number of bicycle and pedestrian projects included in the CTP2050 were not modeled due to limitations in how the AlaCC model captures active transportation demand. These investments have the potential to shift some vehicle trips to active transportation modes, thereby reducing VMT beyond what is reflected in the modeled results. However, the magnitude of that reduction is uncertain and was not quantified in this analysis. To the extent that bicycle and pedestrian improvements generate meaningful mode shift, actual VMT outcomes under the CTP2050 could be more favorable than the figures presented in **Table 5**.

Residential VMT Per Resident

Figure 2 shows residential VMT per resident across all scenarios, both by subregion and countywide. While total network VMT increases, the residential VMT per resident, indicating each county resident's contribution to vehicle travel, is expected to decrease in all subregions from 2020 to 2050, even without the CTP2050. CTP2050 improves the measure slightly. Since the population assumptions for both the Baseline Scenario and CTP2050 Scenario are the same, as shown in **Table 4,** the differences in the Baseline and CTP2050 Scenario reflect changes in how much people are

driving on a per capita basis. The residential VMT per resident in 2050 is nearly identical in both Scenarios, across all subregions and countywide, reflecting minimal changes in travel behavior.

Figure 2. Residential VMT per Resident by Subregion and Countywide



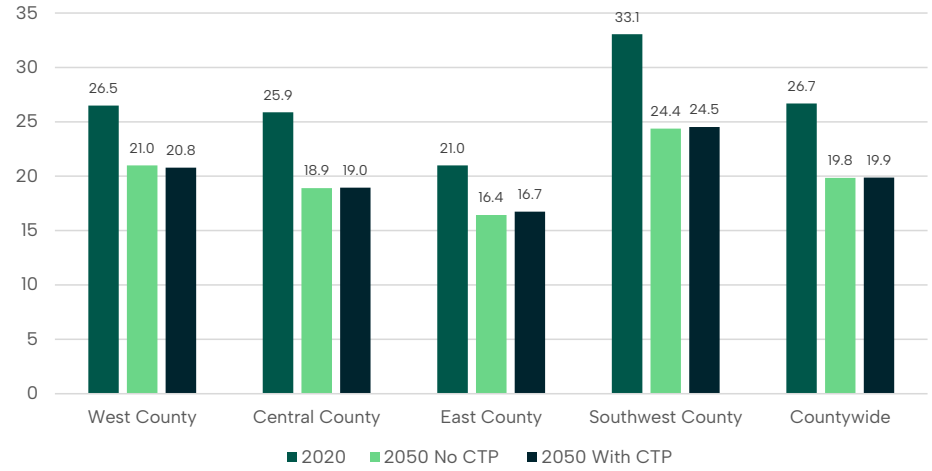
Source: Fehr & Peers, 2026.

Total VMT Per Employee

Total VMT per employee shows similar patterns across the scenarios. **Figure 3** shows that total VMT per employee declined significantly across all areas and at the county level from 2020 to Baseline Scenario. This reflects the effect of regional policies embedded in the future baseline. Differences between the Baseline Scenario and CTP2050 scenarios are minimal, since employment assumptions are consistent between the two scenarios, and the CTP2050 does not materially shift the total amount of employee-generated vehicle travel at the countywide level.

These results suggest that the most significant reductions in driving intensity projected for 2050 are driven by regional land-use and policy assumptions, not by the CTP2050 Scenario itself. The CTP2050's contribution is better reflected through its corridor-level effects, particularly in East County and Southwest County.

Figure 3. Total VMT per Employee by Subregion and Countywide



Source: Fehr & Peers, 2026.

Daily Systemwide Freeway Delay

Contra Costa's major freeway facilities, including Interstates 680, 80, and 580, and State Routes 4, 24, and 242, form the backbone of the county's regional roadway network. Total vehicle-hours of delay for the freeway system are estimated for all passenger vehicles and exclude commercial vehicles. As shown in **Table 6,** freeway delay is estimated to grow substantially across the county by 2050. Total daily vehicle-hours of delay on the countywide freeway system are estimated to increase by 49 percent. This growth is associated with the population and employment increases described above. SR 4, which serves East County, is estimated to see the largest increase in delay, nearly tripling from 7,900 to 20,200 vehicle-hours by Baseline Scenario. I-580 follows a similar trajectory, with delay growing 192 percent over the same period. These two corridors reflect the consequences of high growth in areas that are auto-dependent and currently underserved by transit, compared to other freeway corridors in Contra Costa.

The CTP2050 scenario provides meaningful relief for several of these facilities. SR 242 sees the largest benefit, with delay reduced by 20 percent relative to Baseline Scenario, followed by SR 4 and I-580, each reduced by 9 percent. At the countywide level, CTP2050 reduces total freeway delay by approximately 1 percent. Although the countywide delay relief from CTP2050 is modest, it represents roughly 900 vehicle-hours of delay avoided each day. It is also worth noting that corridor-level changes in delay reflect not only the direct effects of individual investments but also the redistribution of travel patterns across the network. As CTP2050 investments improve capacity or service on specific corridors, some travel shifts to or away from adjacent facilities, which can increase delay on some segments while reducing it on others. The results show that the freeway system will face significant pressure in the future, and that CTP2050 investments in the corridors with the greatest need reduces delay.

Table 6. Daily Vehicle-Hours of Delay by Freeway

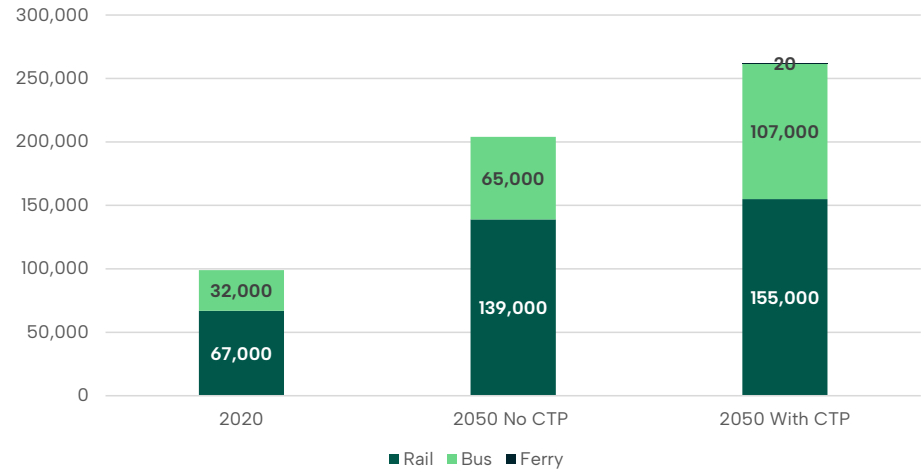
Freeway	Existing	Baseline Scenario	Existing-Baseline Scenario Growth	CTP2050	CTP2050 Effect
I-580	1,200	3,500	192%	3,200	-9%
I-80	11,500	12,300	7%	12,800	4%
SR 4	7,900	20,200	156%	18,300	-9%
SR 242	1,700	2,500	47%	2,000	-20%
I-680	7,800	10,500	35%	11,800	12%
SR 24	10,600	11,600	9%	11,600	0%
All Freeways	40,700	60,600	49%	59,700	-1%

Note:
CAGR: Compound annual growth rate. CAGR= (Baseline Scenario/2020)^(1/30)-1
Values are rounded up to the nearest 100.
Source: Fehr & Peers, 2026.

Transit Ridership

Transit ridership is estimated using stop-level boarding data for all three modes present in the county: bus, rail, and ferry. **Figure 4** shows ridership growth across all modes between 2020 and 2050. It also highlights that CTP2050 accelerates that growth meaningfully. Rail shows the strongest growth by 2050 in the Baseline Scenario, reflecting increased ridership on BART and Capitol Corridor, as the Bay Area and Central Valley continue to grow and as regional rail service expands through projects such as Silicon Valley Phase II and Valley Link. Rail ridership grows even further under the CTP2050 scenario, supported primarily by BART Core Capacity improvements, which increase peak frequency to 12-minute headways. Bus ridership increases reflect the direct effect of CTP2050 service investments. The 23rd Street Multimodal Corridor BRT project and the network of Transit Priority Corridors on SR 4, San Pablo Avenue, Ygnacio Valley Road, Clayton Road, Monument Boulevard, and other key routes improve speed, reliability, and frequency of bus service across the county. Seamless Mobility improvements, which reduce transfer times at regional-to-local nodes, further support bus ridership by making connections to rail more convenient. CTP2050 also adds new ferry services to the transit network; however, ferry remains a modest contributor and does not emerge as a competitive alternative to rail.

Figure 4. Daily Transit Boarding by Mode



Notes:
Values are rounded to the nearest ten.
Source: Fehr & Peers, 2026.

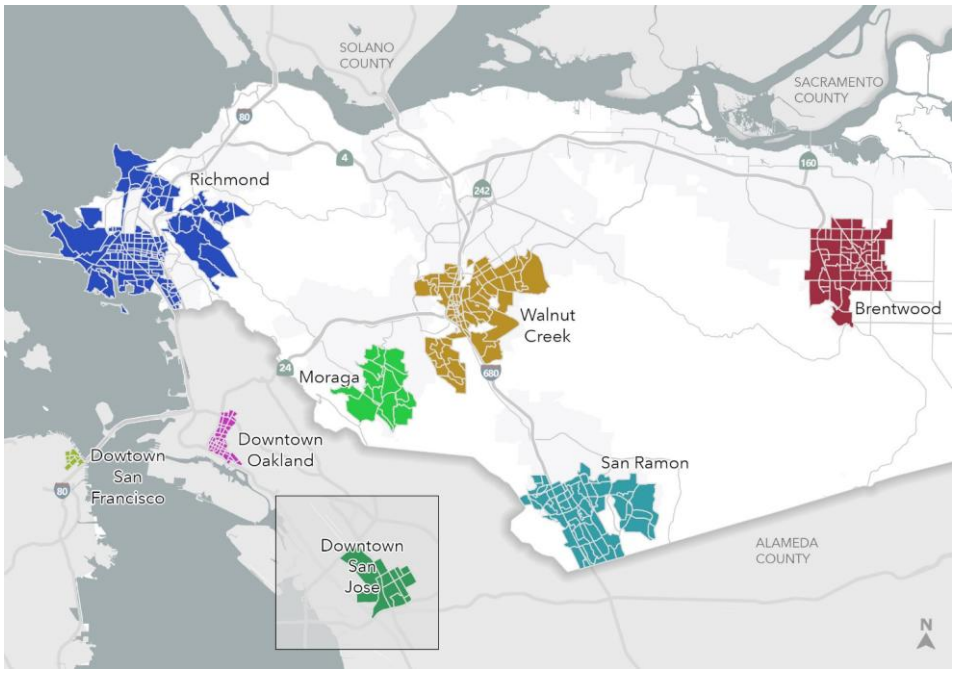
Travel Time Between Key Origins and Destinations (O-D)

To understand how the CTP2050 affects travel choices at the corridor level, multimodal travel times for five origin-destination pairs representing the primary commute corridor for each planning area were estimated. The key origin and destination locations are presented in **Figure 5.** These O-D pairs include the primary commute O-D pair for each subregion, as identified through the CTP2050 needs assessment.

- Richmond to Downtown Oakland (West County)
- Walnut Creek to Downtown San Francisco (Central County)
- Moraga to Downtown San Francisco (Southwest County)
- San Ramon to Downtown San Jose (Southwest County)
- Brentwood to Walnut Creek (East County)

Travel time results reflect how long it takes to travel in the AM peak period between key O-D pairs. Vehicle travel times are disaggregated by drive-alone and carpool, while transit travel times are disaggregated by mode of access: park-and-ride, and multimodal access. The transit travel time considers all legs of the trip, including access to transit. It also includes transfer and wait times. For each combination of travel mode and O-D pair, the best travel time was selected, consistent with MTC's methodology.

Figure 5. Key Origin-Destinations

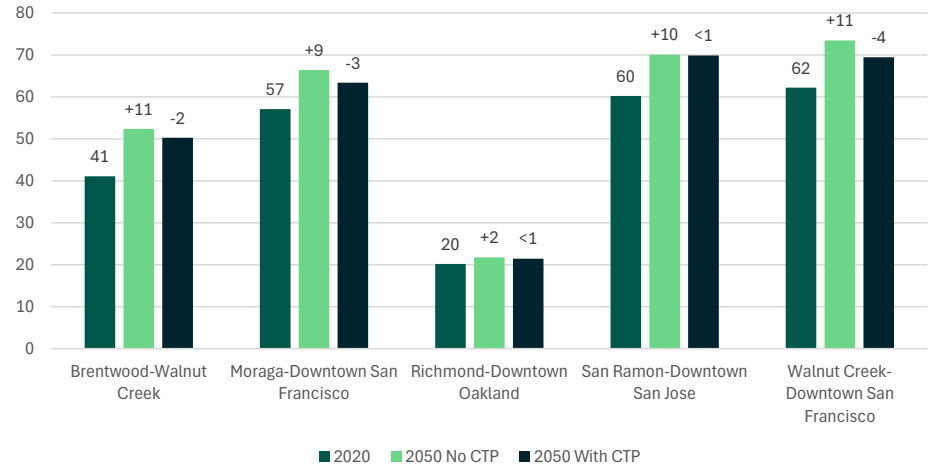


Source: Fehr & Peers, 2026.

DRIVE ALONE AND CARPOOL TRAVEL TIMES

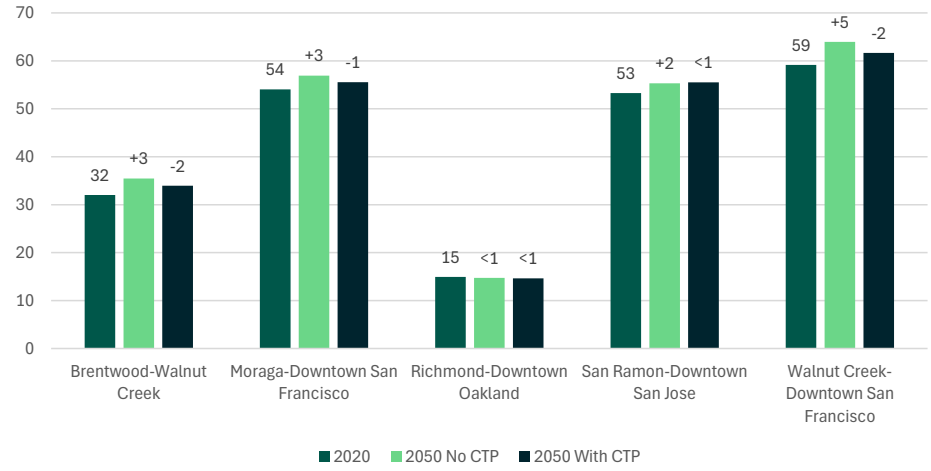
Figure 6 presents the average AM peak period travel time of drive-alone trips between the key origins and destinations, while **Figure 7** present the average AM peak period travel time of the carpool trips between the key origins and destinations. Drive-alone and carpool travel times are both projected to grow across all five corridors by 2050, consistent with the freeway delay findings above. The background growth under the Baseline Scenario adds 2 to 11 minutes of drive-alone time by 2050 across all corridors. Carpool travel times are 5-10 minutes shorter than drive-alone times in 2020, and continue to be shorter in 2050. Similar to drive-alone, the travel time for carpool trips increases between 1 and 5 minutes, and CTP2050 reduces it by 1 and 2 minutes across all the key O-Ds.

Figure 6. AM Peak Period Drive Alone Travel Times between Key O-Ds



Source: Fehr & Peers, 2026.

Figure 7. AM Peak Period Carpooling Travel Times between Key O-Ds



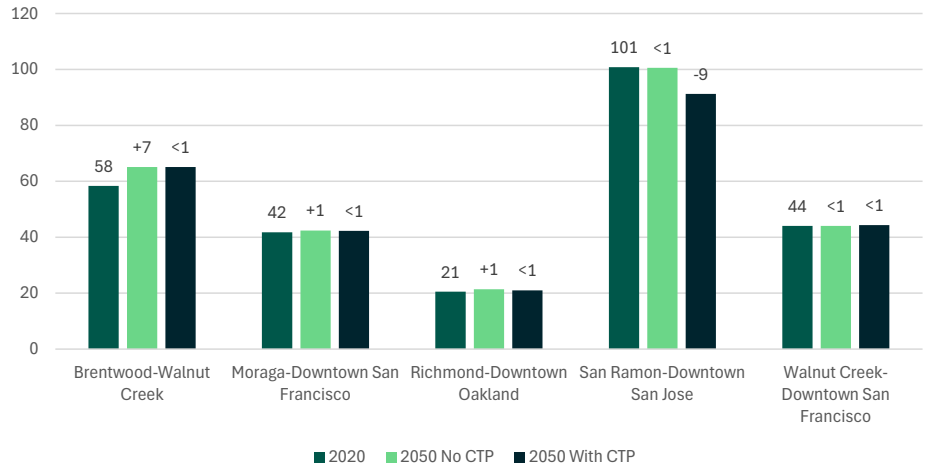
Source: Fehr & Peers, 2026.

TRANSIT TRAVEL TIMES

Transit travel times, including transfer times, are reported for two access modes: park-and-ride, and walk/bike access including transit transfers. These two access modes represent different types of

transit users, as park-and-ride riders are typically traveling longer distances, and walk/bike access riders are more likely to live close to stations. **Figure 8** and **Figure 9** show the average AM peak period transit travel time for these two groups, respectively. For park-and-ride trips, the CTP2050 has minimal effect on most corridors, with travel time changes of less than one minute across four of the five corridor pairs. The exception is San Ramon–Downtown San Jose, where the I-680 express lane investments reduce PNR transit travel time by 9 minutes. This is as reflection of CTP2050 projects, which translate faster freeway access to the station into a shorter door-to-door trip for riders driving to transit. The effect is even more significant since the San Ramon–Downtown San Jose corridor sees no walk/bike transit access trips, meaning the CTP2050's transit benefit in that corridor is delivered entirely through the PNR access mode and is dependent on riders having access to a vehicle to reach the station.

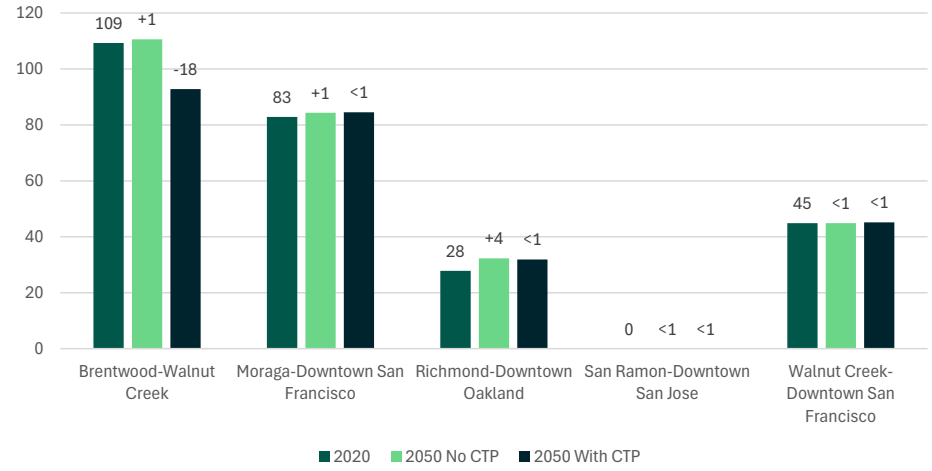
Figure 8. AM Peak Period Transit Travel Times (Park and Ride Access)



Source: Fehr & Peers, 2026.

The CTP2050 scenario effects in travel times for transit trips that are accessed by biking/walking, including transit transfers, show different results. The Brentwood–Walnut Creek corridor sees an 18-minute reduction in transit travel time under the CTP2050. The improvement is driven by new bus investments between Brentwood and Antioch, which shorten the access leg for riders not driving to a station. This result highlights the benefits that targeted bus investments can have in areas where walking or biking access to transit is currently limited, but demand exists.

Figure 9. AM Peak Period Transit Travel Times (Walk/Bike Access and Transit Transfers)



Source: Fehr & Peers, 2026.

Off-Model Performance Results

Performance measures related to safety and equity were analyzed using a GIS-based off-model analysis. All measures in this section compare today's conditions to the CTP2050 scenario. The analysis was conducted for the projects greater than $10M in CTP2050 list that were mapped, and reflect a small subset of all CTP2050 projects. Therefore, the benefits of the plan described in this section are likely underestimated.

Safety and Multimodal Improvements

One of the CTP2050's principles is to proactively increase safety. The plan targets safety investments where the need is most acute, including on the roads and intersections where serious injuries and fatalities are most likely to occur, along the corridors where people walk and bike to reach transit, and on the bicycle network where infrastructure gaps leave riders without safe, connected routes. **Table 7** shows the miles of Backbone Bicycle Network and High Injury Network (HIN) that receive bicycle and safety improvements with the CTP2050.

CTP2050's policies and projects would improve at least 186 miles countywide of the Backbone Bicycle Network. Central County and East County are tied in first place for mileage improved with 58 miles. The CTP2050 will implement safety improvements in approximately 121 of the county's 384 of HIN miles. The West County has the highest improvement share of HIN with at least 40 miles.

Access Improvement Zones (AIZs) are the areas surrounding Transit Priority Corridors where first and last mile connections are most critical. Of the 130 miles of multimodal network improvement within the county, at least 60 miles will be within the Access Improvement Zones. West County has the largest mileage of improvements within the AIZs with 24 miles.

Table 7. Share of Improvements for Bike Network, Multimodal Access, and High Injury Network

Subregion	Miles of Bike Improvements to Backbone Bicycle Network		Miles of Safety Improvements to High Injury Network		Miles of Multimodal Access Improvements in AIZ	
	Existing	Improved by CTP2050	Existing	Improved by CTP2050	Existing	Improved by CTP2050
West County	147	41	91	40	42	24
Central County	182	58	128	41	42	19
East County	211	58	119	26	33	11
Southwest County	141	30	45	14	14	6
Total	**681**	**186**	**384**	**121**	**130**	**60**

Source: Fehr & Peers, 2026.

Equity

MTC's Countywide Transportation Plan Guidelines require CTPs to include quantifiable equity measures and to prioritize investments that improve mobility for residents of Equity Priority Communities (EPCs)[1]. The CTP2050's performance evaluation includes a comparison of the share of project funding across three categories of mapped projects (complete streets projects, improved freeway access, and improved transit connectivity) directed to EPCs against the share of county population located within EPCs.

EPCs represent approximately 24 percent of the countywide population. Complete Streets investments direct approximately 72 percent of project dollars to EPCs, three times the population threshold. Freeway access investments are even more concentrated in EPCs, at approximately 74 percent, meaning nearly three out of every four dollars invested in freeway access improvements goes to an EPC. Transit service access investments reach EPCs at approximately 56 percent, also well above the population share. These results indicate that the CTP2050's investments are directing a significant share of resources toward the communities with the greatest transportation needs.

The equity analysis presented here has a few limitations that should be considered when interpreting the results. The analysis relies on mapped projects only, resulting in the exclusion of countywide projects that cannot be attributed to a specific corridor or geography, and countywide programs, such as eBART Fleet and Facility improvements, Capitol Corridor Service Improvement, and County Connection Zero-Emission Fleet and Infrastructure. This results in only 77 percent of projects greater than $10M in the CTP2050 list being assessed through the equity lens. Additionally, the equity metric is limited to a proportionality comparison between project dollar shares and population shares across

[1] Guidelines for Countywide Transportation Plans. MTC Resolution No. 4550. (November, 2022) https://mtc.ca.gov/sites/default/files/documents/2023-02/Guidelines_for_Countywide_Transportations_Plans.pdf

three investment categories, which does not capture the quality, frequency, or accessibility of improvements experienced by EPC residents. The off-model analysis also does not reflect induced demand, displacement risk, or other indirect effects that infrastructure investment can have on vulnerable communities. These limitations do not invalidate the findings, but they should inform how the performance evaluation results are used in decision-making.

Conclusion

Commented [NC2]: Are we including a summary figure in the Final Report that we also might want to use here?

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The results of this analysis show that the CTP2050 Scenario excels in some areas and performs modestly in others, but overall provides targeted benefits across several of the CTP2050's core principles, as shown in **Figure 10**. Although the CTP2050's effect on countywide VMT and freeway delay is modest relative to a Baseline Scenario, the CTP2050 reduces VMT in most subregions. The nearly neutral countywide effect reflects the fact that several projects that improve mobility also add network capacity, generating induced vehicle travel that offsets the reduction elsewhere. Residential VMT per resident and total VMT per employee both decline substantially by 2050, but differences between Baseline Scenario and CTP2050 Scenario are minimal, suggesting that the reductions are primarily driven by broader future assumptions rather than the CTP2050 Scenario itself.

The evaluation of CTP2050's metrics related to transit, multimodal access, safety, and equity demonstrates clear benefits across these dimensions. Transit ridership increases across all modes under Baseline Scenario, and CTP2050 further increases boardings, particularly for rail and bus service. Daily transit boardings are estimated to grow from approximately 99,000 in 2020 to 204,000 by 2050 under Baseline scenario. The CTP2050 further increases total daily boardings to approximately 262,000, a 29 percent increase over the Baseline Scenario. These results reflect the CTP2050's emphasis on expanding and improving transit service as a core strategy for managing growth and improving mobility across the county. The off-model analysis shows that CTP2050 would improve the bicycle network, high-injury network, and multimodal access within Access Improvement Zones. On the equity side, the analysis shows that CTP2050 projects are directed to EPCs at a rate above their population share countywide. West County with the highest share of EPC residents also sees the strongest relative emphasis on Complete Streets and improved freeway access investments in EPCs, which suggests CTP2050 projects are aligned with the goal of advancing equity.

Overall, the results show that CTP2050 performs as a package of focused improvements that promotes transit use, multimodal access, safety, and equity, while producing more limited effects on countywide VMT and congestion.

Figure 10.Summary of CTP2050 Performance Measures

Source: Fehr & Peers, 2026.

Fehr & Peers

Attachment A

Table A1. Projects Greater Than $10 Million in CTP2050 Project List

ID	Named Project	Total Cost	Project Sponsor	Type	Transformative Vision Category	Mapped	Modeled
1	BART System Modernization	$479.2M	BART	Transit service and access	Create People-First Streets	No	No
2	BART to Bay Trail Bikeway	$50.0M	El Cerrito	Complete streets	Create People-First Streets	Yes	No
3	Coggins Drive and Oak Park Boulevard Complete Street Project	$15.0M	Pleasant Hill	Complete streets	Create People-First Streets	No	No
4	Cooperative Congestion Management	$5.0M	Multiple	Freeways	Provide Reliable Freeway Travel	No	No
5	Gregory Lane Complete Street	$15.0M	Pleasant Hill	Complete streets	Create People-First Streets	Yes	No
6	Cowell Road Complete Streets	$30.0M	Concord	Complete streets	Create People-First Streets	Yes	No
7	Downtown Protected Bikeway Circuit	$27.5M	Walnut Creek	Trails and greenways	Create People-First Streets	Yes	No
8	Macdonald Avenue Streetscape	$25.9M	Richmond	Complete streets	Create People-First Streets	Yes	No
9	Marina Blvd and West Street Improvements	$10.0M	Pittsburg	Complete streets	Create People-First Streets	Yes	No
10	O'Hara Avenue Widening	$20.0M	Oakley	Complete streets	Other Priorities	Yes	Yes
11	Sunset Road Widening	$2,427.3M	Contra Costa County	Complete streets	Create People-First Streets	Yes	No
12	BART Station Modernization and Access	$1,632.7M	Multiple	Transit service and access	Build a Complete, Reliable Transit Network	Yes	Yes

ID	Named Project	Total Cost	Project Sponsor	Type	Transformative Vision Category	Mapped	Modeled
13	Lamorinda School Bus Expansion	$9.0M	Multiple	Complete streets	Create People-First Streets	No	No
14	Walnut Boulevard Bicycle and Pedestrian Improvements	$16.8M	Contra Costa County	Complete streets	Create People-First Streets	Yes	No
15	Monument Blvd/I-680 Bicycle and Pedestrian Improvements	$17.5M	Pleasant Hill	Complete streets	Create People-First Streets	Yes	No
16	Monument Boulevard Trails-to-Transit	$30.0M	Concord	Trails and greenways	Create People-First Streets	Yes	No
17	Oakland Boulevard Protected Bikeway	$12.5M	Walnut Creek	Complete streets	Create People-First Streets	Yes	No
18	Orinda-Moraga Regional Trail Project	$34.4M	Multiple	Trails and greenways	Create People-First Streets	Yes	No
19	Richmond Greenway Gap Project	$40.0M	Richmond	Trails and greenways	Create People-First Streets	Yes	No
20	San Pablo Avenue Bridge Replacement	$22.5M	San Pablo	Trails and greenways	Create People-First Streets	Yes	No
21	SR-24 HOV or Express Lane	$0.0M	CCTA	Freeways	Provide Reliable Freeway Travel	Yes	Yes
22	SR-4 Integrated Corridor Mobility	$15.6M	CCTA	Freeways	Provide Reliable Freeway Travel	Yes	No
23	San Pablo Avenue-Macdonald Avenue Transit Corridor	$203.9M	Multiple	Complete streets	Build a Complete, Reliable Transit Network	Yes	Yes
24	Traffix School Bus Roll Out	$30.0M	San Ramon	Complete streets	Create People-First Streets	No	No
25	Wilder/Downtown Class 1 Multi-use Path	$22.5M	Orinda	Trails and greenways	Create People-First Streets	Yes	No
26	West 10th Street/ Enterprise Circle Improvements	$9.7M	Pittsburg	Complete streets	Create People-First Streets	Yes	No

ID	Named Project	Total Cost	Project Sponsor	Type	Transformative Vision Category	Mapped	Modeled
27	Caldecott Tunnel Modernization and Safety Improvements	$14.7M	CCTA	Freeways	Other Priorities	Yes	No
28	I-580/Stenmark Drive Flyover	$14.2M	Richmond	Freeways	Other Priorities	Yes	No
29	SR-239 Construction	$200.0M	Multiple	Freeways	Other Priorities	Yes	Yes
30	BART Core Capacity	$620.0M	BART	Transit service and access	Build a Complete, Reliable Transit Network	No	Yes
31	Appian Way Complete Streets Project	$23.2M	Contra Costa County	Complete streets	Create People-First Streets	Yes	No
32	Pittsburg-Antioch Highway Widening	$22.5M	Multiple	Freeways	Other Priorities	Yes	Yes
33	San Marco Blvd Extension	$598.8M	Pittsburg	Local roadways	Other Priorities	Yes	Yes
34	Walnut Creek to Pittsburg Transit Priority Corridor	$126.0M	CCTA	Complete streets	Build a Complete, Reliable Transit Network	Yes	Yes
35	I-680/SR-4 Interchange Improvements	$303.9M	CCTA	Freeways	Provide Reliable Freeway Travel	Yes	No
36	SR-160/East 18 St Interchange Improvements	$22.0M	Oakley	Freeways	Provide Reliable Freeway Travel	Yes	Yes
37	"A" Street Grade Separation	$10.2M	Antioch	Goods movement	Other Priorities	Yes	No
38	Brentwood Intermodal Center	$56.8M	Tri Delta Transit	Transit service and access	Build a Complete, Reliable Transit Network	Yes	No
39	Cummings Skyway Truck Lane Extension	$13.9M	Contra Costa County	Goods movement	Other Priorities	Yes	No
40	Byron Highway Widening and Safety Improvements	$44.2M	Contra Costa County	Freeways	Other Priorities	Yes	No
41	East County Track Improvements	$24.1M	MTC	Goods movement	Other Priorities	Yes	No

ID	Named Project	Total Cost	Project Sponsor	Type	Transformative Vision Category	Mapped	Modeled
42	Kirker Pass Road Southbound Truck Lanes	$12.5M	Contra Costa County	Goods movement	Other Priorities	Yes	Yes
43	California Delta Trail	$27.4M	Multiple	Trails and greenways	Create People-First Streets	Yes	No
44	North Richmond Truck Route	$30.1M	Contra Costa County	Goods movement	Other Priorities	Yes	Yes
45	Northern Waterfront Goods Movement Infrastructure	$75.0M	Contra Costa County	Goods movement	Create People-First Streets	No	Yes
46	Laurel Road Extension	$23.2M	Oakley	Local roadways	Other Priorities	No	Yes
47	I-680 HOV Gap Closure Between Livorna and North Main	$410.0M	CCTA	Freeways	Provide Reliable Freeway Travel	Yes	Yes
48	Contra Costa Canal Trail	$24.4M	Multiple	Trails and greenways	Create People-First Streets	Yes	No
49	Balfour Road Shoulder Widening	$44.9M	Contra Costa County	Local roadways	Other Priorities	Yes	No
50	Bella Vista Infrastructure Improvements	$45.0M	Contra Costa County	Local roadways	Other Priorities	No	Yes
51	Brentwood Boulevard Widening	$141.7M	Brentwood	Local roadways	Create People-First Streets	Yes	Yes
52	Cummings Skyway/I-80 Interchange Improvements	$10.7M	Contra Costa County	Complete streets	Create People-First Streets	Yes	No
53	California Avenue Widening	$37.5M	Pittsburg	Local roadways	Other Priorities	Yes	No
54	Camino Diablo Widening	$30.5M	Contra Costa County	Local roadways	Other Priorities	Yes	No
55	Camino Tassajara Safety Improvements	$53.6M	Contra Costa County	Local roadways	Other Priorities	Yes	No
56	Chestnut Street Widening	$419.1M	Contra Costa County	Local roadways	Other Priorities	Yes	No

ID	Named Project	Total Cost	Project Sponsor	Type	Transformative Vision Category	Mapped	Modeled
57	Crow Canyon Road Widening	$19.6M	San Ramon	Local roadways	Other Priorities	Yes	Yes
58	East County Automated Transit Network	$0.0M		Local roadways	Build a Complete, Reliable Transit Network	No	Yes
59	Cutting/Carlson Grade Crossing Improvements	$10.3M	Richmond	Local roadways	Other Priorities	Yes	No
60	EB SR-24 Auxiliary Lanes	$8.7M	Orinda	Freeways	Provide Reliable Freeway Travel	Yes	Yes
61	Paso Nogal Widening	$228.4M	Pleasant Hill	Local roadways	Other Priorities	Yes	No
62	Dallas Ranch Road Extension	$11.2M	Antioch	Local roadways	Other Priorities	Yes	Yes
63	Deer Valley Road Widening	$32.2M	Antioch	Local roadways	Other Priorities	Yes	No
64	Delta Road Widening	$30.2M	Contra Costa County	Local roadways	Other Priorities	Yes	No
65	Highland Road Safety Improvements	$0.0M	Contra Costa County	Local roadways	Other Priorities	Yes	No
66	Hillcrest Avenue Grade Separation	$26.8M	Antioch	Local roadways	Other Priorities	Yes	No
67	I-680 Auxiliary Lanes South of SR-24	$19.5M	CCTA	Freeways	Provide Reliable Freeway Travel	Yes	Yes
68	Martinez to Clayton Transit Priority Corridor	$273.6M	CCTA	Complete streets	Build a Complete, Reliable Transit Network	No	Yes
69	SR-4 Operational Improvements	$122.9M	CCTA	Freeways	Provide Reliable Freeway Travel	Yes	Yes
70	Antioch-Brentwood Transit Extension	$350.0M	Multiple	Transit service and access	Build a Complete, Reliable Transit Network	No	Yes
71	I-680/Concord Blvd/Contra Costa Blvd Interchange Improvements	$20.1M	CCTA	Freeways	Provide Reliable Freeway Travel	Yes	Yes

ID	Named Project	Total Cost	Project Sponsor	Type	Transformative Vision Category	Mapped	Modeled
72	SR-4 and Vasco Road Widening and Interchanges	$164.5M	CCTA	Freeways	Provide Reliable Freeway Travel	No	Yes
73	I-80 CSMP Improvements	$48.5M	WCCTAC	Freeways	Provide Reliable Freeway Travel	Yes	Yes
74	I-80 EB HOV Lane Extension from Cummings Skyway to Carquinez Bridge	$29.7M	CCTA	Freeways	Provide Reliable Freeway Travel	Yes	Yes
75	I-80 EB/Pinole Valley Road On-Ramp Improvement	$13.4M	WCCTAC	Freeways	Other Priorities	Yes	No
76	I-80 Express Bus	$26.9M	Multiple	Transit service and access	Build a Complete, Reliable Transit Network	Yes	Yes
77	I-80 Express Lane Conversion	$51.4M	MTC	Freeways	Provide Reliable Freeway Travel	Yes	Yes
78	I-80 Integrated Corridor Mobility	$38.2M	CCTA	Freeways	Provide Reliable Freeway Travel	Yes	No
79	I-80 WB/John Muir Parkway On-Ramp	$14.6M	Hercules	Freeways	Provide Reliable Freeway Travel	Yes	No
80	I-80/Central Avenue Interchange Modification	$14.2M	CCTA	Freeways	Provide Reliable Freeway Travel	Yes	No
81	I-80/SR-4 Interchange Improvements	$70.6M	Hercules	Freeways	Provide Reliable Freeway Travel	Yes	No
82	James Donlon Boulevard Extension	$306.0M	Pittsburg	Local roadways	Other Priorities	Yes	No
83	Knightsen Avenue and Eden Plains Road Widening	$33.3M	Contra Costa County	Local roadways	Other Priorities	Yes	No
84	Lone Tree Way Grade Seperation	$23.4M	Brentwood	Local roadways	Other Priorities	Yes	No
85	SR-4 Transit Priority Corridor	$1,809.8M	CCTA	Freeways	Provide Reliable Freeway Travel	Yes	Yes

ID	Named Project	Total Cost	Project Sponsor	Type	Transformative Vision Category	Mapped	Modeled
86	Lone Tree Way Widening	$15.4M	Brentwood	Local roadways	Other Priorities	Yes	Yes
87	Monument Boulevard Widening	$15.0M	Pleasant Hill	Local roadways	Other Priorities	Yes	Yes
88	Oakley Main Street Bypass	$15.0M	Oakley	Local roadways	Other Priorities	Yes	No
89	Oakley Main Street Widening	$12.9M	Oakley	Local roadways	Other Priorities	Yes	Yes
90	Marsh Creek Road Improvements	$60.9M	Contra Costa County	Complete streets	Create People-First Streets	Yes	No
91	Marsh Creek Trail	$55.7M	Contra Costa County	Trails and greenways	Create People-First Streets	Yes	No
92	Oakley Road Extension	$17.5M	Antioch	Local roadways	Other Priorities	Yes	Yes
93	Vasco Road Improvements South of Marsh Creek Road	$149.8M	Contra Costa County	Local roadways	Other Priorities	Yes	Yes
94	Antioch-Martinez-San Francisco Ferry	$1,181.0M	Multiple	Transit service and access	Build a Complete, Reliable Transit Network	Yes	Yes
95	Mokelumne Trail	$29.4M	Multiple	Trails and greenways	Create People-First Streets	Yes	No
96	Phillips Lane Extension	$0.0M	Antioch	Local roadways	Other Priorities	Yes	No
97	Pleasant Hill BART to Concord Transit Priority Corridor	$181.7M	CCTA	Complete streets	Build a Complete, Reliable Transit Network	Yes	Yes
98	Sand Creek Road Extension	$4.0M	Antioch	Local roadways	Other Priorities	Yes	Yes
99	Slatten Ranch Road Extensions	$0.0M	Antioch	Local roadways	Other Priorities	Yes	Yes
100	Standard Oil Avenue Construction	$51.0M	Antioch	Local roadways	Other Priorities	Yes	Yes
101	Walnut Boulevard Widening	$62.9M	Contra Costa County	Local roadways	Other Priorities	Yes	Yes
102	West Tregallas Road Widening	$15.2M	Antioch	Local roadways	Other Priorities	Yes	Yes

ID	Named Project	Total Cost	Project Sponsor	Type	Transformative Vision Category	Mapped	Modeled
103	Wilbur Ave Widening	$7.9M	Antioch	Local roadways	Other Priorities	Yes	Yes
104	Pacheco Boulevard Improvements	$43.5M	Contra Costa County	Complete streets	Other Priorities	Yes	No
105	County Connection Zero-Emission Fleet and Infrastructure	$13.9M	County Connection	Resilience	Other Priorities	No	No
106	Waterfront Road Grade Change Project	$25.8M	Contra Costa County	Resilience	Create People-First Streets	Yes	No
107	West County Express Bus Service	$103.0M	WCCTAC	Transit service and access	Build a Complete, Reliable Transit Network	Yes	Yes
108	Pleasant Hill Road Center Median Pathway	$9.2M	Lafayette	Complete streets	Create People-First Streets	Yes	No
109	Pleasant Hill Road Pedestrian Improvements	$10.2M	Pleasant Hill	Complete streets	Create People-First Streets	Yes	No
110	Railroad Avenue and 4th Street Improvements	$21.8M	Pittsburg	Complete streets	Create People-First Streets	Yes	No
111	Delta de Anza Trail	$12.7M	Multiple	Trails and greenways	Create People-First Streets	Yes	No
112	Richmond Parkway Rehabilitation	$50.0M	Richmond	Local roadways	Create People-First Streets	No	No
113	Richmond Yellow Brick Road Complete Streets	$17.0M	Richmond	Complete streets	Create People-First Streets	No	No
114	Richmond-San Francisco Ferry	$69.1M	Richmond	Transit service and access	Build a Complete, Reliable Transit Network	No	Yes
115	San Francisco Bay Trail	$82.9M	Multiple	Trails and greenways	Create People-First Streets	Yes	No
116	County Connection Service Restoration and Expansion	$13.3M	County Connection	Transit service and access	Build a Complete, Reliable Transit Network	Yes	Yes

ID	Named Project	Total Cost	Project Sponsor	Type	Transformative Vision Category	Mapped	Modeled
117	San Pablo Avenue Complete Streets	$20.8M	Contra Costa County	Complete streets	Create People-First Streets	Yes	Yes
118	San Pablo Avenue Intersection Realignment	$15.0M	San Pablo	Local roadways	Other Priorities	Yes	No
119	Hercules Hub Multimodal Transit Center and Ferry Service	$13.0M	Multiple	Transit service and access	Build a Complete, Reliable Transit Network	Yes	Yes
120	San Pablo Creek Trail	$15.5M	Contra Costa County	Trails and greenways	Create People-First Streets	Yes	No
121	San Pablo Avenue Bicycle and Pedestrian Gap Closure and Enhanced Facilities	$25.0M	Pinole	Complete streets	Create People-First Streets	Yes	No
122	I-680 Transit Improvements	$0.0M	CCTA	Freeways	Provide Reliable Freeway Travel	Yes	Yes
123	ECCTA High Frequency Bus Improvements	$20.3M	ECCTA	Transit service and access	Build a Complete, Reliable Transit Network	No	Yes
124	ECCTA Transit Signal Priority on Key Corridors	$11.5M	ECCTA	Transit service and access	Build a Complete, Reliable Transit Network	No	Yes
125	Hydrogen for a Connected West Contra Costa County: AC Transit Divison 3 ZEB Infrastructure	$0.0M	AC Transit	Transit service and access	Build a Complete, Reliable Transit Network	Yes	No
126	Walnut Creek to Concord Transit Priority Corridor	$16.3M	CCTA	Complete streets	Build a Complete, Reliable Transit Network	No	Yes
127	SR-24/Brookwood Ramp Modifications	$32.7M	Orinda	Freeways	Other Priorities	Yes	No
128	SR-242/Clayton Rd Interchange Improvements	$62.7M	Concord	Freeways	Provide Reliable Freeway Travel	Yes	Yes

ID	Named Project	Total Cost	Project Sponsor	Type	Transformative Vision Category	Mapped	Modeled
129	23rd Street Multimodal Corridor	$0.0M	Multiple	Complete streets	Create People-First Streets	Yes	Yes
130	eBART Fleet and Facility Improvements	$15.4M	BART	Transit service and access	Build a Complete, Reliable Transit Network	No	No
131	SR-4 Widening	$14.6M	Multiple	Local roadways	Other Priorities	Yes	Yes
132	SR-4 Overcrossing at Range Road Extension	$32.7M	Pittsburg	Local roadways	Other Priorities	Yes	Yes
133	Alhambra Avenue/SR-4 Intersection Improvements	$127.5M	Martinez	Local roadways	Other Priorities	Yes	Yes
134	SR-4/Port Chicago Highway Interchange Improvements	$56.9M	Concord	Freeways	Provide Reliable Freeway Travel	Yes	No
135	SR-4/Railroad Ave Interchange Interchange Improvements	$12.4M	Pittsburg	Freeways	Provide Reliable Freeway Travel	Yes	Yes
136	SR-4/Willow Pass Interchange Improvements	$43.7M	Concord	Freeways	Provide Reliable Freeway Travel	Yes	No
137	AC Transit Richmond Bus Storage and Maintenace Facility	$16.4M	AC Transit	Transit service and access	Other Priorities	No	No
138	BART to Hercules	$0.0M	WCCTAC	Transit service and access	Build a Complete, Reliable Transit Network	Yes	Yes
139	Bus Transit Coordinating Council Express Bus Service Expansion	$18.1M	Bus Transit Coordinating Council	Transit service and access	Build a Complete, Reliable Transit Network	No	Yes
141	SR-4 Bypass	$152.2M	State Route 4 Bypass Authority	Freeways	Provide Reliable Freeway Travel	No	No
142	Vasco Road Safety Improvements	$53.7M	Contra Costa County	Local roadways	Other Priorities	Yes	No
143	Via Verde Pedestrian Bridge	$15.5M	Contra Costa County	Complete streets	Other Priorities	Yes	No

ID	Named Project	Total Cost	Project Sponsor	Type	Transformative Vision Category	Mapped	Modeled
144	Martinez Intermodal Project	$16.2M	Martinez	Transit service and access	Build a Complete, Reliable Transit Network	No	No
145	Martinez Rail Corridor Improvements	$295.7M	MTC	Transit service and access	Build a Complete, Reliable Transit Network	No	No
146	Monument Corridor Transit Service Improvements	$270.0M	County Connection	Transit service and access	Build a Complete, Reliable Transit Network	Yes	Yes
147	I-680 Operational Improvements	$359.9M	TRANSPAC	Freeways	Provide Reliable Freeway Travel	Yes	No
148	San Pablo Dam Road Multimodal Improvements	$205.8M	Multiple	Complete streets	Create People-First Streets	Yes	Yes
149	Richmond CyberTran	$32.9M	Richmond	Transit service and access	Build a Complete, Reliable Transit Network	No	No
150	Tri Delta Transit Hydrogen Fueling Station	$75.0M	Tri Delta Transit	Transit service and access	Other Priorities	Yes	No
151	Iron Horse Trail	$1,251.4M	Multiple	Trails and greenways	Create People-First Streets	Yes	No
152	Tri Delta Transit Maintenance Building	$73.1M	Tri Delta Transit	Transit service and access	Other Priorities	Yes	No
153	Viera Avenue Grade Separation	$24.4M	Antioch	Transit service and access	Build a Complete, Reliable Transit Network	Yes	Yes
154	WestCAT Infrastructure Improvements	$34.6M	WestCAT	Transit service and access	Build a Complete, Reliable Transit Network	No	Yes
155	Wildcat Creek Regional Trail	$27.1M	Multiple	Trails and greenways	Create People-First Streets	Yes	No
156	Willow Pass Road Widening and Bridge Reconstruction	$21.5M	Multiple	Local roadways	Create People-First Streets	Yes	Yes

ID	Named Project	Total Cost	Project Sponsor	Type	Transformative Vision Category	Mapped	Modeled
157	Willow Pass Road/10th Street Intersection Improvements	$10.2M	Pittsburg	Complete streets	Create People-First Streets	Yes	No
158	Ygnacio Valley Road Bicycle Improvements	$10.0M	Walnut Creek	Complete streets	Create People-First Streets	Yes	No
159	Ygnacio Valley Road Pavement Reconstruction	$24.5M	Walnut Creek	Local roadways	Other Priorities	Yes	No
160	SR-4 Bus on Shoulder	$0.0M	CCTA	Transit service and access	Build a Complete, Reliable Transit Network	No	No
161	SR-4 Vision Study Recommended Project Bundles (including CNWS bike path)	$496.6M	CCTA	Freeways	Provide Reliable Freeway Travel	No	No
162	Automated Transit Network (ATN)	$345.8M	ECCC	Transit service and access	Build a Complete, Reliable Transit Network	No	No
163	ECITS Express Bus/BRT Recommendation	$228.7M	CCTA	Transit service and access	Build a Complete, Reliable Transit Network	No	No
164	Richmond Parkway Study Recommendations	$131.0M	WCCTC	Complete streets	Create People-First Streets	No	No
165	I-80 Bus on Shoulder	$20.0M	CCTA	Transit service and access	Build a Complete, Reliable Transit Network	No	No
166	I-680/Treat Multimodal Improvements	$3.8M	CCTA	Complete streets	Create People-First Streets	No	No
167	Byron Airport EVTOL	$0.0M	CCTA	Local roadways	Other Priorities	No	No
168	CC Canal to Iron Horse Trail Connector	$0.0M	CCTA	Trails and greenways	Create People-First Streets	No	No
169	RSR Multimodal Access Projects	$0.0M	Richmond	Complete streets	Create People-First Streets	No	No

ID	Named Project	Total Cost	Project Sponsor	Type	Transformative Vision Category	Mapped	Modeled
170	Mobility Hubs Program	$759.0M	Multiple	Complete streets	Build a Complete, Reliable Transit Network	Yes	No
171	Oakley Amtrak Station to TriDelta Transit Park & Ride Multimodal Connection	$15.0M	Multiple	Complete streets	Create People-First Streets	No	No

Source: Fehr & Peers