Memorandum

TO: Alameda County Transportation Commission

FROM: Cambridge Systematics, Inc.

DATE: January 6, 2012

RE: Summary of Performance Evaluation and Model Results , Draft Countywide Transportation Plan: Baseline, Fully Funded (Tier 1), Partially Funded (Tier 2) and Vision Scenarios

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This memorandum summarizes performance evaluation results for the Draft Alameda Countywide Transportation Plan (CWTP). Evaluation results are reported for three scenarios:

- Baseline (existing plus committed projects and programs),
- Fully funded projects and proposed additional program spending (Tier 1), and
- Partially funded projects (Tier 2)/Vision -all programs and projects. Some projects are recommended for partial funding because they represent a commitment to project development or a specific phase of development.

Fully funded and partially funded projects and programs represent what can be implemented within the approximately $6.8 billion anticipated revenue for the next 28 years, and assume an extension of the ½ cent local sales tax for transportation. Since an augmented sales tax is being considered for Alameda County, which would increase revenues beyond the $6.8 billion estimate, a Tier 2/Vision scenario is also evaluated. Due to this consideration, the project and program lists included in this evaluation may be revised to be consistent with the final draft Transportation Expenditure Plan (TEP) adopted by the Commission in January 2012. Appendix A provides tables with more details on the performance evaluation results for the three scenarios. Appendix B identifies assumptions used in the performance evaluation including a list of all projects by funding commitment, program funding levels, land use assumptions and a comparison to previous performance measure results.

The performance evaluation results will be used to inform Chapter 6, Projects and Programs, of the Draft CWTP, which will be reviewed by the Steering Committee and Working Groups in March 2012 and which will also incorporate the final draft TEP assumptions.

Background

In March 2011, the Steering Committee adopted performance measures for evaluating programs and projects for inclusion in the CWTP and ultimately the Transportation Expenditure Plan (TEP). The first performance evaluation results, which were part of exploratory analysis of

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draft plan scenarios, were presented in July 2011. The July results were used along with information about commitment to on-going programs and projects, congestion relief, and maintenance to develop the financially constrained lists of programs and projects released in the Administrative Draft CWTP by the Steering Committee in September 2011. The Administrative Draft CWTP program and project lists were adjusted to reflect comments received in October 2011, and a second round of evaluation was conducted in November 2011. The results for this second evaluation, which are the subject of this memorandum, will be used to inform the Draft CWTP, which will be reviewed by the Steering Committee and Working Groups in March 2012.

Compared to the July evaluation, the November evaluation:

- **Focuses on overall countywide performance.** The November evaluation focuses only on overall countywide and subarea performance results. Individual projects are not reevaluated.
- **Includes three new transportation investment scenarios.** The July evaluation included five exploratory scenarios for the year 2035. The November evaluation includes three comparative scenarios that differ by investment level for year 2035:
  - Future Baseline scenario including committed projects and limited programmatic spending;
  - Tier 1 (fully funded) scenario including Baseline commitments, fully funded projects and proposed additional program spending, and
  - Tier 2/Vision (partially funded) scenario including Tier 1, 2 and Vision projects and assuming full program funding.

  Projects included in the Tier 1 scenario were identified through a performance evaluation process and with the input from the CWTP-TEP Advisory Working Groups, Steering Committee, and public input. The draft list of projects and program funding amounts are provided in Appendix B. Due to concurrent development of the TEP, the project and program lists included in this evaluation may be revised to be consistent with the final draft TEP adopted by the Commission in January 2012.
- **Reflects financially constrained funding levels.** The July evaluation reflected initial estimates of discretionary funding of about $12 billion, whereas the combined Fully Funded (Tier 1) and Partially Funded (Tier 2) scenarios represent about $6.8 billion (consistent with the draft RTP assumption), of which two-thirds is generated from local sources including existing Measure B and Measure F (vehicle registration fee) revenues.
- **Reflects more focused land uses.** The land use assumptions for the November evaluation were changed from the July analysis such that: (1) jobs and employed residents were slightly reduced for the whole Bay Area (2) jobs were increased slightly in Alameda County while employed residents, population and households stayed approximately the same; and (3) population and employment was redistributed among the individual jurisdictions to focus growth in Priority Development Areas (PDAs) and to be consistent with ABAG's Alternative Land Use Scenarios released in late August 2011. Appendix B provides more detail on these changes and explains the process for developing the land use assumptions.

- **Assesses refined performance measures.** The November evaluation includes a new congestion-focused performance measure (percent of congested roadway segments during peak periods[1]). The performance measure for roadway state of good repair was refined to better match information provided by MTC, and is now defined as "additional funding necessary to maintain current pavement conditions."

Summary

Consistent with ABAG and MTC land use projections released in the Alternative Land Use Scenarios in August 2011, Alameda County's year 2035 households and employment are projected to increase to about 697,000 and 875,000, respectively (Table 1). These increases equate to 28 percent growth from current levels for households, and 19 percent for employment.

As a result, model forecasts indicate that in the future, approximately 5.7 million trips will be made each day in Alameda County and about 50 million vehicle miles of travel (VMT) will occur. These values correspond to an approximately 24 percent trip growth and 40 percent VMT growth.

Table 1 –Daily Trips and Vehicle Miles / Hours of Travel Within Alameda County

	Current Year	Baseline – (July 2011 Analysis)	Baseline – (Nov, 2011 Analysis)	Tier 1	Tier2/Vision
Drive alone	2,393,000	2,943,000	2,880,000	2,859,000	2,831,000
Carpool	1,442,000	1,773,000	1,822,000	1,810,000	1,782,000
Transit	269,000	358,000	413,000	423,000	432,000
Bicycle	78,000	95,000	99,000	98,000	96,000
Walk	442,000	523,000	546,000	578,000	636,000
Total Trips	4,625,000	5,691,000	5,760,000	5,768,000	5,778,000
Daily Vehicle Miles of Travel (millions)	35.92 (total)	52.02 (total)	*42.55 (auto)* *7.88 (truck)* 50.43 (total)	*42.77 (auto)* *7.95 (truck)* 50.72 (total)	*42.51 (auto)* *7.88 (truck)* 50.39 (total)
Daily Vehicle Hours of Travel (millions)	0.92 (total)	1.56 (total)	1.46 (total)	1.45 (total)	1.40 (total)
Households	542,250	693,540	696,834		
Employment	735,460	835,183	874,605		

[1] Congestion is defined as roadway segments operating at volume to capacity ratios exceeding 0.75 (moderately congested) and 1 (severely congested). These thresholds are consistent with ones used by the Metropolitan Transportation Commission

Alameda County's future auto VMT is projected to be split between three components (truck VMT split is shown in parenthesis) based on where trips begin and end. As such:

- 37 percent are for trips that begin and end in Alameda County (35 percent for trucks);
- 27 percent are for trips that pass through Alameda County without stopping (32 percent for trucks); and,
- 36 percent are for trips that travel between Alameda County and another county (33 percent for trucks), broken out as follows:
  - 6 percent are to/from the San Joaquin Valley (10 percent for trucks);
  - 9 percent are to/from Santa Clara County or the Central Coast (10 percent for trucks);
  - 4 percent are to/from San Mateo County (3 percent for trucks);
  - 5 percent are to/from San Francisco County (2 percent for trucks);
  - 4 percent are to/from the North Bay, Sacramento Region or the North Coast(4 percent for trucks); and,
  - 9 percent are to/from Contra Costa County (4 percent for trucks);

To accommodate these household, employment and travel increases, a balanced investment in transportation infrastructure and services will be needed. Table 2 summarizes performance results for the entire county for the three scenarios; detailed tables are provided in Appendix A. Highlights of the performance evaluation results are discussed below.

Comparison of Scenario Results

Overall, the Tier 1 scenario shows improved performance compared to the Baseline scenario. Most importantly, drive alone and carpool trips are reduced even though total trip making increases for the Tier 1 and Tier 2/Vision scenarios. The reduced driving is accompanied by increases in transit and non-motorized travel, with the largest increase occurring for walking. This increase in non-motorized travel leads to an increase in physical activity as measured by the time spent walking and bicycling each day.

Accessibility to activity centers and frequent transit improved by the largest margins, resulting primarily from improved transit frequencies serving major activity centers. As a result of plan investments, 76 percent of the lowest income households will have convenient access to employment/activity centers, compared to 67 percent in the Baseline, and 88 percent will have access to frequent transit compared with 80 percent in the Baseline. Under Tier 2/Vision, performance for both measures improve to 81 percent and 88 percent respectively. Accessibility to activity centers improved most in North and South county planning areas (see Table A.3) whereas access to frequent transit improved most in the South and East county planning areas (see Table A.4).

Table 2 – Summary Performance Results for Selected Measures

Performance Measure	Definition and Corresponding Detailed Appendix Table	Baseline	Tier 1	Tier 2/ Vision
Congestion	% of lane miles moderately or severely congested during AM (PM) peak period (A.1)	29% (33%)	27% (33%)	27% (31%)
Alternative modes	% trips made by non-automobile modes (A.2)	18%	19%	20%
Activity center accessibility	% of low-income (<$25k annual) households within 20 min. drive or 30 min. transit ride of activity center or 0.5 mi from grade school (A.3)	67%	76%	81%
Public transit accessibility	% of low-income (<$25k annual) households within 0.25mi of bus route or 0.5mi rail transit stop (A.4)	80%	88%	88%
Public transit usage	Daily public transit ridership (A.5)	613,201	648,062	689,456
Transit efficiency	Transit passengers carried per transit revenue hour of service offered (bus only) (A.6)	54	49	51
Travel time	Average travel time per trip in minutes for selected origin-destination pairs in the AM (PM) 1-hr peak period, drive alone trips (A.7a)	48 (44)	46 (42)	45 (41)
	Same as above for transit trips (A.7d)	74	72	71
Reliability	Average ratio of AM (PM) 1-hr peak period to off-peak period travel times for selected origin-destination pairs, drive alone trips (A.8a)	1.6 (1.5)	1.6 (1.5)	1.6 (1.4)
	Same as above for transit trips (A.8d)	1.1	1.1	1.1
Maintenance	Unmet maintenance needs over 28 years assuming current pavement conditions	Please see Figure A.2		
	Percentage of remaining service life for transit vehicles in 2035 (A.9)	23%	35%	41%
Safety	Annual projected injury and fatality crashes (A.10)	13,045	13,121	13,035
Physical Activity	Total daily hours spent biking or walking (A.11)	231,531	235,366	240,678
Clean Environment	Tons of daily greenhouse gas emissions (A.11)	19,777	19,722 (0.3% reduction)	19,443 (1.7% reduction)
	Tons of daily particulate (PM 2.5) emissions (A.12)	1.61	1.60	1.57

Most other measures also showed positive change. Daily transit boardings in the Tier 1 and Tier2/Vision scenarios increased by 6 and 12 percent, respectively, over the Baseline (from 613,000 to 648,000 and 689,000), and walking trips increased by 6 and 16 percent, with the greatest improvements in North and Central counties.

The percentage of countywide lanes miles that are moderately or severely congested decreases (see Table 2 and Table A.1). Results in Appendix A, Table A.1 also indicate that congestion levels decrease for all planning areas in either the A.M and/or P.M peak periods, particularly in South and East counties.

Figures 1 and 2 illustrate roadways within Alameda County that experience substantive changes in peak-period congestion levels, as measured by changes in the volume to capacity ratio, for the Tier 1 and Tier 2/Vision scenarios. About 110 lane miles experience reduced peak period congestion in both scenarios, while approximately 25 lane miles experience increased congestion.

Greenhouse gas and particulate matter emissions declined by small margins between these three future year scenarios (less than one percent between Baseline and Tier 1, and almost 2 percent between Baseline and Tier 2/Vision). All three scenarios incorporate identical economic growth assumptions and strategies for key inputs such as land use policies, low carbon fuel, and vehicle technology; the additional changes for Tier 1 and Tier 2/Vision reflect emission reductions from major transportation projects and programs.

When GHG emissions are considered on a population (or per-capita basis), as MTC is doing for the Regional Transportation Plan (RTP) and Sustainable Community Strategy (SCS) process, a different picture begins to emerge. In that case, daily GHG emissions drop from 18.4 pounds per capita to 14.2 pounds per capita for the Tier 1 Scenario[2]. This 24 percent GHG reduction can be attributed to a combination of strategies that encompass land use and investment strategies in the draft CWTP, economic growth projections, and vehicle technology and fuel standards.

Although most measures show improvement, these improvements are small in some cases and decline in a few other cases for two principal reasons. First, the CWTP scenarios include a range of capital and programmatic investments across all travel modes and geographic areas creating a balanced investment portfolio. This portfolio improves performance for some measures (e.g. accessibility and congestion), but leaves others such as mode of travel or travel times minimally changed or unchanged. While a noticeable change in mode split – or any specific performance measure - could potentially occur with an investment portfolio that is heavily concentrated in an individual mode and/or geographic area, such imbalanced investment could have undesirable effects on other performance measures.

Second, inherent limitations with travel demand modeling limit the ability to capture the full extent of performance benefits from program and smaller scale capital investments. For example, the travel model used for the evaluation cannot forecast the benefits of planned investments in travel demand management, roadway maintenance, or smaller intersection improvements, all of which are important components of the proposed draft CWTP.

[2] These GHG figures include all travel on Alameda County roadways by automobiles and light-duty trucks.

Figure 1 – Roadway Congestion Changes for Tier 1 Scenario

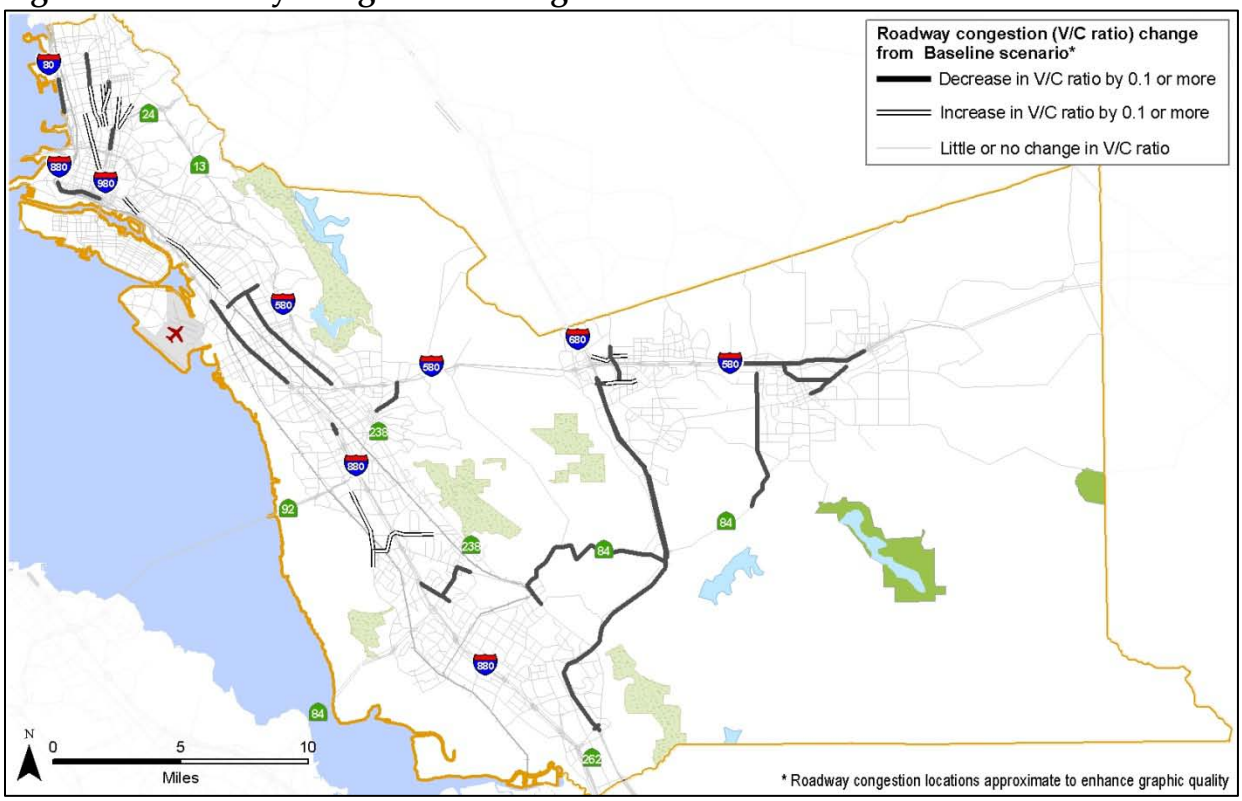
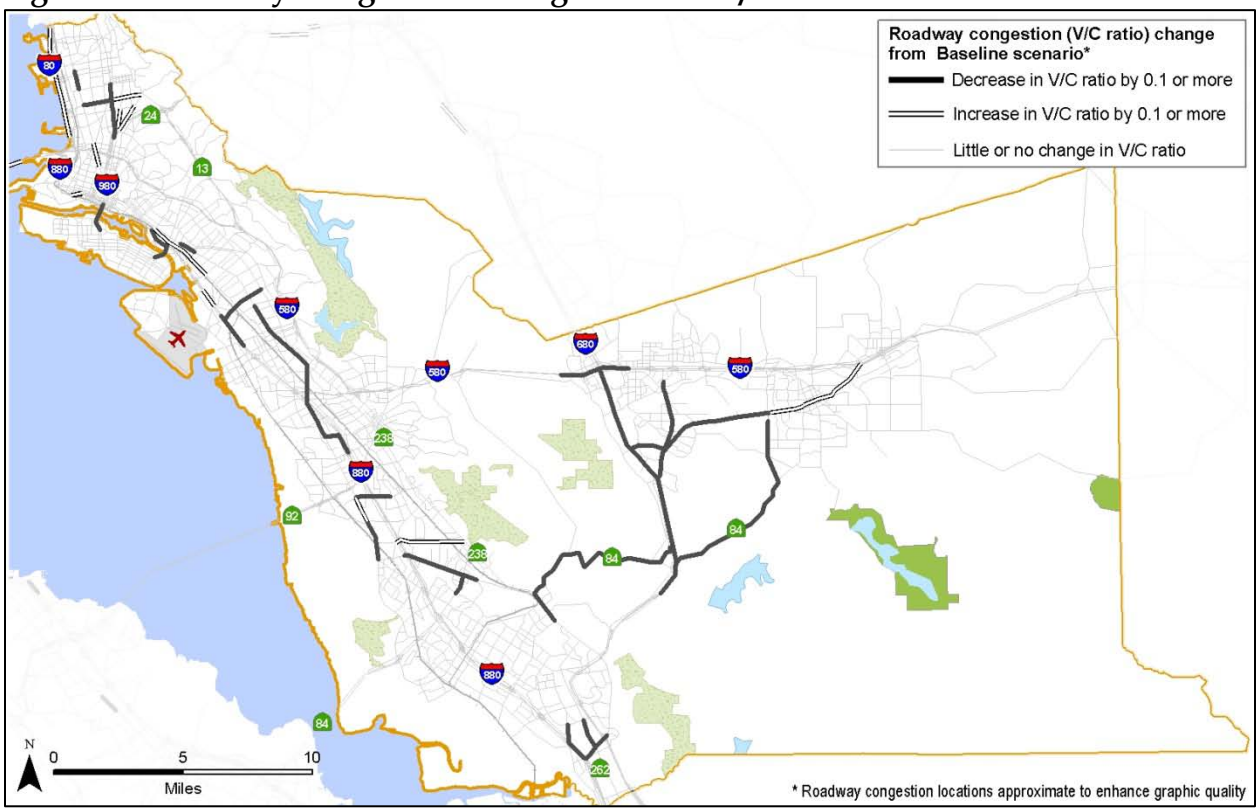


Figure 2 – Roadway Congestion Changes for Tier 2/Vision Scenario



Modest Performance Changes are Observed in Some Cases

A few measures exhibit slightly declining performance for the Tier 1 and/or Tier 2/Vision scenarios:

- **Peak to off peak travel times:** Although congestion was reduced for Tier 1, the average ratio of peak to off peak travel times remained essentially the same. However, this result is primarily driven by improved conditions in the off-peak period rather than a degradation in peak period conditions. Also, these countywide results mask the fact that peak travel times improve in many corridors. For example, trips from East County to San Jose showed a reduction in the peak to off peak ratio, indicating that peak period congestion was reduced more significantly than off-peak congestion in this travel corridor.

- **Maintenance:** MTC has released data showing that $2.15 billion in revenue is expected to be available from current sources to maintain local streets and roads throughout Alameda County over the next 28 years. However, MTC's data also show that an additional $3.18 billion is needed just to maintain current roadway pavement conditions[3] An additional $2.46 billion (for a total of $5.64 billion beyond expected revenue) is needed to achieve a PCI rating of 75 ("state of good repair") in each jurisdiction**.** Figure A.2 in Appendix A shows available revenue and shortfall by jurisdiction for both pavement condition scenarios.

- **Safety:** The expected number of fatal and injury collisions is essentially unchanged between the three scenarios, which reflects relatively stable forecasts of vehicle-miles travelled.

- **Transit Efficiency:** Transit service efficiency (riders per revenue hour) for bus transit decreases slightly. Although transit ridership increases, the increase is not proportional to the increase in service hours provided. This ratio improves somewhat in the Tier2/Vision scenario relative to Tier 1 since the percentage increase in ridership is larger than the percentage increase in transit hours of service between the two scenarios. This result suggests that transit service in Tier 2/Vision is somewhat more focused in areas that have a greater potential to generate new ridership.

Appendix A provides detailed tables for each measure.

Appendix B provides the assumptions for the scenarios in terms of land use and infrastructure investments.

[3] Current conditions, as measured by the Pavement Condition Index (PCI), average 69 across Alameda County with a range of 56 to 78 for individual jurisdictions.

Appendix A – Detailed Tables for Performance Measures Results

This Appendix provides the following detailed tables and figures illustrating performance results:

- Table A.1 – Percent of Lane-Miles Congested During Peak Periods
- Table A.2 – Percentage of Trips by Mode of Travel
- Table A.3 – Activity Center Accessibility
- Table A.4 – Public Transit Accessibility
- Table A.5 – Public Transit Daily Ridership
- Table A.6 – Transit Passengers by Revenue Hour
- Tables A.7a-A.7d – Minutes of Average Travel Time – Drive-Alone Mode, Carpool Mode, Heavy Truck Mode, Transit Mode
- Tables A.8a-A.8d – Peak to Off-Peak Travel Time Ratios – Drive-Alone Mode, Carpool Mode, Heavy Truck Mode, Transit Mode
- Table A.9 – Greenhouse Gas and Particulate Matter Emissions
- Figure A.1 – Carbon Dioxide (CO2) Emissions from Alameda County Roadways
- Figure A.2 – Capital Funding Needs to Maintain and Improve Current Pavement Conditions.
- Table A.10 – Transit Vehicle Conditions
- Table A.11 – Collisions by Type
- Table A.12 – Daily Hours Spent Bicycling and Walking

Brief observations on key trends and notable results are included for each set of related performance measures.

Table A.1 Congested Lane-Miles During Peak Periods

	Percent of Total Lane-Miles			
	A.M. One-Hour		P.M. One-Hour	
	Moderately Congested (v/c 0.75-1.00)	Severely Congested (v/c >1.00)	Moderately Congested (v/c 0.75-1.00)	Severely Congested (v/c >1.00)
Baseline				
North	20%	9%	23%	10%
Central	23%	8%	29%	9%
South	22%	4%	21%	6%
East	21%	8%	24%	11%
County All	**21%**	**8%**	**24%**	**9%**
Tier 1				
North	20%	9%	22%	11%
Central	24%	8%	28%	8%
South	21%	3%	20%	5%
East	18%	8%	24%	9%
County All	**20%**	**7%**	**24%**	**9%**
Tier 2/Vision				
North	19%	10%	22%	10%
Central	22%	8%	28%	8%
South	20%	4%	20%	5%
East	18%	6%	24%	8%
County All	**20%**	**7%**	**23%**	**8%**

Table A.1 displays congested lane mileage results for the three scenarios at the sub-county and county levels. These peak-hour congestion levels are generally consistent with expectations; they remain stable or slightly decreased for Tier 1 compared to Baseline, and for Tier 2/Vision compared to Tier 1. While congestion reduction between these scenarios is seen throughout the County, the largest reductions occur in the East County (e.g. "severely congested" lane miles decreases from 11% in Baseline to 9% in Tier 1; moderately congested decreases from 21% in Baseline to 18% in Tier 1.) This result reflects planned capital investments in BART and I-580 HOV/HOT lanes.

The mode of travel results in Table A.2 show relatively minor changes for the Tier 1 and Tier 2/Vision scenarios compared to the Baseline. The most noticeable change is in the extent of walking in North County. While the magnitude of transit and non-motorized investments may have created an expectation for a larger mode split away from drive alone, the CWTP scenarios actually include a range of capital and programmatic investments across all modes of travel and geographic areas creating a balanced investment portfolio,. This type of balanced portfolio improves performance for some measures (e.g. accessibility and congestion), but leaves others

such as mode of travel minimally changed or unchanged. A noticeable change in mode split would potentially occur with an investment portfolio that is heavily concentrated in an individual mode and/or geographic area, but such imbalanced investment could have undesirable effects on other performance measures.

The accessibility metrics in Tables A.3 and A.4 show strong and consistent improvements throughout the County, especially for access to public transit. The strongest access improvements occur for the lowest income quartile.

For the Tier 1 scenario, activity center accessibility improves in the North, Central and South regions, and remains stable for East County. This sub-regional difference is created by the improved bus service for North, Central and South counties (relative to Baseline), while the BART to Livermore Phase I project under the Tier 1 scenario does not increase access to employment centers (within a 30 minute travel time) due to required transfers between the express bus and rapid rail. The Tier2/Vision scenario extends BART rapid rail through Livermore. The combination of eliminating the rail/bus transfer and directly serving more employment centers with rail results in a large accessibility improvement for East County. It should be noted that BART to Livermore Phases I and II evaluated in this effort were representative of a one-station and bus extension, and a two-station extension to the Greenville Road area. BART is in the process of developing more detailed descriptions of both phases.

Table A.2 Percent of Daily Trips by Mode of Travel

Planning Area	Drive-Alone	Carpool	Transit	Walk	Bicycle
Baseline (5.76 million countywide trips)					
North	46%	30%	11%	12%	2%
Central	53%	33%	6%	8%	1%
South	53%	34%	4%	8%	1%
East	55%	33%	4%	8%	1%
County – All	**50%**	**32%**	**7%**	**9%**	**2%**
Tier 1 Scenario (5.77 million countywide trips)					
North	45%	29%	11%	13%	2%
Central	53%	32%	6%	8%	1%
South	52%	34%	4%	8%	1%
East	55%	32%	4%	8%	1%
County – All	**50%**	**31%**	**7%**	**10%**	**2%**
Tier 2/Vision Scenario (5.78 million countywide trips)					
North	44%	29%	11%	14%	2%
Central	52%	32%	6%	9%	1%
South	52%	33%	5%	9%	1%
East	54%	32%	4%	9%	1%
County – All	**49%**	**31%**	**7%**	**11%**	**2%**

Note: Totals may not equal sums due to rounding.

Table A.3 Activity Center Accessibility

Planning Area	Households within a peak period 30-min transit ride and a 20-min drive of one employment center and a 0.5-mile walk of a grade school by income group			
	< $45,000	$45,000-$81,000	$81,000-$135,000	> $135,000
Baseline				
North	75%	70%	65%	54%
Central	70%	69%	65%	53%
South	28%	29%	28%	21%
East	31%	24%	22%	16%
County - All	**67%**	**58%**	**49%**	**36%**
Tier 1				
North	85%	80%	73%	58%
Central	75%	73%	69%	55%
South	44%	44%	41%	34%
East	30%	24%	22%	17%
County – All	**76%**	**66%**	**55%**	**41%**
Tier 2/Vision				
North	90%	86%	78%	64%
Central	79%	78%	75%	64%
South	51%	51%	48%	43%
East	37%	31%	29%	21%
County – All	81%	72%	61%	48%

Note: Household income is shown in year 2010 dollars.

Public transit access (Table A.4) improves in all sub-regions for the Tier 1 and Tier 2/Vision scenarios, and in some cases exhibits patterns that are not consistent with activity center accessibility shown in Table A.3. For example:

- In South County, public transit access improves by over 40 percentage points for Tier 1 and Tier 2/Vision scenarios, while activity center access improves by 10 to 20 percentage points. The changes to public transit access are related to bus service reduction in the Baseline scenario, which results in many local bus routes in the South County not meeting the definition of "frequent bus service". Bus service restoration and expansion in the Tier 1 and Tier 2/Vision scenarios, plus construction of the Irvington BART station, results in a majority of South County households being located near a rail stop or bus route with frequent service.

- For East County, public transit access improves in the Tier 1 scenario even though activity center access had shown no change. The public transit access improvements for Tier 1 are created by bus service restoration and expansion, as occurred in South County, combined with implementation of the BART to Livermore Phase I (BTL I) project (which adds a rail

station and express bus service to several PDAs). While these Tier 1 features improve transit *access* for many East County residents, they do not improve transit travel times to employment centers in adjacent subregions or counties. It should be noted that BART to Livermore Phases I and II evaluated in this effort were representative of a one-station and bus extension (Phase I), and a two-station extension (Phase II) to the Greenville Road area. BART is in the process of developing more detailed descriptions of both phases.

Daily transit ridership (Table A.5) shows an expected increase for the Tier 1 and Tier 2/Vision scenarios. Some transit options show ridership decreases due to shifts between transit modes as rail service is expanded, bus service is restored, and walk and bicycle access times to some rail stations is improved. For example, East Bay Ferries show decrease for Tier 1 due to increased express bus frequencies in this scenarios (relative to the Baseline scenario). For the Tier 2/Vision scenario, some ferry riders are shifting to BART due to improved walk/bicycle access times in PDAs that are near most BART stations.

Table A.4 Public Transit Accessibility

	Share of households within ¼ mile of frequent bus service, or ½ mile of a rail transit stop, by household income			
Planning Area	**< $45,000**	**$45,000-$81,000**	**$81,000-$135,000**	**> $135,000**
Baseline				
North	94%	92%	86%	74%
Central	87%	84%	78%	66%
South	22%	20%	20%	13%
East	2%	4%	5%	5%
County-all	**80%**	**68%**	**54%**	**40%**
Tier 1				
North	97%	94%	91%	83%
Central	90%	87%	82%	72%
South	62%	63%	59%	51%
East	25%	22%	21%	17%
County-all	**88%**	**79%**	**69%**	**56%**
Tier 2/Vision				
North	97%	96%	95%	92%
Central	92%	89%	84%	73%
South	68%	67%	64%	55%
East	13%	13%	13%	11%
County-all	**88%**	**79%**	**69%**	**58%**

Notes: Household income is shown in year 2010 dollars.
Frequent bus service, for this analysis, is a route with peak-period headways of 14 minutes or less.

Table A.5 Public Transit Daily Boardings in Alameda County

Scenario	Baseline	Tier 1	Tier 2/Vision
BART	270,439	270,334	259,582
Conventional Rail[a]	1,948	4,348	4,511
AC – Local	302,606	331,614	383,196
AC – Transbay	18,621	20,043	19,582
LAVTA	6,180	7,767	8,730
Union City	1,759	2,418	2,992
East Bay Ferries	3,722	3,657	3,219
Dumbarton	3,000	4,153	4,138
Other Local Routes[b]	4,926	3,728	3,506
Countywide	**613,201**	**648,062**	**689,456**

[c] Conventional rail trips represent total boardings at Alameda County Stations on Amtrak and ACE lines.
[b] Other local routes include shuttles in West Berkeley, Emeryville, Broadway Avenue, and Wheels/ACE.

Table A.5 also shows a slight reduction in BART ridership in the Tier 2/Vision scenario compared to Tier 1. This modeling result is related to substantial improvements to local bus headways and assumed reductions in walking and bicycling times within PDAs (for Tier 2 / Vision). Essentially, assumed improvements to local bus and non-motorized travel options divert some shorter trips from BART, which offsets ridership gains from BART capital projects that are included in Tier 2/Vision. This type of result illustrates the importance of considering the entire package of projects and programs that are included in each scenario as well as regional systemwide interactions that are not accounted for in this evaluation. Associating performance changes between scenarios with individual projects would be inaccurate.

The transit passengers per revenue hour (Table A.6) reduces slightly from the Baseline scenario because although transit ridership increases, the increase is not proportional to the increase in service hours provided. This ratio improves somewhat in the Tier 2/Vision scenario relative to the Tier 1 scenario due to the fact that the percentage increase in ridership is larger than the percentage increase in transit hours of service between the two scenarios. This suggests that transit service in the Tier 2/Vision scenario is focused in areas that have a greater potential to generate new ridership.

Table A.6 Transit Passengers per Revenue Hour (Bus Transportation Only)

	Baseline	Tier 1	Tier 2/Vision
Passengers per Revenue Hour of Service	54	49	51

The average travel times shown in Table A.7a through A.7d generally decrease for the Tier 1 and Tier2/Vision compared to Baseline. The magnitude of change is heavily influence by the number of type of transportation investments in the roadway or transit corridors that serve each travel market. For example, Central San Jose to East County shows substantial travel time improvements in Tier 1 for drive-alone, carpool and truck modes due to many planned investments on I-680 and I-580. The situation is different between Central San Jose and South County; in this market, travel times do not change between scenarios since substantial investments have been completed in recent years and are included in the Baseline scenario.

A comparison of results between Tables A.7a, A.7b and A.7c shows that the pattern of changes is not consistent within individual travel markets. For example, in the North-North market, carpool is slower than drive alone while drive alone is slower than truck. These seeming anomalies actually reflect the average travel time for ALL trips that occur in the market. On average, carpool trips tend to be more common in longer distance markets while drive alone trips are more common in shorter distance markets (due the perceived "hassle" of carpooling for short trips). Since an "average" carpool trip will have a longer distance than an "average" drive alone trip, average carpool travel time will also be longer. The likely reason for truck travel time being shorter than other modes for some O-D pairs is that trucks tend to make more direct , shorter and higher speed trips on freeways connecting pickup and drop off points, whereas other types of trips (e.g. drive alone and carpool) go into residential areas on local roads and tend to be longer.

Table A.7a Minutes of Average Travel Time – Drive-Alone Mode

Planning Area Origin	Planning Area Destination	Minutes of Travel Time – A.M. – One Hour Peak Period			Minutes of Travel Time – P.M. – One Hour Peak Period		
		Baseline	Tier 1	Tier 2/ Vision	Baseline	Tier 1	Tier 2/ Vision
North	North	18	19	18	16	16	16
Central	Central	13	13	13	12	12	12
Downtown SF	North	43	44	48	53	51	51
North	Downtown SF	67	67	62	40	40	40
Cen. San Jose	East	59	52	51	75	65	62
East	Central San Jose	96	93	86	67	65	61
Central San Jose	South	35	34	35	34	34	34
South	Central San Jose	34	34	34	35	35	35
North	South	43	43	42	58	56	53
South	North	68	64	64	52	49	49

Table A.7b Minutes of Average Travel Time – Carpool Mode

Planning Area Origin	Planning Area Destination	Minutes of Travel Time – A.M. – One Hour Peak Period			Minutes of Travel Time – P.M. – One Hour Peak Period		
		Baseline	Tier 1	Tier 2/ Vision	Baseline	Tier 1	Tier 2/ Vision
North	North	21	21	20	17	17	17
Central	Central	13	13	13	12	12	12
Downtown SF	North	54	54	57	54	52	52
North	Downtown SF	64	64	56	45	46	44
Cen. San Jose	East	58	49	47	73	48	47
East	Central San Jose	90	83	76	62	59	57
Central San Jose	South	35	34	34	31	30	30
South	Central San Jose	32	32	32	33	33	33
North	South	36	36	35	51	50	48
South	North	72	68	66	39	36	36

Table A.7c Minutes of Average Travel Time – Heavy Truck Mode

Planning Area Origin	Planning Area Destination	Minutes of Travel Time – A.M. – One Hour Peak Period			Minutes of Travel Time – P.M. – One Hour Peak Period		
		Baseline	Tier 1	Tier 2/ Vision	Baseline	Tier 1	Tier 2/ Vision
North	North	16	16	16	15	15	15
Central	Central	11	11	11	11	11	11
Downtown SF	North	31	31	37	49	47	48
North	Downtown SF	62	62	57	37	37	37
Cen. San Jose	East	59	52	51	73	64	62
East	Central San Jose	93	91	84	67	65	61
Central San Jose	South	34	33	33	32	31	31
South	Central San Jose	31	31	31	35	35	34
North	South	45	44	43	61	59	56
South	North	69	64	65	55	52	52

Table A.7d Minutes of Average Travel Time – Transit Mode

Planning Area Origin	Planning Area Destination	Minutes of Travel Time – Overall Average		
		Baseline	Tier 1	Tier 2/Vision
North	North	39	36	36
Central	Central	39	37	36
Downtown SF	North	42	42	50
North	Downtown SF	44	43	46
Cen. San Jose	East	120	119	112
East	Central San Jose	117	115	107
Central San Jose	South	79	77	75
South	Central San Jose	81	79	77
North	South	94	96	93
South	North	82	79	80

Table A.8a Peak to Off-Peak Travel Time Ratio – Drive-Alone Mode

Planning Area Origin	Planning Area Destination	Ratio of Peak to Off Peak Travel Time A.M. One Hour Peak			Ratio of Peak to Off Peak Travel Time P.M. One Hour Peak		
		Baseline	Tier 1	Tier 2/ Vision	Baseline	Tier 1	Tier 2/ Vision
North	North	1.3	1.3	1.3	1.1	1.1	1.1
Central	Central	1.2	1.1	1.1	1.1	1.0	1.0
Downtown SF	North	1.8	1.8	2.0	2.2	2.1	2.1
North	Downtown SF	2.7	2.7	2.4	1.6	1.6	1.6
Cen. San Jose	East	1.4	1.2	1.2	1.8	1.6	1.5
East	Central San Jose	2.3	2.2	2.0	1.6	1.5	1.4
Central San Jose	South	1.3	1.2	1.2	1.2	1.2	1.2
South	Central San Jose	1.2	1.2	1.2	1.3	1.3	1.3
North	South	1.3	1.3	1.2	1.7	1.6	1.5
South	North	2.0	1.9	1.9	1.5	1.5	1.4

Table A.8b Peak to Off-Peak Travel Time Ratio – Carpool Mode

Planning Area Origin	Planning Area Destination	Ratio of Peak to Off Peak Travel Time A.M. One Hour Peak			Ratio of Peak to Off Peak Travel Time P.M. One Hour Peak		
		Baseline	Tier 1	Tier 2/ Vision	Baseline	Tier 1	Tier 2/ Vision
North	North	1.4	1.5	1.4	1.2	1.2	1.1
Central	Central	1.2	1.1	1.1	1.0	1.0	1.0
Downtown SF	North	2.1	2.1	2.2	2.1	2.0	2.0
North	Downtown SF	2.4	2.3	2.1	1.7	1.7	1.6
Cen. San Jose	East	1.4	1.2	1.1	1.8	1.2	1.1
East	Central San Jose	2.2	2.0	1.8	1.5	1.4	1.4
Central San Jose	South	1.3	1.2	1.2	1.1	1.1	1.1
South	Central San Jose	1.2	1.2	1.2	1.2	1.2	1.2
North	South	1.2	1.1	1.1	1.7	1.6	1.5
South	North	2.3	2.2	2.1	1.2	1.2	1.2

Table A.8c Peak to Off-Peak Travel Time Ratio – Heavy Truck Mode

Planning Area Origin	Planning Area Destination	Ratio of Peak to Off Peak Travel Time A.M. One Hour Peak			Ratio of Peak to Off Peak Travel Time P.M. One Hour Peak		
		Baseline	Tier 1	Tier 2/ Vision	Baseline	Tier 1	Tier 2/ Vision
North	North	1.2	1.2	1.2	1.2	1.2	1.1
Central	Central	1.1	1.1	1.1	1.1	1.1	1.1
Downtown SF	North	1.4	1.4	1.6	2.2	2.1	2.1
North	Downtown SF	2.6	2.6	2.3	1.5	1.5	1.5
Cen. San Jose	East	1.4	1.3	1.2	1.8	1.5	1.5
East	Central San Jose	2.2	2.2	2.0	1.6	1.5	1.5
Central San Jose	South	1.3	1.2	1.2	1.2	1.2	1.2
South	Central San Jose	1.2	1.2	1.1	1.3	1.3	1.3
North	South	1.3	1.3	1.2	1.7	1.7	1.6
South	North	2.0	1.8	1.8	1.6	1.5	1.5

Table A.8d Peak to Off-Peak Travel Time Ratio – Transit Mode

Planning Area Origin	Planning Area Destination	Ratio of Peak to Off Peak Travel Time - Overall		
		Baseline	Tier 1	Tier 2/ Vision
North	North	1.1	1.1	1.1
Central	Central	1.0	1.0	1.0
Downtown SF	North	1.0	1.0	1.1
North	Downtown SF	1.0	1.0	1.0
Cen. San Jose	East	1.2	1.2	1.1
East	Central San Jose	1.2	1.2	1.1
Central San Jose	South	1.1	1.1	1.1
South	Central San Jose	1.3	1.2	1.2
North	South	1.3	1.4	1.3
South	North	1.2	1.2	1.3

Table A.9 displays forecasts of year 2035 GHG and fine particle (PM 2.5) emissions in year 2035 for the three scenarios. These emission forecasts are for all travel within Alameda County. All three scenarios include identical assumptions for economic growth, land use patterns, fuel standards, and vehicle technology. The small differences shown in the table reflect transportation policies, programs and projects that are unique to each scenario in the Draft CWTP.

Figure A.2 illustrates another way to look at GHG emissions - a population or "per capita" basis. The regional GHG reduction targets established by the California Air Resources Board (CARB) under Senate Bill (SB) 375 are expressed as percent change in "per capita" greenhouse gas emissions relative to 2005. The targets that CARB approved for the MTC region are a 7 percent reduction by 2020 and a 15 percent reduction by 2035. These targets apply to emissions from automobiles and light duty trucks; heavy trucks and commercial vehicles are not subject to SB 375.

The left-hand column in Figure A.2 illustrates that Alameda County had average daily CO2 emissions of 18.6 pounds per capita in 2005 from autos and light trucks. Under "trend conditions" which reflect ABAG's Projections 2009 land use and federal (but not State) fuel economy standards, daily CO2 emissions would increase to 28.2 pounds per capita.

However, California has additional vehicle technology and fuel efficiency regulations that will substantially reduce CO2 emissions from autos and light duty trucks. As shown in the middle column, these regulations will reduce the County's daily CO2 emissions by 10.1 pounds per capita – down to 18.1 pounds per capita.

That number is further reduced by recent economic growth projections and actions that have been considered in the CWTP such as more concentrated land use and project and program investments. The two columns on the right show that the economic projections and land use

actions will combine to reduce CO2 emissions by 3.6 pounds per capita for all of the year 2035 CWTP scenarios. The Tier 1 scenario of projects and programs deliver an additional 0.24 pounds per capita reduction, while Tier 2/Vision deliver a 0.48 pound per capita reduction.

The resulting total of 14.0 to 14.2 pounds per capita represent a 24 percent to 25 percent reduction from the 2005 value.

Table A.9 GHG and Fine Particulate Matter Emissions

Scenario	Tons of Daily Emissions	
	CO_2 (GHG)	$PM_{2.5}$
Baseline	19,777	1.61
Tier 1	19,722	1.60
Tier 2/Vision	19,443	1.57

Note: Baseline figures include the effects of emissions reductions from Pavley I and the Low Carbon Fuel Standard.

Figure A.1 Carbon Dioxide (CO2) Emissions from Alameda County Roadways

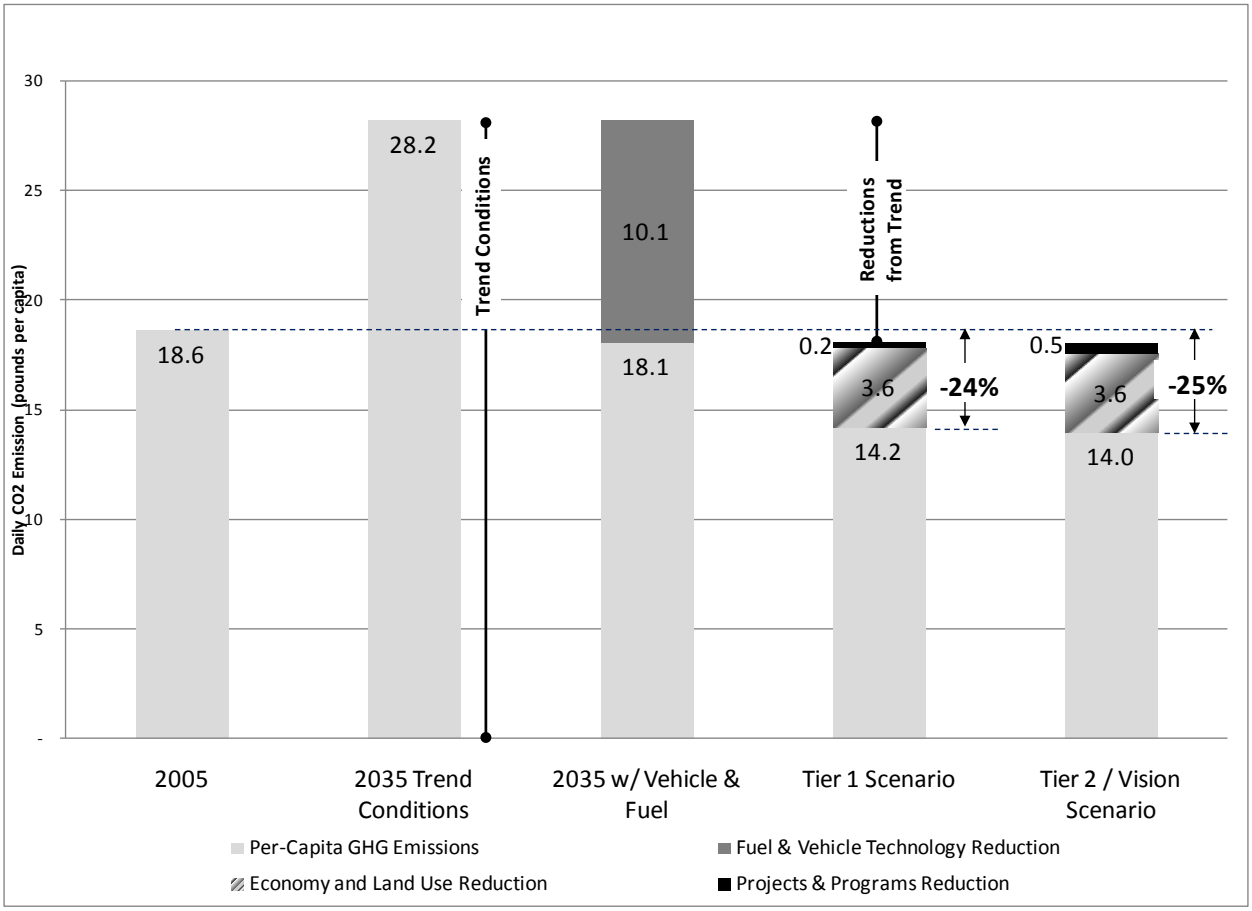
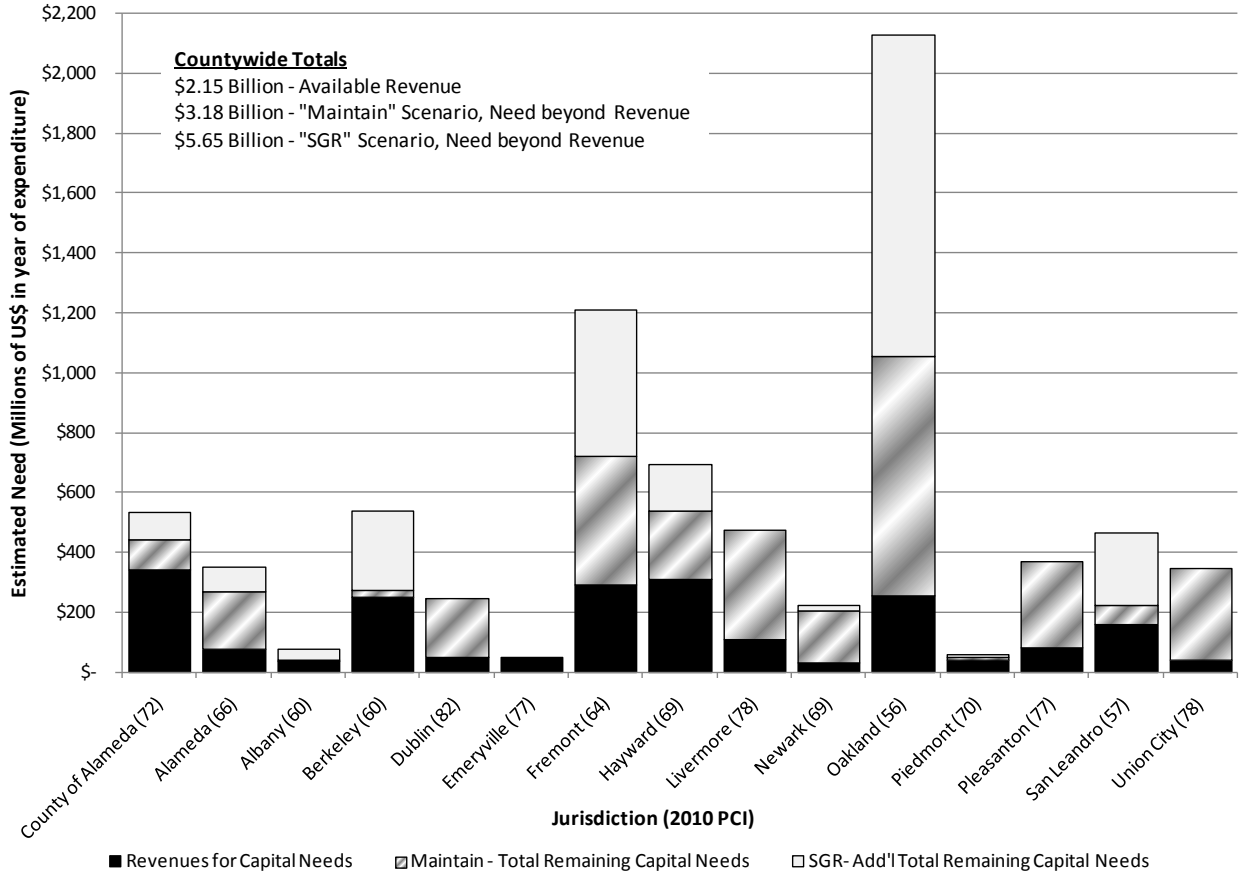


Figure A.2 Capital Funding Needs to Maintain and Improve Current Pavement Conditions



Source: Metropolitan Transportation Commission. The *Maintain* scenario holds each jurisdiction's Pavement Condition Index (PCI) at the current level indicated in parentheses. The *State of Good Repair* (SGR) scenario provides a PCI of 75 for all jurisdictions.

Table A.10 Transit Vehicle Conditions

	Percentage of Remaining Service Life		
	Baseline	**Tier 1**	**Tier 2/ Vision**
Cars	28%	28%	28%
Vans and 25-Foot Buses	50%	63%	63%
Buses 25 to 30 Feet	15%	23%	23%
Buses Greater Than 30 Feet	0%[a]	27%	48%
Average Percent RSL	**23%**	**35%**	**41%**

[a] The financial allocation methodology for remaining vehicle life allocated funding in ascending order by vehicle size. For scenarios with limited revenue, funding may not be available to replace larger vehicles in some years. For 2035, there were not enough funds to purchase the last category of vehicles - large buses - and all vehicles by that year were greater than 12 years old (suggesting that there were a number of years when large buses were not purchased). This methodology does not reflect each transit agencies' individual capital project prioritization processes or rules regarding maximum service life.

Table A.11 Safety – Collisions by Type (Injury, Fatality, and Property Damage)

	Baseline		**Tier 1**		**Tier 2/Vision**	
Mode	**Region**	**Alameda County**	**Region**	**Alameda County**	**Region**	**Alameda County**
Motor Vehicle Fatal	674	151	677	151	674	150
Motor Vehicle Injury	53,478	11,952	53,698	12,021	53,455	11,943
Motor Vehicle Property Damage Only (PDO)	95,726	21,394	96,119	21,518	95,685	21,378
Walk Fatal	168	38	169	38	168	38
Walk Injury	4,424	989	4,443	995	4,423	988
Bicycle Fatal	30	7	30	7	30	7
Bicycle Injury	4,019	898	4,035	903	4,017	898
Total Annualized (Less Property Damage Only)	**58,369**	**13,045**	**58,608**	**13,121**	**58,344**	**13,035**
Average Weekday	**160**	**36**	**161**	**36**	**160**	**36**

Table A.12 Daily Hours of Time Spent Walking / Biking

	Total Daily Time Spent Walking / Biking (hours)					
	Baseline		**Tier 1**		**Tier 2/Vision**	
Trip Origin Planning Area	**Bicycle**	**Walk**	**Bicycle**	**Walk**	**Bicycle**	**Walk**
North	14,772	109,828	14,518	112,599	14,019	114,422
Central	5,784	35,482	5,674	36,285	5,519	37,941
South	5,345	33,976	5,178	34,467	5,001	35,797
East	2,175	24,168	2,157	24,488	2,093	25,885
Countywide	**28,076**	**203,455**	**27,528**	**207,839**	**26,633**	**214,045**

Appendix B. Land Use and Investment Assumptions

Appendix B provides supplementary information on land use assumptions used in this (November 2011) and the previous (July 2011) performance evaluation and provides the project and program funding assumptions for the Baseline (e.g. Existing plus Committed Projects), Tier 1, and Tier 2/Vision scenarios.

The following detailed tables and figures related to land use data are included:

- Table B.1 – 2035 Alameda County Socioeconomic Data
- Table B.2 – Bay Area County Socioeconomic Data
- Table B.3 – Comparison of Performance Results from the July 2011 and Current Nov 2011 Baseline 2035 Forecasts

The following tables detail the project and program assumptions included in the modeling analysis:

- Table B.4 –Committed Projects - included in all Baseline, Tier 1, and Tier 2/Vision scenarios
- Table B.5 - Projects Fully Funded by the Countywide Plan - included in the Tier 1 and Tier2/Vision Scenarios
- Table B.6 – Projects Partially Funded by the Countywide Plan – included in the Tier 2/Vision Scenario
- Table B.7 – Other Tier 2/Vision Projects – included in the Tier 2/Vision Scenario
- Table B.8 - Program Funding Levels by Scenario
- Table B.9 – Sample Eligible Projects by Programmatic Category

Land Use Assumptions

During the summer and early fall of 2011, the Alameda CTC and the CWTP consultant team worked with the local jurisdictions (cities and the county) to review the Sustainable Communities Strategy (SCS) land use concepts being developed by ABAG and MTC and obtain their input.

A range of Alameda County land use alternatives were developed that focused household and employment growth into the Priority Development Areas and Growth Areas and maintained consistency with data being developed by ABAG and MTC for the constrained Alternative Land Use Scenarios. As the ABAG and MTC regional land use scenarios were reviewed, additional growth opportunities were identified with a particular focus on employment growth locations that could be better served by transit, which could benefit from an aggressive set of TDM measures. Total household and jobs growth were kept within the range of the alternative SCS scenarios that had been released by ABAG and MTC in August 2011.

Table B.1 2035 Alameda County Socioeconomic Data

Jurisdiction	Households	Population	Employment	Employed Residents
Alameda	35,055	86,023	33,980	43,680
Alameda County	1,375	4,140	225	2,074
Albany	8,549	21,523	7,598	10,955
Ashland	8,785	26,591	4,086	11,009
Berkeley	55,299	133,463	86,684	69,613
Castro Valley	23,382	62,756	14,784	31,181
Cherryland	5,187	15,925	2,551	6,372
Dublin	29,204	85,074	33,328	30,717
Emeryville	10,368	18,377	24,581	5,451
Fremont	96,411	292,373	113,824	148,630
Hayward	60,028	192,011	81,242	86,876
Livermore	40,059	111,822	57,024	53,650
Newark	19,741	65,063	23,039	30,635
Oakland	195,732	492,362	241,078	215,855
Piedmont	3,828	10,728	2,143	5,177
Pleasanton	32,207	89,750	64,709	48,035
San Leandro	38,584	107,130	52,409	48,509
San Lorenzo	9,676	30,553	3,834	13,250
Union City	23,363	79,724	27,484	37,022
Alameda Co. Total	**696,834**	**1,925,387**	**874,605**	**898,691**

Table B.2 2035 Bay Area County Socioeconomic Data

County	Households	Population	Employment	Employed Residents
Alameda*	696,834	1,925,387	874,605	898,691
Contra Costa	474,276	1,323,937	440,259	559,896
Marin	112,596	275,079	143,721	98,286
Napa	54,403	151,575	74,763	66,398
San Francisco	419,362	972,647	699,670	444,899
San Mateo	318,413	887,527	418,866	363,905
Santa Clara	817,241	2,400,569	1,026,403	977,656
Solano	167,942	487,741	218,458	202,692
Sonoma	214,326	558,687	218,641	244,929
Region Total	**3,275,597**	**8,971,076**	**4,111,982**	**3,854,828**

*Note: Alameda County value represents the county specific adjustments. All other values reflect ABAG's Focused Growth alternative land use scenario developed for the Bay Area RTP/SCS.

Table B.3 Comparison of Performance Results from the July 2011 and Current Nov 2011 Baseline 2035 Forecasts

Performance Measure	Definition	July 2011	Nov, 2011
Congestion	% of lane miles moderately and severely congested during AM (PM) peak period	NA	29%(33%)
Alternative modes	% trips made by non-automobile modes	17%	18%
Activity center accessibility	% of low-income (<$25k annual) households within 20 min. drive or 30 min. transit ride of activity center or 0.5 mi from grade school	70%	67%
Public transit accessibility	% of low-income (<$25k annual) households within 0.25mi of bus route or 0.5mi rail transit stop	81%	80%
Public transit usage	Daily public transit ridership	567,357	613,201
Transit efficiency	Transit passengers carried per transit revenue hour of service offered (bus only)	45	54
Travel time	Average travel time per trip in minutes for selected origin-destination pairs in the AM (PM) 1-hr peak period, drive alone trips. See Table A.7a for detail	58(53)	48 (44)
	Same as above for transit trips. See Table A.7d for detail	75	74
Reliability	Average ratio of AM (PM) 1-hr peak period to off-peak period travel times for selected origin-destination pairs, drive alone trips	1.9 (1.8)	1.6 (1.5)
	Same as above for transit trips	1.1	1.1
Maintenance	Unmet maintenance needs over 28 years assuming current pavement conditions	N/A	
	Percentage of remaining service life for transit vehicles in 2035	38%	23%
Safety	Annual projected injury and fatality crashes	13,456	13,045
Biking and Walking	Average duration of a bicycling trip	18	N/A
	Average duration of a walking trip	23	N/A
Clean Environment	Tons of daily greenhouse gas emissions	21,630	19,777
	Tons of daily particulate (PM 2.5) emissions	1.8	1.61

Source: Differences in the two baseline outcomes are due to several factors, including land use assumptions (the July run used the adjusted SCS Alternative Future Scenario whereas the November run used the adjusted Focused Growth Scenario); small changes to the list of committed projects; and a 15% reduction to peak period transit frequency in the November to reflect programmatic spending changes.

Table B.4 Committed Projects Included in the 2035 Future Baseline

Project Name	Planning Area	Cost
Countywide Local Projects		
I-880 Widening for SB HOV Lane in Oakland and San Leandro	Central	$109.40
I-880 NB and SB Auxiliary Lanes	Central	$15.40
I-880 Auxiliary Lanes in Hayward	Central	$9.50
Rte 92/Clawiter Road Whitesell Interchange Improvement, Phase 1 (Hayward)	Central	$27.50
Route 238 Corridor Improvements in Hayward	Central	$118.70
Clawiter-Whitesell Interchange Improvements in Hayward	Central	$52.00
I-880 Industrial Parkway Interchange in Hayward	Central	$43.00
SR 92 Industrial Interchange in Hayward	Central	$6.00
East 14th Street/Hesperian Boulevard/150th Street channelization improvements in San Leandro	Central	$6.60
I-880 Davis Street Interchange in San Leandro	Central	$10.20
I-880 Marina Boulevard Interchange in San Leandro	Central	$31.80
SR 262 Widening and Interchange Improvements in Fremont	South	$58.10
Union City Intermodal, Phase 1	South	$57.00
I-580 Widening for HOV and Aux Lanes in Pleasanton and Livermore	East	$291.30
I-580 EB Express (HOT) Lane in Pleasanton and Livermore	East	$19.00
I-580 EB Auxiliary Lane Project (Isabel to Livermore Ave; Livermore Ave to First)	East	$40.00
Alamo Canal Trail under I-580 in Dublin	East	$2.70
Construct a 4-lane Major Arterial in Livermore connecting Dublin Blvd. and North Canyons Parkway	East	$12.00
Las Positas Road Connection, Phase 2, in Livermore	East	$3.50
I-680 Bernal Interchange Improvements in Pleasanton	East	$4.00
Stoneridge Drive Extension in Pleasanton	East	$16.20
I-880 Integrated Corridor Mobility (580/80/880 to SR-237)	Regional	$45.70
I-80 Integrated Corridor Mobility	Regional	$69.10
Subtotal		***$1,048.70***
Regional and Multijurisdictional Projects		
BART-Oakland International Airport Connector	North	$484.10
BART Warm Springs extension	South	$890.00
I-580 Corridor ROW Preservation	East	$120.70
I-580 Eastbound Truck Climbing Lane	East	$64.20
Subtotal		***$1,559.00***
TOTAL		***$2,607.70***

Table B.5 - Fully Funded Projects (included in Tier 1 and Tier 2 / Vision scenarios)

RTPID	Project Name	Project Sponsor	Planning Area	Other Planning Process	Composite Value (July 2011 analysis)	Transportation Type**	Total Cost Estimate	Funds Already Identified	Discretionary Funding Request	Proposed Funding
Alameda County Projects										
240324	Fruitvale Avenue (Miller Sweeney) Lifeline Bridge Project (bike/pedestrian elements)	Alameda County/City of Alameda	North			B/P	$41			$41
240207	Bay Trail Extension - Berkeley Marina	City of Berkeley	North			B/P	$31			$31
240003	I-80 Bike Ped Bridge (65th Street)	City of Emeryville	North			B/P	$22			$22
	Tennyson Road Pedestrian/bike bridge (from Nuestro Parquecito to South Hayward BART station – Included in Bicycle Master Plan)	City of Hayward	Central			B/P	$2			$2
240227	Bike/ped bridge over Lake Merritt Channel	City of Oakland	North			B/P	$77			$32
240347	Gap Closure and Development of Three Major Trails in Alameda County (Iron Horse, Bay Trail, East Bay Greenway Project / UPRR Corridor Improvements Project)	Multiple / City of Oakland	North			B/P	$114			$114
240347	Gap Closure and Development of Three Major Trails in Alameda County (Iron Horse, Bay Trail, East Bay Greenway Project / UPRR Corridor Improvements Project)	Multiple / City of San Leandro	Central			B/P	$115			$115
22769	I-880 at 23rd/29th Avenue interchange safety and access improvements	ACTC	North	Measure B	L	H	$102	$99	$4	$4
240047	I-880 West A Street Interchange	ACTC	Central	LATIP	M	H	$43	$0	$43	$43
22776	SR 84 Expressway Widening (Pigeon Pass to Jack London)	ACTC	East		L	H	$137	$127	$10	$10
21144	I-80 Gilman Street Interchange Improvements	ACTC /City of Berkeley	North		L	H	$25	$1	$24	$24
21126	SR 84 WB HOV on ramp from Newark Blvd	Caltrans	South	LATIP	M	H	$13	$0	$13	$13
22002	I-880 NB HOV lane extension from HOV terminus at Bay Bridge approach to Maritime	Caltrans	North		H	H	$19	$0	$19	$19
98207	I-880 Broadway/Jackson Interchange, ramp and circulation Improvements; and Alameda Point, Downtown Oakland, and Jack London SquareTransit Access	City of Alameda/City of Oakland	North	Measure B	H	H	$81	$8	$75	$75
22779	Route 262/I-880 interchange improvements, Ph 2 -Construct grade separation at Warren Avenue/Union Pacific RR	City of Fremont	South	Measure B (Partial), LATIP	M	H	$78	$0	$78	$78
240037	I-880 Winton Avenue interchange improvements	City of Hayward	Central	LATIP	L	H	$25	$0	$25	$25
240562	Rte 92/Clawiter Road Whitesell interchange improvement, Ph 2	City of Hayward	Central	Measure B, LATIP	L	H	$52	$52	$0	$0
230132	I-580/Isabel Avenue Intechange, Phase 2	City of Livermore	East	Measure B		H	$30	$25	$5	$5
21477	I-580 Greenville interchange	City of Livermore	East		H	H	$46	$37	$9	$9
21100	I-580 Vasco interchange	City of Livermore	East		M	H	$60	$52	$8	$8
21475	I-580 First St. interchange	City of Livermore	East		M	H	$40	$35	$5	$5
230170	I-880: 42nd/High Street Access Improvements	City of Oakland	North	I-880 Study	L	H	$17	$6	$11	$11

Table B.5 - Fully Funded Projects (included in Tier 1 and Tier 2 / Vision scenarios)

RTPID	Project Name	Project Sponsor	Planning Area	Other Planning Process	Composite Value (July 2011 analysis)	Transportation Type**	Total Cost Estimate	Funds Already Identified	Discretionary Funding Request	Proposed Funding
230171	Route 24 /Caldecott Tunnel Enhancements -Settlement Agreement projects	City of Oakland	North			H	$15			$7
21489	I-580 /Foothill/San Ramon Interchange improvements	City of Pleasanton	East		M	H	$4	$3	$1	$1
240052	I-880 / Whipple Road Interchange Improvement	City of Union City	South	LATIP	L	H	$60	$0	$60	$60
240261	Scarlett Drive Extension from Dougherty Road to Dublin Boulevard	City of Dublin	East	Measure B	H	R	$13	$0	$13	$13
94506	East-West Connector Project in North Fremont and Union City	ACTC	South	Measure B (1986), LATIP	H	R	$190	$107	$83	$83
230110	Route 262 Mission Boulevard Cross Connector Improvements between I-680 and Warm Springs Boulevard SR 262 Mission Blvd Improvements	ACTC/ City of Fremont	South	Measure B, LATIP	M	R	$20	$0	$20	$20
240094	Crow Canyon Road Safety Improvements Project	Alameda County	Central			R	$16			$15
240100	Park Street Bridge Replacement Project	Alameda County	North			R	$46			$46
240350	Local Road Safety - Marin Avenue	City of Albany	North		N/A	R	$3		$3	$3
	Solano Avenue pavement resurfacing and beautification	City of Albany	North			R	$3		$3	$3
	San Pablo Avenue medians, rain gardens, and streetscape improvements	City of Albany	North			R	$3		$3	$3
240202	SR 13/Ashby Avenue Corridor Improvements	City of Berkeley	North		N/A	R	$8		$8	$8
240038	Dougherty Road Widening from Sierra Lane to North city Limit	City of Dublin	East		L	R	$18	$7	$11	$11
240250	Dublin Boulevard Widening from Sierra Court to Dublin Court	City of Dublin	East		L	R	$4	$1	$4	$4
230114	Auto Mall Parkway Cross Connector Widening between I-680 and I-880	City of Fremont	South	Measure B	M	R	$24	$0	$24	$24
240264	Widen Fremont Boulevard from I-880 to Grimmer Boulevard	City of Fremont	South		H	R	$5	$0	$5	$5
21484	Kato Road widening from Warren Ave. to Milmont	City of Fremont	South		M	R	$12	$0	$12	$12
240263	Upgrade Relinquished Route 84 in Fremont	City of Fremont	South		H	R	$43		$43	$43
240055	Tennyson Road Grade Separation	City of Hayward	Central			R	$14			$14
240254	Greenville Widening	City of Livermore	East		M	R	$10	$5	$5	$5
240272	Thornton Avenue Widening	City of Newark	South		M	R	$9	$0	$9	$9
21103	Central Avenue Railroad Overpass	City of Newark	South			R	$18.7	$1.2	$17.5	$17.5

Table B.5 - Fully Funded Projects (included in Tier 1 and Tier 2 / Vision scenarios)

RTPID	Project Name	Project Sponsor	Planning Area	Other Planning Process	Composite Value (July 2011 analysis)	Transportation Type**	Total Cost Estimate	Funds Already Identified	Discretionary Funding Request	Proposed Funding
240024	Oakland Army Base Transportation Infrastructure Improvements	City of Oakland	North		H	R	$209	$94	$115	$115
240139	I-680 Stoneridge Drive overcrossing widening	City of Pleasanton	East		H	R	$5	$1	$4	$4
240175	Bernal Bridge (west) second bridge construction (Non-Capacity Increasing Local Bridge Rehabilitation/Replacement/Retrofit)	City of Pleasanton	East			R	$5			$5
230103	Grade Separation in the Decoto neighborhood	City of Union City	South		M	R	$130	$0	$130	$130
240053	Whipple Road from I-880 to Mission Boulevard Widening and Enhancement	City of Union City	South		M	R	$100	$0	$100	$100
240051	Union City Boulevard (widen to 3 lanes from Whipple Road in Union City to Industrial Parkway in Hayward)	City of Union City	South		M	R	$10	$0	$10	$10
22760	Outer Harbor Intermodal Terminal (OHIT)	Port of Oakland	North		H	RF	$217	$170	$46	$46
22082	7th Street Grade Separation & Roadway Improvement Project	Port of Oakland	North		H	RF	$221	$110	$110	$110
240208	Safety improvements at UPRR - Fremont Blvd, Maple, Dusterberry, Nursery	City of Fremont	South			RF	$3			$3
240372	College/ Broadway Corridor Improvements - Transit Priority Measures	AC Transit	North			TB	$5			$5
	Foothill TSP - Transit Priority Measures	AC Transit	Central			TB	$2			$2
	Grand/MacArthur Corridor Improvements - Transit Priority Measures	AC Transit	North			TB	$4			$4
240077	Rapid Bus Service - City of Alameda and Alameda Point PDA (Alameda Naval Station) to Fruitvale BART	City of Alameda	North			TB	$9			$9
240217	Downtown Berkeley BART Plaza and Transit Area Enhancements	City of Berkeley	North	TLC	N/A	TB	$6	$2	$4	$4
240226	Berkeley Ferry Terminal Access Improvements	City of Berkeley	North			TF	$106			$106
240014	Construct new Ferry Operations and Maintenance Facility in Alameda.	WETA	North			TF	$37			$37
240304	Platform Extension at Alameda and San Joaquin Co. ACE Stations	ACE	South		M	TR	$5	$0	$5	$5
240101	Fruitvale Avenue Lifeline Bridge Project (rail)	City of Alameda / Alameda County	North			TR	$94			$94
240179	Downtown Berkeley Transit Center	City of Berkeley	North			TR	$27			$27
22062	Irvington BART Station	City of Fremont/ BART	South	Res.3434-related	M	TR	$123	$0	$123	$123
21123	Union City Intermodal Station infrastructure improvements (Phase 2)	City of Union City	South	Measure B	M	TR	$26	$19	$6	$6
	North County CBTPs - implementation of specific recommendations - including transit, local road, streetscape, bike, pedestrian and TDM elements (CBTPs in: Alameda, West Oakland, Central and East Oakland, and South and West Berkeley.)		North							$50
	Central County CBTPs - implementation of specific recommendations - including transit, local road, streetscape, bike, pedestrian and TDM elements (Central Alameda County CBTP)		Central							$50

Table B.5 - Fully Funded Projects (included in Tier 1 and Tier 2 / Vision scenarios)

RTPID	Project Name	Project Sponsor	Planning Area	Other Planning Process	Composite Value (July 2011 analysis)	Transportation Type**	Total Cost Estimate	Funds Already Identified	Discretionary Funding Request	Proposed Funding
Regional Projects										
22042	I-680 for NB HOV/HOT lane from SR 237 to SR 84 (includes ramp metering and auxiliary lanes)	ACTC	South	Measure B	H	H	$81	$8	$75	$75
22664	I-580 WB Express Lane from Greenville Road to Foothill Blvd	ACTC	East		H	H	$17	$4	$0	$0
240061	I-680 widening for SB HOV/HOT from Alcosta Blvd to Route 84	ACTC	East		H	H	$136	$0	$0	$0
240059	I-680 widening for NB HOV/HOT Lane from Route 84 to Alcosta Blvd	ACTC	East		H	H	$136	$0	$0	$0
230088	I-880 NB HOV/HOT Extension from north of Hacienda to Hegenberger Phase 1 and 2: I-880 extend NB HOV lanes	ACTC	Central	LATIP	H	H	$276	$0	$0	$0
22455	AC Transit East Bay Bus Rapid Transit (BRT)	AC Transit	North	Measure B, Reso 3434	H	TB	$211	$173	$0	$0
240018	Dumbarton Rail Corridor Phase I	ACTC/ SamTrans	South	Measure B, Reso 3434	M	TR	$164	$46	$0	$0
240216	Dumbarton Rail Corridor Phase II	ACTC/ SamTrans	South	Measure B, Reso 3434	M	TR	$716	$259	$0	$0
230101	Union City Passenger Rail Station & Dumbarton Rail Segment G Improvement Union City BART Phase 2 /Passenger Rail Station	City of Union City	South	Resolution 3434 (partial)	M	TR	$180	$34	$147	$73
							$4,969	$1,486	$1,528	$2,285

*** Transportation Type: H:Highway, R:Roadway, RF: Road/Freight; TB: Transit Bus; TR Transit Rail; TF Transit Ferry; B/P: Bike, Pedestrian**

Table B.6 - Partially Funded Projects (included in Tier 2 / Vision scenario)

		Project Sponsor	Planning Area	Other Planning Process	Transportation Type**	Total Cost Estimate	Funds Already Identified	Discretionary Funding Request	Proposed Funding	Vision Funding Request	Regionally Funded
Alameda County Projects											
240262	Sullivan Road Overcrossing Ped/Bike Safety and Trail Improvements	City of Fremont	South		B/P	$1.6					
240281	Bicycle/Pedestrian Expansion: Pedestrian and Bicycle Access Way from Downtown to Fremont BART	City of Fremont	South		B/P	$0.5					
240260	Greenbelt Gateway on Grimmer Boulevard	City of Fremont	South			$9.0					
240287	Construct Bicycle/Pedestrian Grade Separation on Blacow Road at Union Pacific railroad tracks and future BART line in Irvington Area PDA	City of Fremont	South		B/P	$5.9			$2.0		
230100	Bicycle/Pedestrian Connector Over UPRR Tracks to Jobs Center@Union City Intermodal Station	City of Union City	South		B/P	$20.0					
240347	Gap Closure and Development of Three Major Trails in Alameda County (Iron Horse, Bay Trail, East Bay Greenway Project / UPRR Corridor Improvements Project)	Multiple	South		B/P	$214.0					
240291	Rails to Trails Fremont UPRR/BART Corridor Trail	City of Fremont	South		B/P	$44.0			$44.0		
22765	I-580/I-680 HOV Direct Connector - Project Development	ACTC	East		H	$1,167.0	$0.0	$17.0	$17.0	$1,150.0	$0.0
240106	SR-84/Sunol Improvements	Alameda County	East		H	$8.0	$0.0	$2.0	$2.0	$6.0	$0.0
240657	I-580 Spot Intersection Improvements	Alameda County	Central		H	$60.0	$0.0	$6.0	$6.0	$54.0	$0.0
230604	Contra Flow Lanes on Westbound Lanes of San Francisco-Oakland Bay Bridge	AC Transit	North		H	$611.0	$0.0	$5.0	$5.0	$606.0	$0.0
230086	I-580 Interchange Improvements at Hacienda Drive and Fallon Road – Phase II	City of Dublin	East		H	$38.0	$22.0	$16.0	$1.0	$0.0	$0.0
240318	I-80 Ashby Interchange	City of Emeryville	North		H	$52.0	$0.0	$0.0	$5.0	$47.0	$0.0
240265	Vargas Road Safety Improvement Project	City of Fremont	South		R	$5.0		$5.0	$1.0		
240273	Newark Area 4 Railroad Overpass	City of Newark	South		R	$9.0	$0.0	$9.0	$2.9		
240282	Tidewater District Street Reconstruction	City of Oakland	North		R	$5.0	$0.0	$1.0	$1.0	$4.0	$0.0
240278	Harrison St-Oakland Avenue Major Street Improvements	City of Oakland	North		R	$12.0	$1.0	$3.0	$3.0	$8.0	$0.0
240280	Woodland - 81st Avenue Industrial Zone street reconstruction	City of Oakland	North		R	$12.0	$0.0	$3.0	$3.0	$9.0	$0.0
240270	San Leandro East 14th Streetscape Improvements	City of San Leandro	Central		R	$8.3		$8.3	$1.0		
240302	San Leandro Local Streets and Roads Rehabilitation	City of San Leandro	Central		R	$80.0		$80.0	$20.0	$60.0	
240306	Lake Chabot Road Stabilization	City of San Leandro	Central		R	$10.0		$10.0	$1.0		
22780	AC Transit Grand-MacArthur BRT	AC Transit	North	Reso 3434	TB	$37.0	$0.0	$4.0	$4.0	$33.0	$0.0
22021	AC Transit transfer station/park-and-ride facility in Alameda County (1. Central, 2. Northern)	AC Transit	Central		TB	$40.0	$0.0	$10.0	$10.0	$30.0	$0.0

Table B.6 - Partially Funded Projects (included in Tier 2 / Vision scenario)

		Project Sponsor	Planning Area	Other Planning Process	Transportation Type**	Total Cost Estimate	Funds Already Identified	Discretionary Funding Request	Proposed Funding	Vision Funding Request	Regionally Funded
240196	BART to Livermore Extension Phase 1	BART	East	Measure B	TR	$1,250.0	$145.0	$1,105.0	$400.0	$805.0	$0.0
98139	Right-of Way Preservation and track improvements in Alameda County	Countywide/ACE submission	Central		TR	$200.0	$5.0	$195.0	$67.0	$128.0	$0.0
98139	Right-of Way Preservation and track improvements in Alameda County	Countywide/ACE submission	North		TR	$200.0	$5.0	$195.0	$67.0	$128.0	$0.0
98139	Right-of Way Preservation and track improvements in Alameda County	Countywide/ACE submission	South		TR	$200.0	$5.0	$195.0	$67.0	$128.0	$0.0
230116	Railroad Crossing Improvements @Gilman	City of Berkeley	North		TR	$108.2			$11.0		
240268	Construct Altamont Commuter Express/Capitol Corridor Station at Auto Mall Parkway	City of Fremont	South		TR	$15.0			$1.0		
240347	Gap Closure and Development of Three Major Trails in Alameda County (Iron Horse, Bay Trail, East Bay Greenway Project / UPRR Corridor Improvements Project)	Multiple	East		TR	$53.0			$6.0		
240099	High Street Bridge Replacement Project	Alameda County	North			$40.3			$17.8		
Regional Projects											
22009	Capitol Corridor intercity rail service service expansion (Oakland to San Jose)	Capital Corridor	South	Reso 3434	TR	$511.0	$16.0	$45.0	$0.0	$450.0	$45.0
TOTAL						**$5,026.8**	**$199.0**	**$1,914.3**	**$765.7**	**$3,646.0**	**$45.0**

*** Transportation Type: H:Highway, R:Roadway, RF: Road/Freight; TB: Transit Bus; TR Transit Rail; TF Transit Ferry; B/P: Bike, Pedestrian**

Table B.7 - Other Vision Projects (included in Tier 2 / Vision scenario)

RTPID		Project Sponsor	Planning Area	Other Planning Process	Transportation Type**	Total Cost Estimate	Funds Already Identified	Discretionary Funding Request	Proposed Funding	Vision Funding Request	Regionally Funded
Projects											
230099	I-580/I-680 Improvements Phase 1	ACTC	East		H	$528	$0	$0	$0	$528	$0
240062	SR 84 / I-680 interchange and SR 84 Widening	ACTC	East		H	$244	$0	$0	$0	$244	$0
98207	I-880 Broadway/Jackson Interchange, ramp and circulation Improvements; and Alameda Point, Downtown Oakland, and Jack London SquareTransit Access	City of Alameda/City of Oakland	North	Measure B	H	$106	$0	$0	$0	$106	$0
240144	I-580 Santa Rita Interchange improvements	City of Pleasanton	East		H	$3	$1	$2	$0	$2	$0
240141	I-680 Sunol Boulevard Interchange (Non-Capacity Increasing Freeway/Expressway Interchange Modifications)	City of Pleasanton	East		H	$1	$0	$1	$0	$1	$0
240092	Lewelling Blvd. / Hesperian Blvd. Intersection Improvements Project (I-880 Hesperian/Lewelling Interchange)	Alameda County	Central	Measure B	R	$5	$0	$0	$0	$5	$0
230243	Access Improvements to West End Transit Hub on Mariner Square Drive (MSD)	City of Alameda	North		R	$4	$0	$0	$0	$4	$0
240116	Powell Street Bridge Widening at Christie Avenue	City of Emeryville	North		R	$5	$0	$0	$0	$5	$0
21482	Extend Fremont Boulevard to connect to I-880/Dixon Landing Road	City of Fremont	South		R	$48	$0	$48	$0	$48	$0
240279	Mandela Parkway and 3rd Street Corridor Commercial/Industrial Area Street Reconstruction	City of Oakland	North		R	$157	$0	$12	$0	$157	$0
240132	El Charro Road Construction	City of Pleasanton	East		R	$49	$0	$49	$0	$49	$0
240249	San Leandro Street Circulation and Capacity Improvements	City of San Leandro	Central		R	$11	$0	$0	$0	$11	$0
240180	BayFair Connection (Capacity Improvements)	BART	Central		TB	$150	$0	$0	$0	$150	$0
22667	BART to Livermore Extension Phase 2	BART	East	Measure B	TR	$2,927	$145	$0	$0	$2,782	$0
240113	BART Hayward Maintenance Complex	BART	Central		TR	$585	$5	$0	$0	$580	$0
22089	Martinez Subdivision	Port of Oakland/MTC	North		TR	$100	$0	$0	$0	$100	$0
TOTAL						**$4,923.0**	**$151.0**	**$112.0**	**$0.0**	**$4,772.0**	**$0.0**

*** Transportation Type: H:Highway, R:Roadway, RF: Road/Freight; TB: Transit Bus; TR Transit Rail; TF Transit Ferry; B/P: Bike, Pedestrian**

Table B.8 - Program Funding Levels by Scenario

	Category	Description	Baseline Scenario (July 11)	Baseline Scenario (Nov 11)	Tier 1 Scenario (Nov 11)	Vision Scenario (Nov 11)
1	Bicycle & Pedestrian	Infrastructure, support facilities (including operations), and maintenance	$660	$80	$475	$1,845
2	Transit Enhancements - Expansion & Safety	Capital rehabilitation, capacity expansion, safety, stations, communications, environmental	$1,500	$26	$1,100	$4,613
3	Transit & Paratransit - Operations & Maintenance	Operations restoration, service expansion, maintenance, transit priority measures (TPM), fare incentives	$1,320	$433	$1,000	$4,613
4	Community Based Transportation Plan (CBTP) Implementation	Improvements for transit, bike/pedestrian, safety, support services- focus on communities of concern	$60		$82	$277
5	Local Road Improvements	Major Arterial Performance Initiative Program, safety, grade separations, signals, complete streets, signage, coordination with freeways	$660	$230	$475	$1,845
6	Local Streets & Roads - Operations & Maintenance	Pavement and other maintenance, signal operations, ITS	$300	$220	$220	$923
7	Highway/Freeway - Safety & Non-Capacity Improvements	Interchange improvements, freeway operations and maintenance, ramp metering, soundwalls	$660		$50	$2,214
8	Bridge Improvements	Operations, replacement, repair, maintenance and expansion	$120		$100	$185
9	Transportation & Land Use (TOD/PDA Program)	Development Areas (PDA) through multimodal improvements and CEQA mitigation	$180	$17	$200	$738
10	Planning/Studies	Planning studies and implementation	$60		$50	$92
11	TDM, Outreach, Parking Mgmt.	Routes to School (SR2S), Safe Routes to Transit (SR2T), travel training, variable parking pricing	$60		$70	$369
12	Goods Movement	Improvements for goods movement by truck and coordinated with rail (and air) such as truck parking and truck/port/freight operations	$420		$200	$369
13	PDA Support (Non-Transportation)	Non-transportation infrastructure to support PDAs such as sewer, utilities, etc.	$0		$25	$55
14	Environmental Mitigation	Environmental Mitigation for major construction projects	$0		$25	$55
15	Transportation Technology and Revenue Enhancement	Advancing technologies for transportation and revenue efficiency such as charging stations, communications, HOT/Express lanes toll collection, etc	$0	$28	$70	$258
TOTAL			**$6,000**	**$1,034**	**$4,142**	**$18,450**

DRAFT - Projects and programs may be revised to be consistent with draft final Transportation Expenditure Plan anticipated for adoption by the Commission in January 2012.

Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
1. Bicycle and Pedestrian Program - RTP ID # 240381						***Bicycle and pedestrian infrastructure, support facilities (including operations), and maintenance***
	1A. Countywide Bike Plan Capital Projects network					
3	City of San Leandro	East Bay Greenway/UPRR Rail to Trail*	Central	240322	$26.0	4.7 miles of Bicycle and Pedestrian multi-use pathway following the existing Union Pacific Railroad Oakland Subdivision building upon the Eastbay Greenway
6	City of Dublin	Iron Horse Trail Overcrossing at Dublin Boulevard near Dublin Transit Center (Bicycle/Pedestrian Enhancements)	East	240292	$7.6	This project proposes to enhance the Iron Horse Trail located in the City of Dublin by constructing a pedestrian/bicycle bridge overcrossing at Dublin Boulevard
7	City of Dublin	Iron Horse Trail Overcrossing at Dougherty Road (Bicycle/Pedestrian Enhancements)	East	240294	$7.9	This project will enhance the Iron Horse Trail by constructing a pedestrian/bicycle bridge overcrossing at Dougherty Road located in the City of Dublin.
8	City of Pleasanton	Iron Horse Trail Construction of Ped/ Bicycle bridge over Arroyo Mocho.	East	240170	$0.2	Phase 2 of the Pleasanton Iron Horse Trail project will provide pedestrian/bicycle bridge or ramp access to southern Zone 7 access road. Access to southern access road will eliminate Iron Horse Trail Crossing of Santa Rita Road by allowing use of undercrossing on the south side of the Arroyo
9	City of Pleasanton	Iron Horse Trail construction in South Pleasanton	East	240194	1.7	This project will complete the final leg of the Iron Horse Trail in Pleasanton, from the current terminus at Busch Road to the City Limits at Shadow Cliffs on Stanley Boulevard
10		Countywide Bicycle Plan implementation	Multi		$249.0	Implementation of projects and programs included in the updated Countywide Bicycle Plan (Cost estimate is a placeholder based on 2006 Plan)
Total by Subcategory					***$292.4***	
	1B. Countywide Pedestrian Plan Capital Projects network					
12		Countywide Pedestrian Plan implementation	Multi		$892.0	Implementation of projects and programs included in the updated Countywide Pedestrian Plan. Cost estimate is a placeholder based on the 2006 Plan
13	City of Pleasanton	Pedestrian Gap Closure Projects over I-580 and I-680 program	East	240189	$2.0	Pedestrian and bicycle gap closure projects
Total by Subcategory					***$894.0***	
	1C. Local Bike & Pedestrian Plan Implementation					
14	City of Alameda	Bike and Ped Infrastructure	North	240191	$15.6	To provide funding for bicycle and pedestrian networks in the City.
15	City of Albany	Bike/ped expansion - Cleveland Avenue Improvements	North	240352	$1.1	The project entails continuing the Class I bikeway from the 500 block of Pierce St. through the surplus parcel of land and connect it to the bike lanes planned for Cleveland Avenue. Included in this phase is the extension of the sound wall along the 500 block of Pierce St.
16	City of Albany	Key Route Boulevard	North		$1.5	Bicycle and pedestrian improvements - included in the update to the bike plan currently in progress
20	City of Albany	Washington Avenue @ San Pablo bike improvements	North		$0.7	bike boulevard and intersection improvements at San Pablo Avenue - included in the update to the bike plan currently in progress
21	City of Berkeley	Berkeley Bicycle Plan implementation , including Safe Routes to School and Safe Routes to Transit elements (Bicycle/Pedestrian Enhancements)	North	240206	$17.9	Implement Berkeley Bicycle Plan, including Safe Routes to School and Safe Routes to Transit elements
22	City of Emeryville	Emeryville Greenway (Bicycle/Pedestrian Expansion)	North	240201	$1.5	Expand Emeryville Greenway through design and construction of pathway(s) and landscaping on existing City owned right of way (former rail right of way).
23	City of Emeryville	Bicycle/Pedestrian Enhancements	North	240188	$0.1	This project will complete implementation of the 1998 Bicycle and Pedestrian Plan, including bicycle boulevard stencils, bicycle detection loops/video detection at traffic signals, and installation of signs on most of the network.
24	City of Oakland	Bicycle and Pedestrian Safety and Enhancements: Streetscapes	North	240225	$20.0	Completion of bicycle and pedestrian projects citywide. Work includes pavement resurfacing, construction of bulbouts, medians, pedestrian refuges, widened sidewalks, installation of new street furniture, streets trees and other enhancements.
25	Alameda County	San Lorenzo Creek Trail	Central	240049	$10.0	The San Lorenzo Creek project extends from Mission Boulevard to the Meek Estate. The project includes a multi-use pathway and serves the County grow opportunity area on East 14th / Mission Blvd.
26	City of Hayward	Bike-Pedestrian Enhancements*	Central	240016	$9.5	• C Street – Grand to Filbert – narrow, increase sidewalk, construct median • C Street – Watkins to Mission – narrow to one lane, increase sidewalk, provide bike lane • Main Street – D Street to McKeever – narrow to 2 lanes, increase sidewalk and provide bike lane • Cannery Pedestrian bridge over the UPRR tracks in the Cannery Area. • Dixon Street – Valle Vista to Industrial – streetscape improvements to complement TLC project from Valle Vista to Tennyson

* Submitted by project sponsors throug the *Call for Projects and Programs*

Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
30	City of Newark	Bike/Ped Enhancements: Pedestrian and Bicycle Master Plan Implementation	South	240284	$30.0	Pedestrian and Bicycle Master Plan Implementation
31	City of Newark	Bike/Ped Expansion: Dumbarton TOD Bay Trail Railroad Overcrossing*	South	240288	$3.0	Dumbarton TOD Bay Trail Railroad Overcrossing
32	City of Newark	Cedar Boulevard Pedestrian and Bicycle Railroad Crossing	South	240289	$2.5	Cedar Boulevard Pedestrian and Bicycle Railroad Overcrossing
34	City of Livermore	Bicycle/Pedestrian Expansion - *Master Plan Implementation*	East	240255	$150.0	Implement projects identified in Bike and Ped Master Plan
35	City of Pleasanton	Arroyo Mocho Trail Paving along Zone 7 channel	East	240173	$3.4	This project will provide a paved class one trail from Hopyard Road to the eastern Pleasanton City Limit. This will provide a 3.2 mile paved trail between Pleasanton and Livermore Trail connection for both recreational and commute trips
36	City of Pleasanton	Arroyo Mocho Bridge Construction	East	240172	$0.2	This project will construct a new bridge over the Arroyo Mocho to connect the south Zone 7 access road to the Hacienda Business Park
37	City of Pleasanton	Stoneridge Mall Gap Closure	East	240192	$1.4	Mixed use development is identified around the Stoneridge Mall but significant gaps in the pedestrian pathway exist. This project closes those gaps.
38	Alameda County	Sidewalk Improvements	Multi	240107	$18.8	Sidewalk Projects at various locations in Alameda County unincorporated areas
39		Implementation of Local Bicycle and Pedestrian Plan projects and programs	Multi			Implementation of projects and programs included in local bicycle and pedestrian plans
Total by Subcategory					***$287.2***	
	1D. Bike Support Facilities - Capital & Operations					
40		Bike parking	Multi		$6.0	Includes bike parking, storage and changing facilities, showers
41		Bikesharing	Multi			Implementation of bike-share programs
Total by Subcategory					***$6.0***	
	1E. Infrastructure Maintenance					
42		Maintenance of bike and pedestrian facilities	Multi		50	Maintenance of bikeways, sidewalks, trails, signage, signals and other bike/pedestrian infrastructure. *$50M proposed for total subcategory.*
Total by Subcategory					***$50.0***	
Overall Program Type Total					**$1,529.6**	**Proposed Total Program Allocation: $475.0M**

* Submitted by project sponsors throug the *Call for Projects and Programs*

Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
2. Transit Enhancements, Expansion and Safety Program - RTP ID # 240382						***Capital/vehicle rehabilitation/replacement, capacity expansion, safety, seismic retrofit, station/stop improvements, maintenance facilities, environmental improvements***
	2A. Transit Capital/ *Vehicle* Rehabilitation					
43	ACE	Locomotive rehabilitation (6 locomotives, mid-life)	South & East	240307	$10.8	Mid-life Overhaul of six (6) locomotives
44	ACE	Rail Car Rehabilitation (28 pax rail cars, mid-life)	South & East	240308	$28.0	Mid-life overhaul of twenty-eight (28) passenger rail cars
45	ACE	Capital Spares, Minor Locomotive & Rail Car Rehabilitation	South & East	240310	$6.2	Spare & replacement parts, mechanical and cosmetic, for rail cars and locomotives.
Total by Subcategory					***$45.0***	
	2B. Transit Capital Replacement					
46	ACE	Fiscal System modernization	South & East	240312	$0.2	Includes cash registers, updated fiscal management software (Caselle Clarity), updated computers, and associated infrastructure. *FORMERLY LISTED UNDER 2F SYSTEM CAPACITY*
47	City of Emeryville	Transit Vehicle ~~Rehabilitation/~~Replacement~~/Retrofit~~	North	240251	$6.0	Replace 14 outdated Emery Go Round Shuttles with Low Floor Diesel, hybrid and/or CNG shuttles
48	LAVTA	Transit Vehicle Rehabilitation/Replacement/Retrofit (197veh + 194 veh)	East	94527	$163.2	LAVTA will need to replace 197 fixed-route vehicles and perform mid-life rehabilitations on 194 vehicles through 2040. This program is intended to provide funding for the Authority's fleet replacement and rehabilitation requirements. Vehicle replacement includes replacing all vehicle components including all ITS, fareboxes, radios, and equipment necessary for safe and efficient fleet operations.
Total by Subcategory					***$169.4***	
	2C. Vehicle/Fleet Expansion					
49	ACE	ACE Vehicles	South & East	240314	$0.3	Purchase of bucket truck for Maintenance Department. Purchase of tow-behind sweeper for Maintenance Department for parking lot and private roadway upkeep. Purchase of two (2) all electric vehicles with sufficient range to travel to and from San Jose with incidental stops at stations and vendors without recharging en-route or using any on-board fuel. Estimated range needed is greater than 200 miles after 10 years of normal battery usage.
50	AC Transit	Additional Fleet Vehicles To Support Improved Transit Service	Multi	21154	$74.6	Purchases rolling stock for enhanced transbay, local, or express services
51	BART	BART Rail Vehicle Capacity Expansion- 225 cars (Alameda County portion)	Multi	240073	$444.0	Purchase 225 additional cars to accommodate future increases in ridership.
Total by Subcategory					***$518.9***	
	2D. Safety and Security for Passengers and System					
52	ACE	On-board Security Cameras	South & East	240275	$0.1	On-board, remotely accessible security cameras and associated infrastructure to include Wi-Fi networking on each rail car.
53	ACE	Security Cameras at the Alameda & SJ Stations	South & East	240295	$1.9	IP-based video surveillance system for all San Joaquin County stations, Vasco, Pleasanton, and Alameda County Stations.
54	AC Transit	Safety and security improvements*	Multi	230098	$24.5	This project encompasses a number of capital elements to ensure AC Transit vehicles and facilities are safe and secure for the passengers, including: bus video and facility surveillance system with data storage; mobile communications vehicle; emergency generator systems at operating divisions; Emergency Operations Center Upgrades; Transfer Centers/Stop surveillance program; and "Hardening" upgrades to operating divisions and temporary Transbay terminal.
55	BART	BART Security Program (Alameda County portion)	Multi	240072	$86.4	Project will improve or enhance BART security to protect the patrons and the system. Projects to be implemented include: 1) Emergency Communications; 2) Operations Control Center; 3) Locks & Alarms; 4) Public Safety Preparedness; 5) Structural Augmentation; 6) Surveillance - CIP Track Two Portion; and 7) weapons Detection Systems.
Total by Subcategory					***$112.9***	

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Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
	2E. Station and Stops Improvements (access, expansion and amenities)					
58	City of Emeryville	Transit Station Rehabilitation	North	240247	$3.9	Enhance Emeryville's existing transit services with installation of up to 30 bus shelters and other site amenities including benches, maps, signage and amenities for existing AC Transit and Emery Go Round routes and expansion of the Amtrak station platform in Emeryville. *PREVIOUSLY LISTED UNDER 2A*
59	City of Oakland	Downtown (12th and 19th Street) BART Stations Transit Enhancements	North	240232	$139.0	Enhance pedestrian and bicycle access to downtown BART stations through streetscape projects incorporating pedestrian enhancements, construction of safe basements underneath sidewalks, paving, sidewalks, bicycle facilities, bicycle storage and bike station development, and signage.
61	LAVTA	Bus Stop Improvements*	East	230148	$4.1	To improve bus stops throughout Dublin, Pleasanton, and Livermore to provide ADA access where access does not exist and improved amenities such as passenger shelters, benches, trash receptacles, system maps and schedules, solar lighting, accessibility upgrades, etc.
62	AC Transit	Bicycle/Pedestrian Enhancements on East Bay BRT corridor (non-transit elements)	North & Central	240371	$24.0	Provides bike/ped improvements, street-scape elements to support BRT on Telegraph Avenue/International Blvd./E.14th street. Includes non-transit ped bulbs, lighting, curb cuts and other related improvements. Does not include transit elements, but supports project: # 22455
63	AC Transit	Livable Communities/Complete Streets/ADA	Multi	240373	$13.2	Complete Streets improvements, including Livable Communities Ped Improvements, ADA curb cuts, ped countdowns, improved sidewalks, signage and bike improvements along transit corridors. Includes: $13.2 for Alameda County and $1.8 for Contra Costa County
64	ACE	Information Display Kiosks at ACE stations & on-board rail cars	South & East	240240	$0.5	Information displays and accompanying infrastructure to provide real time arrival and departure information for ACE and connecting transit/shuttle services. General information, announcements, and advertisements could also be accommodated.
65	ACE	ACE Station Improvements	South & East	240241	$0.3	Passenger shelters, including solar lighting and power infrastructure, street furniture, ADA-accessibility.
66	BART	BART Station Capacity (Alameda County portion)	Multi	240075	$294.7	Makes station capacity improvements at 43 BART stations throughout the District. Types of improvements include faregate, stair, and elevator additions; and platform modifications, including platform widening, escalator additions, train-screens, and doors.
305	BART	BART Station Modernization	Multi		$ 660.00	The Station Modernization Program includes improvements at all BART stations addressing station site, building envelope, vertical transportation, circulation & wayfinding, HVAC, and other station equipment replacements/upgrades, and lighting & ambient environment.
Total by Subcategory					***$1,139.7***	
	2F. System capacity*/communications improvements*					
68	ACE	Altamont Rail Corridor (Upgrades) Rehabilitation- Track, positive train control, and signaling upgrade	South & East	240305	$12.5	Track, positive train control, and signaling upgrades along the existing and planned Altamont Commuter Express operational corridors.
69	ACE	Interoperable Communications Equipment	South & East	240297	0.2	This project will provide a scalable, cost-effective IP-based solution for quickly establishing communications between disparate systems in support of emergency response and day-to-day operations. Additional funding is being sought for Fremont and Great America.
70	AC Transit	Transit Management/*Communication* Systems*	Multi	240205	$54.7	Computer Aided Dispatch Upgrades, including Automatic Vehicle Locator and Real Time Passenger Information. Bus enhancements including automatic passenger counters, internal text messaging and associated system upgrades required for enhancements to function.
306	BART	BART Metro Program	Multi	240182	625	Advance BART Metro program (service, capacity and coverage) to align future investments in support of the region's emerging Sustainable Communities Strategy (SCS). Types of projects eventually could include trackway enhancements on the core system (pocket tracks, cross-overs, other investments to relieve mainline bottlenecks), route service changes, capacity improvements to stations and supporting facilities, infill stations, integrated transit services, and expansion of high capacity transit lines
71	BART	BART System Capacity (Alameda County portion)	Multi	240089	$78.3	Make investments across BART system including train control modifications to operations control center and integrated control system; traction power upgrades, 3rd rail feeder cables, negative return capacity in yards, and 1/4 of traction power substations; ventilation in underground stations to handle increased passenger loads; crossovers can reduce fleet demand by 16-30 BART cars, while allowing for more operational flexibility (mitigation of delays, more frequent evening and weekend service).
Total by Subcategory					***$770.7***	

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Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
	2G. Maintenance Facilities Expansion/ *Enhancements*					
72	LAVTA	*New* maintenance/operations facility	East	21151	$47.3	Constructs a new maintenance facility. LAVTA has outgrown its existing facility. The current facility was designed for no more than 43 vehicles, both motorbus and demand response. The current LAVTA fleet consists of 75 motor buses and 18 demand response vehicles. The proposed facility would incorporate facilities and parking for up to 160 buses, which will equip LAVTA for the growth anticipated in the Tri-Valley.
73	AC Transit	Maintenance Facility Efficiency Upgrades	Multi	21159	$80.0	Expand/enhance AC Transit facilities such as environmental sustainability projects, heavy equipment, IT infrastructure, other facility improvements.
74	AC Transit	66th Ave Upgrade to Operational Facility	Multi		$12.0	
Total by Subcategory					***$139.3***	
	2H. *Green/* Environmental Program					
76	AC Transit	Environmental projects	Multi	230121	$67.0	The project would be to reduce AC Transit's carbon footprint, as well as address other environmental issues associated with bus transit operations such as ZEB fueling and maintenance facility. The program would also implement projects to reduce the energy currently used at operating facilities by installing solar panels to reduce the lighting costs for our facilities. To address environmental issues currently facing the agency, the project would also include programs to enhance our wastewater treatment programs to better manage our industrial wastewater systems, including: upgrades and/or replacement of our underground fuel tanks and the related clean-up of historical contamination; continued efforts in preventing contaminants from entering storm water drains at facilities.
77	AC Transit	Greening of Vehicles - environmental program	Multi		$2.6	
78	AC Transit	Alternative Fueling Facilities (D3,D6, CMF)	Multi		$37.0	
Total by Subcategory					***$106.6***	
Overall Program Type Total					**$3,002.5**	**Proposed Total Program Allocation: $1100.0M**
3. Transit and Paratransit Operations and Maintenance Program - RTP ID # 240383						***Operations, service expansion, transit priority measures (TPM), fare incentives, maintenance.***
	3A. Transit and Paratransit Operations *Restoration* and Expansion					
83	City of Berkeley	I-80 Corridor Transit Service	North		$20.0	Restore Service to 2009 Levels to Higher Density neighborhoods. Lifeline Service for low-income communities • I-80 adjacent elements of South & West Berkeley Community-Based Transportation Plan • West Berkeley Circulation Master Plan • AC Transit Service Plan
85	ACE	UPRR Capital Access Fee	South & East	240274	$1.9	As part of the second amendment to the SJRRC/UPRR Trackage Rights Agreement approved December 2003, an annual Capital Access Fee is required in January of each year to operate ACE trains on the 86 mile corridor.
86	AC Transit	Transit Priority Measures (TPM)	North, Central & East	230111	$ 264.0	Transit Priority Measures (TPM), corridor or street improvements, and rider amenities within Alameda County to protect buses from degrading speeds on arterials while providing passenger amenities to encourage increased ridership, such as: signal timing, signal priority and queue jump lanes; more frequent service levels; passenger loading stations or amenities; real-time passenger information; and street and sidewalk geometric changes to assist bus operations (bus bulbs if appropriate), as well as a HOV facilities on bridges and appropriate access roadways. Also includes single intersection-level improvements not included in a larger corridor projects.
87	AC Transit	Speed Protection in Urban Core	Multi		$48.0	
307	AC Transit	Expanded Owl Service	Multi	240695	$160.5	Additional service hours in order to meet projected Owl Service (late night) demand. To ensure adequate transit services for transit-dependent, and other riders, have late night/early morning service for hours that BART is not operating. Systemwide Total Cost for this program is $182.4 million, and Alameda County share is 88%.
308	AC Transit	Expanded Weekend Bus Service	Multi	240696	$1,509.7	Increase weekend operations to meet projected demand.Systemwide Total Cost for this program is $1,715.6 million, and Alameda County share is 88%.
309	AC Transit	Express Bus Service on Expanded HOT Lane Network	Multi	240697	$1,803.2	Expanded Bus Transit Service along the Bay Area's expanded HOT Lane network. Provided expanded and more frequent services on the HOT lane network.Systemwide Total Cost for this program is $2,049.1 million, and Alameda County share is 88%.

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Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
310	AC Transit	Frequent Tranist Network	Multi	240698	$1,056.0	Expands frequent transit service within the AC Transit Service area to support increased housing and commercial density. Provides 15 minute frequency on transit routes serving the most dense parts of the region to provide an alternative to Single Auto Use. Systemwide Total Cost for this program is $ 1,200 million, and Alameda County share is 88%.
311	AC Transit	Neighborhood Circulator	Multi	240700	$162.8	Provides increased frequency and service span on neighborhood circulator service. Systemwide Total Cost for this program is $185 million, and Alameda County share is 88%.
312	AC Transit	Supplemental School Service Increases	Multi	240701	$290.4	Provides increased frequency and coverage of AC Transit supplemental school service. Systemwide Total Cost for this program is $330 million, and Alameda County share is 88%.
88	AC Transit	Transit Service Restoration and Enhancement*	Multi	240699	$1,777.6	This project would restore AC Transit operations to 2009 service levels, including frequency improvements, span of service enhancements and day of the week increases. Systemwide Total Cost for this program is $2,020 million, and Alameda County share is 88%.
89	BART/AC Transit	Paratransit Operations (mandated and non-mandated)	Multi		$ 1,120.0	Maintain and expand paratransit service operations
313	WETA	Provide ferry service between Berkeley/Albany and San Francisco	Multi	22511	$ 323.0	
Total by Subcategory					***$8,214.1***	
	3B. Transit Fare Incentives					
90	Alameda County Office of Education	Student Bus Pass*	Multi		$375.0	Provide free bus passes to all middle and high school students in Alameda County
Total by Subcategory					***$375.0***	
	3C. Preventive Maintenance					
91	ACE	Annual Preventive Maintenance costs for rail cars and locomotives.	South & East	240311	$9.0	Annual Preventive Maintenance costs for rail cars and locomotives. *FORMERLY LISTED UNDER 2A TRANSIT CAPITAL REHAB*
92	LAVTA	Maintenance Facilities -- *state of good repair*	East	230151	$4.1	LAVTA owns and maintains three main facilities: the administrative, operations, and maintenance facility, the Livermore Transit Center, and the Atlantis Satellite Bus Facility. As these facilities age, regular on-going maintenance, major and minor, is required to maintain the assets in a state of good repair. This program would provide on-going funding to maintain and extend the useful life of the Authority's three main facilities. *FORMERLY LISTED UNDER 2G MAINTENANCE FACILITIES*
Total by Subcategory					***$13.1***	
Overall Program Type Total					**$8,602.2**	**Proposed Total Program Allocation: $1000.0M**
4. Community Based Transportation Plan (CBTP) Implementation - RTP ID # 240384						***Implement lifeline programs, and projects and programs identified in "communities of concern" (low-income areas) in CBTPs. Most of these improvements overlap with other transit, bike/ped, support services, safety. Adopted CBTPs include (City of) Alameda, Central Alameda County, West Oakland, Central and East Oakland, South and West Berkeley.***
93	City of Emeryville	Lifeline Transportation	North	240209	$0.1	Continue operation of the Emeryville Lifeline Transportation Program, a door to door shuttle called "8 to Go" for the duration of the Plan's funding cycle.
94	in Central and E. Oakland	Streetscape and bus stop improvements along transit corridors, at BART stations, and existing CEDA streetscape improvement projects	North		$8.9	$1.7 million to $8.9 million, depending on the length of the corridor and the scope of work (e.g. whether the project includes utility undergrounding, street resurfacing, signal upgrades, landscaping, custom bus shelters or standard bus shelters, decorative paving or standard paving).
95	in Central and E. Oakland	Improve bicycle connections to BART stations Class 3A Bicycle Route on East 12th Street from Fruitvale Ave to 40th Ave (signing and striping and/or lane conversion projects)	North		$0.0	$37,500. The City of Oakland Bicycle Master Plan estimates that a Class 3A Arterial Bike Route has a unit cost of approximately $75,000 per mile. This project is 0.50 miles in length.
96	in Central and E. Oakland	Improve bicycle connections to BART stations Class 2 Bicycle Lane on San Leandro Street from 66th Ave to 85th Ave. (signing and striping and/or lane conversion projects)	North		$0.1	$93,000. The City of Oakland Bicycle Master Plan estimates that a Class 2 Bicycle Lane has a unit cost of approximately $100,000 per mile. This proposed bicycle lane is 0.93 miles in length.

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Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
97	in Central and E. Oakland	Improve bicycle connections to BART stations Class 2 Bicycle Lane on Camden Street and Havenscourt Blvd from MacArthur Blvd to International Blvd (signing and striping and/or lane conversion projects)	North		$0.1	$132,000. The City of Oakland Bicycle Master Plan estimates that a Class 2 Bicycle Lane has a unit cost of approximately $100,000 per mile. This proposed project is 1.32 miles in length.
98	in Central and E. Oakland	Improve bicycle connections to BART stations Class 2 Bicycle Lane on Fruitvale Ave from Foothill Blvd to East 12th Street (signing and striping and/or lane conversion projects)	North		$0.1	$55,000. The City of Oakland Bicycle Master Plan estimates that a Class 2 Bicycle Lane has a unit cost of approximately $100,000 per mile. This proposed project is 0.55 miles in length.
99	in Central and E. Oakland	Coliseum BART to Bay Trail Connector Path*	North		$2.2	$2.2 million. The Alameda Countywide Bicycle Plan includes improvements to the 66th Avenue underpass.
100	in Central and E. Oakland	Bicycle Programs: Offer Road I Courses to residents in the project area	North		$0.5	The cost to provide Road I courses and funding to Cycles of Change is relatively low compared to more capital-intensive projects.
101	in Central and E. Oakland	Bicycle Programs: Provide funding for Cycles of Change program	North		$1.3	Increase Bicycling Options for Youth and Low-Income Residents
102	In city of Alameda	Implement Bus Stop and Shelter Improvements	North		$0.2	$220 per trash can (plus $36 weekly per trash can for servicing); approximately $3,000 per bus stop for lighting; $18,000 per shelter (plus $1,500 annually per shelter for maintenance) City of Alameda
103	In city of Alameda	Improve the Pedestrian Experience in Alameda Point	North		$0.3	$500 to $1,250 for street trees; $250 to $1,000 per tree for a program modeled after Urban Releaf; $200 to $400 per linear foot of landscaped medians, including irrigation; $1,800 per tree in a planter box; $20 per square foot of sidewalk repairs
104	In city of Alameda	Install Pedestrian Street Lights	North		$0.5	$8,000 to $15,000 per lamp including trenching and electrical, plus $100 per lamp every four years for bulb changing
105	In city of Alameda	Improve Pedestrian Access between West Alameda and Oakland	North		$100.0	$5 million for a pedestrian barge (plus $2.5 million annually for operation); $40 million for a one-way path for pedestrians and bicyclists in the Webster/Posey Tube
106	In city of Alameda	Increase Pedestrian Crossing Visibility and Safety	North		$1.5	$3 per linear foot for striping new crosswalks; $80,000 to $100,000 per lighted crosswalk; $8,000 to$15,000 per refuge island
107	In city of Alameda	Improve Pavement and Bicycle Striping near the Ferry Terminal	North		$0.1	$4 per square foot to repave roadways; $2.30 per linear foot to stripe bicycle lanes
108	In city of Alameda	Create More Bicycle Lanes throughout Alameda	North		$0.1	$10,000 per linear mile
109	In city of Alameda	Increase the Bicycle Capacity Onboard Buses	North		$0.1	$900 to $1,350 each for racks that mount to front of bus; $500 to $700 each for onboard racks
110	In city of Alameda	Increase Bicycling Options for Youth and Low-Income Residents	North		$3.7	Cycles of Changes has an annual budget of $146,000 and financial support should contribute to this amount or augment it.
111	In city of Alameda	Increase Pedestrian and Bicyclist Safety in the Tube	North		$8.3	$7 million, plus an annual cleaning cost of $50,000
112	In city of Alameda	Improve Bicycling Access between Alameda and Oakland	North		$50.3	$300,000 for a bicycle shuttle (plus $2 million annually in operating costs)
113	In city of Alameda	Increase Education Regarding Bicycling Routes and Safety	North		$0.2	$500 per wayfinding signage; $10,000 for marketing material production (plus $5,000 per printing); contributions toward the Cycles of Change annual budget of $146,000
114	in city of Berkeley	Expansion of Berkeley Paratransit Services Taxi Scrip Program	North			
115	in S. and W. Berkeley	Bus Stop and Shelter Improvement	North		$0.1	Shelters/benches at no cost; solar powered lighting $700 to $3,000 per stop/shelter, transit info. $85-$385 each
116	in S. and W. Berkeley	Improved Pedestrian Signal Timing	North		$0.1	City staff can implement
117	in S. and W. Berkeley	Improved Crosswalk Visibility at Uncontrolled Intersections	North		$0.1	
118	in S. and W. Berkeley	Shared Roadway Pavement Markings	North		$0.0	
119	in S. and W. Berkeley	Improved Pedestrian Lighting	North		$1.0	$768,000 to $1,024,000
120	in S. and W. Berkeley	Secure Bicycle Parking (Provide More Locations for Safe Bicycle Storage)	North		$0.1	
121	in S. and W. Berkeley	Education of Cyclists regarding Bicycle Boulevard Network	North		$0.5	$10,000 to $20,000

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Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
122	in S. and W. Berkeley	Improved Crossing for Bicycles at Bicycle Boulevards (Improved Crossings at Bicycle Boulevards)	North		$0.5	$400,000 to $500,000
123	in S. and W. Berkeley	Improved Crossing for Bicycles at Bicycle Boulevards (Shared Roadway Pavement Markings on Class II.5 Bikeways and Traffic Circle Approaches)	North		$0.4	See "Improved Crossings at Bicycle Boulevards"
124	in W. Oakland	Pedestrian Improvements/Bikes Lanes: Mandela, 8th, Wood	North		$1.4	
125	in W. Oakland	7th Street Streetscape Project - Phase I	North		$1.3	West Oakland
126	in W. Oakland	Bike Lanes: Market Street	North		$0.4	West Oakland
127	in W. Oakland	Bike Racks	North		$0.0	$150/rack
128	in W. Oakland	Cycles of Change program	North		$0.2	$90,000 for two years for O&M
129	in W. Oakland	7th Street Streetscape Project - Phase II	North		$6.0	$5-6 million
130	in W. Oakland	Bike Lanes: Grand Avenue and 14th Street	North		$1.1	Grand: $200,000-$250,000; 14th: $500,000-$800,000
131	in W. Oakland	Traffic Calming: Peralta Street : Design only	North		$0.1	$100,000 (design only)
132	in W. Oakland	Bikeway: Middle Harbor Shoreline Park	North		$2.0	TBD: Part of multi-million roadway project that has not been designed.
133	in W. Oakland	Subsidized car sharing-W. Oakland	North		$2.8	$110K/Year
134	in W. Oakland	Comprehensive Transportation/Land Use Plan W. Oakland CBTP	North		$0.2	$150K
135	in W. Oakland	BART underground - W. Oakland	North		$0.0	*To address noise concerns. Tier 3 priority in CBTP. $200-350M/mile. TOTAL COST ESTIMATE $1,050M.*
136	in W. Oakland	CBTP Project Implementation Assistance W. Oakland	North		$0.0	$15K
137		Medical Service Access (Taxi Return)	North		$1.3	$50k/year
138		BART Transit Village Parking	North		$0.1	$5K (community monitoring)
139	In Ashland, Cherryland and S. Hayward	Bicycle Parking	Central		$0.1	Operating Costs: $0 - $50/year per unit for maintenance; Capital Costs: $200 - $450 per bike rack unit; $3000 per 8-10 unit bike lockers
140	In Ashland, Cherryland and S. Hayward	Bus Shelters	Central		$0.2	$215,000. Operating Costs: Up to several thousand dollars per year (depending on vandalism); Capital Costs: Free per high-traffic location
141	In Ashland, Cherryland and S. Hayward	Sidewalks in Cherryland	Central		$36.0	$36,000,000. Operating Costs: Some maintenance costs; Capital Costs: $500,000 per block
142	In Ashland, Cherryland and S. Hayward	Lighting	Central		$0.1	$120,000. Operating Costs: $42/year per unit (electric charge only); $95 -$120/year electricity and maintenance; Capital Costs: $12,000 for a new light pole; $2,000 - $3,000 if light can use an existing pole and wiring
143	In Ashland, Cherryland and S. Hayward	Bicycle Lanes	Central		$0.3	Operating Costs: Some maintenance costs included as part of street maintenance costs; Capital Costs: $30,000 per roadway mile for striping and signage
144	In Ashland, Cherryland and S. Hayward	Bicycle Purchase Assistance	Central		$1.0	Operating Costs: program cost depends on available funds - $20,000/year for administration as part of an existing program; Capital Costs: $200/bicycle, lock, and helmet
145		Bus Shelters	Central		$0.2	One-time cost for forty shelters
146		Transportation Information on Cable Television	Central		$0.0	One-time cost to adapt existing video
147		Information Center	Central		$0.1	2 Communities ($60K each per year) plus equipment ($20K one-time)
148		Information at Stops and on Buses	Central		$0.0	Info at shelters for both equipment and materials
149		Bicycle Purchase Assistance	Central		$0.1	To provide 200 bicycles, the minimum to justify administrative costs is $20K. per year
150		Bicycle Racks	Central		$0.0	5 per community (for 3 communities)
152		BART Noise Study	Multi			Reduce noise impacts for neighborhoods
153		BART Rail Grinding	Multi			Reduce vibration impacts on neighborhoods
Total by Subcategory					***$236.2***	
Overall Program Type Total					**$236.2**	**Proposed Total Program Allocation: $83.0M**

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Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
5. Local Road Improvements Program - RTP ID # 240386						***Major Arterial Performance Initiative Program, safety, grade separations, signals, complete streets, signage, coordination with freeways***
154		Congestion relief	Multi			Congestion relief on local streets and roads
Total by Subcategory					***$0.0***	
	5A. Major Arterial Performance Initiative Program					
155	ACTC	Arterial Performance Initiative Program	Multi	230224	$ 200.0	Focus on Metropolitan Transportation System (MTS), a companion to MTC'c Freeway Performance initiative. This would include improved mobility, management of the existing system and meeting environmental targets through signal interconnect, transit priority, incident management, traveler information and intersection improvements.
Total by Subcategory					***$200.0***	
	5B. Safety Improvements / *Grade Separations*					
159	City of Berkeley	Ashby/State Route 13 Disaster Resilience	North	240266	$54.9	Undergrounding of utilities on Ashby/State Route 13 to ensure resiliency of emergency evacuation routes in the event of a disaster.
160	City of Emeryville	Local Road Safety - rail improvements *at 65th, 66th, 67th Streets*	North	240199	$4.9	Rail safety improvements consisting of 4-quad gates and detection technology at local roadway crossings at the UPRR main line at 65th,66th and 67th Streets consistent with Quiet Zone approval.
161	City of Oakland	Local Road Safety Program: Railroad Crossings, Street Realignments	North	240221	$7.5	Improving Railroad Crossings - existing rail crossings are generally deficient in gate arms and warning lights, at grade cross-track sidewalk access and ADA access, paving, signage, pavement markings.
162	City of Oakland	Local Road Safety	North	240222	$10.0	Street Realignments, signal modifications, intersection modifications, guardrail installation, shoulder construction and other measures to increase the safety of existing roadways.
163	City of Oakland	Laurel District Safety and Access on MacArthur, from High Street to Seminary (LAMMPS)	North	240277	$20.3	Improve safety along MacArthur Blvd between High Street and Seminary by altering lane widths, installing additional traffic signals, adding bike lanes, a path, and pedestrian crossings; move curb and gutter in sections of the street, relocate utility poles to provide ADA width sidewalks, provide retaining wall in one location.
165	Alameda County	Redwood Road/A Street Improvements (I-580 to Hayward city limits)	Central	240111	$9.0	The project will improve significantly improve bicycle and pedestrian safety and access along Redwood Road / A Street between I-580 and Hayward city limit. The project includes, wider sidewalk, bicycle lanes, median islands, and improve crosswalks.
166	Alameda County	Redwood Road Safety Improvement Project (Castro Valley to Oakland)	Central	240325	$47.0	The project will improve significantly improve bicycle and pedestrian safety and access along Redwood Road between Oakland City limits and Buti Park in Castro Valley. The shoulder widening will make the roadway complete for bicyclist and pedestrians. The project construction would be completed in ten phases.
170	City of Fremont	Vargas Road Safety Improvement Project from I-680 to the Vargas Plateau Regional Park	South	240265	$5.0	Widening of Vargas Road from Pico Road to Morrison Canyon Road and widening of Morrison Canyon Road from Vargas Road to County Line to 18' wide paved road with 1' shoulder on each side and turnouts
173	Alameda County	Patterson Pass Road Safety Improvements Project	East	240095	$94.0	The project includes roadway realignment, shoulder widening, retaining wall systems, and guardrail modifications along Patterson Pass Road between Cross and Midway. The shoulder widening will make the roadway complete for bicyclists and pedestrians. The project construction would be completed in six phases.
174	Alameda County	Tesla Road Safety Improvements Project	East	240096	$145.0	The project includes roadway realignment, shoulder widening, retaining wall systems, and guardrail modifications along Tesla Road between Greenville Road and the San Joaquin County line. The shoulder widening will make the roadway complete for bicyclist and pedestrians. The project construction would be completed in ten phases.
175	Alameda County	Altamont Pass Safety Improvements Project	East	240097	$8.4	The project includes roadway realignment, shoulder widening, retaining wall systems, and guardrail modifications along Altamont Pass Road between. The shoulder widening will make the roadway complete for bicyclist and pedestrians.
176	Alameda County	Vasco Road Safety Improvements Project Phase II	East	240098	$27.0	The project includes roadway realignment, shoulder widening, installation of median barriers along Vasco Road between Contra Costa County and the City of Livermore.
177	City of Pleasanton	(Local Road Safety)Re-alignment and addition of bike lanes to Foothill Road between Muirwood Drive North and Highland Oaks	East	240286	$1.3	Re-alignment and addition of bike lanes to Foothill Road between Muirwood Drive North and Highland Oaks
178		Safety improvements	Multi			Examples include rail crossings, roadway crossings, etc.
179		Grade separations	Multi			Grade separations at rail lines and major roadways for safety for auto/ bike / pedestrians
Total by Subcategory					***$434.3***	

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Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
	5C. Street-scape Improvements / *Complete Streets*					
180	City of Alameda	Shoreline Drive streetscape: bicycle, transit, and pedestrian access improvements	North	240080	$19.1	Provides an enhanced Class I bike path with a landscaped median and gateway features on and near Shoreline Drive. Improved landscaping and gateway features . Improved bus stops, bicycle parking and pedestrian scaled lighting. The project also includes constructing an enhanced bicycle/pedestrian bridge on Bay Farm Island to replace the existing "Wooden Bridge", which was built in the early 1980s.
181	City of Albany	State Highway Preservation (San Pablo Ave?)	North	240354	$2.9	The proposed project entails implementing median, sidewalk and crosswalk improvements to make this roadway easier to navigate for pedestrians and to create a more enticing environment that attract pedestrian oriented businesses.
182	City of Berkeley	Complete Streets: Streetscape Improvements & Pedestrian Plan Implementation	North	240197	$26.9	Implement Berkeley Pedestrian Master Plan, adopted 6/10. The Plan includes well developed conceptual plans, which include Safe Routes to Schools, and Safe Route to Transit elements. *PREVIOUSLY LISTED UNDER 1C: LOCAL BIKE/PED PLAN*
183	City of Berkeley	*(Complete Streets)* Non-Capacity Increasing Local Road Intersection Modifications and Channelization	North	240228	$38.5	Berkeley Complete Streets Road Network Improvements. Restore 1-way streets to 2-way operation per Southside Plan. Reconfigure Shattuck Avenue in Downtown Berkeley for continuous 2-way traffic on west leg of Shattuck Square per Downtown Plan. Implement West Berkeley Circulation Master Plan. Study and develop reconfiguration designs for Adeline per UC Berkeley Study.
184	City of Berkeley	Complete Streets: Roadway Network Improvements	North		$11.0	Southside roadway reversion to 2-way. Shattuck Ave/Square 2-way west leg. West Berkeley Circulation Master Plan. Adeline/Ashby corridor. Berkeley Comments: • Critical Initiative #4 - Southside Plan Implementation • Critical Initiative #1080 - Downtown Plan • Critical Initiative #1041 - West Berkeley Circulation Master Plan • Departmental Initiative #936: Traffic Signal Priorities
185	Alameda County	Castro Valley Blvd Streetscape Improvements Project Phase II	Central	240102	$18.0	To create a safe, comfortable and attractive pedestrian main street for downtown Castro Valley, a series of street improvements along Castro Valley Boulevard between San Miguel and Strobridge. Calm the traffic environment by reconfiguring traffic lanes and providing on-street parking with shared bicycle access while still maintaining adequate traffic capacity on the Boulevard. Create a beautiful and inviting pedestrian environment that will encourage the community to access Castro Valley Boulevard for shopping, dining and entertainment by providing widened sidewalks with ample seating areas, a canopy of street trees and planter beds, landscaped bulb-outs, street furnishings and gateway markers.
186	Alameda County	E. 14th / Mission Blvd. Streetscape Improvements Project Phase II & III*	Central	240103	$25.8	E. 14th Street/Mission Blvd. (Route 185) Streetscape Improvement Project extends from 162nd Avenue to Rufus Court (Hayward City Limit). The project features include new widen sidewalks, transit stop improvements, intersection bulb-outs, landscaping, and raised medians.
187	Alameda County	Hesperian Blvd Streetscape Improvements Project	Central	240104	$11.8	The project includes installing wider sidewalks, reducing travel lanes, improving transit facilities, planting street trees, constructing medians, and enhancing pedestrian lighting along Hesperian Blvd. between San Leandro city limit and Hayward city limit
188	Alameda County	East Lewelling Blvd. Streetscape Improvements Project Phase II	Central	240110	$21.5	The project includes wider sidewalks, bicycle lanes, median islands, and landscaping along E. Lewelling Blvd. between Mission Blvd. and Meekland Avenue.
190	City of Dublin	Iron Horse bicycle, pedestrian and transit route	East	21460	$12.8	A bicycle/pedestrian/roadway and transit lane in existing Alameda County right-of-way between the East Dublin BART station and Dougherty Road and widening of Dougherty Road from Scarlett Drive to North City Limit to accommodate transit and bicyclists. Environmental review and preliminary engineering is complete.
191	City of Pleasanton	Complete Streets Project in Hacienda Business Park	East	240184	$7.5	Redesign and construction of existing 4, 5 and 6 lane arterial and collector roadways in Hacienda Business Park to a complete street design that incorporates bike lanes, friendly transit stops, improved streetscapes and wide and connected walking paths.
192		Complete Streets - implementation	Multi			Implementation of Complete Streets to improve mobility for all modes: transit, bike, walking, driving
Total by Subcategory					***$195.8***	
	5D. Coordination with Freeways					
194		Better coordination between freeway and local streets	Multi			Improve connections between local streets and freeways
Total by Subcategory					***$0.0***	
	5E. Traffic calming					
195	City of Oakland	Harrison-Oakland Avenue Major Street Improvements	North	240278	$12.4	Redesign and construct the Harrison-Oakland Avenue couplet as two two-way streets. Incorporate bicycle facilities, bus enhancements, and pedestrian crossings.
196	City of Hayward	*(Traffic Calming)* Local Road Safety	Central	240029	$5.0	A lump sum to implement various traffic calming measures on local residential streets
Total by Subcategory					***$17.4***	

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Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
	5F. ITS/Signals					
197	City of San Leandro	Traffic Signal Systems Upgrade	Central	230198	$2.8	Provides citywide traffic signal system elements to provide an ITS including new controllers, system communication, facilities, detection, upgrades and relocations, emergency vehicle preemption, speed, level of service monitoring along with advance detection and implementation of Adaptive Traffic Control on critical corridors of Hesperian Bl, Washington Av, San Leandro Bl, Marina Bl, Doolittle Dr, Bancroft Av, Davis St and East 14th St. and all arterials.
198		ITS/SMART Corridors	Multi			Ongoing implementation
Total by Subcategory					***$2.8***	
	5G Signage					
199		Wayfinding Signage	Multi			Installation of effective wayfinding signage
Total by Subcategory					***$0.0***	
Overall Program Type Total					$850.3	**Proposed Total Program Allocation: $475.0M**
6. Local Streets and Roads Operations and Maintenance (O&M) Program - RTP ID # 240387						***Pavement and other maintenance, signal operations, ITS***
	6A. Pavement Rehabilitation					
201	City of Oakland	*(Pavement)* Non-Capacity Increasing Local Road Rehabilitation	North	240219	$487.0	Rehabilitate Oakland Streets, including street resurfacing, preventive maintenance, sidewalk repair and replacement, ADA curb ramp installation, and bus pad installation. *FORMERLY LISTED UNDER 6B*
203	City of Newark	*(Pavement)* Local Streets and Roads O&M	South	240285	$62.5	Newark local streets and roads maintenance including pavement resurfacing, pedestrian and bicycle infrastructure replacement, restriping, base failure repair, etc. *FORMERLY LISTED UNDER 6B*
204	City of Livermore	*(Pavement)* Local Streets and Roads O&M	East	240298	$134.0	Livermore's Pavement Maintenance Needs 2015-2035 derived from MTC P-TAP Round 11 Pavement Management Update Report *FORMERLY LISTED UNDER 6B*
205	Alameda County	Pavement rehabilitation	Multi	240108	$15.2	Pavement Rehabilitation at various locations in Alameda County unincorporated areas
206		Pavement rehabilitation	Multi			Pavement rehabilitation and resurfacing to meet local PCI targets
Total by Subcategory					***$698.7***	
	6B. Maintenance / Operations					
207	City of Alameda	Local Streets and Roads O&M	North	240187	50	This project will provide funding for maintenance and rehab of Alameda streets. The funding will also be used for maintaining ITS infrastructure in the City.
208	City of Albany	Local Streets and Roads O&M (Solano Ave btw Masonic and Berkeley city limit)	North	240342	$2.5	This project entails pavement resurfacing and implementation of pedestrians improvements, such as bulb outs at intersections, curb ramps, and visible crosswalks at selected intersections along Solano Avenue from Masonic Avenue to the Berkeley City Limit.
209	City of Albany	Local Streets and Roads O&M *(Cleveland Ave)*	North	240343	$2.7	Project located between the intersection of the Richmond City Limits and Buchanan Avenue. Project includes pavement resurfacing, utility undergrounding, and installation of bike lanes.
210	City of Berkeley	Local Streets and Roads O&M	North	240224	$71.2	Rehabilitate and repair local streets and roads in Berkeley following Complete Streets policies, including street resurfacing, preventative maintenance, sidewalk repair and replacement, ADA curb ramp installation, bus pad installation and low-impact development Green Streets elements where feasible. FORMERLY LISTED UNDER 5E COMPLETE STREETS
211	City of Oakland	Arterial Management Program City of Oakland ITS Local Streets and Road Operations: Citywide Intelligent Traffic System (ITS), Signal Operations	North	230169	$26.9	Provides ITS elements including new controllers, signal interconnect/coordination, transit priority, speed and level of service monitoring, real time arrival information, CCTV, incident management, and emergency vehicle preemption along Hegenberger Road, 73rd Avenue, 98th Avenue, East 14th Street, International Boulevard, San Leandro Street, High St, MacArthur Boulevard, Telegraph Avenue and Broadway.
212	City of Oakland	Local Streets and roads O&M: Repair and maintenance of street system (excluding roadway rehab and repair). Includes Signal Operations, Striping and Signs maintenance	North	240220	$12.5	Repair and maintenance of street system (excluding roadway rehab and repair). Includes Signal Operations, Striping and Signs maintenance
213		O&M for local streets and roads	Multi			Support maintenance and operations of local streets and roads infrastructure
Total by Subcategory					***$165.8***	
	6C. ITS/Signals					
214	ACTC	I-80 ICM San Pablo Corridor Arterial & Transit Improvement Project	North	230226	25.2	Arterial component of I-80 ICM project. This is the corridor management along parallel arterials and the connecting roadways across Alameda County and Contra Costa County along the Interstate 80 (I-80) corridor.
215	City of Livermore	I-580 SMART corridor (Local Streets and Roads) O&M - Livermore share	East	240300	$2.0	Livermore's share of I-580 Smart Corridor operations and maintenance plus local coordinated signal systems
216		SMART corridors coordination	Multi			Ongoing program operation
Total by Subcategory					***$27.2***	
Overall Program Type Total					**$891.7**	**Proposed Total Program Allocation: $220.0M**

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Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
7. Highway, Freeway - Safety and Non-Capacity Improvements - RTP ID # 240388						***Interchange improvements, freeway operations and maintenance, soundwalls, ramp metering***
	7A Interchange Improvements					
217		Interchange improvements	Multi			
Total by Subcategory					***$0.0***	
	7B Operations/Safety					
218		Congestion relief	Multi			Ongoing program for congestion relief on/for freeways/highways
219		Safety improvements	Multi			Ongoing program for safety improvements on/for freeways/highways
Total by Subcategory					***$0.0***	
	7C Maintenance					
220		Maintenance of state highways	Multi			Maintenance of state highways and freeways
Total by Subcategory					***$0.0***	
	7D Soundwalls					
221	City of Berkeley	I-80 Aquatic Park Soundwall	North	240252	$17.3	Construct innovative soundwall on Interstate 80/580 at Aquatic Park between University Avenue Interchange and Ashby Avenue Interchange.
222	ACTC	Soundwalls - Central Alameda County Freeway Study	Central	230094		To provide funds to construct soundwalls in the Central Alameda County Freeway Study area corridor at locations that are not associated with a specific LATIP project.
223	ACTC	Soundwalls	Multi	98208	$10.0	Fulfills a countywide programmatic set aside to construct soundwalls
Total by Subcategory					***$27.3***	
	7E Freeway Service Patrol					
224		Freeway Service Patrol	Multi			Ongoing operation of the regional Freeway Service Patrol tow-truck service
Total by Subcategory					***$0.0***	
	7F ITS					
225		Maintenance of state highways ITS systems	Multi			Maintenance of ITS on state highway system
Total by Subcategory					***$0.0***	
Overall Program Type Total					**$27.3**	**Proposed Total Program Allocation: $50.0M**
8. Bridge Improvements Program - RTP ID # 240389						***Bridge operations, replacement, repair, maintenance and expansion***
	8A Bridge Replacement/ Retrofit/Repair					
Total by Subcategory					***$0.0***	
	8B Bridge Expansion and Maintenance					
Total by Subcategory					***$0.0***	
	8C Bridge Operations					
230	Alameda County	Estuary Bridge Operations	North	240105	$60.0	Maintain and operate High Street, Park Street, and Miller Sweeney (Fruitvale) bridges that connect the City of Oakland and the City of Alameda.
Total by Subcategory					***$60.0***	
Overall Program Type Total					$60.0	**Proposed Total Program Allocation: $100.0M**
9. Transportation & Land Use (PDA/TOD Program) - RTP ID # 240391						***Supports Priority Development Areas (PDA) and Transit Oriented Development (TOD) through transit, bike, pedestrian, CEQA mitigation and other transportation/land use improvements. (Overlaps with other program categories)***
231	City of Berkeley	San Pablo Avenue Public Improvements	North	240214	$29.9	Implement the San Pablo Avenue Public Improvements Plan in Berkeley to support focused growth along designated PDA corridor.
232	City of Berkeley	Transit-Oriented Development Access Infrastructure	North	240321	$40.0	To provide necessary infrastructural investments to support focused growth in Transit-Oriented Developments in Berkeley, including Downtown Berkeley and the Ashby BART Station, and all of Berkeley's designated PDAs
233	in Berkeley	Asbhy BART TOD & Station Capacity Expansion*	North	230135	$20.0	Develop Transit Oriented Development on west parking lot of Ashby BART Station, including supportive, workforce, and affordable housing, replacement BART parking, improved bike, ped, and transit access, BART Capacity improvements include new escalators.
234	City of Oakland	Coliseum/Oakland Airport BART Transit Enhancements (Coliseum BART parking structure)	North	240230	$105.0	Transit Village - Coliseum/Oakland Airport BART. Construction of structured parking to replace current surface lot at the BART station. Reconfigured and expanded connections between BART/Oakland Airport Connector/Capitol Corridor/Oakland Coliseum Arena.
235	City of Oakland	West Oakland PDA/TOD Transit Enhancements*	North	240231	$20.6	West Oakland PDA Transit Enhancement. This project includes improvements to all modes, including streetscape, bike and ped access, and infrastructure enhancements to encourage development and reuse around the West Oakland BART station and environs.
236	City of Oakland	Fruitvale/Diamond PDA: Transit Enhancements*	North	240233	$35.4	Fruitvale/Diamond PDA Transit Enhancements - Streetscape improvements including pedestrian-scaled lighting, Sidewalk and pedestrian crossing improvements, landscaping, bus shelters, and bicycle facilities.

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Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
237	City of Oakland	Eastmont Transit Center PDA: Transit Enhancements	North	240234	$19.7	Eastmont Transit Center PDA - planning and construction of bicycle, pedestrian and transit improvements at the Eastmont Transit Center and along major bus route corridors along 73rd Avenue, MacArthur Boulevard, Foothill Boulevard and Bancroft Avenue within the PDA.
238	City of Oakland	MacArthur BART Station PDA/TOD: Transit Enhancements*	North	240235	$13.5	MacArthur BART Station Priority Development Area - enhanced bicycle, pedestrian, and transit connections to the BART station within the PDA boundaries. Projects include streetscape improvements on Telegraph Avenue, Martin Luther King, Jr. Way, and West MacArthur Boulevard, and bicycle connectivity improvements.
239	City of Oakland	Lake Merritt BART Specific Plan Implementation.: Transit Enhancements*	North	240236	$5.0	Lake Merritt BART Specific Plan Implementation. Upon completion of the Specific Plan, numerous improvements will be required to re-connect the component areas of the study through multiple transportation improvements: Chinatown, Lake Merritt BART station area, Laney College, Oakland Museum, Jack London Square area, and the Estuary. Probable projects include bicycle lanes and paths, transit circulators, improved and redesigned streets, bridges, and streetscapes, sidewalks, and a possible parking garage. Because the Plan is not yet complete, we recommend a placeholder of $5 million in the CWTP to ensure that the plan process, EIR, and any additional studies can be completed prior to design development and construction requests.
240	City of Oakland	Broadway Valdez Specific Plan Area Transit Access Improvements	North	240323	$5.9	Broadway Valdez Specific Plan Area Transit Access Improvements.
241	City of Oakland	TOD: 19th Street BART*	North			
242	Alameda County	Castro Valley BART TOD	Central			
243	City of San Leandro	Downtown San Leandro TOD*	Central	240269	70	This project constructs street and pedestrian improvements in the Downtown San Leandro TOD area to encourage transit oriented development within walking distance to the downtown core, San Leandro BART and East 14th Street.
244	City of San Leandro	Bay Fair BART Transit Village (TOD)	Central	240296	$70.0	This project constructs street and pedestrian improvements in the Bayfair BART PDA area to encourage transit oriented development within walking distance to the Bayfair BART Station, Bayfair Mall, Hesperian Blvd and East 14th Street.
245	City of San Leandro	San Leandro City Streetscape Improvements	Central	240271	$10.0	Pedestrian, bicycle, streetscape, transit center, traffic safety, signal and parking improvements to support Transit Oriented Development along major travel corridors in San Leandro including MacArthur Blvd, Marina Blvd, Doolittle Dr., Bancroft Drive, W. Juana Ave and Davis Street. *FORMERLY LISTED UNDER 5C STREETSCAPE IMPROVEMENTS*
246	City of Fremont	Fremont Boulevard Streetscape Project *(Centerville PDA)*	South	240257	$7.4	The Centerville PDA is one of the key locations in the City's vision to become "strategically urban" and Fremont Boulevard streetscape improvements is one of the highest-priority implementation measures in the entire Framework Plan. The City seeks funding for the following changes to Fremont Boulevard in order to promote an attractive pedestrian area and "complete street" in the heart of the Centerville PDA surrounding the Centerville Train Station: narrowing lane widths/eliminating travel lanes, introducing on-street parking to slow traffic; adding bulbouts, crosswalks, medians, and landscaping; adding new street furniture, street lighting, and signage; adding bike lanes and bicycle parking. *FORMERLY LISTED UNDER 5C STREETSCAPE IMPROVEMENTS*
247	City of Fremont	Downtown Pedestrian Streetscape Improvements on Capitol Avenue and New Middle Road in Central Fremont PDA	South	240258	$77.3	Fremont's 110-acre Midtown District is planned as the heart of the Central Fremont Priority Development Area (Central PDA), a mixed-use transit-oriented district located between the Fremont BART Station and the Fremont Boulevard transit corridor. Currently, the Midtown district street network does not fully support the planned future uses: a new street (referred to as "New Middle Road") and the extension of another street (Capitol Ave. from State Street to Fremont Blvd.) are necessary to provide connectivity and to reduce block lengths to a comfortable walking distance. This project proposes to construct the two new street segments and associated streetscapes, and to upgrade the streetscape along the existing length of Capitol Ave. with enhanced landscaping, paving materials, street furniture and street lighting. This attractive public space will encourages pedestrian activity and serve as the cultural, civic, and entertainment center for Fremont over the next 20 years.
60	City of Fremont	BART Warm Springs Station West side Access Improvements	South		$11.0	The proposal is to construct station access structure on the west side of the new Warm Springs BART Station. The purpose is to provide access to BART from the proposed 480-acre TOD area west of the new BART station. The access to transit from this site is vital to successful development of the area for mixed uses comprising of residential/commercial/R&D. The $11 m project cost includes the full cost of a BART bridge, including 20-foot wide bridge, ramps, elevators, canopy, lighting, additional fare gates, ticket vending machines, and a station agent booth on the west side of the station. It also includes acquisition of two acres where the access structure lands
248	City of Newark	Dumbarton TOD Transportation Infrastructure Improvements	South	240293	$1.2	Provide funding for infrastructure support to Priority Development Areas, including the City of Newark's Dumbarton TOD Project.

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249	City of Dublin	Dublin TOD : West Dublin and downtown Dublin Program*	East	240267	$15.1	This program consists of street improvements and pedestrian enhancements within Downtown Dublin (a Priority Development Area) to support and encourage transit oriented development within walking distance of the West Dublin BART Station.
250		TOD / PDA - *plans* and implementation program	Multi			Develop PDA, TOD and GOA plans and implement plan recommendations
251	ACTC	CEQA Mitigation Toolkit (for land use)	Multi			Develop a toolkit for land-use development that supports SCS
252	BART	Station Access projects (Alameda County portion)	Multi	22675	$344.1	Combines parking, smart growth / TOD, transit connectivity, bicycle / pedestrian, signage and other access modes essential to meet growing demand for BART services. Prices are broad brush, but comprehensive station plans in tandem with VTA's BART capacity study will give better definition to this large project over time.
Total by Subcategory					***$901.1***	
Overall Program Type Total					$901.1	**Proposed Total Program Allocation: $200.0M**
10. Planning/Studies - RTP ID # 240392						***Planning studies and implementation***
	10A Planning Studies and Implementation					
253	City of Berkeley	West Berkeley Circulation Master Plan Implementation	North	240229	$26.7	Implement multi-modal access and circulation projects identified in West Berkeley Circulation Master Plan and West Berkeley Project Environmental Impact Report.
254	City of Berkeley	I-80 University Ave interchange - Study *and Design*	North	240164	$33.1	Study and develop design of a full interchange for Interstate 80/580 at University Avenue in Berkeley to enable eastbound I-80 vehicles to exit and travel westbound.
255	City of Emeryville	Regional Planning and Outreach - develop a CBTP	North	240242	$0.0	Develop a Community Based Transportation Plan to: 1) provide reliable, safe, and affordable access to regional transit infrastructure in adjacent communities (Oakland and Berkeley) to residents of Emeryville; and 2) in collaboration with Oakland and Berkeley provide reliable, safe and affordable access to Emeryville jobs and retail destinations to the residents of West Berkeley and North Oakland, by addressing barriers to cross-jurisdictional, multimodal travel. *FORMERLY LISTED UNDER 4 CBTP*
256	ACE	Altamont Corridor Acquisition & Development/Short Haul Freight (Planning and Environmental phase)	South & East	240276	$0.0	Contributes local share of continuing the planning and environmental work after the HSRA funded the first 20 months of the project team effort. Given the state budget crisis, HSRA funding for this Phase II Corridor is unlikely. This funding would move the project from the Alternative Analysis to the final stages of the EIR/EIS.
257	ACE	Marketing strategies study	South & East	240299	$0.1	Marketing Strategies Study identifying what keeps commuters in their cars and out of public transit. Similar to the Caltrans license plate study, the Altamont Commuter Express seeks to gain a deeper understanding of why commuters continue to drive over the Altamont Pass amongst some of the most congested highways in California instead of taking alternative modes of transit. This study would identify deep consumer insights to help ACE develop and implement effective marketing and communication strategies aimed at digging deeper into the commuters' thoughts and feelings about their car, public transit, traffic congestion, etc. This study will identify the deep mental and emotional universal orientations that structure and guide how people think, feel, and act with regard to commuting.
258	ACE	Northern California Mega Region Rail Plan	Multi	240301	$0.1	This plan will examine how current and planned rail systems (ACE, BART, CalTrain, Amtrak San Joaquins, Amtrak Capitol Corridor, SMART, CAHSR) integrate with each other, other modes of transit, the transportation network, and land use patterns.
259		Planning studies for corridors, specified areas, programs and projects	Multi			Ongoing program. Examples of potential studies include: corridor studies, PDA/GOA plans, freight-movement, etc
Total by Subcategory					***$60.0***	
Overall Program Type Total					$60.0	**Proposed Total Program Allocation: $50.0M**
11. Transportation Demand Management (TDM), Outreach, and Parking Management Program - RTP ID # 240393						***Range of TDM and Outreach programs including Guaranteed Ride Home, Safe Routes to School (SR2S), Safe Routes to Transit (SR2T), Travel Choice, Travel Training. Parking Management includes parking cash out, variable pricing***
	11A Parking programs					
260	City of Berkeley	Downtown Berkeley Transit Center Parking Facility	North	240215	$32.5	Replace Center Street Garage with new public parking facility to serve the Downtown Berkeley BART Station and proposed Transit Center. The Downtown Berkeley Transit Center Parking Facility will serve visitors to Berkeley and travelers connecting to BART, AC Transit, and Lawrence Berkeley National Lab and UC Berkeley shuttles.
261	City of Emeryville	Parking Management	North	240195	$1.8	This project includes the second phase of the Emeryville Parking Policy and Management Implementation Plan. Phase II involves installation of 31 multi-space meters timed for short term use and 63 meters timed for long-term use in the North Hollis area, except for the low/medium density neighborhood east of Doyle Street as identified in March 2010

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Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
262	City of Oakland	Parking Management	North	240239	$10.0	Completion of a parking management plan incorporating market based pricing and regular review of parking occupancy and pricing to best serve parking demand. Installation of modern single space and multi-space meters, directional signage, automated occupancy detectors, and other appropriate technology.
263	City of Pleasanton	Park and Ride construction on Bernal Avenue	East	240165	$2.4	Construction of a 100 stall park and ride facility adjacent to the Bernal at I-680 interchange
264		Parking programs / projects	Multi			Parking upgrades (infrastructure, equipment)
265		Parking Management/Policies	Multi			Parking policies, demand management, pricing, unbundling, etc
Total by Subcategory					***$46.7***	
	11B Transit Cards					
266		Transit cards	Multi			Examples include Clipper card, discounted fares, multi-purpose smartcards, etc
Total by Subcategory					***$0.0***	
	11C School Programs*/ Promotion*					
267	City of Oakland	Local Road Safety - Neighborhood Traffic Safety Program and Safe Routes to Schools programs	North	240223	$10.0	Neighborhood Traffic Safety Program and Safe Routes to Schools programs. Includes school safety and neighborhood traffic reviews and public education and crossing guards, as well as installation of hardscape traffic calming devices (bulbouts, pedestrian safety refuges, etc)
268	In city of Alameda	Expand the Safe Routes to Schools Program	North		$12.5	*Included in the Community Based Transportation Plan*
269		Outreach to schools/ students	Multi			Outreach to schools and school districts for promoting alternative modes, as well as coordination in land-use/ PDA development
270		Crossing guard program	Multi		$30.4	Support for crossing guard programs. *FORMERLY LISTED UNDER 1-BICYCLE AND PEDESTRIAN PROGRAM*
271		Safe Routes to School implementation	Multi			Ongoing program implementation
Total by Subcategory					***$52.9***	
	11D Greenhouse gas (GHG) Reduction					
272		GHG reduction	Multi			Supports local Climate Action Plans, SCS, or addresses sea-level change
Total by Subcategory					***$0.0***	
	11E Transportation Demand Management (TDM)					
273	City of Berkeley	Parking Value-Pricing Parking/TDM Program	North	230122	$11.4	Enlarge Berkeley's pilot Value-Priced Parking and Transportation Alternatives TDM Program. Elements include upgrades to parking meters, occupancy analysis, demand-responsive pricing, enhanced enforcement, 511 Park info and wayfinding signage . Coordinated with marketing, transit passes, carsharing expansion, bikesharing, bike/ped and other TDM programs.
274	City of Oakland	Transportation Demand Management (Downtown)	North	240238	$10.0	Downtown TDM program, including operating support for free downtown shuttle circulator (The "Free B"), TDM coordination, funding of employee Transit Pass programs, and other TDM strategies, and planning for future downtown mobility improvements
275	ACTC	Develop Countywide TDM/parking guidelines/ technical assistance program	Multi			
276		Guaranteed Ride Home Program	Multi			Ongoing program implementation. *Also an element of Program 4 CBTP*
277		Travel training	Multi			Programs to educate people how to use transit , tailored to their needs. *FORMERLY LISTED UNDER 11J*
278		Safe Routes to Transit	Multi			*(Moved from 10B)*
Total by Subcategory					***$21.4***	
	11F Pricing Programs					
279		Pricing programs	Multi			Examples include congestion pricing, HOT lanes, variable parking fees
Total by Subcategory					***$0.0***	
	11G Shuttles, Streetcars - Alternatives to Fixed Transit					
280	in Oakland	Senior Shuttle Expansion	North		$0.1	City of Oakland or Bay Area Community Services (BACS) O&M Costs $85K/year
281	in W. Oakland	Youth library shuttle-W. Oakland	North		$1.5	$50-60K/Year. Included in the Community Based Transportation Plan
282	ACE	ACE Connecting Shuttle Services	South & East	240303	$0.7	Provides connecting shuttles to move ACE passenger to either other modes of transit or to their ultimate destination. Partnership with VTA, LAVTA, CCCTA, and private providers to shuttle ACE passengers to employment centers closing the 'last mile' of their commute.
283		Shuttles	Multi			Local shuttles to supplement fixed transit route service in support of TDM. Ongoing program
Total by Subcategory					***$2.3***	
	11H Carsharing					
284		Carsharing	Multi		$0.1	
285		Auto Loan Program - CBTP element	Multi		$0.1	*Included in the Community Based Transportation Plan*
Total by Subcategory					***$0.2***	

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Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
	11i *Outreach,* Education and Marketing					
286		Promotion of biking and walking	Multi			Examples include Bike to Work Day, Bike/Walk to School day, active transportation, etc. *FORMERLY LISTED UNDER 1-BICYCLE/PEDESTRIAN PROGRAM*
287		Bicycle safety	Multi			Examples include Street Skills /Road I bike classes, and Share the Road campaigns. *FORMERLY LISTED UNDER 1-BICYCLE/PEDESTRIAN PROGRAM*
288		Multi-lingual outreach	Multi			Creating non-English (and culture-sensitive) versions of transportation marketing and education materials. *FORMERLY LISTED UNDER 10C*
289		Outreach/Promotion/Education	Multi		$ 30.0	Covers transit, bike, walking, paratransit, alternatives to SOV driving, and other support programs. Cost estimate from 2006 Countywide Bike/Ped Plans. *FORMERLY LISTED UNDER 10B*
290		*Real time information*	Multi			Examples include real-time transit information, 511, etc
Total by Subcategory					***$30.0***	
Overall Program Type Total					$153.5	**Proposed Total Program Allocation: $75.0M**
12. Goods Movement Program - RTP ID # 240394						***Freight-related improvements for truck, rail and ports (capital, operations, ROW) such as truck parking, grade separations, etc***
291		Goods Movement Program	Multi		$ 10.0	Improvements in support of freight transportation to support economic vitality
Total by Subcategory					***$10.0***	
	12A Truck Parking					
292	ACTC	Local Air Quality and Climate Protection Strategies (Implementation of 2008 Truck Parking Study)	Multi	230117	$5.0	Implements the recommendations of the ACTC Board adopted Truck Parking Facility Feasibility and Location Study (December 2008) funded by Caltrans and managed by the CMA.
Total by Subcategory					***$5.0***	
	12B Port Operations Improvements					
293	Port of Oakland	Shore power for ships at the Port of Oakland	North	240190	$90.0	Install electric utility infrastructure throughout the Port's marine terminal area to provide shore-side power connections that allow vessels at-berth to turn off their diesel auxiliary engines.
Total by Subcategory					***$90.0***	
	12C Truck Impacts to Local Streets - Improvements For					
294	City of Oakland	Melrose - Coliseum District Street Reconstruction (formerly 'Oakland Coliseum Transportation Infrastructure Access Improvements'?)	North	240290	$13.2	Reconstruct Coliseum Way and 50th Avenue to handle heavy truck traffic, reduce safety hazards due to sight distance, and provide bicycle and pedestrian safety facilities.
295	City of Oakland	Woodland - 81st Avenue Industrial Zone street reconstruction	North	240280	$11.5	Reconstruct goods movement streets within the Woodland-81st Avenue industrial area to withstand heavy truck traffic; modify gateways, provide at-grade safe RR crossings.
Total by Subcategory					***$24.7***	
	12D Truck Routing					
296	City of Oakland	Goods Movement: Truck Facilities, Truck Route Rehabilitation	North	240237	$20.0	Provision of truck storage facilities away from residential areas and improvement/re-routing of regional truck routes on Oakland City streets. Improve industrial load-bearing streets to withstand impact of truck movement.
Total by Subcategory					***$20.0***	
	12E Freight Operations Improvements (rail, roads, port)					
297		Truck Services at Oakland Army Base (ROW)	North		$20.0	$20 million (land costs only)
Total by Subcategory					***$20.0***	
Overall Program Type Total					$169.7	**Proposed Total Program Allocation: $200.0M**
13. PDA Support - Non-Transportation Program - RTP ID # 240395						***Non-transportation infrastructure to support Priority Development Areas such as sewer, utilities, etc.***
298	City of Livermore	Regional Air Quality and Climate Protection Strategies	East	240256	20	Construct public infrastructure and enhancements to support TOD in the PDAs
299		Non-transportation infrastructure in PDAs	Multi			Includes utilities, sewers, drainage to support development in PDAs
Total by Subcategory					***$20.0***	
Overall Program Type Total					$20.0	**Proposed Total Program Allocation: $25.0M**

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Table B.9 Sample Eligible Projects* by Programmatic Category

#	Sponsor/ Location	Program Name	Planning Area	RTP ID# (if application submitted)	Cost Estimate ($M)	Project Description
14. Environmental Mitigation Program - RTP ID # 240396						***Mitigation of environmental impacts to support projects moving to construction, such as land banking***
300		Environmental Mitigation for major projects	Multi			Examples include off-site mitigations, land banking
Total by Subcategory					***$0.0***	
Overall Program Type Total					$0.0	**Proposed Total Program Allocation: $25.0M**
15. Transportation Technology and Revenue Enhancement Program - RTP ID # 240397						***Emerging technologies for transportation and revenue efficiency such as charging stations, communication, HOT/Express lanes toll collection, etc***
301	ACE	ACE eTicketing	South & East	240253	$1.5	Electronic fare collection system with seamless Clipper integration and associated infrastructure.
302	Stopwaste.org	Transportation Energy from Waste	Multi		$75.0	
303		Alternative and sustainable fuel sources - use of	Multi			
304		Alternative Fuel stations - comprehensive network of	Multi			
Total by Subcategory					***$76.5***	
Overall Program Type Total					$76.5	**Proposed Total Program Allocation: $75.0M**
GRAND TOTAL					**$13,578.1**	

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