

# COAST, CANYONS, AND TRAILS COMPREHENSIVE MULTIMODAL CORRIDOR PLAN

## Appendix E: Implementation

- E1. Model and Off-Model Performance Results
- E2. Cost Estimates
- E3. Implementation Assessment Matrix
- E4. Funding Sources

## E1. Model and Off-Model Performance Results

### MODEL PERFORMANCE RESULTS

The Coast, Canyon, and Trails CMCP analyzed a 2050 Coast, Canyon, and Trails CMCP Build (CCT CMCP Build) condition using the SANDAG Activity Based Model 2+(ABM2+)<sup>1</sup>, including the applicable transportation solutions identified in Chapter 4: Transportation Solution Strategies. This model analysis included short-, medium- and long-term projects from the CMCP inventory, as well as the full buildout of the 2021 Regional Plan<sup>2</sup>, including the Sustainable Communities Strategy (SCS)<sup>3</sup>.

The modeled scenarios are numbered below.

Model Year 2016:

1. 2016 Base Conditions (DS 39)

Model Year 2050:

2. 2021 RP Build Network with TSS (DS 38)
3. CCT CMCP Alternative 2 Build with TSS (DS 38)
4. CCT CMCP Alternative 3 Build with TSS (DS 38)

The scenarios included both Demographic Scenario 39 (DS 39), which is based on existing general planned land uses within the County of San Diego, as well as Demographic Scenario 38 (DS 38), which includes anticipated land use intensification based on the 2021 Regional Plan SCS. The second scenario, 2021 RP Build Network with SCS (DS 38), does not include the transportation solutions identified in the CCT CMCP. The third and fourth scenarios, CCT CMCP Alternative 2 and 3 Build with TSS (DS 38), include the projects in the 2021 Regional Plan and the transportation solutions identified in the CCT CMCP. Respectively, Alternatives 2 and 3 reference different TSS, which are described in Chapter 4: Transportation Solutions. High-frequency transit<sup>4</sup>,

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<sup>1</sup> SANDAG ABM2+: <https://github.com/SANDAG/ABM/wiki>

<sup>2</sup> SANDAG 2021 Regional Plan: <https://www.sandag.org/regional-plan/2021-regional-plan>

<sup>3</sup> SANDAG Sustainable Community Strategies: <https://www.sandag.org/-/media/SANDAG/Documents/PDF/regional-plan/2021-regional-plan/final-2021-regional-plan/2021-regional-plan-appendix-d-2021-12-01.pdf>

<sup>4</sup> High-Frequency Transit can be characterized as transit headways between 2-6 minutes, 10-30 buses per hour, or a system capable of carrying 500 – 2,000 passengers per hour. [Transit Frequency & Volume | National Association of City Transportation Officials \(nacto.org\)](https://www.nacto.org/publications/transit-frequency-volume/)

The project team did not evaluate a mid-term (2035) scenario. Out of the 367 total projects in the original project inventory, 177 were able to be coded into the ABM2+ since many of the projects are soft improvements that will not impact the performance measures included in the ABM2+. Examples of projects that were not able to be modeled include: sidewalk improvements, intersection control evaluations, and evacuation warning sirens, certain technology improvements and environmental projects. While these projects will not impact the quantitative performance measure outputs, they will provide noted benefits to corridor users and help advance the needs identified by the public and subject matter experts (SME). Additionally, due to the more limited number of projects that were able to be modeled in the 2050 Build scenario, and the limited population and geographic area of the corridor, the ABM2+ performance measure results were not anticipated to show significant differences between the No-Build and Build conditions. Therefore, the project team evaluated the cumulative impacts of all short-, mid-, and long-term projects under 2050 Build conditions.

For the purposes of this analysis, model significance is defined as being above the threshold of "model noise," (percent variation in results of +/- 0.2%).

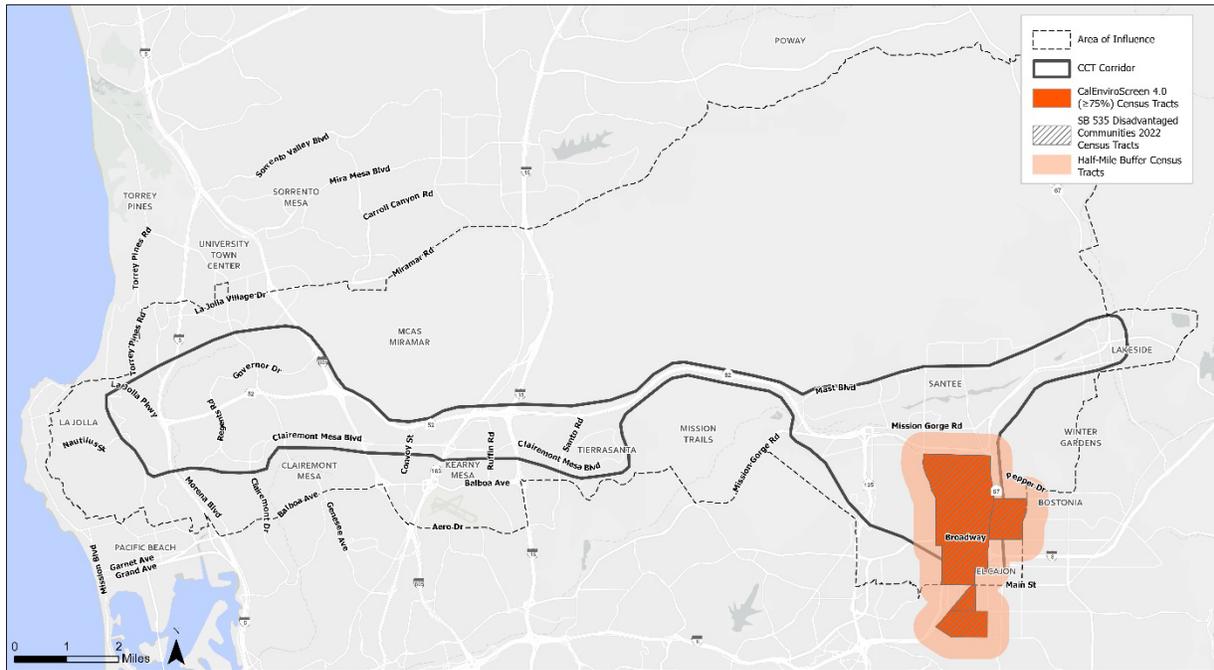
## OFF-MODEL PERFORMANCE RESULTS

The Equitable Investments Analysis performance metric is an off-model metric. The goal of the CCT CMCP Equitable Investments Analysis is to identify the value of strategies recommended within Disadvantaged Communities. Disadvantaged Communities are defined as:

- Census Tracts with a CalEnviroScreen 4.0 score  $\geq 75\%$  (the highest 25%); or
- Census Tracts designated as Disadvantaged Communities by CalEPA under SB 525.

**Figure E-1** identifies the Census Tracts meeting the criteria with a half-mile buffer.

Figure E-1: Census Tracts Identified as a Disadvantaged Community



Four Disadvantaged Community Census Tracts are within the study area and vicinity, each meeting both criteria identified above. Two of the Census Tracts are partially within the CCT Study Area, while two additional Census Tracts are just outside the Area of Influence.

A spatial analysis was performed to identify strategies within a ½-mile as-the-crow flies buffer of the Disadvantaged Communities. The buffer was utilized considering people within the Disadvantaged Communities will use and benefit from nearby strategies.

Only the portion of the strategy within the ½-mile as-the-crow flies buffer was recognized as a Disadvantaged Community investment. For example, if half of a \$1,000,000 strategy was within ½-mile of a Disadvantaged Community Census Tract and the other half was beyond, \$500,000 would be categorized as a Disadvantaged Community investment.

The analysis was performed for CCT-specific strategies under each of the 5 Big Moves (Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets, Next OS), including Alternatives 1, 2, and 3. Regionwide strategies, operating costs, and strategies that did not have a cost estimate were excluded. **Table E-1** summarizes the analysis results.

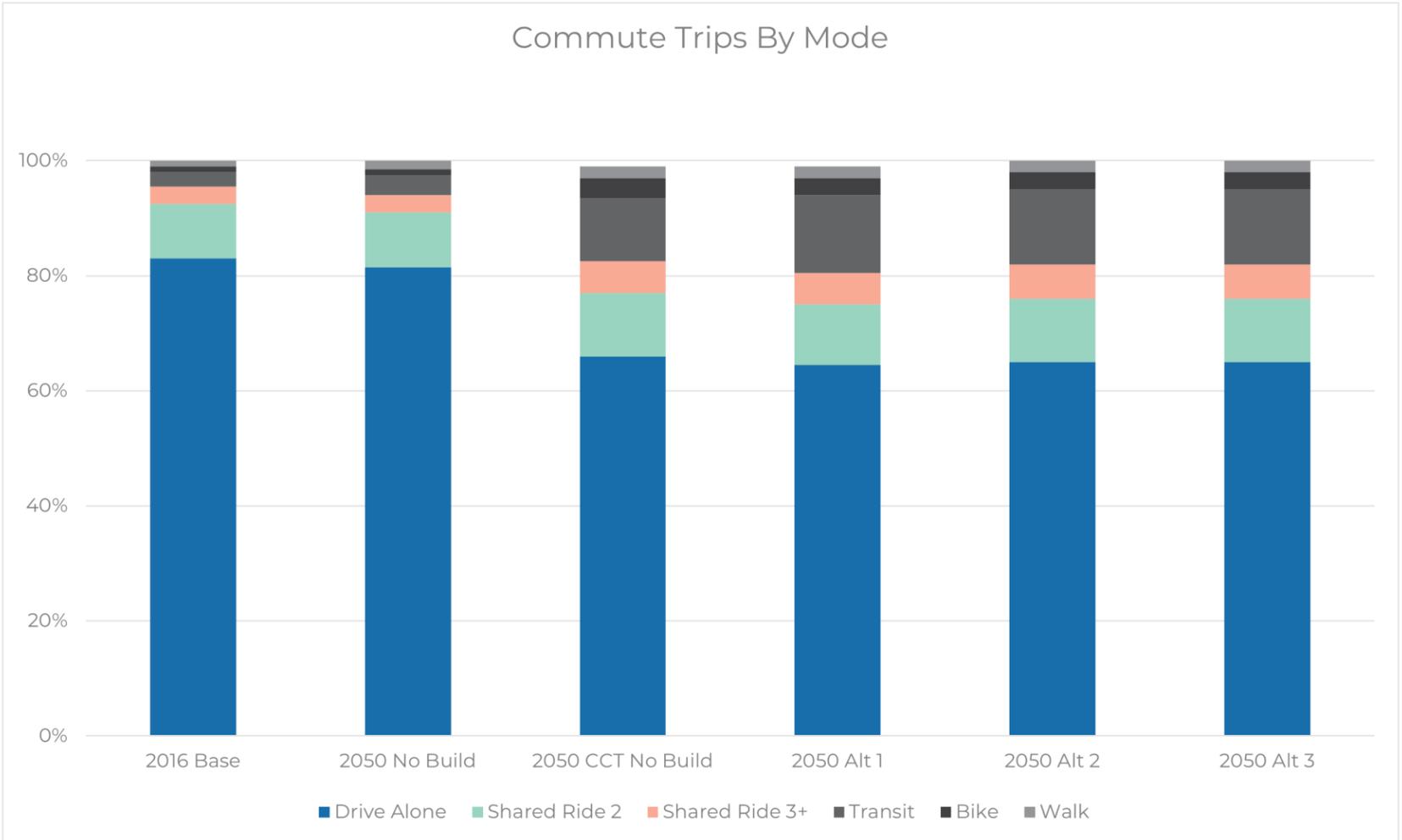
**Table E-1: Investments in Disadvantaged Communities**

	<b>Alt 1</b>	<b>Alt 2</b>	<b>Alt 3</b>
<b>Investments in Disadvantaged Community</b>	\$153,260,000	\$344,110,000	\$436,880,000
<b>Total CCT-Specific Investments <sup>5</sup></b>	\$4,269,529,000	6,130,610,000	6,470,186,000
<b>% of Investments Located in Disadvantaged Community</b>	3.6%	5.6%	6.8%

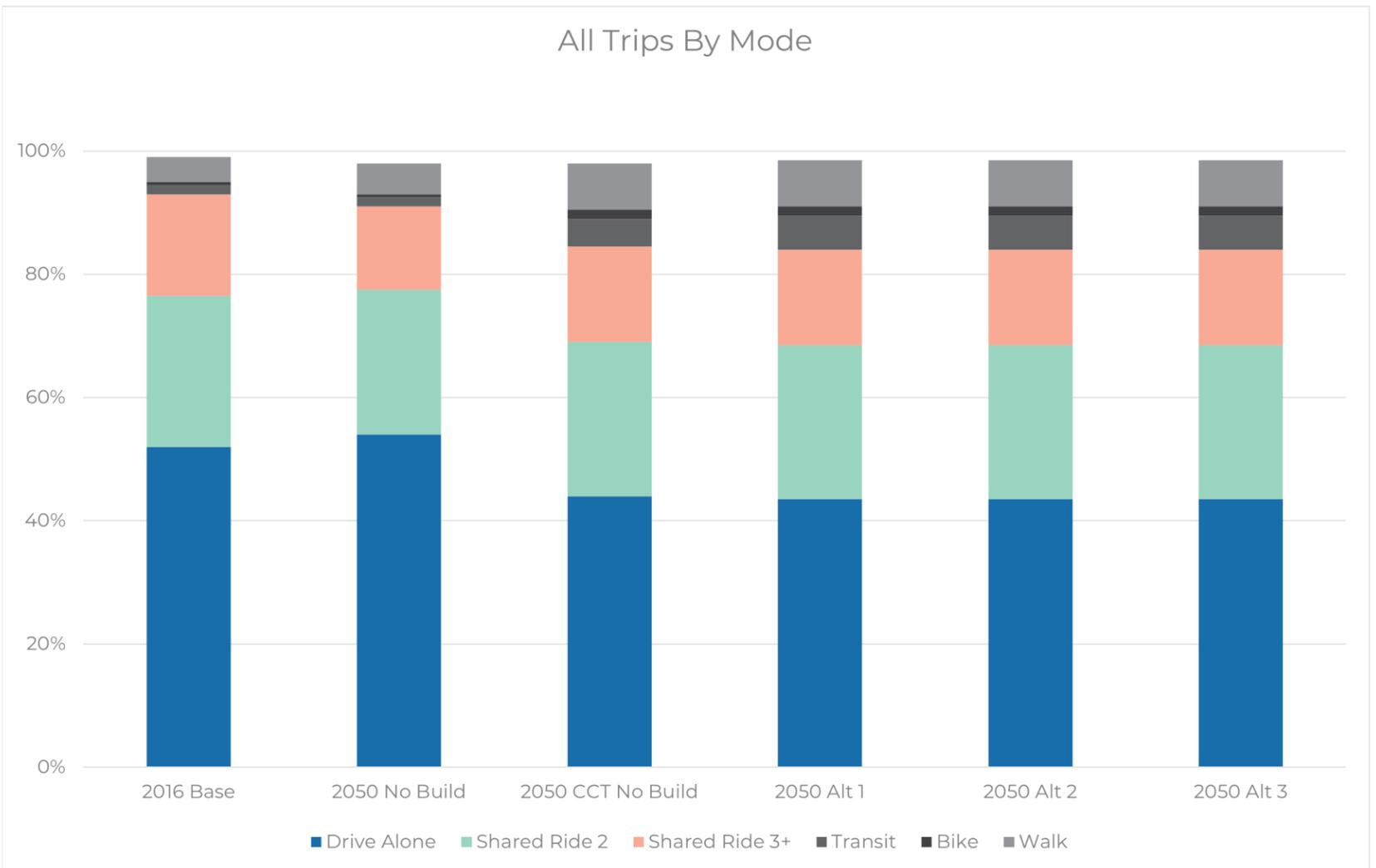
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<sup>5</sup> Projects excluded from the analysis are not included in the total

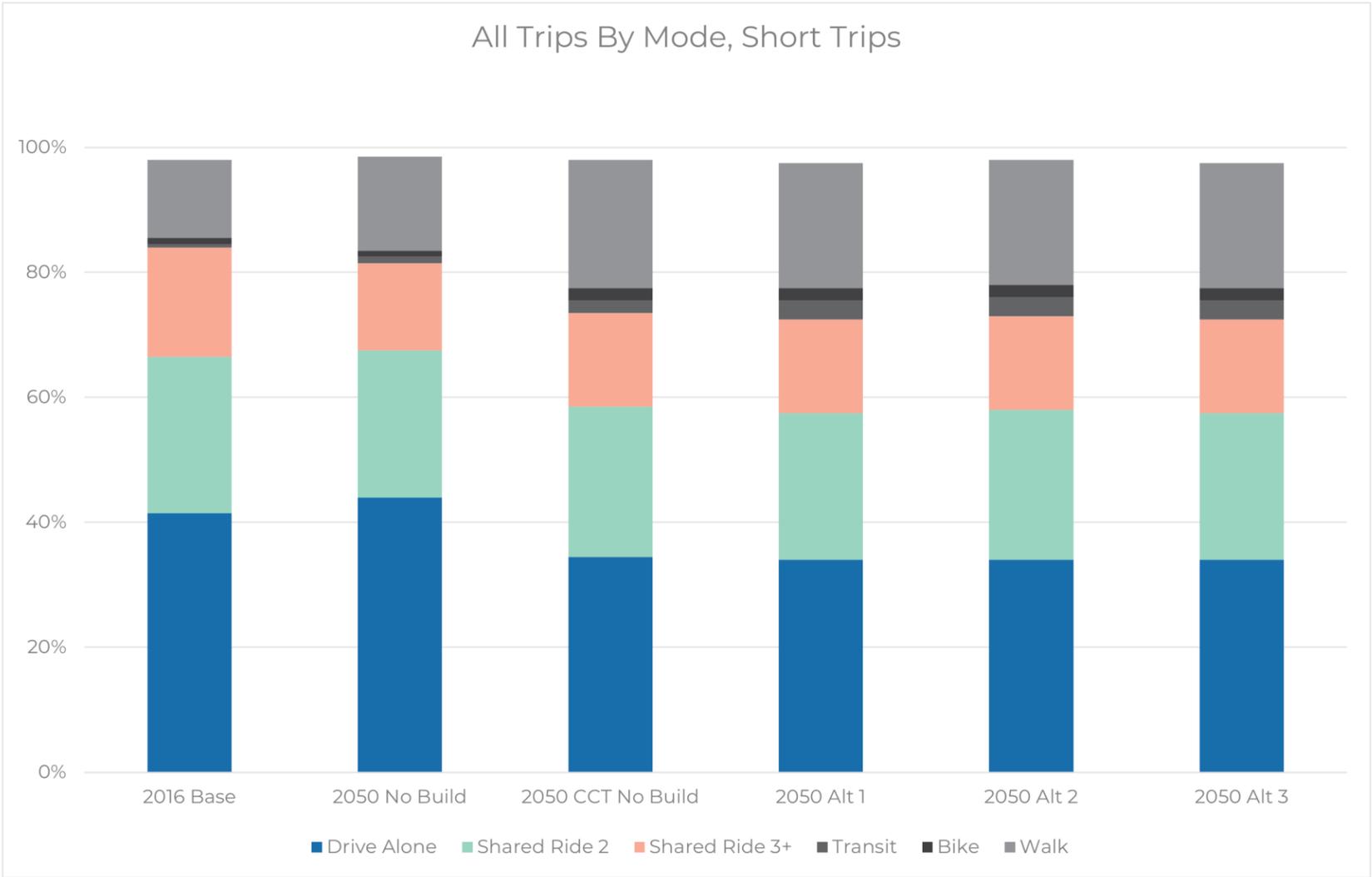
**Figure E-2: Commute Trips by Mode Chart**



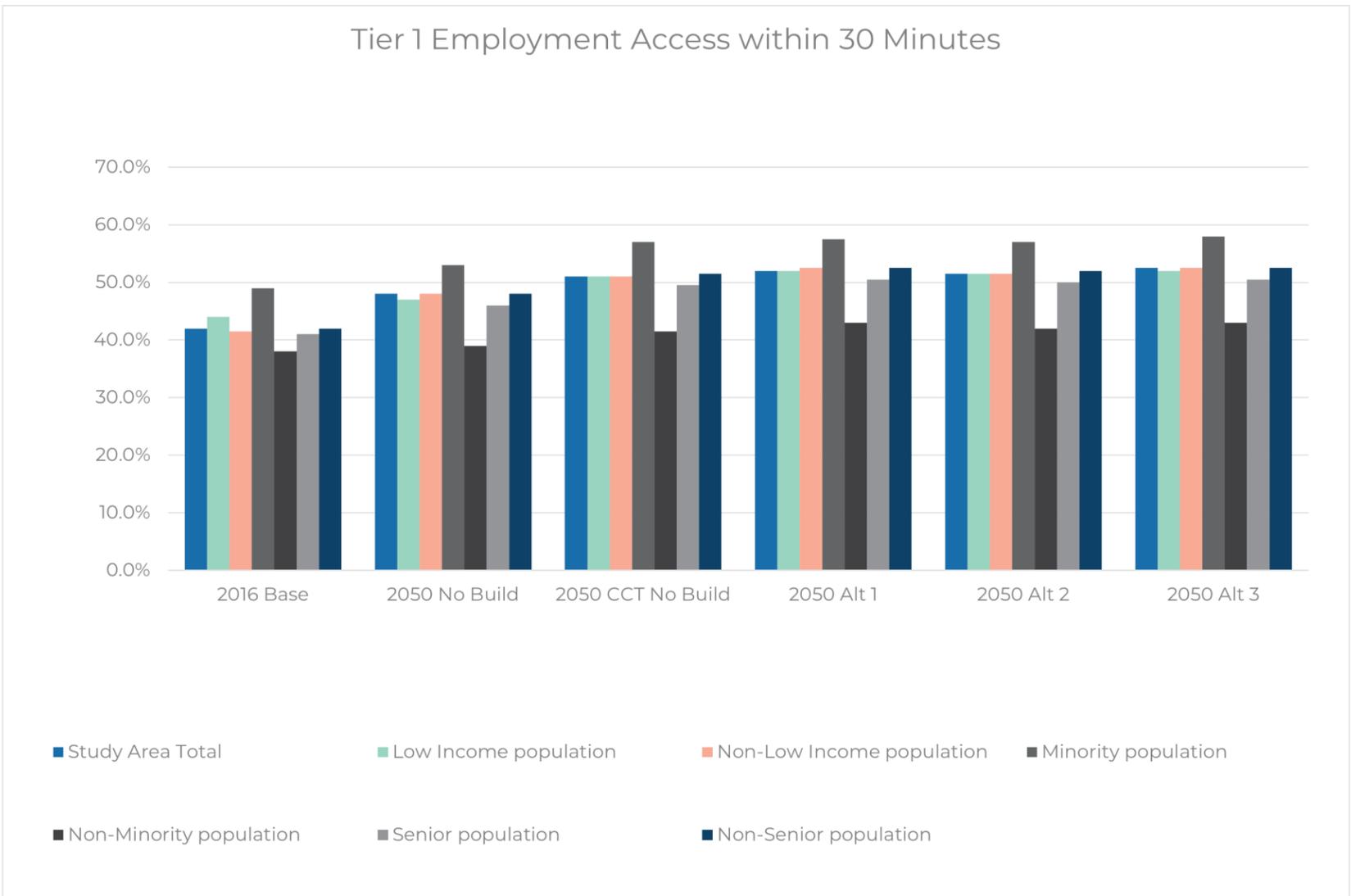
**Figure E-3: All Trips by Mode Chart**



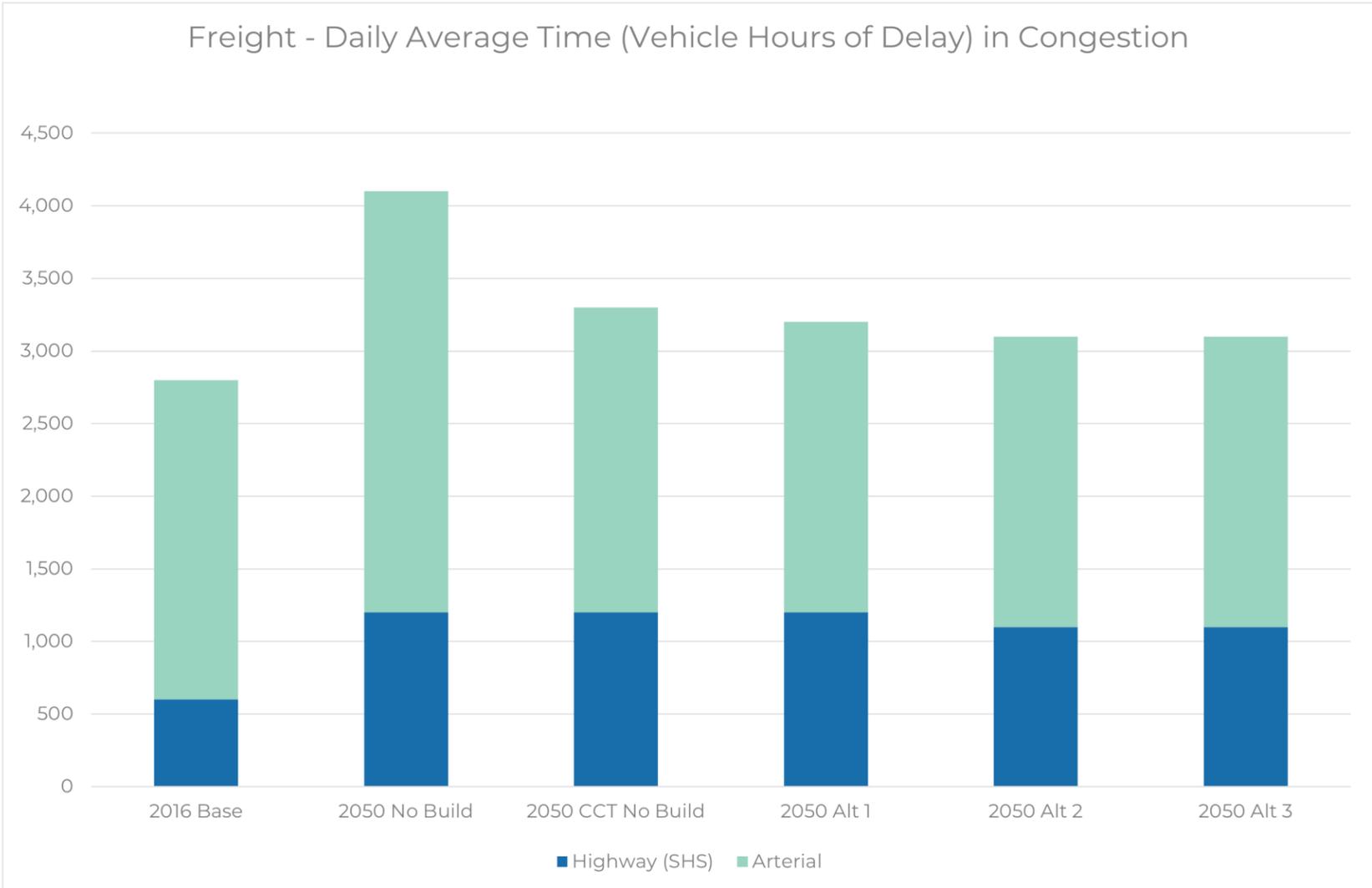
**Figure E-4: All Trips by Mode, Short Trips Chart**



**Figure E-5: Tier 1 Employment Access Within 30 Minutes Chart**



**Figure E-6:** Freight – Daily Average Time (Vehicle Hours of Delay) in Congestion Chart



**Figure E-7:** Percentage of Population Within 0.5 Miles of High Frequency Transit Chart

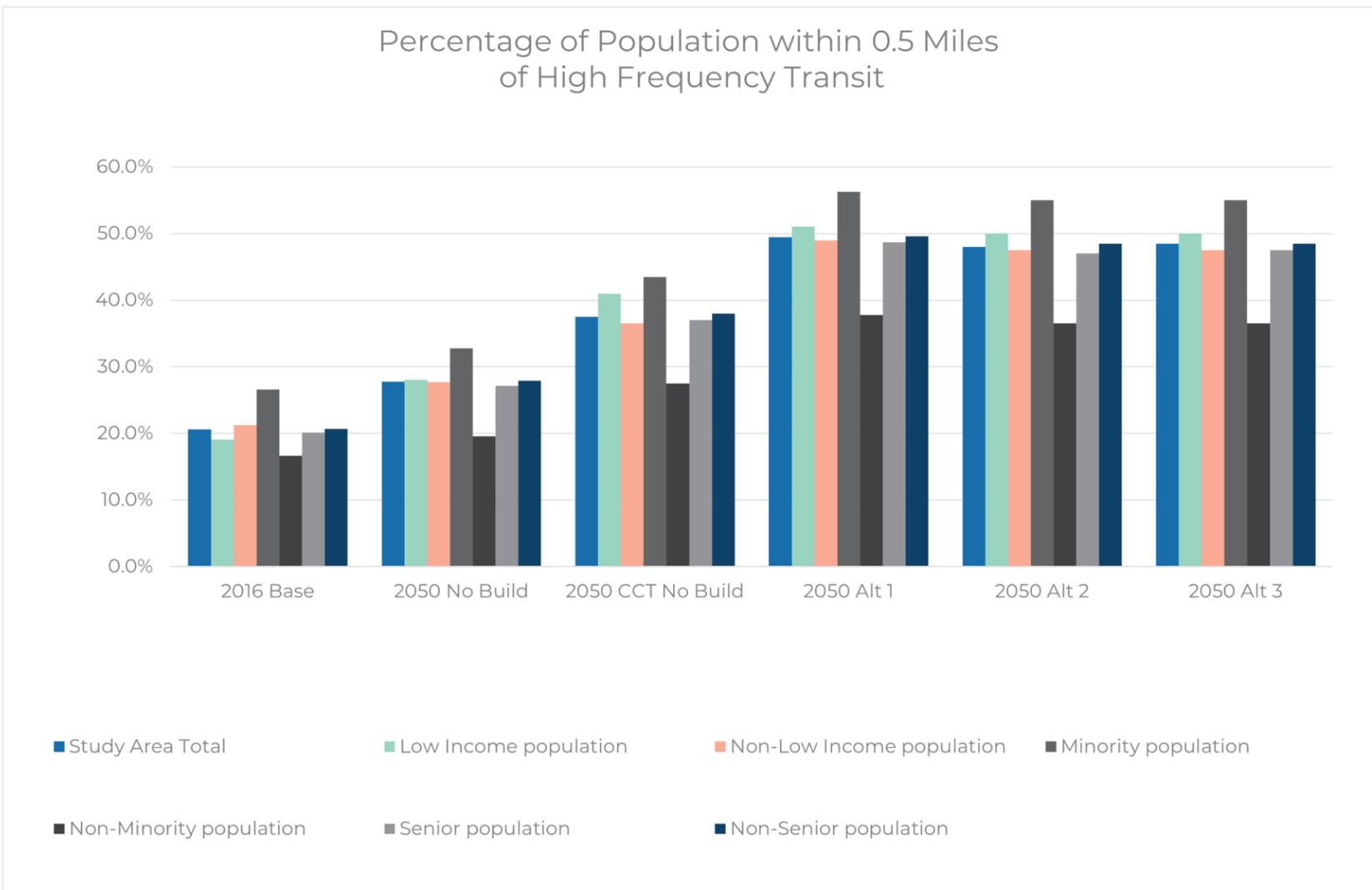


Table E-2 Performance Table

				Base	2021 RP No Build Network & DS 39	CMCP CCT NB (DS 38)	2021 RP Build Network & DS 38	Corridor Alt 2 (DS38)	Corridor Alt 3 (DS38)
				2016	2050 NB	2050	2050	2050	2050
Scenario ID				2016 Base	2050 No Build	2050 CCT No Build	2050 Alt 1	2050 Alt 2	2050 Alt 3
Multimodal focus	Mode Share (commute trips, all trips)	Commute Trips	Drive Alone	82.8%	81.6%	66.1%	64.6%	65.0%	65.0%
			Shared Ride 2	9.3%	9.3%	11.2%	10.7%	10.8%	10.8%
			Shared Ride 3+	3.2%	2.8%	5.7%	5.7%	5.8%	5.8%
			Transit	2.6%	3.7%	11.1%	13.3%	12.8%	12.8%
			Bike	0.9%	1.0%	3.3%	3.2%	3.2%	3.2%
			Walk	1.1%	1.3%	2.0%	1.9%	1.9%	1.9%
		All Trips	Drive Alone	51.8%	54.1%	44.2%	43.6%	43.7%	43.7%
			Shared Ride 2	24.6%	23.7%	25.1%	24.8%	24.9%	24.9%
			Shared Ride 3+	16.5%	13.4%	15.4%	15.3%	15.4%	15.4%
			Transit	1.3%	1.7%	4.4%	5.5%	5.3%	5.3%
			Bike	0.5%	0.6%	1.4%	1.4%	1.4%	1.4%
			Walk	4.2%	5.2%	7.6%	7.5%	7.5%	7.5%
	Percent Change in Mode Share (commute trips, all trips)	Commute Trips	Drive Alone				-17.0%	65.0%	-1.1%
			Shared Ride 2				1.4%	10.8%	-0.5%
			Shared Ride 3+				2.9%	5.8%	0.1%
			Transit				9.6%	12.8%	1.7%
			Bike				2.2%	3.2%	-0.1%
			Walk				0.6%	1.9%	-0.1%
		All Trips	Drive Alone				-10.5%	43.7%	-0.5%
			Shared Ride 2				1.1%	24.9%	-0.2%
			Shared Ride 3+				2.0%	15.4%	0.0%
			Transit				3.8%	5.3%	0.9%
			Bike				0.8%	1.4%	0.0%
			Walk				2.2%	7.5%	-0.1%
Mode share for short trips (3 miles or less for all trip types)	All Trips	Drive Alone	41.7%	44.0%	34.3%	33.8%	34.0%	33.9%	
		Shared Ride 2	25.1%	23.5%	23.8%	23.7%	23.8%	23.7%	
		Shared Ride 3+	17.4%	13.8%	15.0%	14.8%	14.8%	14.8%	
		Transit	0.7%	0.9%	2.1%	3.1%	3.0%	2.9%	
		Bike	0.9%	1.0%	1.9%	1.9%	1.9%	1.9%	
		Walk	12.5%	15.2%	20.4%	20.0%	20.1%	20.2%	
Multimodal focus		Commute Trips	Drive Alone	217,059	233,997	175,901	173,233	173,535	173,694

				Base	2021 RP No Build Network & DS 39	CMCP CCT NB (DS 38)	2021 RP Build Network & DS 38	Corridor Alt 2 (DS38)	Corridor Alt 3 (DS38)
				2016	2050 NB	2050	2050	2050	2050
	Person Trips (commute trips, all trips)		Shared Ride 2	24,285	26,675	29,947	28,792	28,703	28,805
			Shared Ride 3+	8,377	8,024	15,240	15,219	15,435	15,553
			Transit	6,786	10,530	29,527	35,696	34,137	34,083
			Bike	2,291	2,990	8,681	8,607	8,410	8,436
			Walk	2,811	3,615	5,317	5,100	5,063	5,136
			Total	262,246	286,684	266,217	268,206	266,904	267,269
			All Trips	Drive Alone	1,285,711	1,527,854	1,202,323	1,189,992	1,190,870
	Shared Ride 2	609,452		669,902	681,668	677,411	677,049	676,470	
	Shared Ride 3+	410,575		376,767	419,885	418,181	419,534	420,463	
	Transit	32,024		47,417	119,497	149,519	144,256	143,837	
	Bike	12,317		16,993	38,788	38,267	37,360	37,733	
	Walk	103,112		147,861	206,456	203,350	203,193	204,599	
	Total	2,482,130		2,821,680	2,718,064	2,726,911	2,722,019	2,722,027	
	Person Trips for short trips (3 miles or less for all trip types)	All Trips	Drive Alone	342,611	427,851	347,152	343,373	344,217	343,783
			Shared Ride 2	206,421	228,574	240,942	241,029	240,524	239,795
			Shared Ride 3+	143,006	134,102	151,261	150,573	149,965	150,481
			Transit	6,113	9,190	21,251	31,752	29,912	29,832
			Bike	7,318	10,132	19,378	19,207	19,015	19,274
			Walk	103,112	147,861	206,456	203,350	203,193	204,599

				Base	2021 RP No Build Network & DS 39	CMCP CCT NB (DS 38)	2021 RP Build Network & DS 38	Corridor Alt 2 (DS38)	Corridor Alt 3 (DS38)
				2016	2050 NB	2050	2050	2050	2050
			Total	821,707	972,697	1,011,591	1,015,392	1,012,378	1,013,547
Economic development and goods movement	Percent of residents that can access tier 1 & 2 employment centers or higher education within 30 and 45 minutes (Social Equity Analysis)	Tier 1 Employment Center - 30min	Study Area Total	42.1%	47.8%	51.1%	52.2%	51.5%	52.3%
			Low Income population	44.2%	47.2%	51.2%	51.8%	51.4%	52.0%
			Non-Low Income population	41.4%	48.0%	51.1%	52.3%	51.5%	52.3%
			Minority population	49.0%	53.1%	56.8%	57.7%	57.1%	57.8%
			Non-Minority population	38.1%	39.1%	41.4%	42.8%	42.0%	42.8%
			Senior population	41.2%	46.0%	49.4%	50.6%	49.9%	50.7%
			Non-Senior population	42.2%	48.1%	51.4%	52.5%	51.8%	52.5%
		Tier 2 - 30min	Study Area Total	28.5%	31.6%	54.8%	56.5%	54.7%	53.9%
			Low Income population	39.1%	36.5%	60.0%	61.6%	60.1%	59.5%
			Non-Low Income population	24.9%	30.2%	53.3%	55.0%	53.2%	52.3%
			Minority population	31.9%	34.6%	60.3%	62.4%	60.6%	59.8%
			Non-Minority population	26.5%	26.7%	45.5%	46.6%	44.8%	43.8%
			Senior population	26.2%	31.1%	53.4%	55.1%	53.1%	52.2%
			Non-Senior population	28.7%	31.7%	55.1%	56.8%	55.0%	54.2%
		Higher Education - 30min	Study Area Total	46.7%	55.3%	59.1%	60.3%	58.9%	59.8%
			Low Income population	55.8%	66.1%	68.9%	69.7%	68.8%	69.4%
			Non-Low Income population	43.5%	52.2%	56.2%	57.6%	56.0%	57.0%
			Minority population	56.7%	61.5%	65.5%	66.5%	65.3%	66.2%
			Non-Minority population	40.8%	45.2%	48.2%	49.8%	48.1%	49.0%
			Senior population	43.1%	51.7%	55.6%	57.1%	55.3%	56.3%
			Non-Senior population	47.0%	56.0%	59.7%	60.9%	59.6%	60.4%
		Tier 1 Employment Center - 45min	Study Area Total	47.4%	52.0%	58.0%	68.3%	67.6%	63.9%
			Low Income population	48.5%	55.5%	64.1%	72.9%	72.2%	69.9%
			Non-Low Income population	47.1%	50.9%	56.2%	67.0%	66.2%	62.2%
			Minority population	53.4%	56.2%	62.9%	72.0%	71.3%	68.4%
			Non-Minority population	44.0%	45.1%	49.6%	62.0%	61.2%	56.2%
			Senior population	46.7%	49.2%	55.2%	66.1%	65.3%	61.2%
			Non-Senior population	47.5%	52.5%	58.5%	68.7%	68.0%	64.4%
Tier 2 - 45min	Study Area Total	60.9%	69.6%	83.2%	83.8%	83.0%	76.8%		
	Low Income population	72.6%	74.1%	88.8%	89.4%	88.9%	84.7%		
	Non-Low Income population	56.9%	68.4%	81.6%	82.2%	81.3%	74.4%		
	Minority population	66.4%	73.6%	86.3%	86.8%	86.1%	81.2%		
	Non-Minority population	57.8%	63.2%	77.9%	78.6%	77.6%	69.3%		

				Base	2021 RP No Build Network & DS 39	CMCP CCT NB (DS 38)	2021 RP Build Network & DS 38	Corridor Alt 2 (DS38)	Corridor Alt 3 (DS38)	
				2016	2050 NB	2050	2050	2050	2050	
	Higher Education - 45min	Senior population		57.5%	68.4%	81.5%	82.1%	81.1%	74.2%	
		Non-Senior population		61.3%	69.9%	83.5%	84.1%	83.3%	77.2%	
		Study Area Total		63.6%	69.1%	71.7%	79.6%	76.3%	74.8%	
		Low Income population		72.4%	78.4%	79.3%	85.8%	82.7%	82.6%	
		Non-Low Income population		60.6%	66.4%	69.4%	77.7%	74.4%	72.5%	
		Minority population		71.7%	74.4%	76.6%	83.2%	80.3%	79.3%	
		Non-Minority population		58.9%	60.5%	63.4%	73.4%	69.5%	67.0%	
		Senior population		61.5%	65.9%	69.1%	77.7%	74.0%	72.2%	
	Non-Senior population		63.8%	69.7%	72.2%	79.9%	76.7%	75.2%		
	Freight - Average amount of time in congestion	All day - All Heavy Duty (HHD + MHD + LHD)	Highway (SHS)		558	1,238	1,196	1,178	1,085	1,076
			Arterial		2,232	2,939	2,059	1,960	1,963	1,969
			Total		2,790	4,177	3,256	3,139	3,048	3,045
		AM and PM peak - All Heavy Duty (HHD + MHD + LHD)	Highway (SHS)		451	900	749	717	660	648
			Arterial		989	1,328	903	854	845	850
			Total		1,441	2,228	1,651	1,571	1,505	1,498
	System operations and congestion relief	Daily Vehicle hour delay by vehicle class	All Day	SOV		63,264	92,005	52,834	49,131	51,214
HOV					11,256	15,591	11,671	11,000	11,459	11,448
Bus					155	200	186	375	407	418
AM and PM peak			SOV		42,336	60,721	32,808	29,981	31,252	31,148
			HOV		7,286	9,822	7,046	6,509	6,781	6,756
			Bus		82	105	94	186	207	210
Daily vehicle delay per capita (min)				15.9	19.5	11.6	10.9	11.3	11.3	
Low-income and disadvantaged community focus		Percentage of population within 0.5 miles of high frequency transit stop (Social Equity Analysis)	Study Area Total	Study Area Total	20.6%	27.8%	37.7%	49.5%	48.2%	48.3%
			Low Income population	Low Income population	19.1%	28.0%	40.9%	51.1%	50.0%	50.0%
	Non-Low Income population		Non-Low Income population	21.2%	27.7%	36.7%	49.0%	47.7%	47.7%	

				Base	2021 RP No Build Network & DS 39	CMCP CCT NB (DS 38)	2021 RP Build Network & DS 38	Corridor Alt 2 (DS38)	Corridor Alt 3 (DS38)
				2016	2050 NB	2050	2050	2050	2050
		Minority population	Minority population	26.6%	32.8%	43.6%	56.3%	55.0%	55.0%
		Non-Minority population	Non-Minority population	16.7%	19.6%	27.5%	37.8%	36.6%	36.6%
		Senior population	Senior population	20.1%	27.1%	37.0%	48.7%	47.2%	47.3%
		Non-Senior population	Non-Senior population	20.7%	27.9%	37.8%	49.6%	48.3%	48.4%
	Accessible investments in disadvantaged communities (investment amount or percent)								
Reduce greenhouse gas emissions and Vehicle Miles Traveled (VMT)	Daily VMT	Study Area Total	Study Area Total	11,290,459	12,973,001	11,347,869	11,226,853	11,211,579	11,216,646
		SB743 VMT per resident	SB743 VMT per resident	19.34	19.32	16.31	16.11	16.2	16.2
		SB743 VMT per employee	SB743 VMT per employee	27.55	26.43	22.48	22.04	22.2	22.19
		Lane Mile		6,949	7,705	6,714	6,366	6,361	6,364
	Greenhouse Gas (GHG) Emissions	Study Area Total							
Improve air quality and public health	On-road smog-forming pollutants (pounds/day) per capita (ROG, NOx) (summer)	ROG							
		Nox							
	Average PM 2.5 exposure	Study Area Total							
	Near-roadway population exposure (social equity analysis)	Study Area Total		1.6%	3.6%	1.2%	1.4%	2.3%	2.3%
		Low Income population		1.8%	3.6%	1.5%	1.2%	2.8%	2.8%
	Non-Low Income population		1.5%	3.6%	1.1%	1.5%	2.2%	2.2%	

			Base	2021 RP No Build Network & DS 39	CMCP CCT NB (DS 38)	2021 RP Build Network & DS 38	Corridor Alt 2 (DS38)	Corridor Alt 3 (DS38)
			2016	2050 NB	2050	2050	2050	2050
		Minority population	1.6%	3.7%	1.3%	1.3%	2.4%	2.4%
		Non-Minority population	1.6%	3.3%	1.1%	1.5%	2.2%	2.2%
		Senior population	1.8%	3.6%	1.2%	1.5%	2.2%	2.2%
		Non-Senior population	1.6%	3.5%	1.2%	1.4%	2.3%	2.3%
Active transportation and micromobility	Bicycle and pedestrian miles traveled	Pedestrian	161,826	217,369	314,024	329,982	328,698	328,522
		Bicycle	44,191	61,094	189,336	188,288	180,779	182,306
	Percent of the population engaged in 20 minutes or more of transportation related physical activity		11.7%	14.4%	22.2%	23.1%	22.9%	22.9%
Improve jobs-housing balance	Population in multifamily residences within 0.25 miles of a transit stop	Number	88,080	148,326	148,953	150,777	148,159	141,078
		Percent	73.9%	79.8%	80.1%	81.1%	79.7%	75.9%
	Average peak commute time to work (min)	Drive Alone	23.6	25.2	22.8	22.5	22.8	22.7
		Shared Ride 2	22.4	23.1	21.4	20.8	21.1	21.1
		Shared Ride 3+	22.2	24.2	21.2	20.6	20.4	20.5
		Transit	66.1	61.3	50.8	49.6	49.9	49.3
		Bike	26.7	27.5	27.0	28.3	27.3	27.5
		Walk	22.9	23.4	24.3	24.1	23.8	23.9
Increase supply of affordable housing	Multifamily housing within 0.5 miles of high frequency transit	Number	26,804	54,754	62,729	70,648	70,099	70,167
		Percent	54.8%	66.4%	76.1%	85.7%	85.0%	85.1%

## E2. Capital Cost Estimates

Capital Costs were estimated for each strategy identified as part of the CCT CMCP, except for microtransit strategies where operating costs are used. The estimates include construction, design, engineering, and planning. Costs are rough order of magnitude costs that were derived from SANDAG’s 2021 Regional Plan exercise<sup>6</sup>, to be consistent with other agencies’ plans and efforts. Estimates derived from other CMCPs were also reviewed to further add consistency across the CMCP program. Costs for each individual strategy are independent of other related strategies. Of the 367 strategies in the CCT CMCP, 246 were analyzed for cost estimates due to overlapping strategies (e.g. multiple *Rapid* bus on the same alignment). The total estimated cost for the 246 strategies is \$4.59 billion.

The total cost of TSS unique to the CCT CMCP is \$4.59 billion, \$22.31 billion less than the total of all TSS in the CCT CMCP study area. Most of the difference between the total and CCT-only costs is attributable to the Commuter Rail 582 (Purple Line), which has an estimated cost of \$15.7 billion. Eight other Transit Leap TSS are in other CMCPs—all *Rapid* routes—with a total cost of \$3 billion. In addition to Transit Leap, there are 21 Complete Corridors TSS in other CMCPs, which have a total cost of approximately \$200 million. The remaining difference between the total and CCT-only costs is attributable to the duplication of flex lane costs across Complete Corridors and Transit Leap TSS, and the duplication of stations across *Rapid* corridors with shared alignment segments.

The California Construction Cost Index (CCCI) is used to escalate costs to 2022 dollars. The CCCI is developed based upon Building Cost Index (BCI) cost indices average for San Francisco and Los Angeles ONLY as produced by Engineering News Record (ENR) and reported in the second issue each month.

**Table E-3** California Construction Cost Index (CCCI) 2017-2022

Year	CA CCI(1) Month	Index	Escalation Multiplier to 2022\$
2017	December 2016	6373	1.35
2018	December 2017	6596	1.30
2019	December 2018	6684	1.29
2020	December 2019	6924	1.24

<sup>6</sup> Cost estimation methodology from the 2021 SANDAG Regional Plan can be found here: [2021-regional-plan-appendix-u-2021-05-01.pdf \(sandag.org\)](https://www.sandag.org/files/2021-regional-plan-appendix-u-2021-05-01.pdf)

Year	CA CCI(1) Month	Index	Escalation Multiplier to 2022\$
2021	June 2021	7746	1.11
2022	September 2022	8604	1

(1) California Construction Cost Index

For Flexible Fleets and Next OS elements, a yearly escalation of 5% was applied for all costs produced before 2020 and a yearly escalation of 10% was applied for all costs produced in 2020 or 2021. For example, if a cost was sourced from 2019, the escalation was assumed to be 25%. This was applied to Flexible Fleets and Next OS elements since technology escalation differs from construction escalation. Technology and electronic elements follow the yearly Consumer Price Index (CPI) more closely, deviating slightly higher due to specific industry challenges. As an example, electronic manufacturers increased component prices by 10% on average in 2022, however 12-month CPI inflation projections for 2022 are around 8%, indicating technology escalation is higher than that of the general market.

Soft costs of 44% and an unallocated contingency of 25-30% are included in the rough order of magnitude capital cost estimates as is customary at the conceptual planning stage, unless otherwise noted.

# TRANSIT LEAP COSTS

Table E-4: Transit Leap Cost Estimates

Refined Strategy ID	Strategy Name	Description	Operating Costs (2022\$)	Capital Cost (2022\$)	Other Plan - Cost Not Included
TC01	Torrey Pines Transit Center	Torrey Pines Transit Center at Callan Road	Not Estimated <sup>7</sup>	\$25,000,000 (aggregated) <sup>8</sup>	N/A
TC02	Gilman Transit Center (UC San Diego)	UC San Diego Transit Center at Gilman Drive	Not Estimated	\$25,000,000 (aggregated)	N/A
TC03	Sorrento Valley Transit Center	Sorrento Valley Coaster Station at Sorrento Valley Road	Not Estimated	\$25,000,000 (aggregated)	N/A
TC04	UTC Transit Center	UTC Trolley Station at Genesee Avenue	Not Estimated	\$25,000,000 (aggregated)	N/A
TC05	West Kearny Mesa Transit Center	West Kearny Mesa Transit Center at Convoy Street	Not Estimated	\$25,000,000 (aggregated)	N/A
TC06	East Kearny Mesa Transit Center	East Kearny Mesa Transit Center at Complex Drive	Not Estimated	\$25,000,000 (aggregated)	N/A
TC07	Santee Transit Center	Santee Transit Center at Santee Town Center	Not Estimated	\$25,000,000 (aggregated)	N/A
TC08	El Cajon Transit Center	El Cajon Trolley Station at Marshall Avenue	Not Estimated	\$25,000,000 (aggregated)	N/A
TM01	Sorrento Mesa Microtransit	Sorrento Mesa Mobility Hub	\$430,000	\$430,000 (annual operating)	N/A
TM02	UTC Microtransit	UTC Mobility Hub	\$450,000	\$450,000 (annual operating)	N/A

<sup>7</sup> Some TSS costs were not estimated due to inadequate TSS information available at the time of cost estimating.

<sup>8</sup> All costs for transit center improvements TC01-TC08 are aggregated and total \$25,000,000.

Refined Strategy ID	Strategy Name	Description	Operating Costs (2022\$)	Capital Cost (2022\$)	Other Plan - Cost Not Included
TM04	Clairemont Mesa Microtransit	Clairemont Mesa Mobility Hub	\$500,000	\$500,000 (annual operating)	N/A
TM05	Kearny Mesa Microtransit	Kearny Mesa Mobility Hub	\$740,000	\$740,000 (annual operating)	N/A
TM06	Santee Microtransit	Santee Mobility Hub	\$870,000	\$870,000 (annual operating)	N/A
TM07	El Cajon Microtransit	El Cajon Mobility Hub	\$1,000,000	\$1,000,000 (annual operating)	N/A
TR01	Rapid 27 Phase 1	Balboa Transit Center to Kearny Mesa via Balboa Avenue	Not Estimated	\$100,000,000	N/A
TR02	Rapid 27 Phase 2	Pacific Beach to Kearny Mesa via Balboa Avenue	Not Estimated	\$160,000,000	N/A
TR03	Rapid 28	Point Loma to Kearny Mesa via Central Mobility Hub	Not Estimated	\$270,000,000	SB2S CMCP
TR04	Rapid 30	Balboa Transit Center to Sorrento Mesa via Pacific Beach, La Jolla, and UTC	Not Estimated	\$420,000,000	Regional Plan
TR05	Rapid 41	Fashion Valley to UTC/UC San Diego via Linda Vista and Clairemont Mesa	Not Estimated	\$240,000,000	SB2S CMCP
TR06	Rapid 43	Pacific Beach to Kearny Mesa via Clairemont Mesa	Not Estimated	\$200,000,000	N/A
TR07	Rapid 120	Kearny Mesa to Downtown San Diego via Fashion Valley	Not Estimated	\$310,000,000	Regional Plan
TR08	Rapid 292	El Cajon to Otay Mesa via Jamacha and Otay Lakes	Not Estimated	\$350,000,000	Regional Plan
TR09	Rapid 292 Phase 1	Pacific Beach to Kearny Mesa	Not Estimated	\$170,000,000	N/A

Refined Strategy ID	Strategy Name	Description	Operating Costs (2022\$)	Capital Cost (2022\$)	Other Plan - Cost Not Included
TR10	Rapid 292 Phase 2	Pacific Beach to Otay Mesa via El Cajon, Jamacha, and Otay Lakes	Not Estimated	\$710,000,000	Regional Plan
TR11	Rapid 295	Spring Valley to Clairemont Mesa via Kearny Mesa	Not Estimated	\$350,000,000	SB2S CMCP
TR14	Route 848	El Cajon to Lakeside via Winter Gardens	\$5,000,000	\$5,000,000 (operating)	N/A
TR24	Route 832	Santee Town Center to North Santee	\$850,000	\$850,000 (operating)	N/A
TR25	Route 834	Santee Town Center to West Santee	\$680,000	\$680,000 (operating)	N/A
TR13	Rapid 630	Iris Avenue to Kearny Mesa via I-5 and City College	Not Estimated	\$350,000,000	N/A
TR15	Rapid 870 Alt 1	El Cajon to Torrey Pines via Santee, SR 52, UC San Diego, I-805	Not Estimated	\$460,000,000	N/A
TR16	Rapid 870 Alt 2	El Cajon to UTC via Santee, SR 52, I-805	Not Estimated	\$380,000,000	N/A
TR17	Rapid 870 Alt 3	El Cajon to Torrey Pines via Santee, SR 52, UC San Diego, I-805	Not Estimated	\$480,000,000	N/A
TR18	Rapid 880 Alt 2	El Cajon to UC San Diego via Santee, SR 52, Kearny Mesa, I-805, UTC	Not Estimated	\$450,000,000	N/A
TR19	Rapid 880 Alt 3	El Cajon to UC San Diego via Santee, SR 52, Kearny Mesa, I-805, UTC	Not Estimated	\$480,000,000	N/A
TR20	Rapid 890 Alt 1	El Cajon to Sorrento Mesa via Santee, SR 52, I-805	Not Estimated	\$400,000,000	SB2S CMCP
TR21	Rapid 890 Alt 2	El Cajon to Sorrento Mesa via Santee, SR 52, I-805	Not Estimated	\$400,000,000	SB2S CMCP

Refined Strategy ID	Strategy Name	Description	Operating Costs (2022\$)	Capital Cost (2022\$)	Other Plan - Cost Not Included
TR22	Rapid 890 Alt 3	El Cajon to Sorrento Mesa via Santee, SR 52, I-805	Not Estimated	\$430,000,000	SB2S CMCP
TR23	Rapid 893	Lakeside to El Cajon via SR 52, SR 67	Not Estimated	\$180,000,000	N/A
TR12	Commuter Rail 582	Sorrento Mesa to National City via UTC, Kearny Mesa, and University Heights	Not Estimated	\$15,700,000,000	SB2S CMCP

## NEXT OS COSTS

Table E-5: Next OS Cost Estimates

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
NO01	Next OS - Data Hub	High-speed data analytics, data repository, and data performance management platform that will bring together public transportation data and develop a public-private information exchange with companies such as transportation network companies and micromobility fleets. Micromobility and other flexible fleets will benefit from a consolidated database given the decentralized nature of the service. In addition, data hub should support complete corridor performance monitoring and metrics to support optimization of dynamic lane management for Active Traffic Management (ATM) and Active Transportation Demand Management (ATMD).	\$2,000,000	SB2S
NO02	Next OS - Curb Access and Parking	Dynamic management of curbs including access and pricing rules. Overall functionality to be applied in proximity to neighborhood mobility hubs and where flex lanes are designated. Can also be applied throughout the study area where higher densities of commercial and residential uses occur and the strategy would assist with reducing static parking requirements and allowing increased PUDO (pick-up/drop-off) areas.	\$700,000	SB2S
NO03	Next OS - Transit Optimization	Dynamic transit routing, scheduling, and communications, already some functionality in place regionally, but enhanced optimization would include improved monitoring of traffic conditions and ensuring optimal use of ATDM functions.	\$450,000	SB2S
NO04	Next OS - Mobility as a Service App	Application to plan, book, and pay across public and private shared services. Relies on the sharing of information between public and private providers. This function should be provided regionally and leveraged in the study area to promote transit and alternative modes and lower obstacles to greater mode shifts.	\$670,000	SB2S

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
NO05	Next OS - Smart Intersections - Mast Boulevard	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$2,000,000	SB2S
NO06	Next OS - Smart Intersections - Mission Gorge Road	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$510,000	N/A
NO07	Next OS - Smart Intersections - Broadway	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$510,000	N/A
NO08	Next OS - Smart Intersections - Clairemont Mesa Boulevard	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$510,000	N/A
NO09	Next OS - Smart Intersections - Ruffin Road	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$510,000	N/A
NO10	Next OS - Smart Intersections - Convoy Street	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$510,000	N/A
NO11	Next OS - Smart Intersections - Genesee Avenue	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$510,000	N/A
NO12	Next OS - Smart Intersections - Regents Road	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$510,000	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
NO13	Next OS - Smart Intersections - Santo Road	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$510,000	N/A
NO14	Next OS - Smart Intersections - Bradley Avenue	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$510,000	N/A
NO15	Next OS - Smart Intersections - Marshall Avenue	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$510,000	N/A
NO16	Next OS - Smart Intersections - Johnson Avenue	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$510,000	N/A
NO17	Next OS - Smart Intersections - Magnolia Avenue	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$510,000	N/A
NO18	Next OS - Smart Intersections - Nobel Dr	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$ 510,000	N/A
NO19	Next OS - Smart Intersections - Governor Dr	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	\$510,000	N/A
NO20	Next OS - Next Generation Integrated Corridor	Provide coordinated response and control for real-time operations across freeway, arterials, and transit networks as part of the broader complete corridors concept in the study area. In particular ICMS functions should support and integrate with the	\$6,000,000	SB2S

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
	Management System	ATM/ATDM features and provide for improved mobility between the designated ATDM and the smart intersection/flex lane facilities under recurring and non-recurring congestion conditions.		
NO21	Next OS - Systems and Software	Enables regional transportation system operators to collect, analyze, and share data to improve transportation systems management and operations. This is a regionally enabled function that would be leveraged by the corridor to support a variety of operations and optimization efforts including optimizing transit service and operations, ATM, ATDM, and monitoring the success of on-going mobility programs.	\$10,000,000	SB2S
NO22	Next OS - Truck Route Data	ATM concepts along the corridor include provisions for a temporal truck lane in areas with significant grades along SR-52. The scheduled times or actual status of this truck lane should be made available through Next OS to 511SD and associated traveler information systems.	Not Estimated	N/A
NO23	Next OS - Emergency Response and Other Data	Emergency situations and incidents can significantly impact mobility along key portions of the corridor (e.g. open spaces susceptible to wild fires, etc.) that could limit capacity and impact transit services, truck routing, etc. It is important incidents and situations of this sort leverage Next OS to inform all operations centers and private and public mobility operators of the situation to allow for shifts in operations and to inform travelers of viable alternatives to reduce exacerbating impacts of the situation.	Not Estimated	N/A
NO24	Next OS - Dynamic Curb Management - Kearny Mesa	Physical, signage, and ITS infrastructure in Kearny Mesa should be implemented to support flexible curb usage and accommodate for changing demand. Curb management may be integrated with smart parking solutions where appropriate.	\$380,000	N/A
NO25	Next OS - Dynamic Curb Management - Santee	Physical, signage, and ITS infrastructure in Santee should be implemented to support flexible curb usage and accommodate for changing demand.	\$380,000	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
NO26	Next OS - Dynamic Curb Management - Clairemont	Physical, signage, and ITS infrastructure in Clairemont should be implemented to support flexible curb usage and accommodate for changing demand.	\$380,000	N/A
NO27	Next OS - Dynamic Curb Management - University City	Physical, signage, and ITS infrastructure in University should be implemented to support of flexible curb usage and accommodate for changing demand. Curb management may be integrated with smart parking solutions where appropriate.	\$380,000	N/A
NO28	Next OS - Dynamic Lane Assignment	Part of the ATM/ATDM concept, lanes can be dynamically assigned based on temporal conditions and anticipated demands and traffic types. For ATDM this will typically include bus only lanes or bus and HOV lanes, but can also include HOT/Express Lanes or support Connected Autonomous Vehicle designated lanes. Repurpose road space to reflect current or expected demand conditions.	Not Estimated	N/A
NO29	Next OS - Shoulder Running	Part of the ATM/ATDM concept, shoulder running or "all-lanes running" allows for peak period use of shoulder areas as running lanes presuming the shoulders have been properly upgraded and prepared for regular traffic. Shoulder lanes may be used for transit lanes, truck lanes, or additional auxiliary lanes to support transitions to/from major N/S freeway corridors to the SR-52.	\$4,000,000	N/A
NO30	Next OS - Variable Speed Limits - East	Utilize information on the roadway like volume and traffic speed to post speed limits that are adaptive to changing network conditions. This can reduce accidents and increase throughput of traffic overall. In the future VSS may be paired with speed enforcement. Signage also allows for tailored messaging to indicate incidents and improve safety.	\$3,000,000	N/A
NO31	Next OS - Variable Speed Limits - West	Utilize information on the roadway like volume and traffic speed to post speed limits that are adaptive to changing network conditions. This can reduce accidents and increase throughput of traffic overall. In the future VSS may be paired with speed enforcement. Signage also allows for tailored messaging to indicate incidents and improve safety.	\$4,000,000	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
NO32	Next OS - Flexible Travel Lanes - Genesee Avenue	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	\$13,000,000	N/A
NO33	Next OS - Flexible Travel Lanes - Nobel Dr	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	\$ 3,000,000	N/A
NO34	Next OS - Flexible Travel Lanes - Ruffin Road	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	\$1,000,000	N/A
NO35	Next OS - Flexible Travel Lanes - Santo Road	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	\$1,000,000	N/A
NO36	Next OS - Flexible Travel Lanes - Clairemont Mesa Boulevard	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	\$7,000,000	N/A
NO37	Next OS - Flexible Travel Lanes - Mission Gorge Road	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	\$2,000,000	N/A
NO38	Next OS - Flexible Travel Lanes - North Cuyamaca Street	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	\$1,000,000	N/A
NO39	Next OS - Flexible Travel Lanes - North Marshall Avenue	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	\$4,000,000	N/A
NO40	Next OS - ATM 1 - All Lanes Running SR52 from I-5 to I-805	Active Traffic Management 1: Enables the smooth flow of all traffic modes with dedicated lanes to HOV and transit, but all lanes open and running with variable speeds. Electronic signage enables use of shoulder areas, as well as enhanced traffic separation prior to	\$12,000,000	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
		major moves to N/S connecting facilities. ATM includes traveler information functions to warn of incidents and other conditions and would be integrated with regional traveler information solutions such as 511SD.		
NO41	Next OS - ATM 2 - Variable Speeds & Dynamic Lanes SR52 from I-805 to Spring Canyon	Active Traffic Management 2: Enables the smooth flow of all traffic modes with dynamic lane assignments, VSS, shoulder running, and possible truck climbing lane. ATM includes traveler information functions to warn of incidents and other conditions and would be integrated with regional traveler information solutions such as 511SD.	\$12,000,000	N/A
NO42	Next OS - ATM 3 - Variable Speeds, Dynamic Lanes SR52 from Spring Canyon to Mast Boulevard.	Active Traffic Management 3: Enables the smooth flow of all traffic modes with dynamic lane assignments, and VSS. ATM includes traveler information functions to warn of incidents and other conditions and would be integrated with regional traveler information solutions such as 511SD.	\$12,000,000	N/A
NO43	Next OS - ATM 4 - Variable Speeds & All Lanes Running SR52 from Mast Boulevard to Cuyamaca Street	Active Traffic Management 4: Enables the smooth flow of all traffic modes with possible dedicated lanes to HOV and transit, but all lanes open and running with variable speeds. Note this is a constrained environment and shoulder running may be used to support early transitions and movement to N/S facilities SR-125. ATM includes traveler information functions to warn of incidents and other conditions and would be integrated with regional traveler information solutions such as 511SD.	\$12,000,000	N/A
NO44	Next OS - ATDM 1	Active Transportation and Demand Management 1: Promote a mode shift and support alternative modes along the corridor by integrating with smart intersections, incentivizing mode shifts, designating special transit lanes and ramp access along the ATM enabled areas of SR52. ATDM would include integration with supporting traveler information and trip planning functions regionally as provided through systems such as 511SD and others.	\$910,000	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
NO45	Next OS - ATDM 2	Active Transportation and Demand Management 2: Promote a mode shift and support alternative modes along the corridor by integrating with smart intersections, incentivizing mode shifts, designating special transit lanes and ramp access along the ATM enabled areas of SR52. ATDM would include integration with supporting traveler information and trip planning functions regionally as provided through systems such as 511SD and others.	\$2,000,000	N/A
NO46	Next OS - ATDM Integration at Mast Boulevard/SR-52	In order to support proper access and improve transit service, the configuration of the Mast Boulevard. ramps should be adjusted and temporal transit/HOV lanes put in place to support integration of the arterial flex lanes and the ATDM elements on SR-52. This should allow buses to bypass long queues on Mast Boulevard. near SR52.	\$410,000	N/A
NO47	Next OS - ATDM Integration at Cuyamaca Street/SR52	In order to support proper access and improve transit service, the configuration of the Cuyamaca Street. ramps should be adjusted and temporal transit/HOV lanes put in place to support integration of the arterial flex lanes and the ATDM elements on SR-52. This should allow buses to bypass long queues on Cuyamaca Street. near SR52. Trolley operations should be integrated with the concept as well.	\$410,000	N/A
NO48	Next OS - Incident Management	Install the systems and ITS to coordinate incident detection, response, and clearing and restore traffic flow quickly and safely. This includes enhancement of camera, vehicle detection, and incident detection systems along SR52 and I-805, as well as improved integrated incident management between State and local agencies along the corridor consistent with emerging TSM&O and ICMS efforts.	Not Estimated	N/A
NO49	Next OS - Incident Response	Systems that prepare and communicate incidents to the community. Responses could dynamically adjust speed, divert or reroute traffic, encourage transit, and reach corridor wide coordination/integration.	\$490,000	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
NO50	Next OS - Performance Monitoring	Utilize real-time data (speeds, volumes, vehicle occupancy, VSS compliance) to improve performance of transit, carshare, bikeshare, and traffic flows. This information can be used to point users to mobility alternatives and to enforce ATDM and dynamic lane assignments.	\$9,000,000	N/A
NO51	Next OS - Performance Assessment, Evaluation, Optimization	Utilize historical data (vehicle classification, speeds, volumes, vehicle occupancy, VSS compliance) to perform system assessments and evaluations to better understand the impact of network changes and events on performance. Optimize system function informed by this analysis.	\$9,000,000	N/A
NO52	Next OS - Fleet and Vehicle tracking	Consistent with current practice for bus and BRT systems, automatic vehicle location (AVL) functions help operators and the central management system understand the locations of individual vehicles within a transit network. This informs real-time transit information, and should support integrated information between MTS provided services and potential private supporting flex fleet services.	Not Estimated	N/A
NO53	Next OS - Passenger Counting	This function helps to understand passenger demand patterns that can be used to adjust and inform service changes and improvements.	Not Estimated	N/A
NO54	Next OS - Integrated fare payment and trip-planning portal	Off-board fare payment and routing information makes it more seamless for riders using transit. Riders can pay beforehand for their whole trip and receive guided instructions for their trip, particularly if they are using multiple modes. This function should be regionally integrated with the MaaS functions and leveraged within the study area. Account based approaches such as those being rolled out regionally with Pronto could be leveraged.	Not Estimated	N/A
NO55	Next OS - Regional Traveler Information/511	Regional traveler information on trip planning, roadway conditions, weather, travel options, congestion, incidents, mobility services, mobility systems status, etc. would be provided for the CCT corridor through regional outlets such as 511SD and other private options receiving data from agency systems. Access to	Not Estimated	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
		this information would be through multiple means including smartphone apps, web, broadcast through third parties, kiosks at mobility hubs, etc.		
NO56	Next OS - Real-time Information	Real-time information allows riders to receive updates on their smartphone or locally placed dynamic signage to know the status of their transit vehicles and ease rider uncertainty.	\$3,000,000	N/A
NO57	Next OS - Wi-Fi	Reliable on-board Wi-Fi is increasingly important as smartphones are widely used and can connect riders to real-time transit information, routing and payment as well for an enhanced experience while riding.	Not Estimated	N/A
NO58	Next OS - Audio and visual next stop announcements	Consistent with current standard practice ensure all buses and transit are equipped with communication devices to provide next stop announcements letting riders know the next stop and enhancing the customer experience. This feature also helps support the goal of equity for all types of users. This currently exists on MTS fixed route service.	Not Estimated	N/A
NO59	Next OS - Transportation Management Center	Leverage and operate ATM/ATDM functions through existing operations centers for Caltrans and MTS.	\$460,000	N/A
NO60	Next OS - Universal Transportation Account	Leverage regional efforts towards an integrated application providing centralized information related to parking, rideable, mobility-on-demand and fixed route transit. This may leverage current account-based solutions such as Pronto (depending on institutional agreements).	Not Estimated	N/A
NO61	Next OS - Transit Signal Priority	Part of the smart intersection corridors functionality where signal programming allows transit vehicles to be prioritized at crossings/intersections. Shorter travel times and more reliable service could result from the addition of dedicated lanes paired with signal priority during peak travel hours. Should be integrated with physical infrastructure improvements (e.g. Flex Lanes, etc.) where possible.	Not Estimated	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
NO62	Next OS - Bike Signals	Along key active transportation arterials or in known areas of bicycle/auto conflict issues, bike signals (eg. the green wave) may be installed to incentivize safe bicycle use as well as prioritize bikes on streets.	Not Estimated	N/A
NO63	Next OS - Smart Parking - Kearny Mesa	Implement smart parking functionality which provides enhanced information on parking availability, time limitations, costs, and payment in conjunction with curbside management and mobility hub efforts.	\$2,000,000	N/A
NO64	Next OS - Smart Parking - UTC	Implement smart parking functionality which provides enhanced information on parking availability, time limitations, costs, and payment in conjunction with curbside management and mobility hub efforts.	\$2,000,000	N/A
NO65	Next OS - Smart Parking - UCSD	Implement smart parking functionality which provides enhanced information on parking availability, time limitations, costs, and payment in conjunction with curbside management and mobility hub efforts.	\$2,000,000	N/A
NO66	Next OS - Smart Parking - El Cajon	Implement smart parking functionality which provides enhanced information on parking availability, time limitations, costs, and payment in conjunction with curbside management and mobility hub efforts.	\$2,000,000	N/A

# MOBILITY HUB COSTS

Table E-6: Mobility Hub Cost Estimates

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
MH01	Mo-Hub - Major Node 1 - UCSD Transit Center	Bike lockers and fix-it station	\$78,000	SB2S
MH02	Mo-Hub Major Node 2 - UTC Transit Center	Bike lockers and fix-it station	\$78,000	SB2S
MH03	Mo-Hub Minor Node 20 - Grossmont College	Bike lockers and fix-it station	\$210,000	N/A
MH04	Mo-Hub Minor Node 21 - Fanita Ranch	Bike Parking	\$26,000	N/A
MH05	Mo-Hub Minor Node 22 - Winter Gardens	Bike Parking	\$26,000	N/A
MH06	Mo-Hub Minor Node 13 - Governor Drive	Bike parking and fix-it station	\$26,000	N/A
MH07	Mo-Hub Major Node 2 - UTC Transit Center	Dynamic / flexible parking	Not Estimated	SB2S
MH08	Mo-Hub Major Node 4 - W Kearny Mesa Transit Center	Dynamic / flexible parking	Not Estimated	SB2S
MH09	Mo-Hub Major Node 5 - E Kearny Mesa Transit Center	Dynamic / flexible parking	Not Estimated	SB2S
MH10	Mo-Hub Minor Node 17 - Convoy Street and Othello Avenue	Dynamic / flexible parking	Not Estimated	SB2S
MH11	Mo-Hub Minor Node 20 - Grossmont College	Dynamic / flexible parking	Not Estimated	N/A
MH12	MoHub - All - Dynamic signage and wayfinding	Dynamic signage, such as TransitScreens, provide real-time information to travelers on transit connections, airport arrivals/departures. Dynamic wayfinding allows varied messages to show on electronic screens to travelers that are making connections	Not Estimated	SV, SB2S
MH13	Mo-Hub Major Node 2 - UTC Transit Center	EV Charging Stations	\$2,000,000	SB2S

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
MH14	Mo-Hub Minor Node 6 - Tierrasanta	EV Charging stations	\$400,000	N/A
MH15	Mo-Hub Minor Node 7 - Santee City Hall	EV Charging Stations	\$400,000	N/A
MH16	Mo-Hub Major Node 8 - Santee Town Center	EV Charging Stations	\$2,000,000	N/A
MH17	Mo-Hub Major Node 10 - Downtown El Cajon	EV Charging Stations	\$2,000,000	N/A
MH18	Mo-Hub Major Node 11 - Hillside	EV Charging Stations	\$2,000,000	N/A
MH19	Mo-Hub Minor Node 12 - Lakeside	EV Charging Stations	\$400,000	SV
MH20	Mo-Hub Minor Node 14 - Clairemont Mesa Boulevard and Geneese Avenue	EV Charging Stations	\$400,000	N/A
MH21	Mo-Hub Minor Node 16 - Balboa Avenue and Genesee Avenue	EV Charging Stations	\$3,000,000	N/A
MH22	Mo-Hub Minor Node 18 - Aero Drive and Kearny Villa Road	EV Charging Stations	\$3,000,000	SB2S
MH23	Mo-Hub Minor Node 21 - Fanita Ranch	EV Charging Stations	\$400,000	N/A
MH24	Mo-Hub Minor Node 22 - Winter Gardens	EV Charging Stations	\$400,000	N/A
MH25	MoHub - All - Placemaking Amenities	Including landscaping and shade, benches, device charging stations and public art	Not Estimated	SV, SB2S
MH26	MoHub - All - Interactive Kiosks	Kiosks at transit station may provide such services as fare payment, wayfinding, real-time transit, and services and amenities directories	Not Estimated	SV, SB2S
MH27	Mo-Hub - Major Node 1 - UCSD Transit Center	Lockers for safe retail deliveries	\$160,000	SB2S
MH28	Mo-Hub Major Node 2 - UTC Transit Center	Lockers for safe retail deliveries	\$160,000	SB2S
MH29	Mo-Hub Minor Node 3 - Clairemont Town Square	Lockers for safe retail deliveries	\$410,000	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
MH30	Mo-Hub Minor Node 6 - Tierrasanta	Lockers for safe retail deliveries	\$52,000	N/A
MH31	Mo-Hub Minor Node 7 - Santee City Hall	Lockers for safe retail deliveries	\$52,000	N/A
MH32	Mo-Hub Major Node 8 - Santee Town Center	Lockers for safe retail deliveries	\$160,000	N/A
MH33	Mo-Hub Major Node 10 - Downtown El Cajon	Lockers for safe retail deliveries	\$160,000	N/A
MH34	Mo-Hub Minor Node 14 - Clairemont Mesa Boulevard and Geneese Avenue	Lockers for safe retail deliveries	\$52,000	N/A
MH35	Mo-Hub Minor Node 20 - Grossmont College	Lockers for safe retail deliveries	\$410,000	N/A
MH36	Mo-Hub Minor Node 21 - Fanita Ranch	Lockers for safe retail deliveries	\$52,000	N/A
MH37	Mo-Hub Minor Node 22 - Winter Gardens	Lockers for safe retail deliveries	\$52,000	N/A
MH38	Mo-Hub Minor Node 7 - Santee City Hall	Multilingual wayfinding, real-time information and interactive kiosks	\$81,000	N/A
MH39	Mo-Hub Major Node 8 - Santee Town Center	Multilingual wayfinding, real-time information and interactive kiosks	\$320,000	N/A
MH40	Mo-Hub Major Node 9 - El Cajon Transit Center	Multilingual wayfinding, real-time information and interactive kiosks	\$320,000	N/A
MH41	Mo-Hub Major Node 10 - Downtown El Cajon	Multilingual wayfinding, real-time information and interactive kiosks	\$320,000	N/A
MH42	Mo-Hub - Major Node 1 - UCSD Transit Center	Parking for shared rideables	\$ 340,000	SB2S
MH43	Mo-Hub Major Node 2 - UTC Transit Center	Parking for shared rideables	\$340,000	SB2S
MH44	Mo-Hub Major Node 4 - W Kearny Mesa Transit Center	Parking for shared rideables	\$340,000	SB2S
MH45	Mo-Hub Major Node 5 - E Kearny Mesa Transit Center	Parking for shared rideables	\$340,000	SB2S

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
MH46	Mo-Hub Minor Node 7 - Santee City Hall	Parking for shared rideables	\$210,000	N/A
MH47	Mo-Hub Major Node 8 - Santee Town Center	Parking for shared rideables	\$340,000	N/A
MH48	Mo-Hub Major Node 9 - El Cajon Transit Center	Parking for shared rideables	\$340,000	N/A
MH49	Mo-Hub Major Node 10 - Downtown El Cajon	Parking for shared rideables	\$340,000	N/A
MH50	Mo-Hub Minor Node 13 - Governor Drive	Parking for shared rideables	\$210,000	N/A
MH51	Mo-Hub Minor Node 20 - Grossmont College	Parking for shared rideables	\$350,000	N/A
MH52	Mo-Hub - Major Node 1 - UCSD Transit Center	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	SB2S
MH53	Mo-Hub Major Node 2 - UTC Transit Center	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	SB2S
MH54	Mo-Hub Major Node 4 - W Kearny Mesa Transit Center	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	SB2S
MH55	Mo-Hub Major Node 5 - E Kearny Mesa Transit Center	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	SB2S

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
MH56	Mo-Hub Major Node 8 - Santee Town Center	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	N/A
MH57	Mo-Hub Major Node 10 - Downtown El Cajon	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	N/A
MH58	Mo-Hub Major Node 11 - Hillsdale	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	N/A
MH59	Mo-Hub Minor Node 3 - Clairemont Town Square	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	N/A
MH60	Mo-Hub Minor Node 6 - Tierrasanta	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	N/A
MH61	Mo-Hub Minor Node 7 - Santee City Hall	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	N/A
MH62	Mo-Hub Minor Node 12 - Lakeside	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks,	Not Estimated	SV

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
		advance stop bars, pedestrian countdown signal heads, LPIs, signage		
MH63	Mo-Hub Minor Node 13 - Governor Drive	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	N/A
MH64	Mo-Hub Minor Node 14 - Clairemont Mesa Boulevard and Geneese Avenue	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	N/A
MH65	Mo-Hub Minor Node 15 - Balboa Avenue and Garnet Avenue	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	N/A
MH66	Mo-Hub Minor Node 16 - Balboa Avenue and Genesee Avenue	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	N/A
MH67	Mo-Hub Minor Node 17 - Convoy Street and Othello Avenue	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	SB2S
MH68	Mo-Hub Minor Node 18 - Aero Drive and Kearny Villa Road	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	SB2S

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
MH69	Mo-Hub Minor Node 19 - Aero Drive	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	SB2S
MH70	Mo-Hub Minor Node 20 - Grossmont College	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	N/A
MH71	Mo-Hub Minor Node 21 - Fanita Ranch	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	N/A
MH72	Mo-Hub Minor Node 22 - Winter Gardens	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Not Estimated	N/A
MH73	EV Charging SR 67 & Mapleview Street	EV Charging Stations	\$400,000	SV
MH74	EV Charging at Mission Trails Regional Park	EV Charging Stations	\$400,000	N/A

# FLEXIBLE FLEET COSTS

Table E-7: Flexible Fleets Cost Estimates

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Reference to Other CMCP Other Plan - Cost Not Included
FF01	Flexible Fleet Operations	Operations for Flexible Fleet services including micromobility, ridehail/carshare, rideshare microtransit, and last-mile delivery	\$1,000,000	SV, SB2S
FF02	Flexible Fleet - Major Node 1 - UCSD Transit Center	Mobile retail services	Not Estimated	N/A
FF03	Flexible Fleet - Major Node 1 - UCSD Transit Center	Micromobility shared rideables	\$210,000	SB2S
FF04	Flexible Fleet - Major Node 2 - UTC Transit Center	Micromobility shared rideables	\$300,000	SB2S
FF05	Flexible Fleet - Major Node 2 - UTC Transit Center	Mobile retail services	Not Estimated	N/A
FF06	Flexible Fleet - Major Node 2 - UTC Transit Center	Rideshare services	Not Estimated	N/A
FF07	Flexible Fleet - Minor Node 3 - Clairemont Town Square	Mobile retail services	Not Estimated	N/A
FF08	Flexible Fleet - Minor Node 3 - Clairemont Town Square	Rideshare services	Not Estimated	N/A
FF09	Flexible Fleet - Major Node 4 - W Kearny Mesa Transit Center	Rideshare services	Not Estimated	N/A
FF10	Flexible Fleet - Major Node 4 - W Kearny Mesa Transit Center	Micromobility shared rideables	\$37,000	SB2S
FF11	Flexible Fleet - Major Node 5 - E Kearny Mesa Transit Center	Rideshare services	Not Estimated	N/A
FF12	Flexible Fleet - Major Node 5 - E Kearny Mesa Transit Center	Micromobility shared rideables	\$34,000	SB2S
FF13	Flexible Fleet - Minor Node 6 - Tierrasanta	Rideshare services	Not Estimated	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Reference to Other CMCP Other Plan - Cost Not Included
FF14	Flexible Fleet - Minor Node 6 - Tierrasanta	Mobile retail services	Not Estimated	N/A
FF15	Flexible Fleet - Minor Node 7 - Santee City Hall	Mobile retail services	Not Estimated	N/A
FF16	Flexible Fleet - Minor Node 7 - Santee City Hall	Rideshare services	Not Estimated	N/A
FF17	Flexible Fleet - Minor Node 7 - Santee City Hall	Micromobility shared rideables	\$60,000	N/A
FF18	Flexible Fleet - Major Node 8 - Santee Town Center	Rideshare services	Not Estimated	N/A
FF19	Flexible Fleet - Major Node 8 - Santee Town Center	Mobile retail services	Not Estimated	N/A
FF20	Flexible Fleet - Major Node 8 - Santee Town Center	Micromobility shared rideables	\$92,000	N/A
FF21	Flexible Fleet - Major Node 9 - El Cajon Transit Center	Rideshare services	Not Estimated	N/A
FF22	Flexible Fleet - Major Node 9 - El Cajon Transit Center	Micromobility shared rideables	\$160,000	N/A
FF23	Flexible Fleet - Major Node 10 - Downtown El Cajon	Rideshare services	Not Estimated	N/A
FF24	Flexible Fleet - Major Node 10 - Downtown El Cajon	Mobile retail services	Not Estimated	N/A
FF25	Flexible Fleet - Major Node 10 - Downtown El Cajon	Micromobility shared rideables	\$290,000	N/A
FF26	Flexible Fleet - Major Node 11 - Hillside	Rideshare services	Not Estimated	N/A
FF27	Flexible Fleet - Minor Node 12 - Lakeside	Rideshare services	Not Estimated	N/A
FF28	Flexible Fleet - Minor Node 13 - Governor Drive	Micromobility shared rideables	\$19,000	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Reference to Other CMCP Other Plan - Cost Not Included
FF29	Flexible Fleet - Minor Node 14 - Clairemont Mesa Boulevard and Genesee Avenue	Rideshare services	Not Estimated	N/A
FF30	Flexible Fleet - Minor Node 14 - Clairemont Mesa Boulevard and Genesee Avenue	Mobile retail services	Not Estimated	N/A
FF31	Flexible Fleet - Minor Node 16 - Balboa Avenue and Genesee Avenue	Rideshare services	Not Estimated	N/A
FF32	Flexible Fleet - Minor Node 17 - Convoy Street and Othello Avenue	Rideshare services	Not Estimated	N/A
FF33	Flexible Fleet - Minor Node 18 - Aero Drive and Kearny Villa Road	Rideshare services	Not Estimated	N/A
FF34	Flexible Fleet - Minor Node 19 - Aero Drive	Rideshare services	Not Estimated	N/A
FF35	Flexible Fleet - Minor Node 20 - Grossmont College	Rideshare services	Not Estimated	N/A
FF36	Flexible Fleet - Minor Node 20 - Grossmont College	Mobile retail services	Not Estimated	N/A
FF37	Flexible Fleet - Minor Node 20 - Grossmont College	Micromobility shared rideables	\$73,000	N/A
FF38	Flexible Fleet - Minor Node 21 - Fanita Ranch	Mobile retail services	Not Estimated	N/A
FF39	Flexible Fleet - Minor Node 22 - Winter Gardens	Mobile retail services	Not Estimated	N/A

## COMPLETE CORRIDOR COSTS

Table E-8: Complete Corridors Cost Estimates

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
CC01	SR 52 Managed Lanes: I-5 to I-805	Add 2 managed lanes and 1 reversible	\$270,000,000	N/A
CC02	SR 52 Managed Lanes: I-805 to I-15	Convert 2 general purpose lanes to 2 managed lanes and add 1 reversible	\$110,000,000	N/A
CC021	SR 52 Managed Lanes Phase 1: I-805 to I-15	Convert 2 general purpose lanes to 2 managed lanes	\$8,500,000	N/A
CC03	SR 52 Managed Lanes: I-15 to Mast Boulevard	Convert 2 general purpose lanes to 2 managed lanes and add 1 reversible	\$190,000,000	N/A
CC031	SR 52 Managed Lanes Phase 1: I-15 to Mast Boulevard	Convert 2 general purpose lanes to 2 managed lanes	\$14,500,000	N/A
CC04	SR 52 Managed Lanes: Mast Boulevard to SR 125	Add 2 managed lanes and 1 reversible	\$130,000,000	N/A
CC041	SR 52 Managed Lanes Phase 1: Mast Boulevard to SR 125	Add 2 managed lanes	\$9,500,000	N/A
CC05	Complete Corridor: MLC SR 52 (I-5)	South to East and West to North	\$250,000,000	N/A
CC06	Complete Corridor: MLC SR 52 (I-5)	North to East and West to South	\$250,000,000	N/A
CC07	Complete Corridor: MLC SR 52 (I-805)	West to North and South to East	\$190,000,000	N/A
CC071	Complete Corridor: MLC SR 52 (I-805)	North to West and East to South	\$160,000,000	N/A
CC081	Complete Corridor: MLC SR 52 (I-15)	South to West and East to North	\$240,000,000	N/A
CC082	Complete Corridor: MLC SR 52 (I-15)	West to North and South to East	\$220,000,000	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
CC083	Complete Corridor: MLC SR 52 (I-15)	North to West and East to South	\$240,000,000	N/A
CC084	Complete Corridor: MLC SR 52 (I-15)	North to East and West to South	\$240,000,000	N/A
CC09	Complete Corridor: MLC SR 52 (SR 125)	North to West and East to South	\$250,000,000	N/A
CC10	Genesee Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$7,000,000	N/A
CC11	Genesee Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$11,000,000	N/A
CC12	Genesee Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$15,000,000	N/A
CC13	Genesee Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$33,000,000	N/A
CC14	Genesee Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$16,000,000	N/A
CC15	Nobel Drive Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$23,000,000	N/A
CC16	Clairemont Mesa Boulevard Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$31,000,000	N/A
CC17	Ruffin Road Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$8,000,000	N/A
CC18	Mast Boulevard Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$5,000,000	N/A
CC19	Mission Gorge Road Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$12,000,000	N/A
CC20	Cuyamaca Street Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$7,000,000	N/A
CC21	Marshall Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$9,000,000	N/A
CC22	Marshall Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$6,000,000	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
CC23	Marshall Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$8,000,000	N/A
CC24	Balboa Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$9,000,000	N/A
CC42	Garnet Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$13,000,000	N/A
CC43	Grand Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	\$12,000,000	N/A
CC44	SR 67 Digital Infrastructure	Install broadband fiber optic connection filling the missing gap between El Cajon and Lakeside	\$9,000,000	SV CMCP
CC45	WB 52 to NB 805 Auxiliary Lane	Add additional freeway to freeway ramp lane and extend as auxiliary lane to Governor.	\$10,000,000	N/A
CC46	WB 52 Auxiliary Lane	Add westbound SR 52 auxiliary lane from Convoy Street to I-805 northbound ramp.	\$12,000,000	N/A
CC47	WB 52 Truck Climbing Lane	Add westbound SR 52 truck climbing lane from Mast Boulevard to crest of hill	\$29,000,000	N/A
CC48	EB 52 Auxiliary Lane	Add eastbound SR 52 auxiliary lane from Spring Canyon Bridge to Mast Boulevard	\$10,000,000	N/A
CC49	SR 67 & Mapleview Street ICE	Perform intersection control evaluation and evaluate intersection geometry	\$400,000 - \$5,000,000	SV CMCP
CC50	SR 67 & Willow Road ICE	Perform intersection control evaluation and evaluate intersection geometry	\$400,000 - \$5,000,000	SV CMCP
CC51	Willow Road & Wildcat Canyon ICE	Perform intersection control evaluation and evaluate intersection geometry	\$400,000 - \$5,000,000	SV CMCP
CC52	Lake Jennings Road & El Monte Road ICE	Perform intersection control evaluation and evaluate intersection geometry	\$400,000 - \$5,000,000	SV CMCP
CC53	Julian Avenue & Lemon Crest Drive ICE	Perform intersection control evaluation and evaluate intersection geometry	\$400,000 - \$5,000,000	SV CMCP
CC54	SR 67 & Gold Bar Lane ICE	Perform intersection control evaluation and evaluate intersection geometry	\$400,000 - \$5,000,000	SV CMCP

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
CC55	SR 67 & Lakeside Avenue	Perform signal warrant analysis	\$400,000 - \$5,000,000	SV CMCP
CC56	Willow Road Traffic Calming	Implement traffic calming strategies to SR-67	\$5,000 - \$600,000	SV CMCP
CC58	Wildcat Canyon Road Falling Rock Improvement	Install falling rock protection devices and warning signage along roadway	\$210,000	SV CMCP
CC59	SR 67: San Diego River Bridge	Widen bridge to accommodate evacuation needs (based on Highway Safety Improvement Plan evacuation study)	\$7,500,000	SV CMCP
CC60	Ashwood Street: Mapleview Street to Cactus Park Road	Create passing lane from Mapleview Street to Cactus Park	\$30,000 - \$1,000,000	SV CMCP
CC61	SR 67 PM 6.05 to 9.01 Shoulder Widening	Widen shoulders on both sides of the roadway to be used for evacuation (based on Highway Safety Improvement Plan evacuation study)	\$26,000,000 - \$110,000,000	SV CMCP
CC62	SR 67 PM 5.48 to 5.85 Shoulder Widening	Widen shoulders on both sides of the roadway to be used for evacuation (based on Highway Safety Improvement Plan evacuation study)	\$3,000,000 - \$13,000,000	SV CMCP
CC63	SR 67 Utility Enhancements	Ensure all utilities have redundancy for resiliency for wildfires, earthquakes, and other natural disasters	\$3,000,000 - \$5,000,000	SV CMCP
CC64	SR 67 Wildlife Crossing #1	Restore/enhance habitat connection via wildlife crossing facility	\$4,000,000 - \$50,000,000	SV CMCP
CC65	SR 67 Wildlife Crossing #2	Restore/enhance habitat connection via wildlife crossing facility	\$4,000,000 - \$50,000,000	SV CMCP
CC66	SR 67 Wildlife Crossing #3	Restore/enhance habitat connection via wildlife crossing facility	\$4,000,000 - \$50,000,000	SV CMCP
CC67	Mapleview Street Green Infrastructure	Create green infrastructure elements to improve stormwater runoff water quality	\$400,000 - \$850,000	SV CMCP

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
CC68	SR 67 VMS	Install variable message signs from I-8 to SR 78 at major intersections to communicate evacuation events, and provide navigation information	\$2,000,000	SV CMCP
CC69	SR 67 CCTV	Install corridor-wide CCTV from I-8 to SR 78 with live data stream to Transportation Management Center	\$600,000 - \$800,000	SV CMCP
CC70	SR 67 Emergency Event Tow	Implement emergency event tow truck deployment utilizing CCTV system to identify stranded vehicles	\$20,000 - \$30,000	SV CMCP
CC71	SR 67 Guardrail	Install guardrail where necessary for reducing run-off-road collisions	\$320,000	SV CMCP
CC73	Governor Drive In-Line Rapid Station	Add an in-line station on I-805 at Governor Drive to serve the 870, 880, 890	\$80,000,000	N/A
CC74	SR 52 HOV Policy	Create a HOV 3+ policy change when managed lanes are utilized at their target capacity (LOS C).	Not Estimated	N/A
CC75	SR 52 CCTV	Install CCTV from SR 67 to Mast Boulevard with live data stream to Transportation Management Center	\$700,000	N/A
CC76	SR 52 VMS	Install variable message signs from SR 67 to Mast Boulevard to communicate evacuation events, and provide navigation information	\$4,000,000	N/A
CC77	SR 52 at Convoy Interchange	Recommend a focused operational investigation at this interchange	\$2,700,000	N/A
CC78	I-15 at Miramar Way Direct Access Ramp	Add a direct access ramp (DAR) at I-15 at Miramar Way	\$61,000,000	SANDAG MM Military Study
CC79	I-15 at Clairemont Mesa Boulevard Direct Access Ramp	Add a direct access ramp (DAR) at I-15 at Clairemont Mesa Boulevard	\$61,000,000	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
CC80	SR 67 at Riverford Road Interchange	Recommend a focused operational investigation at this interchange (existing project).	\$21,000,000	N/A
CC81	EB SR 52 Auxiliary Lane	Add eastbound SR 52 auxiliary lane from I-15 to Santo Road	\$15,000,000	N/A
CC82	SR 52 Wildlife Crossing	Initiate and environmental study to restore/enhance habitat connection via wildlife crossings.	\$27,000,000	N/A
CC83	SR 67 at Bradley Interchange	Recommend a focused operational investigation at this interchange (existing project).	\$22,000,000	N/A
CC84	Kate Session Park Drive at Soledad Road	Recommend a focused operational investigation at this intersection.	\$2,700,000	N/A
CC85	SR 52 at Mast Boulevard Direct Access Ramp	Add a direct access ramp (DAR) at SR 52 at Mast Boulevard	\$110,000,000	N/A
CC86	Active Transportation - Gilman Drive Class IV Cycle Track	Osler Lane to La Jolla Colony Drive	\$9,000,000	SB2S CMCP
CC87	Active Transportation - Rose Canyon Class I Bike Path	Judicial Drive to Gilman Drive	\$50,000,000	SB2S CMCP
CC88	Active Transportation - SR-52 Class I Bike Path	Rose Canyon Bike Path/Coastal Rail trail to Mast Boulevard	\$99,000,000	SB2S CMCP
CC89	Active Transportation - SR-52 Bike Path Grade Separated Crossing to Rose Creek Bike Path	Connect SR-52 Bike Path to Rose Canyon Bike Path via Grade Separated Crossing of the Rail Corridor	\$15,000,000	N/A
CC90	Active Transportation - La Jolla Colony Drive Class IV Cycle Track	Gilman Drive to Charmant Drive/Palmilla Drive	\$5,000,000	SB2S CMCP
CC91	Active Transportation - Palmilla Drive Class IV Cycle Track	La Jolla Colony Drive to Arriba Street	\$3,000,000	SB2S CMCP

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
CC92	Active Transportation - Regents Road Class I Bike Path	Arriba Street to Rose Canyon Bike Path and Across Canyon	\$6,000,000	SB2S CMCP
CC93	Active Transportation - SR-52 Bike Path Grade Separated Crossing	Connect University Community to SR-52 Bike Path via Grade Separated Crossing Just West of Genesee Avenue. Connect to Syracuse Avenue and/or Genesee Avenue	\$6,000,000	N/A
CC94	Active Transportation - SR-52 Class I Bike Path to MacDowell Park	Connect SR-52 Bike Path to Clairemont Mesa Community	\$370,000	SB2S CMCP
CC95	Active Transportation - Limerick Avenue Class III Bike Route	Limerick Avenue/Chandler Drive/Charger Boulevard, from Northern terminus to Charger Boulevard southern terminus	\$200,000	N/A
CC96	Active Transportation - SR-52 Bike Path Grade Separated Crossing of I-805	Continue SR-52 Bike Path via Grade Separated Crossing of I-805	\$14,000,000	N/A
CC97	Active Transportation - SR-52 Class I Bike Path to Clairemont Mesa Boulevard	Parallel to I-805 along east side	\$5,000,000	SB2S CMCP
CC98	Active Transportation - SR-52 Bike Path Grade Separated Crossing of SR-163	Continue SR-52 Bike Path via Grade Separated Crossing of SR-163	\$14,000,000	N/A
CC99	Active Transportation - SR-52 Bike Path Grade Separated Crossing of I-15	Continue SR-52 Bike Path via Grade Separated Crossing of I-15	\$25,000,000	N/A
CC100	Active Transportation - SDGE Class I Bike Path	SR-52 Bike Path to Conrad Avenue via Utility Corridor	\$3,000,000	SB2S CMCP

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
CC101	Active Transportation - Genesee Avenue Class IV Cycle Track	Nobel Drive to Appleton Street/Lehrer Drive	\$16,000,000	SB2S CMCP
CC102	Active Transportation - Nobel Drive Class IV Cycle Track	Villa La Jolla to I-805	\$14,000,000	SB2S CMCP
CC103	Active Transportation - Regents Road Class IV Cycle Track	Nobel Drive to Arriba Street; Governor Drive to Luna Avenue	\$14,000,000	SB2S CMCP
CC104	Active Transportation - Jutland Drive Class III Bike Route	Morena Boulevard to Luna Avenue	\$93,000	N/A
CC105	Active Transportation - Luna Avenue Class III Bike Route	Western terminus to Regents Road	\$80,000	N/A
CC106	Active Transportation - Clairemont Mesa Boulevard Class IV Cycle Track	Doliva Drive to Santo Road	\$29,000,000	SB2S CMCP
CC107	Active Transportation - Clairemont Mesa Boulevard Class II Bike Lanes	Clairemont Drive to Kleefeld Avenue; Genesee Avenue to Doliva Drive	\$1,000,000	N/A
CC108	Active Transportation - Convoy Court Class I Bike Path	Hickman Field Drive to Mercury Street	\$12,000,000	SB2S CMCP
CC109	Active Transportation - Convoy Street Class II Bike Lanes	SR-52 Bikeway to Aero Road	\$1,000,000	N/A
CC110	Active Transportation - Raytheon Road Class I Bike Path	Ruffner Street to Mercury Street	\$6,000,000	SB2S CMCP

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
CC111	Active Transportation - Kearny Mesa Road Class I Bike Path	Engineer Road to SR-52 Bikeway	\$14,000,000	SB2S CMCP
CC112	Active Transportation - Chesapeake Drive Class II Bike Lanes	Kearny Villa Road to Clairemont Mesa Boulevard	\$620,000	N/A
CC113	Active Transportation - Shawline Street Class II Bike Lanes	Ronson Road to Convoy Court	\$270,000	N/A
CC114	Active Transportation - Mercury Street Class II Bike Lanes	Convoy Court to Engineer Road	\$470,000	N/A
CC115	Active Transportation - Murphy Canyon Road Class II	Clairemont Mesa Boulevard to Balboa Avenue	\$500,000	N/A
CC116	Active Transportation - Copley Park Place Class IV Cycle Track	Ruffner Street to Convoy Street	\$3,000,000	SB2S CMCP
CC117	Active Transportation - Tech Way Class IV Cycle Track	Kearny Villa Road to Overland Avenue	\$5,000,000	SB2S CMCP
CC118	Active Transportation - Kearny Via Road Class IV Cycle Track	Ruffin Road to Mesa College Road	\$21,000,000	SB2S CMCP
CC119	Active Transportation - Ruffin Road Class IV Cycle Track	SR-52 Bikeway to Murphy Canyon Road Class I Bike Path	\$63,000,000	SB2S CMCP
CC120	Active Transportation - Ruffner Street Class IV Cycle Track	Copley Park Place to just south of Balboa Avenue	\$3,000,000	SB2S CMCP
CC121	Active Transportation - Clairemont Drive Class IV Cycle Track	Kleefeld Avenue to Clairemont Mesa Boulevard	\$4,000,000	SB2S CMCP

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
CC122	Active Transportation - San Diego River Bikeway (Class I Bike Path)	Parallels San Diego River	\$15,000,000	SB2S CMCP
CC123	Active Transportation - Mission Gorge Road Class I Bike Path	SR-125 to Carlton Hills Boulevard	\$5,000,000	SB2S CMCP
CC124	Active Transportation - Magnolia Avenue Class II Bike Lane	Prospect Avenue to Airport Drive	\$320,000	N/A
CC125	Active Transportation - Magnolia Avenue Class IV Cycle Track	Airport Drive to Bradley Avenue	\$2,000,000	SB2S CMCP
CC126	Active Transportation - Graves Avenue Class IV Cycle Track	Pepper Drive to VerNon Way	\$6,000,000	SB2S CMCP
CC127	Active Transportation - Santo Road Class IV Cycle Track	SR-52 Bike Path to Clairemont Mesa Boulevard	\$6,000,000	SB2S CMCP
CC128	Active Transportation - Governor Drive Class II Bike Lanes	Stressmann Street to Gullstrand Street	\$1,000,000	N/A
CC129	Active Transportation - Governor Drive Class IV Cycle Track	Gullstrand Street to I-805 Bikeway	\$4,000,000	SB2S CMCP
CC130	Active Transportation - Greenwich Drive Class II Bike Lanes	Governor Drive to Shoreham Place	\$98,000	N/A
CC131	Active Transportation - Propsect Avenue Class II Bike Lanes	Mesa Road to Fanita Drive and Magnolia Avenue to Graves Avenue	\$800,000	N/A
CC132	Active Transportation - Cottonwood Avenue Class II Bike Lane	Mission Gorge Road to Propsect Avenue	\$340,000	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
CC133	Active Transportation - Mission Greens Road Class III Bike Route	Mission Gorge Road to Buena Vista Avenue	\$24,000	N/A
CC134	Active Transportation - Fanita Parkway Class I Bike Path	Carlton Oaks Drive to Mission Gorge Road	\$6,000,000	SB2S CMCP
CC135	Active Transportation - Mast Boulevard Class I Bike Path	Los Ranchitos Road to River Trail	\$7,000,000	SB2S CMCP
CC136	Active Transportation - San Diego River Trail Grade Separated Crossing (Class I)	Town Center to Town Center Park	\$4,000,000	N/A
CC137	Active Transportation - Carlton Hills Boulevard Class II Bike Lanes	Lake Canyon Road to Swanton Drive	\$130,000	N/A
CC138	Active Transportation - Madison Avenue Class II Bike Lanes	Johnson Avenue to Greenfield Drive	\$2,000,000	N/A
CC139	Active Transportation - Fletcher Parkway Class IV Cycle Track	Sharon Way/Westwind Dr to Ballantyne Street	\$15,000,000	SB2S CMCP
CC140	Active Transportation - West Bradley Avenue Class II Bike Lanes	Marshall Avenue to City Limit	\$480,000	N/A
CC141	Active Transportation - N Magnolia Avenue Class II Bike Lanes	El Cajon City Limit to Fletcher Parkway	\$250,000	N/A
CC142	Active Transportation - N Johnson Avenue Class II Bike Lanes	West Bradley Avenue to Fletcher Parkway	\$440,000	N/A
CC143	Active Transportation - Buena Terrace/Peatree	Fletcher Parkway to N Johnson Avenue	\$71,000	N/A

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
	Street/Jackman Street Class III Bike Route			
CC144	Active Transportation - Arnele Avenue Class III Bike Route	Marshall Avenue to N Johnson Avenue	\$26,000	N/A
CC145	Active Transportation - Cuyamaca Street Class III Bike Route	W Bradely Avenue to Fletcher Parkway	\$65,000	N/A
CC146	Active Transportation - Marshall Avenue Class IV Cycle Track	Fletcher Parkway to W Main Street	\$6,000,000	SB2S CMCP
CC147	Active Transportation - Johnson Avenue Class I Bike Path	Fletcher Parkway to El Cajon Boulevard	\$12,000,000	SB2S CMCP
CC148	Active Transportation - Riverside Drive Class I Bike Path	Marathon Parkway/Piney Grove to Riverford Road	\$5,000,000	SB2S CMCP
CC149	Active Transportation - Riverside Drive Class IV Cycle Track	Riverford Road to Lakeside Avenue	\$8,000,000	SB2S CMCP
CC150	Active Transportation - Riverford Road Class IV Cycle Track	Riverside Drive to Woodside Avenue	\$3,000,000	SB2S CMCP
CC151	Active Transportation - Woodside Avenue Class IV Cycle Track	Woodside Avenue from Woodside Trail to Vine Street	\$11,000,000	SB2S CMCP
CC152	Active Transportation - Winter Gardens Boulevard Class IV Cycle Track	Industry Road to Gardena Way	\$10,000,000	SB2S CMCP
CC153	Active Transportation - Mapleview Street Class IV Cycle Track	Channel Road to Pino Drive	\$7,000,000	SB2S CMCP

Refined Strategy ID	Strategy Name	Description	Capital Cost (2022\$)	Other Plan - Cost Not Included
CC154	Active Transportation - Vine Street Class IV Cycle Track	Mapleview Street to Woodside Avenue	\$3,000,000	SB2S CMCP
CC155	Active Transportation - Lakeside Avenue Class IV Cycle Track	Riverside Drive to SR-67	\$3,000,000	SB2S CMCP
CC156	Active Transportation - Channel Road Class IV Cycle Track	Lakeside Avenue to Julian Avenue	\$5,000,000	SB2S CMCP
CC157	Active Transportation - Maine Avenue Class III Bike Route	Mapleview Street to Woodside Avenue	\$39,000	N/A
CC158	Active Transportation - Pedestrian Hybrid Beacon at San Diego River Trail/Cuyamaca Street	Pedestrian Hybrid Beacon at San Diego River Trail & Cuyamaca Street	\$680,000	N/A
CC159	Active Transportation - Pedestrian Hybrid Beacon at Forrester Creek Trail/Mission Gorge Road	Pedestrian Hybrid Beacon at Forrester Creek Trail & Mission Gorge Road	\$680,000	N/A
CC160	Active Transportation - Pedestrian Hybrid Beacon at Forrester Creek Trail/Prospect Avenue	Pedestrian Hybrid Beacon at Forrester Creek Trail & Prospect Avenue	\$680,000	N/A
CC161	Active Transportation - Jutland Drive Class I Bike Path to Santa Fe Street/Rose Creek Bikeway	Class I connection from Jutland Drive/Morena Boulevard to Santa Fe Street/Rose Creek Bikeway	\$13,000,000	SB2S CMCP

## E3. Implementation Assessment Matrix

The following criteria were used in a two-step strategic approach to determine the implementation score and phasing for each TSS:

### 1. Initial Scoring

- a. Each TSS was qualitatively and quantitatively evaluated against five criteria and rated based on whether the strategy would lead to a low, medium, or high impact.
- b. Each rating was scored according to the following point system:
  1. Low impact = 3 points
  2. Medium impact = 2 points
  3. High impact = 1 point
- c. The scores were totaled by TSS, with the highest scores suggesting TSS that are the easiest to implement.

### 2. Additional Factors

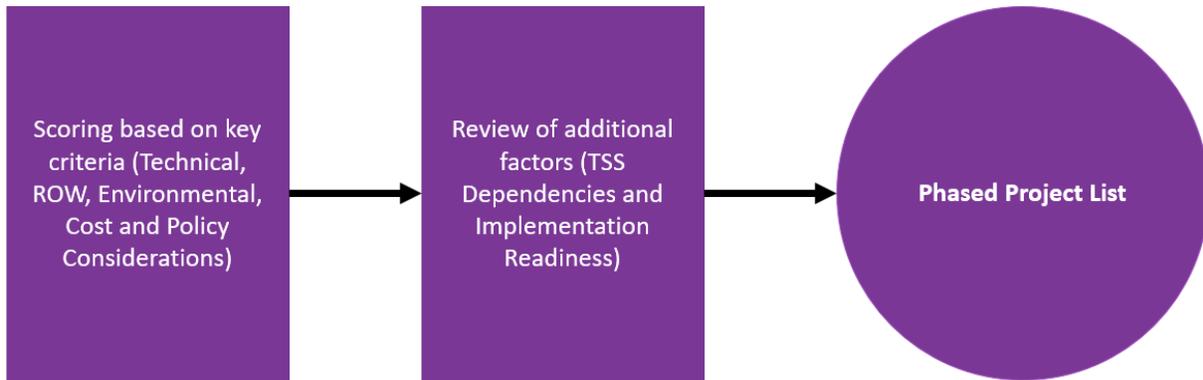
Following this initial scoring, each TSS was also evaluated on two additional factors:

- a. TSS Dependencies: Identifies whether an improvement must be preceded by the implementation of another TSS. For example, a TSS project that is phased in the short term based on the initial implementation criteria may be pushed completely out of a short-term phase and into a medium-term phase or later if it is dependent upon the implementation of another improvement that is late short to medium-term. The assumption is that one project would be fully built and then another project would begin without developing the project simultaneously at risk.
- b. Implementation Readiness: If current technologies, practices, processes, and/or partnerships are already in place to support TSS implementation, then the phasing was revised based on this assessment.

Upon review of the initial scoring and additional factors, each TSS was phased based on a short (less than 5 years), medium (6-15 years) or long-term (more than 15 years) timeframe.

**Figure E-8** below illustrates this methodology.

Figure E-8 Scoring Methodology



# TRANSIT LEAP IMPLEMENTATION

Table E-9: Transit Leap Implementation Matrix

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
			Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
TC01	Torrey Pines Transit Center	Torrey Pines Transit Center at Callan Road	High	Medium	Medium	Medium	Low	Rapid 870	Yes	10	Medium
TC02	Gilman Transit Center (UC San Diego)	UC San Diego Transit Center at Gilman Drive	High	Medium	Medium	Medium	Low	Rapid 880	Yes	10	Medium
TC03	Sorrento Valley Transit Center	Sorrento Valley Coaster Station at Sorrento Valley Road	High	Medium	Medium	Medium	Low	Rapid 890	Yes	10	Medium
TC04	UTC Transit Center	UTC Trolley Station at Genesee Avenue	High	Medium	Medium	Medium	Low	Rapid 880	Yes	10	Medium
TC05	West Kearny Mesa Transit Center	West Kearny Mesa Transit Center at Convoy Street	High	Medium	Medium	Medium	Low	Rapid 880, Rapid 27	Yes	10	Short
TC06	East Kearny Mesa Transit Center	East Kearny Mesa Transit Center at Complex Drive	High	Medium	Medium	Medium	Low	Rapid 880	Yes	10	Medium
TC07	Santee Transit Center	Santee Transit Center at Santee Town Center	High	Medium	Medium	Medium	Low	Rapid 870, Rapid 880, Rapid 890	Yes	10	Medium
TC08	El Cajon Transit Center	El Cajon Trolley Station at Marshall Avenue	High	Medium	Medium	Medium	Low	Rapid 870, Rapid 880, Rapid 890	Yes	10	Medium
TM01	Sorrento Mesa Microtransit	Sorrento Mesa Mobility Hub	Low	Low	Low	Medium	Low		Yes	14	Short
TM02	UTC Microtransit	UTC Mobility Hub	Low	Low	Low	Low	Low		Yes	15	Short
TM04	Clairemont Mesa Microtransit	Clairemont Mesa Mobility Hub	Low	Low	Low	Low	Low		Yes	15	Short
TM05	Kearny Mesa Microtransit	Kearny Mesa Mobility Hub	Low	Low	Low	Low	Low		Yes	15	Short
TM06	Santee Microtransit	Santee Mobility Hub	Low	Low	Low	Low	Low		Yes	15	Medium
TM07	El Cajon Microtransit	El Cajon Mobility Hub	Low	Low	Low	Low	Low		Yes	15	Medium
TR01	Rapid 27 Phase 1	Balboa Transit Center to Kearny Mesa via Balboa Avenue	Low	Low	Low	Medium	Medium		Yes	13	Short
TR02	Rapid 27 Phase 2	Pacific Beach to Kearny Mesa via Balboa Avenue	Low	Low	Low	Medium	Medium	CC24 Balboa Flex, CC42 Grand Flex, CC43 Garnet Flex	Yes	13	Medium
TR03	Rapid 28	Point Loma to Kearny Mesa via Central Mobility Hub	Low	Low	Low	Medium	Medium		Yes	13	Short
TR04	Rapid 30	Balboa Transit Center to Sorrento Mesa via Pacific Beach, La Jolla, and UTC	Low	Low	Low	Medium	Medium		Yes	13	Short
TR05	Rapid 41	Fashion Valley to UTC/UC San Diego via Linda Vista and Clairemont Mesa	Low	Low	Low	Medium	Medium		Yes	13	Short

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
			Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
TR06	Rapid 43	Pacific Beach to Kearny Mesa via Clairemont Mesa	Low	Low	Low	Medium	Medium	CC16 Clairemont Mesa Flex, CC42 Grand Flex, CC43 Garnet Flex	Yes	13	Medium
TR07	Rapid 120	Kearny Mesa to Downtown San Diego via Fashion Valley	Low	Low	Low	Medium	Medium		Yes	13	Medium
TR08	Rapid 292	El Cajon to Otay Mesa via Jamacha and Otay Lakes	Low	Low	Low	Medium	Medium		Yes	13	Medium
TR09	Rapid 292 Phase 1	Pacific Beach to Kearny Mesa	Low	Low	Low	Medium	Medium	CC16 Clairemont Mesa Flex	Yes	13	Short
TR10	Rapid 292 Phase 2	Pacific Beach to Otay Mesa via El Cajon, Jamacha, and Otay Lakes	Low	Low	Low	Medium	Medium	CC16 Clairemont Mesa Flex, CC42 Grand Flex, CC43 Garnet Flex	Yes	13	Medium
TR11	Rapid 295	Spring Valley to Clairemont Mesa via Kearny Mesa	Low	Low	Low	Medium	Medium		Yes	13	Medium
TR14	Route 848	El Cajon to Lakeside via Winter Gardens	Low	Low	Low	Medium	Medium		Yes	13	Short
TR24	Route 832	Santee Town Center to North Santee	Low	Low	Low	Medium	Medium		Yes	13	Short
TR25	Route 834	Santee Town Center to West Santee	Low	Low	Low	Medium	Medium		Yes	13	Short
TR13	Rapid 630	Iris Avenue to Kearny Mesa via I-5 and City College	Low	Low	Low	Medium	Low		Yes	14	Medium
TR15	Rapid 870	El Cajon to Torrey Pines via Santee, SR 52, UC San Diego, I-805	Low	Low	Low	Medium	Low	CC021, CC031, CC041 SR 52 CC GP Conversion	Yes	14	Medium
TR16	Rapid 870	El Cajon to UTC via Santee, SR 52, I-805	Low	Low	Low	Medium	Low	CC02-CC04 SR 52 CC GP Conversion plus Reversible	Yes	14	Medium
TR17	Rapid 870	El Cajon to Torrey Pines via Santee, SR 52, UC San Diego, I-805	Low	Low	Low	Medium	Low	CC021, CC031, CC041 SR 52 CC GP Conversion, CC73 Governor Stop	Yes	14	Medium
TR18	Rapid 880	El Cajon to UC San Diego via Santee, SR 52, Kearny Mesa, I-805, UTC	Low	Low	Low	Medium	Low	CC021, CC031, CC041 SR 52 CC GP Conversion	Yes	14	Medium

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
			Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
TR19	Rapid 880	El Cajon to UC San Diego via Santee, SR 52, Kearny Mesa, I-805, UTC	Low	Low	Low	Medium	Low	CC021, CC031, CC041 SR 52 CC GP Conversion, CC73 Governor Stop	Yes	14	Medium
TR20	Rapid 890	El Cajon to Sorrento Mesa via Santee, SR 52, I-805	Low	Low	Low	Medium	Low	CC021, CC031, CC041 SR 52 CC GP Conversion	Yes	14	Medium
TR21	Rapid 890	El Cajon to Sorrento Mesa via Santee, SR 52, I-805	Low	Low	Low	Medium	Low	CC021, CC031, CC041 SR 52 CC GP Conversion	Yes	14	Medium
TR22	Rapid 890	El Cajon to Sorrento Mesa via Santee, SR 52, I-805	Low	Low	Low	Medium	Low	CC021, CC031, CC041 SR 52 CC GP Conversion, CC73 Governor Stop	Yes	14	Medium
TR23	Rapid 893	Lakeside to El Cajon via SR 52, SR 67	Low	Low	Low	Medium	Low		Yes	14	Medium
TR12	Commuter Rail 582	Sorrento Mesa to National City via UTC, Kearny Mesa, and University Heights	High	High	High	High	High		Yes	5	Medium

# NEXT OS IMPLEMENTATION

Table E-10: Next OS Implementation Matrix

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation (yes/no)	Points	Phasing
NO01	Next OS - Data Hub	High-speed data analytics, data repository, and data performance management platform that will bring together public transportation data and develop a public-private information exchange with companies such as transportation network companies and micromobility fleets. Micromobility and other flexible fleets will benefit from a consolidated database given the decentralized nature of the service. In addition, data hub should support complete corridor performance monitoring and metrics to support optimization of dynamic lane management for Active Traffic Management (ATM) and Active Transportation Demand Management (ATMD).	High	Low	Low	Low	Low	Yes, leverage regional implementation	Yes	13	Short
NO02	Next OS - Curb Access and Parking	Dynamic management of curbs including access and pricing rules. Overall functionality to be applied in proximity to neighborhood mobility hubs and where flex lanes are designated. Can also be applied throughout the study area where higher densities of commercial and residential uses occur and the strategy would assist with reducing static parking requirements and allowing increased PUDO (pick-up/drop-off) areas.	Medium	Low	Low	Low	Low	CC10-43	Yes	14	Medium
NO03	Next OS - Transit Optimization	Dynamic transit routing, scheduling, and communications, already some functionality in place regionally, but enhanced optimization would include improved monitoring of traffic conditions and ensuring optimal use of ATDM functions.	High	Low	Low	Low	Low	Yes, leverage regional implementation	Yes	13	Medium
NO04	Next OS - Mobility as a Service App	Application to plan, book, and pay across public and private shared services. Relies on the sharing of information between public and private providers. This function should be provided regionally and leveraged in the study area to promote transit and alternative modes and lower obstacles to greater mode shifts.	High	Low	Low	Low	Low	Yes, leverage regional implementation ; MH01	No	13	Short
NO05	Next OS - Smart Intersections - Mast Boulevard	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation (yes/no)	Points	Phasing
NO06	Next OS - Smart Intersections - Mission Gorge Road	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO07	Next OS - Smart Intersections - Broadway	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO08	Next OS - Smart Intersections - Clairemont Mesa Boulevard	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO09	Next OS - Smart Intersections - Ruffin Road	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO10	Next OS - Smart Intersections - Convoy Street	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO11	Next OS - Smart Intersections - Genesee Avenue	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO12	Next OS - Smart Intersections - Regents Road	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO13	Next OS - Smart Intersections - Santo Road	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO14	Next OS - Smart Intersections - Bradley Avenue	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation (yes/no)	Points	Phasing
NO15	Next OS - Smart Intersections - Marshall Avenue	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO16	Next OS - Smart Intersections - Johnson Avenue	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO17	Next OS - Smart Intersections - Magnolia Avenue	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO18	Next OS - Smart Intersections - Nobel Dr	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO19	Next OS - Smart Intersections - Governor Dr	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO20	Next OS - Next Generation Integrated Corridor Management System	Provide coordinated response and control for real-time operations across freeway, arterials, and transit networks as part of the broader complete corridors concept in the study area. In particular ICMS functions should support and integrate with the ATM/ATDM features and provide for improved mobility between the designated ATDM and the smart intersection/flex lane facilities under recurring and non-recurring congestion conditions.	High	Low	Low	Low	Low	NO01	Yes	13	Medium
NO21	Next OS - Systems and Software	Enables regional transportation system operators to collect, analyze, and share data to improve transportation systems management and operations. This is a regionally enabled function that would be leveraged by the corridor to support a variety of operations and optimization efforts including optimizing transit service and operations, ATM, ATDM, and monitoring the success of on-going mobility programs.	High	Low	Low	Low	Low	Yes, leverage regional implementation	Yes	13	Medium

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation (yes/no)	Points	Phasing
NO22	Next OS - Truck Route Data	ATM concepts along the corridor include provisions for a temporal truck lane in areas with significant grades along SR-52. The scheduled times or actual status of this truck lane should be made available through Next OS to 511SD and associated traveler information systems.	High	Low	Low	Low	Low	NO01, NO55	Yes	13	Medium
NO23	Next OS - Emergency Response and Other Data	Emergency situations and incidents can significantly impact mobility along key portions of the corridor (e.g. open spaces susceptible to wild fires, etc.) that could limit capacity and impact transit services, truck routing, etc. It is important incidents and situations of this sort leverage Next OS to inform all operations centers and private and public mobility operators of the situation to allow for shifts in operations and to inform travelers of viable alternatives to reduce exacerbating impacts of the situation.	High	Low	Low	Low	Low	NO01	Yes	13	Medium
NO24	Next OS - Dynamic Curb Management - Kearny Mesa	Physical, signage, and ITS infrastructure in Kearny Mesa should be implemented to support flexible curb usage and accommodate for changing demand. Curb management may be integrated with smart parking solutions where appropriate.	Medium	Low	Low	Low	Low	CC17,	No	14	Medium
NO25	Next OS - Dynamic Curb Management - Santee	Physical, signage, and ITS infrastructure in Santee should be implemented to support flexible curb usage and accommodate for changing demand.	Medium	Low	Low	Low	Low	CC18, CC19, CC20, CC21, CC22, CC23,	No	14	Medium
NO26	Next OS - Dynamic Curb Management - Clairemont	Physical, signage, and ITS infrastructure in Clairemont should be implemented to support flexible curb usage and accommodate for changing demand.	Medium	Low	Low	Low	Low	CC16, CC42, CC43	No	14	Medium
NO27	Next OS - Dynamic Curb Management - University City	Physical, signage, and ITS infrastructure in University should be implemented to support of flexible curb usage and accommodate for changing demand. Curb management may be integrated with smart parking solutions where appropriate.	Medium	Low	Low	Low	Low	CC10, CC11, CC12, CC13, CC14, CC15	No	14	Medium

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation (yes/no)	Points	Phasing
NO28	Next OS - Dynamic Lane Assignment	Part of the ATM/ATDM concept, lanes can be dynamically assigned based on temporal conditions and anticipated demands and traffic types. For ATDM this will typically include bus only lanes or bus and HOV lanes, but can also include HOT/Express Lanes or support Connected Autonomous Vehicle designated lanes. Repurpose road space to reflect current or expected demand conditions.	Medium	Medium	Low	Low	Low	NO40-43	No	13	Medium
NO29	Next OS - Shoulder Running	Part of the ATM/ATDM concept, shoulder running or "all-lanes running" allows for peak period use of shoulder areas as running lanes presuming the shoulders have been properly upgraded and prepared for regular traffic. Shoulder lanes may be used for transit lanes, truck lanes, or additional auxiliary lanes to support transitions to/from major N/S freeway corridors to the SR-52.	Medium	Medium	Low	Low	Medium	NO40-47	No	12	Medium
NO30	Next OS - Variable Speed Limits - East	Utilize information on the roadway like volume and traffic speed to post speed limits that are adaptive to changing network conditions. This can reduce accidents and increase throughput of traffic overall. In the future VSS may be paired with speed enforcement. Signage also allows for tailored messaging to indicate incidents and improve safety.	Low	Low	Low	Low	Low	No	Yes	15	Short
NO31	Next OS - Variable Speed Limits - West	Utilize information on the roadway like volume and traffic speed to post speed limits that are adaptive to changing network conditions. This can reduce accidents and increase throughput of traffic overall. In the future VSS may be paired with speed enforcement. Signage also allows for tailored messaging to indicate incidents and improve safety.	Low	Low	Low	Low	Low	No	Yes	15	Short
NO32	Next OS - Flexible Travel Lanes - Genesee Avenue	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	Medium	Medium	Low	Low	Low	CC10, CC11, CC12, CC13, CC14	Yes	13	Medium
NO33	Next OS - Flexible Travel Lanes - Nobel Dr	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	Medium	Medium	Low	Low	Low	CC15	Yes	13	Medium
NO34	Next OS - Flexible Travel Lanes - Ruffin Road	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	Medium	Medium	Low	Low	Low	CC17	Yes	13	Medium

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation (yes/no)	Points	Phasing
NO35	Next OS - Flexible Travel Lanes - Santo Road	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	Medium	Medium	Low	Low	Low	No	Yes	13	Medium
NO36	Next OS - Flexible Travel Lanes - Clairemont Mesa Boulevard	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	Medium	Medium	Low	Low	Low	CC16	Yes	13	Medium
NO37	Next OS - Flexible Travel Lanes - Mission Gorge Road	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	Medium	Medium	Low	Low	Low	CC19	Yes	13	Medium
NO38	Next OS - Flexible Travel Lanes - North Cuyamaca Street	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	Medium	Medium	Low	Low	Low	CC20	Yes	13	Medium
NO39	Next OS - Flexible Travel Lanes - North Marshall Avenue	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	Medium	Medium	Low	Low	Low	CC21, CC22, CC23	Yes	13	Medium
NO40	Next OS - ATM 1 - All Lanes Running SR52 from I-5 to I-805	Active Traffic Management 1: Enables the smooth flow of all traffic modes with a few dedicated lanes to HOV and transit, but all lanes open and running with variable speeds. Electronic signage enables use of shoulder areas, as well as enhanced traffic separation prior to major moves to N/S connecting facilities. ATM includes traveler information functions to warn of incidents and other conditions and would be integrated with regional traveler information solutions such as 511SD.	Medium	Low	Low	Low	Medium	NO28, NO30, NO31 VSS, CC01	No	13	Medium
NO41	Next OS - ATM 2 - Variable Speeds & Dynamic Lanes SR52 from I-805 to	Active Traffic Management 2: Enables the smooth flow of all traffic modes with dynamic lane assignments, VSS, shoulder running, and possible truck climbing lane. ATM includes traveler information functions to warn of incidents and other conditions and would be integrated with regional traveler information solutions such as 511SD.	Medium	Low	Low	Low	Medium	NO28, NO30, NO31 VSS, CC02, CC031, CC03	Yes	13	Medium

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation (yes/no)	Points	Phasing
	Spring Canyon										
NO42	Next OS - ATM 3 - Variable Speeds, Dynamic Lanes SR52 from Spring Canyon to Mast Boulevard.	Active Traffic Management 3: Enables the smooth flow of all traffic modes with dynamic lane assignments, and VSS. ATM includes traveler information functions to warn of incidents and other conditions and would be integrated with regional traveler information solutions such as 511SD.	Medium	Low	Low	Low	Medium	NO28, NO30, NO31 VSS, CC031, CC03	Yes	13	Medium
NO43	Next OS - ATM 4 - Variable Speeds & All Lanes Running SR52 from Mast Boulevard to Cuyamaca Street	Active Traffic Management 4: Enables the smooth flow of all traffic modes with possible dedicated lanes to HOV and transit, but all lanes open and running with variable speeds. Note this is a constrained environment and shoulder running may be used to support early transitions and movement to N/S facilities SR-125. ATM includes traveler information functions to warn of incidents and other conditions and would be integrated with regional traveler information solutions such as 511SD.	Medium	Low	Low	Low	Medium	NO28, NO30, NO31 VSS, NO29, CC041, CC04	Yes	13	Medium
NO44	Next OS - ATDM 1	Active Transportation and Demand Management 1: Promote a mode shift and support alternative modes along the corridor by integrating with smart intersections, incentivizing mode shifts, designating special transit lanes and ramp access along the ATM enabled areas of SR52. ATDM would include integration with supporting traveler information and trip planning functions regionally as provided through systems such as 511SD and others.	Medium	Low	Low	Low	Medium	TR-15-22	No	13	Medium

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation (yes/no)	Points	Phasing
NO45	Next OS - ATDM 2	Active Transportation and Demand Management 2: Promote a mode shift and support alternative modes along the corridor by integrating with smart intersections, incentivizing mode shifts, designating special transit lanes and ramp access along the ATM enabled areas of SR52. ATDM would include integration with supporting traveler information and trip planning functions regionally as provided through systems such as 511SD and others.	Medium	Low	Low	Low	Medium	TR10, TR15, TR16, TR17, TR18, TR19, TR20, TR21, TR22, TR23, TR24, TR25	No	13	Medium
NO46	Next OS - ATDM Integration at Mast Boulevard/SR-52	In order to support proper access and improve transit service, the configuration of the Mast Boulevard. ramps should be adjusted and temporal transit/HOV lanes put in place to support integration of the arterial flex lanes and the ATDM elements on SR-52. This should allow buses to bypass long queues on Mast Boulevard. near SR52.	Medium	Low	Low	Low	Medium	TR10, TR15, TR16, TR17, TR18, TR19, TR20, TR21, TR22, TR24, TR25		13	Medium
NO47	Next OS - ATDM Integration at Cuyamaca Street/SR52	In order to support proper access and improve transit service, the configuration of the Cuyamaca Street. ramps should be adjusted and temporal transit/HOV lanes put in place to support integration of the arterial flex lanes and the ATDM elements on SR-52. This should allow buses to bypass long queues on Cuyamaca Street. near SR52. Trolley operations should be integrated with the concept as well.	Medium	Low	Low	Low	Medium	TR08, TR10, TR24, TR25	Yes	13	Medium
NO48	Next OS - Incident Management	Install the systems and ITS to coordinate incident detection, response, and clearing and restore traffic flow quickly and safely. This includes enhancement of camera, vehicle detection, and incident detection systems along SR52 and I-805, as well as improved integrated incident management between State and local agencies along the corridor consistent with emerging TSM&O and ICMS efforts.	High	Low	Low	Low	Low	NO20; Yes, leverage regional implementation	Yes	13	Medium
NO49	Next OS - Incident Response	Systems that prepare and communicate incidents to the community. Responses could dynamically adjust speed, divert or reroute traffic, encourage transit, and reach corridor wide coordination/integration.	High	Low	Low	Low	Low	Yes, leverage regional implementation	Yes	13	Medium

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation (yes/no)	Points	Phasing
NO50	Next OS - Performance Monitoring	Utilitize real- time data (speeds, volumes, vehicle occupancy, VSS compliance) to improve performance of transit, carshare, bikeshare, and traffic flows. This information can be used to point users to mobility alternatives and to enforce ATDM and dynamic lane assignments.	High	Low	Low	Low	Low	Yes, leverage regional implementation	Yes	13	Medium
NO51	Next OS - Performance Assessment, Evaluation, Optimization	Utilize historical data (vehicle classification, speeds, volumes, vehicle occupancy, VSS compliance) to perform system assessments and evaluations to better understand the impact of network changes and events on performance. Optimize system function informed by this analysis.	High	Low	Low	Low	Low	Yes, leverage regional implementation	Yes	13	Medium
NO52	Next OS - Fleet and Vehicle tracking	Consistent with current practice for bus and BRT systems, automatic vehicle location (AVL) functions help operators and the central management system understand the locations of individual vehicles within a transit network. This informs real-time transit information, and should support integrated information between MTS provided services and potential private supporting flex fleet services.	High	Low	Low	Low	Low	Yes, leverage regional implementation	Yes	13	Medium
NO53	Next OS - Passenger Counting	This function helps to understand passenger demand patterns that can be used to adjust and inform service changes and improvements.	Medium	Low	Low	Low	Low	Yes, leverage regional implementation	Yes	14	Medium
NO54	Next OS - Integrated fare payment and trip-planning portal	Off-board fare payment and routing information makes it more seamless for riders using transit. Riders can pay beforehand for their whole trip and receive guided instructions for their trip, particularly if they are using multiple modes. This function should be regionally integrated with the MaaS functions and leveraged within the study area. Account based approaches such as those being rolled out regionally with Pronto could be leveraged.	High	Low	Low	Low	Low	NO04, MH01	Yes	13	Short
NO55	Next OS - Regional Traveler Information/511	Regional traveler information on trip planning, roadway conditions, weather, travel options, congestion, incidents, mobility services, mobility systems status, etc. would be provided for the CCT corridor through regional outlets such as 511SD and other private options receiving data from agency systems. Access to this information would be through multiple means including smartphone apps, web,	High	Low	Low	Low	Low	Yes, leverage regional implementation	Yes	13	Short

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation (yes/no)	Points	Phasing
		broadcast through third parties, kiosks at mobility hubs, etc.									
NO56	Next OS - Real-time Information	Real-time information allows riders to receive updates on their smartphone or locally placed dynamic signage to know the status of their transit vehicles and ease rider uncertainty.	High	Low	Low	Low	Low	MH01	Yes	13	Short
NO57	Next OS - Wi-Fi	Reliable on-board Wi-Fi is increasingly important as smartphones are widely used and can connect riders to real-time transit information, routing and payment as well for an enhanced experience while riding.	High	Low	Low	Low	Low	No	Yes	13	Short
NO58	Next OS - Audio and visual next stop announcements	Consistent with current standard practice ensure all buses and transit are equipped with communication devices to provide next stop announcements letting riders know the next stop and enhancing the customer experience. This feature also helps support the goal of equity for all types of users. This currently exists on MTS fixed route service - but may need associated	High	Low	Low	Low	Low	Yes, leverage regional implementation	Yes	13	Short
NO59	Next OS - Transportation Management Center	Leverage and operate ATM/ATDM functions through existing operations centers for Caltrans and MTS.	Low	Low	Low	Low	Low	Yes, leverage regional implementation	No	15	Short
NO60	Next OS - Universal Transportation Account	Leverage regional efforts towards an integrated application providing centralized information related to parking, rideable, mobility-on-demand and fixed route transit. This may leverage current account based solutions such as Pronto (depending on institutional agreements).	Medium	Low	Low	Low	Low	NO04, MH01	Yes	14	Short

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation (yes/no)	Points	Phasing
NO61	Next OS - Transit Signal Priority	Part of the smart intersection corridors functionality where signal programming allows transit vehicles to be prioritized at crossings/intersections. Shorter travel times and more reliable service could result from the addition of dedicated lanes paired with signal priority during peak travel hours. Should be integrated with physical infrastructure improvements (e.g. Flex Lanes, etc.) where possible.	Medium	Low	Low	Low	Low	NO05-19; Yes, leverage regional implementation	Yes	14	Short
NO62	Next OS - Bike Signals	Along key active transportation arterials or in known areas of bicycle/auto conflict issues, bike signals (eg. the green wave) may be installed to incentivize safe bicycle use as well as prioritize bikes on streets.	Medium	Low	Low	Low	Low	NO05-19; CC10-43	Yes	14	Short
NO63	Next OS - Smart Parking - Kearny Mesa	Implement smart parking functionality which provides enhanced information on parking availability, time limitations, costs, and payment in conjunction with curb management and mobility hub efforts.	Low	Low	Low	Low	Low	No	Yes	15	Medium
NO64	Next OS - Smart Parking - UTC	Implement smart parking functionality which provides enhanced information on parking availability, time limitations, costs, and payment in conjunction with curb management and mobility hub efforts.	Low	Low	Low	Low	Low	No	Yes	15	Short
NO65	Next OS - Smart Parking - UCSD	Implement smart parking functionality which provides enhanced information on parking availability, time limitations, costs, and payment in conjunction with curb management and mobility hub efforts.	Low	Low	Low	Low	Low	No	Yes	15	Short
NO66	Next OS - Smart Parking - El Cajon	Implement smart parking functionality which provides enhanced information on parking availability, time limitations, costs, and payment in conjunction with curb management and mobility hub efforts.	Low	Low	Low	Low	Low	No	Yes	15	Medium

# MOBILITY HUB IMPLEMENTATION

Table E-11: Mobility Hub Implementation Matrix

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Implementation Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
MH01	Mo-Hub - Major Node 1 - UCSD Transit Center	Bike lockers and fix-it station	Low	Low	Low	Low	Low	No	Yes	15	Short
MH02	Mo-Hub Major Node 2 - UTC Transit Center	Bike lockers and fix-it station	Low	Low	Low	Low	Low	No	Yes	15	Short
MH03	Mo-Hub Minor Node 20 - Grossmont College	Bike lockers and fix-it station	Low	Low	Low	Low	Low	No	Yes	15	Short
MH04	Mo-Hub Minor Node 21 - Fanita Ranch	Bike Parking	Low	Low	Low	Low	Low	No	No	15	Short
MH05	Mo-Hub Minor Node 22 - Winter Gardens	Bike Parking	Low	Low	Low	Low	Low	No	Yes	15	Short
MH06	Mo-Hub Minor Node 13 - Governor Drive	Bike parking and fix-it station	Low	Low	Low	Low	Low	No	Yes	15	Short
MH07	Mo-Hub Major Node 2 - UTC Transit Center	Dynamic / flexible parking	Low	Low	Low	Low	Medium	No	Yes	14	Medium
MH08	Mo-Hub Major Node 4 - W Kearny Mesa Transit Center	Dynamic / flexible parking	Low	Low	Low	Low	Medium	No	Yes	14	Medium
MH09	Mo-Hub Major Node 5 - E Kearny Mesa Transit Center	Dynamic / flexible parking	Low	Low	Low	Low	Medium	No	Yes	14	Medium
MH10	Mo-Hub Minor Node 17 - Convoy Street and Othello Avenue	Dynamic / flexible parking	Low	Low	Low	Low	Medium	No	Yes	14	Medium
MH11	Mo-Hub Minor Node 20 - Grossmont College	Dynamic / flexible parking	Low	Low	Low	Low	Medium	No	Yes	14	Medium
MH12	MoHub - All - Dynamic signage and wayfinding	Dynamic signage, such as TransitScreens, provide real-time information to travelers on transit connections, airport	Low	Low	Low	Low	Low	No	Yes	15	Short

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Implementation Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
		arrivals/departures. Dynamic wayfinding allows varied messages to show on electronic screens to travelers that are making connections									
MH13	Mo-Hub Major Node 2 - UTC Transit Center	EV Charging Stations	Low	Low	Low	Low	Low	No	Yes	15	Short
MH14	Mo-Hub Minor Node 6 - Tierrasanta	EV Charging stations	Low	Low	Low	Low	Low	No	Yes	15	Short
MH15	Mo-Hub Minor Node 7 - Santee City Hall	EV Charging Stations	Low	Low	Low	Low	Low	No	Yes	15	Short
MH16	Mo-Hub Major Node 8 - Santee Town Center	EV Charging Stations	Low	Low	Low	Low	Low	No	Yes	15	Short
MH17	Mo-Hub Major Node 10 - Downtown El Cajon	EV Charging Stations	Low	Low	Low	Low	Low	No	Yes	15	Short
MH18	Mo-Hub Major Node 11 - Hillsdale	EV Charging Stations	Low	Low	Low	Low	Low	No	Yes	15	Short
MH19	Mo-Hub Minor Node 12 - Lakeside	EV Charging Stations	Low	Low	Low	Low	Low	No	Yes	15	Short
MH20	Mo-Hub Minor Node 14 - Clairemont Mesa Boulevard and Geneese Avenue	EV Charging Stations	Low	Low	Low	Low	Low	No	Yes	15	Short
MH21	Mo-Hub Minor Node 16 - Balboa Avenue and Geneese Avenue	EV Charging Stations	Low	Low	Low	Low	Low	No	Yes	15	Short
MH22	Mo-Hub Minor Node 18 - Aero Drive and Kearny Villa Road	EV Charging Stations	Low	Low	Low	Low	Low	No	Yes	15	Short

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Implementation Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
MH23	Mo-Hub Minor Node 21 - Fanita Ranch	EV Charging Stations	Low	Low	Low	Low	Low	No	Yes	15	Short
MH24	Mo-Hub Minor Node 22 - Winter Gardens	EV Charging Stations	Low	Low	Low	Low	Low	No	No	15	Short
MH25	MoHub - All - Placemaking Amenities	Including landscaping and shade, benches, device charging stations and public art	Low	Low	Low	Low	Low	No	No	15	Short
MH26	MoHub - All - Interactive Kiosks	Kiosks at transit station may provide such services as fare payment, wayfinding, real-time transit, and services and amenities directories	Low	Low	Low	Low	Low	No	No	15	Short
MH27	Mo-Hub - Major Node 1 - UCSD Transit Center	Lockers for safe retail deliveries	Low	Low	Low	Low	Low	No	No	15	Short
MH28	Mo-Hub Major Node 2 - UTC Transit Center	Lockers for safe retail deliveries	Low	Low	Low	Low	Low	No	No	15	Short
MH29	Mo-Hub Minor Node 3 - Clairemont Town Square	Lockers for safe retail deliveries	Low	Low	Low	Low	Low	No	No	15	Short
MH30	Mo-Hub Minor Node 6 - Tierrasanta	Lockers for safe retail deliveries	Low	Low	Low	Low	Low	No	Yes	15	Short
MH31	Mo-Hub Minor Node 7 - Santee City Hall	Lockers for safe retail deliveries	Low	Low	Low	Low	Low	No	Yes	15	Short
MH32	Mo-Hub Major Node 8 - Santee Town Center	Lockers for safe retail deliveries	Low	Low	Low	Low	Low	No	Yes	15	Short
MH33	Mo-Hub Major Node 10 - Downtown El Cajon	Lockers for safe retail deliveries	Low	Low	Low	Low	Low	No	Yes	15	Short
MH34	Mo-Hub Minor Node 14 - Clairemont Mesa Boulevard and Geneese Avenue	Lockers for safe retail deliveries	Low	Low	Low	Low	Low	No	Yes	15	Short
MH35	Mo-Hub Minor Node 20 -	Lockers for safe retail deliveries	Low	Low	Low	Low	Low	No	Yes	15	Short

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Implementation Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
	Grossmont College										
MH36	Mo-Hub Minor Node 21 - Fanita Ranch	Lockers for safe retail deliveries	Low	Low	Low	Low	Low	No	Yes	15	Short
MH37	Mo-Hub Minor Node 22 - Winter Gardens	Lockers for safe retail deliveries	Low	Low	Low	Low	Low	No	Yes	15	Short
MH38	Mo-Hub Minor Node 7 - Santee City Hall	Multilingual wayfinding, real-time information and interactive kiosks	Low	Low	Low	Low	Low	No	Yes	15	Short
MH39	Mo-Hub Major Node 8 - Santee Town Center	Multilingual wayfinding, real-time information and interactive kiosks	Low	Low	Low	Low	Low	No	Yes	15	Short
MH40	Mo-Hub Major Node 9 - El Cajon Transit Center	Multilingual wayfinding, real-time information and interactive kiosks	Low	Low	Low	Low	Low	No	No	15	Short
MH41	Mo-Hub Major Node 10 - Downtown El Cajon	Multilingual wayfinding, real-time information and interactive kiosks	Low	Low	Low	Low	Low	No	Yes	15	Short
MH42	Mo-Hub - Major Node 1 - UCSD Transit Center	Parking for shared rideables	Low	Low	Low	Low	Low	No	Yes	15	Short
MH43	Mo-Hub Major Node 2 - UTC Transit Center	Parking for shared rideables	Low	Low	Low	Low	Low	No	Yes	15	Short
MH44	Mo-Hub Major Node 4 - W Kearny Mesa Transit Center	Parking for shared rideables	Low	Low	Low	Low	Low	No	No	15	Short
MH45	Mo-Hub Major Node 5 - E Kearny Mesa Transit Center	Parking for shared rideables	Low	Low	Low	Low	Low	No	No	15	Short
MH46	Mo-Hub Minor Node 7 - Santee City Hall	Parking for shared rideables	Low	Low	Low	Low	Low	No	No	15	Short
MH47	Mo-Hub Major Node 8 - Santee Town Center	Parking for shared rideables	Low	Low	Low	Low	Low	No	Yes	15	Short

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Implementation Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
MH48	Mo-Hub Major Node 9 - El Cajon Transit Center	Parking for shared rideables	Low	Low	Low	Low	Low	No	Yes	15	Short
MH49	Mo-Hub Major Node 10 - Downtown El Cajon	Parking for shared rideables	Low	Low	Low	Low	Low	No	Yes	15	Short
MH50	Mo-Hub Minor Node 13 - Governor Drive	Parking for shared rideables	Low	Low	Low	Low	Low	No	Yes	15	Short
MH51	Mo-Hub Minor Node 20 - Grossmont College	Parking for shared rideables	Low	Low	Low	Low	Low	No	Yes	15	Short
MH52	Mo-Hub - Major Node 1 - UCSD Transit Center	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH53	Mo-Hub Major Node 2 - UTC Transit Center	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH54	Mo-Hub Major Node 4 - W Kearny Mesa Transit Center	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH55	Mo-Hub Major Node 5 - E Kearny Mesa Transit Center	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH56	Mo-Hub Major Node 8 - Santee Town Center	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars,	Low	Low	Low	Low	Low	No	Yes	15	Short

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Implementation Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
		pedestrian countdown signal heads, LPIs, signage									
MH57	Mo-Hub Major Node 10 - Downtown El Cajon	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH58	Mo-Hub Major Node 11 - Hillsdale	Within 1/2-mile of major node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH59	Mo-Hub Minor Node 3 - Clairemont Town Square	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	No	15	Short
MH60	Mo-Hub Minor Node 6 - Tierrasanta	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH61	Mo-Hub Minor Node 7 - Santee City Hall	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH62	Mo-Hub Minor Node 12 - Lakeside	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH63	Mo-Hub Minor Node 13 - Governor Drive	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental	Low	Low	Low	Low	Low	No	Yes	15	Short

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Implementation Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
		crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage									
MH64	Mo-Hub Minor Node 14 - Clairemont Mesa Boulevard and Geneese Avenue	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH65	Mo-Hub Minor Node 15 - Balboa Avenue and Garnet Avenue	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH66	Mo-Hub Minor Node 16 - Balboa Avenue and Genesee Avenue	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH67	Mo-Hub Minor Node 17 - Convoy Street and Othello Avenue	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH68	Mo-Hub Minor Node 18 - Aero Drive and Kearny Villa Road	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH69	Mo-Hub Minor Node 19 - Aero Drive	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH70	Mo-Hub Minor Node 20 -	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing	Low	Low	Low	Low	Low	No	Yes	15	Short

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Implementation Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
	Grossmont College	enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage									
MH71	Mo-Hub Minor Node 21 - Fanita Ranch	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH72	Mo-Hub Minor Node 22 - Winter Gardens	Within 1/4-mile of minor node: Complete missing sidewalks; Signalized intersection crossing enhancements: Continental crosswalks, advance stop bars, pedestrian countdown signal heads, LPIs, signage	Low	Low	Low	Low	Low	No	Yes	15	Short
MH73	EV Charging SR 67 & Maplevue	EV Charging Stations	Low	Low	Low	Low	Low	No	Yes	15	Short
MH74	EV Charging at Mission Trails Regional Park	EV Charging Stations	Low	Low	Low	Low	Low	No	Yes	15	Short

# FLEXIBLE FLEET IMPLEMENTATION

Table E-12: Flexible Fleet Implementation Matrix

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation	Points (5 - 15 pts)	Phasing
FF01	Flexible Fleet Operations	Operations for Flexible Fleet services including micromobility, ride hail/carshare, rideshare microtransit, and last-mile delivery	Low	Low	Low	Low	Low	No	Yes	15	Short
FF02	Flexible Fleet - Major Node 1 - UCSD Transit Center	Mobile retail services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF03	Flexible Fleet - Major Node 1 - UCSD Transit Center	Micromobility shared rideables	Low	Low	Low	Low	Low	No	Yes	15	Short
FF04	Flexible Fleet - Major Node 2 - UTC Transit Center	Micromobility shared rideables	Low	Low	Low	Low	Low	No	Yes	15	Short
FF05	Flexible Fleet - Major Node 2 - UTC Transit Center	Mobile retail services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF06	Flexible Fleet - Major Node 2 - UTC Transit Center	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF07	Flexible Fleet - Minor Node 3 - Clairemont Town Square	Mobile retail services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF08	Flexible Fleet - Minor Node 3 - Clairemont Town Square	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF09	Flexible Fleet - Major Node 4 - W Kearny Mesa Transit Center	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF10	Flexible Fleet - Major Node 4 - W Kearny Mesa Transit Center	Micromobility shared rideables	Low	Low	Low	Low	Low	No	Yes	15	Short

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation	Points (5 - 15 pts)	Phasing
FF11	Flexible Fleet - Major Node 5 - E Kearny Mesa Transit Center	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF12	Flexible Fleet - Major Node 5 - E Kearny Mesa Transit Center	Micromobility shared rideables	Low	Low	Low	Low	Low	No	Yes	15	Short
FF13	Flexible Fleet - Minor Node 6 - Tierrasanta	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF14	Flexible Fleet - Minor Node 6 - Tierrasanta	Mobile retail services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF15	Flexible Fleet - Minor Node 7 - Santee City Hall	Mobile retail services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF16	Flexible Fleet - Minor Node 7 - Santee City Hall	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF17	Flexible Fleet - Minor Node 7 - Santee City Hall	Micromobility shared rideables	Low	Low	Low	Low	Mid	No	Yes	12	Medium
FF18	Flexible Fleet - Major Node 8 - Santee Town Center	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF19	Flexible Fleet - Major Node 8 - Santee Town Center	Mobile retail services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF20	Flexible Fleet - Major Node 8 - Santee Town Center	Micromobility shared rideables	Low	Low	Low	Low	Mid	No	Yes	12	Medium
FF21	Flexible Fleet - Major Node 9 - El Cajon Transit Center	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation	Points (5 - 15 pts)	Phasing
FF22	Flexible Fleet - Major Node 9 - El Cajon Transit Center	Micromobility shared rideables	Low	Low	Low	Low	Mid	No	Yes	12	Medium
FF23	Flexible Fleet - Major Node 10 - Downtown El Cajon	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF24	Flexible Fleet - Major Node 10 - Downtown El Cajon	Mobile retail services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF25	Flexible Fleet - Major Node 10 - Downtown El Cajon	Micromobility shared rideables	Low	Low	Low	Low	Mid	No	Yes	12	Medium
FF26	Flexible Fleet - Major Node 11 - Hillsdale	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF27	Flexible Fleet - Minor Node 12 - Lakeside	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF28	Flexible Fleet - Minor Node 13 - Governor Drive	Micromobility shared rideables	Low	Low	Low	Low	Low	No	Yes	15	Short
FF29	Flexible Fleet - Minor Node 14 - Clairemont Mesa Boulevard and Genesee Avenue	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF30	Flexible Fleet - Minor Node 14 - Clairemont Mesa Boulevard and Genesee Avenue	Mobile retail services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF31	Flexible Fleet - Minor Node 16 - Balboa Avenue and Genesee Avenue	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF32	Flexible Fleet - Minor Node 17 - Convoy Street and Othello Avenue	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short

Refined Strategy ID	Strategy Name	Description	Implementation Criteria (Scoring)					Additional Factors		Points and Phasing	
			Construction/ Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Readiness of Implementation	Points (5 - 15 pts)	Phasing
FF33	Flexible Fleet - Minor Node 18 - Aero Drive and Kearny Villa Road	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF34	Flexible Fleet - Minor Node 19 - Aero Drive	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF35	Flexible Fleet - Minor Node 20 - Grossmont College	Rideshare services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF36	Flexible Fleet - Minor Node 20 - Grossmont College	Mobile retail services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF37	Flexible Fleet - Minor Node 20 - Grossmont College	Micromobility shared rideables	Low	Low	Low	Low	Low	No	Yes	15	Short
FF38	Flexible Fleet - Minor Node 21 - Fanita Ranch	Mobile retail services	Low	Low	Low	Low	Low	No	Yes	15	Short
FF39	Flexible Fleet - Minor Node 22 - Winter Gardens	Mobile retail services	Low	Low	Low	Low	Low	No	Yes	15	Short

# COMPLETE CORRIDOR IMPLEMENTATION

Table E-13: Complete Corridors Implementation Matrix

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
CC01	SR 52 Managed Lanes	Add 2 managed lanes and 1 reversible	I-5	I-805	High	High	High	High	Low	0	Yes	7	Long
CC02	SR 52 Managed Lanes	Convert general purpose lanes and/or shoulder to 2 managed lanes and add 1 reversible	I-805	I-15	Medium	Medium	Low	High	Low	0	Yes	11	Medium
CC021	SR 52 Managed Lanes Phase 1	Convert general purpose lanes and/or shoulder to 2 managed lanes	I-805	I-15	Low	Low	Low	Medium	Low	0	Yes	14	Short
CC03	SR 52 Managed Lanes	Convert general purpose lanes and/or shoulder to 2 managed lanes and add 1 reversible	I-15	Mast Boulevard	Medium	Medium	Low	High	Low	0	Yes	11	Medium
CC031	SR 52 Managed Lanes Phase 1	Convert general purpose lanes and/or shoulder to 2 managed lanes	I-15	Mast Boulevard	Low	Low	Low	Medium	Low	0	Yes	14	Short
CC04	SR 52 Managed Lanes	Convert general purpose lanes and/or shoulder to 2 managed lanes and add 1 reversible	Mast Boulevard	SR 125	Medium	Medium	Low	High	Low	0	Yes	11	Medium
CC041	SR 52 Managed Lanes Phase 1	Convert general purpose lanes and/or shoulder to 2 managed lanes	Mast Boulevard	SR 125	Low	Low	Low	Medium	Low	0	Yes	14	Short
CC05	Complete Corridor: MLC SR 52 (I-5)	South to East and West to North	I-5	SR 52	High	High	Medium	High	Low	CC01, CC02, CC03, CC04 SR 52 ML	Yes	8	Long
CC06	Complete Corridor: MLC SR 52 (I-5)	North to East and West to South	I-5	SR 52	High	High	Medium	High	Low	CC01, CC02, CC03, CC04 SR 52 ML	Yes	8	Long
CC07	Complete Corridor: MLC SR 52 (I-805)	West to North and South to East	I-805	SR 52	High	High	Medium	High	Low	CC01, CC02, CC03, CC04 SR 52 ML	Yes	8	Long

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
CC071	Complete Corridor: MLC SR 52 (I-805)	North to West and East to South	I-805	SR 52	High	High	Medium	High	Low	CC01, CC02, CC03, CC04 SR 52 ML	Yes	8	Long
CC081	Complete Corridor: MLC SR 52 (I-15)	South to West and East to North	I-15	SR 52	High	High	Medium	High	Low	CC01, CC02, CC03, CC04 SR 52 ML	Yes	8	Long
CC082	Complete Corridor: MLC SR 52 (I-15)	West to North and South to East	I-15	SR 52	High	High	Medium	High	Low	CC01, CC02, CC03, CC04 SR 52 ML	Yes	8	Long
CC083	Complete Corridor: MLC SR 52 (I-15)	North to West and East to South	I-15	SR 52	High	High	Medium	High	Low	CC01, CC02, CC03, CC04 SR 52 ML	Yes	8	Long
CC084	Complete Corridor: MLC SR 52 (I-15)	North to East and West to South	I-15	SR 52	High	High	Medium	High	Low	CC01, CC02, CC03, CC04 SR 52 ML	Yes	8	Long
CC09	Complete Corridor: MLC SR 52 (SR 125)	North to West and East to South	n/a	n/a	High	High	Medium	High	Low	CC01, CC02, CC03, CC04 SR 52 ML	Yes	8	Long
CC10	Genesee Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	I-5	Regents Road	Medium	Medium	Low	Medium	Low	0	Yes	12	Medium
CC11	Genesee Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	Regents Road	Nobel Drive	Medium	Medium	Low	Medium	Low	0	Yes	12	Medium
CC12	Genesee Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	Nobel Drive	SR 52	Medium	Medium	Low	Medium	Low	0	Yes	12	Medium
CC13	Genesee Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	SR 52	Marlesta Drive	Medium	Medium	Low	Medium	Low	0	Yes	12	Medium
CC14	Genesee Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	Marlesta Drive	SR 163	Medium	Medium	Low	Medium	Low	0	Yes	12	Medium
CC15	Nobel Drive Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	I-5	I-805	Medium	Medium	Low	Medium	Low	0	Yes	12	Short

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
CC16	Clairemont Mesa Boulevard Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	I-805	I-15	Medium	Medium	Low	Medium	Low	0	Yes	12	Short
CC17	Ruffin Road Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	Kearny Villa Road	Clairemont Mesa Boulevard	Medium	Medium	Low	Medium	Low	0	Yes	12	Short
CC18	Mast Boulevard Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	SR 52	Boulder Vista	Medium	Medium	Low	Medium	Low	0	Yes	12	Short
CC19	Mission Gorge Road Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	SR 52	Cuyamaca Street	Medium	Medium	Low	Medium	Low	0	Yes	12	Short
CC20	Cuyamaca Street Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	Mission Gorge Road	Marshall Avenue	Medium	Medium	Low	Medium	Low	0	Yes	12	Short
CC21	Marshall Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	Cuyamaca Street	Bradley Avenue	Medium	Medium	Low	Medium	Low	0	Yes	12	Short
CC22	Marshall Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	Bradley Avenue	Fletcher Parkway	Medium	Medium	Low	Medium	Low	0	Yes	12	Short
CC23	Marshall Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	Fletcher Parkway	Main Street	Medium	Medium	Low	Medium	Low	0	Yes	12	Short
CC24	Balboa Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	I-805	SR 163	Medium	Medium	Low	Medium	Low	0	Yes	12	Short
CC42	Garnet Avenue Flex Lane	Convert general purpose lanes and/or shoulder/parking to flex lane.	Grand Avenue	Morena Boulevard	Medium	Medium	Low	Medium	Low	0	Yes	12	Medium
CC43	Grand Avenue Flex Lane	Convert general purpose lanes and/or	Mission Boulevard	Garnet Avenue	Medium	Medium	Low	Medium	Low	0	Yes	12	Medium

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
		shoulder/parking to flex lane.											
CC44	SR 67 Digital Infrastructure	Install broadband fiber optic connection filling the missing gap between El Cajon and Lakeside	El Cajon	Lakeside	Medium	Medium	Low	Medium	Low	0	Yes	12	Short
CC45	WB 52 to NB 805 Auxiliary Lane	Add additional freeway to freeway ramp lane and extend as auxiliary lane to Governor.	SR 52	Governor Drive	Medium	High	High	Medium	Low	0	Yes	9	Short
CC46	WB 52 Auxiliary Lane	Add westbound SR 52 auxiliary lane from Convoy Street to I-805 northbound ramp.	Convoy Street	I-805	Medium	High	High	Medium	Low	0	Yes	9	Short
CC47	WB 52 Truck Climbing Lane	Add westbound SR 52 truck climbing lane from Mast Boulevard to crest of hill	Mast Boulevard	Crest of hill	High	High	High	High	Low	0	Yes	7	Short
CC48	EB 52 Auxiliary Lane	Add eastbound SR 52 auxiliary lane from Spring Canyon Bridge to Mast Boulevard	Spring Canyon Bridge	Mast Boulevard	Medium	High	High	Medium	Low	0	Yes	9	Short
CC49	SR 67 & Mapleview Street ICE	Perform intersection control evaluation and evaluate intersection geometry	n/a	n/a	Low	Low	Low	Low	Low		Yes	15	Medium
CC50	SR 67 & Willow Road ICE	Perform intersection control evaluation and evaluate intersection geometry	SR 67	Willow Road	Low	Low	Low	Low	Low	0	Yes	15	Medium
CC51	Willow Road & Wildcat Canyon ICE	Perform intersection control evaluation and evaluate intersection geometry	Wildcat Canyon	Wildcat Canyon	Low	Low	Low	Low	Low	0	Yes	15	Medium
CC52	Lake Jennings Road & El Monte Road ICE	Perform intersection control evaluation and evaluate intersection geometry	Willow Road	Wildcat Canyon	Low	Low	Low	Low	Low	0	Yes	15	Medium
CC53	Julian Avenue & Lemon Crest Drive ICE	Perform intersection control evaluation and evaluate intersection geometry	Lemon Crest Drive	Lemon Crest Drive	Low	Low	Low	Low	Low	0	Yes	15	Medium

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
CC54	SR 67 & Gold Bar Lane ICE	Perform intersection control evaluation and evaluate intersection geometry	Gold Bar Lane	Gold Bar Lane	Low	Low	Low	Low	Low	0	Yes	15	Medium
CC55	SR 67 & Lakeside Avenue	Perform signal warrant analysis	Lakeside Avenue	Lakeside Avenue	Medium	Medium	Low	Low	Low	0	Yes	13	Medium
CC56	Willow Road Traffic Calming	Implement traffic calming strategies to SR-67	Willow Road	Willow Road	Medium	Medium	Low	Medium	Low	0	Yes	12	Medium
CC58	Wildcat Canyon Road Falling Rock Improvement	Install falling rock protection devices and warning signage along roadway	El Cajon Mountain Trailhead	Mapleview Street	Medium	Medium	Medium	Medium	Low	0	Yes	11	Medium
CC59	SR 67: San Diego River Bridge	Widen bridge to accommodate evacuation needs (based on Highway Safety Improvement Plan evacuation study)	Vine Street	Lakeside Avenue	High	High	High	High	Low	0	Yes	7	Long
CC60	Ashwood Street: Mapleview Street to Cactus Park Road	Create passing lane from Mapleview Street to Cactus Park	Mapleview Street	Cactus Park	High	High	High	High	Low	0	Yes	7	Long
CC61	SR 67 PM 6.05 to 9.01 Shoulder Widening	Widen shoulders on both sides of the roadway to be used for evacuation (based on Highway Safety Improvement Plan evacuation study)	PM 6.05	PM 9.01	High	High	High	High	Low	0	Yes	7	Long
CC62	SR 67 PM 5.48 to 5.85 Shoulder Widening	Widen shoulders on both sides of the roadway to be used for evacuation (based on Highway Safety Improvement Plan evacuation study)	PM 5.48	PM 5.85	High	High	High	High	Low	0	Yes	7	Long
CC63	SR 67 Utility Enhancements	Ensure all utilities have redundancy for resiliency for wildfires, earthquakes, and other natural disasters	I-8	Ramona	Medium	Medium	Low	Medium	High	0	Yes	10	Medium

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
CC64	SR 67 Wildlife Crossing #1	Restore/enhance habitat connection via wildlife crossing facility	SR 52	Main Street	High	High	High	High	Low	0	Yes	7	Long
CC65	SR 67 Wildlife Crossing #2	Restore/enhance habitat connection via wildlife crossing facility	SR 52	Main Street	High	High	High	High	Low	0	Yes	7	Long
CC66	SR 67 Wildlife Crossing #3	Restore/enhance habitat connection via wildlife crossing facility	SR 52	Main Street	High	High	High	High	Low	0	Yes	7	Long
CC67	Mapleview Street Green Infrastructure	Create green infrastructure elements to improve stormwater runoff water quality	SR 67	Pino Drive	Medium	Medium	Medium	Medium	Low	0	Yes	11	Medium
CC68	SR 67 VMS	Install variable message signs from I-8 to SR 78 at major intersections to communicate evacuation events, and provide navigation information	I-8	SR 78	Low	Low	Low	Medium	Low	0	Yes	14	Medium
CC69	SR 67 CCTV	Install corridor-wide CCTV from I-8 to SR 78 with live data stream to Transportation Management Center	I-8	SR 78	Low	Low	Low	Medium	Low	0	Yes	14	Medium
CC70	SR 67 Emergency Event Tow	Implement emergency event tow truck deployment utilizing CCTV system to identify stranded vehicles	I-8	SR 78	Medium	Low	Low	Medium	High	0	Yes	11	Medium
CC071	Complete Corridor: MLC SR 52 (I-805)	North to West and East to South	I-805	SR 52	High	High	Medium	High	Low	CC01, CC02, CC03, CC04 SR 52 ML	Yes	8	Long
CC71	SR 67 Guardrail	Install guardrail where necessary for reducing run-off-road collisions	I-8	SR 78	Medium	Medium	Low	Medium	Low	0	Yes	12	Medium
CC73	Governor Drive In-Line Rapid Station	Add an in-line station on I-805 at Governor Drive to serve the 870, 880, 890	Governor Drive	Governor Drive	High	High	Medium	High	Low	TR16 (870), TR17 (880), TR19 (890)	Yes	8	Medium

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
CC74	SR 52 HOV Policy	Create a HOV 3+ policy change when managed lanes are utilized at their target capacity (LOS C).	I-5	SR 125	Medium	Medium	Low	Medium	High	0	Yes	10	Medium
CC75	SR 52 CCTV	Install CCTV from SR 67 to Mast Boulevard with live data stream to Transportation Management Center	SR 67	Mast Boulevard	Low	Low	Low	Medium	Low	0	Yes	14	Medium
CC76	SR 52 VMS	Install variable message signs from SR 67 to Mast Boulevard to communicate evacuation events, and provide navigation information	SR 67	Mast Boulevard	Low	Low	Low	Medium	Low	0	Yes	14	Medium
CC77	SR 52 at Convoy Interchange	Recommend a focused operational investigation at this interchange	SR 52 EB ramps	SR 52 WB ramps	Medium	Medium	Medium	Medium	Low	0	Yes	11	Short
CC78	I-15 at Miramar Way Direct Access Ramp	Add a direct access ramp (DAR) at I-15 at Miramar Way	Miramar Way	Miramar Way	High	High	Medium	High	Low	0	Yes	8	Long
CC79	I-15 at Clairemont Mesa Boulevard Direct Access Ramp	Add a direct access ramp (DAR) at I-15 at Clairemont Mesa Boulevard	Clairemont Mesa Boulevard	Clairemont Mesa Boulevard	High	High	Medium	High	Low	0	Yes	8	Medium
CC80	SR 67 at Riverford Road Interchange	Recommend a focused operational investigation at this interchange (existing project).	SR 67	SR 67	Medium	Medium	Medium	Medium	Low	0	Yes	11	Medium
CC81	EB SR 52 Auxiliary Lane	Add eastbound SR 52 auxiliary lane from I-15 to Santo Road	I-15	Santo Road	Medium	High	High	Medium	Low	0	Yes	9	Short
CC82	SR 52 Wildlife Crossing	Initiate and environmental study to restore/enhance habitat connection via wildlife crossings.	I-15	Santo Road	High	High	High	Medium	Low	0	Yes	8	Short
CC83	SR 67 at Bradley Interchange	Recommend a focused operational	SR 67	SR 67	Medium	Medium	Medium	Medium	Low	0	Yes	11	Short

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
		investigation at this interchange (existing project).											
CC84	Kate Session Park Drive at Soledad Road	Recommend a focused operational investigation at this intersection.	Kate Sessions Park Drive	Kate Sessions Park Drive	Low	Low	Low	Medium	Low	0	Yes	14	Short
CC85	SR 52 at Mast Boulevard Direct Access Ramp	Add a direct access ramp (DAR) at SR 52 at Mast Boulevard	Mast Boulevard	SR 52	High	High	Medium	High	Low	TR16 (870), TR17 (880), TR19 (890)	Yes	8	Long
CC86	Active Transportation - Gilman Drive Class IV Cycle Track	Osler Lane to La Jolla Colony Drive	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC87	Active Transportation - Rose Canyon Class I Bike Path	Judicial Drive to Gilman Drive	n/a	n/a	High	High	High	Medium	Low	0	Yes	8	Long
CC88	Active Transportation - SR-52 Class I Bike Path	Rose Canyon Bike Path/Coastal Rail trail to Mast Boulevard	n/a	n/a	High	High	High	High	Low	0	Yes	7	Long
CC89	Active Transportation - SR-52 Bike Path Grade Separated Crossing to Rose Creek Bike Path	Connect SR-52 Bike Path to Rose Canyon Bike Path via Grade Separated Crossing of the Rail Corridor	n/a	n/a	High	High	Medium	Medium	Low	FF42 (2050)	Yes	9	Long
CC90	Active Transportation - La Jolla Colony Drive Class IV Cycle Track	Gilman Drive to Charmant Drive/Palmilla Drive	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC91	Active Transportation - Palmilla Drive Class IV Cycle Track	La Jolla Colony Drive to Arriba Street	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC92	Active Transportation - Regents Road Class I Bike Path	Arriba Street to Rose Canyon Bike Path and Across Canyon	n/a	n/a	High	Medium	Medium	Medium	Low	0	Yes	10	Long
CC93	Active Transportation - SR-52 Bike Path Grade Separated Crossing	Connect University Community to SR-52 Bike Path via Grade Separated Crossing Just West of Genesee Avenue. Connect to Syracuse Avenue and/or Genesee Avenue	n/a	n/a	High	High	Medium	Medium	Low	FF42 (2050)	Yes	9	Long

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
CC94	Active Transportation - SR-52 Class I Bike Path to MacDowell Park	Connect SR-52 Bike Path to Clariemont Mesa Community	n/a	n/a	High	High	High	Medium	Low	FF42 (2050)	Yes	8	Long
CC95	Active Transportation - Limerick Avenue Class III Bike Route	Limerick Avenue/Chandler Drive/Charger Boulevard, from Northern terminus to Charger Boulevard southern terminus	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC96	Active Transportation - SR-52 Bike Path Grade Separated Crossing of I-805	Continue SR-52 Bike Path via Grade Separated Crossing of I-805	n/a	n/a	High	High	Medium	Medium	Low	FF42 (2050)	Yes	9	Long
CC97	Active Transportation - SR-52 Class I Bike Path to Clairemont Mesa Boulevard	Parallel to I-805 along east side	n/a	n/a	High	High	Low	Medium	Low	FF42 (2050)	Yes	10	Long
CC98	Active Transportation - SR-52 Bike Path Grade Separated Crossing of SR-163	Continue SR-52 Bike Path via Grade Separated Crossing of SR-163	n/a	n/a	High	High	Medium	Medium	Low	FF42 (2050)	Yes	9	Long
CC99	Active Transportation - SR-52 Bike Path Grade Separated Crossing of I-15	Continue SR-52 Bike Path via Grade Separated Crossing of I-15	n/a	n/a	High	High	Medium	Medium	Low	FF42 (2050)	Yes	9	Long
CC100	Active Transportation - SDGE Class I Bike Path	SR-52 Bike Path to Conrad Avenue via Utility Corridor	n/a	n/a	High	High	High	Medium	Low	FF42 (2050)	Yes	8	Long
CC101	Active Transportation - Genesee Avenue Class IV Cycle Track	Nobel Drive to Appleton Street/Lehrer Drive	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC102	Active Transportation - Nobel Drive Class IV Cycle Track	Villa La Jolla to I-805	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC103	Active Transportation - Regents Road Class IV Cycle Track	Nobel Drive to Arriba Street; GoverNor Drive to Luna Avenue	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC104	Active Transportation - Juntaland Drive Class III Bike Route	Morena Boulevard to Luna Avenue	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
CC105	Active Transportation - Luna Avenue Class III Bike Route	Western terminus to Regents Road	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC106	Active Transportation - Clairemont Mesa Boulevard Class IV Cycle Track	Doliva Drive to Santo Road	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC107	Active Transportation - Clairemont Mesa Boulevard Class II Bike Lanes	Clairemont Drive to Kleefeld Avenue; Genesee Avenue to Doliva Drive	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC108	Active Transportation - Convoy Court Class I Bike Path	Hickman Field Drive to Mercury Street	n/a	n/a	High	Medium	Medium	Medium	Low	0	Yes	10	Long
CC109	Active Transportation - Convoy Street Class II Bike Lanes	SR-52 Bikeway to Aero Road	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC110	Active Transportation - Raytheon Road Class I Bike Path	Ruffner Street to Mercury Street	n/a	n/a	High	Medium	Medium	Medium	Low	0	Yes	10	Long
CC111	Active Transportation - Kearny Mesa Road Class I Bike Path	Engineer Road to SR-52 Bikeway	n/a	n/a	High	High	High	Medium	Low	0	Yes	8	Long
CC112	Active Transportation - Chesapeake Drive Class II Bike Lanes	Kearny Villa Road to Clairemont Mesa Boulevard	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC113	Active Transportation - Shawline Street Class II Bike Lanes	Ronson Road to Convoy Court	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC114	Active Transportation - Mercury Street Class II Bike Lanes	Convoy Court to Engineer Road	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC115	Active Transportation - Murphy Canyon Road Class II	Clairemont Mesa Boulevard to Balboa Avenue	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC116	Active Transportation - Copley Park Place Class IV Cycle Track	Ruffner Street to Convoy Street	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC117	Active Transportation - Tech Way Class IV Cycle Track	Kearny Villa Road to Overland Avenue	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
CC118	Active Transportation - Kearny Via Road Class IV Cycle Track	Ruffin Road to Mesa College Road	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC119	Active Transportation - Ruffin Road Class IV Cycle Track	SR-52 Bikeway to Murphy Canyon Road Class I Bike Path	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC120	Active Transportation - Ruffner Street Class IV Cycle Track	Copley Park Place to just south of Balboa Avenue	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC121	Active Transportation - Clairemont Drive Class IV Cycle Track	Kleefeld Avenue to Clairemont Mesa Boulevard	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC122	Active Transportation - San Diego River Bikeway (Class I Bike Path)	Parallels San Diego River	n/a	n/a	High	High	High	High	Low	0	Yes	7	Long
CC123	Active Transportation - Mission Gorge Road Class I Bike Path	SR-125 to Carlton Hills Boulevard	n/a	n/a	High	High	High	Medium	Low	0	Yes	8	Long
CC124	Active Transportation - Magnolia Avenue Class II Bike Lane	Prospect Avenue to Airport Drive	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC125	Active Transportation - Magnolia Avenue Class IV Cycle Track	Airport Drive to Bradley Avenue	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC126	Active Transportation - Graves Avenue Class IV Cycle Track	Pepper Drive to VerNon Way	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC127	Active Transportation - Santo Road Class IV Cycle Track	SR-52 Bike Path to Clairemont Mesa Boulevard	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC128	Active Transportation - Governor Drive Class II Bike Lanes	Stressmann Street to Gullstrand Street	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	12	Short
CC129	Active Transportation - Governor Drive Class IV Cycle Track	Gullstrand Street to I-805 Bikeway	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC130	Active Transportation - Greenwich Drive Class II Bike Lanes	GoverNor Drive to Shoreham Place	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC131	Active Transportation - Propsect Avenue Class II Bike Lanes	Mesa Road to Fanita Drive and MagNolia	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
		Avenue to Graves Avenue											
CC132	Active Transportation - Cottonwood Avenue Class II Bike Lane	Mission Gorge Road to Propsect Avenue	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC133	Active Transportation - Mission Greens Road Class III Bike Route	Mission Gorge Road to Buena Vista Avenue	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC134	Active Transportation - Fanita Parkway Class I Bike Path	Carlton Oaks Drive to Mission Gorge Road	n/a	n/a	High	High	High	Medium	Low	0	Yes	8	Long
CC135	Active Transportation - Mast Boulevard Class I Bike Path	Los Ranchitos Road to River Trail	n/a	n/a	High	High	High	Medium	Low	0	Yes	8	Long
CC136	Active Transportation - San Diego River Trail Grade Separated Crossing (Class I)	Town Center to Town Center Park	n/a	n/a	High	High	High	Medium	Low	0	Yes	8	Long
CC137	Active Transportation - Carlton Hills Boulevard Class II Bike Lanes	Lake Canyon Road to Swanton Drive	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC138	Active Transportation - Madison Avenue Class II Bike Lanes	Johnson Avenue to Greenfield Drive	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC139	Active Transportation - Fletcher Parkway Class IV Cycle Track	Sharon Way/Westwind Dr to Ballantyne Street	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC140	Active Transportation - West Bradley Avenue Class II Bike Lanes	Marshall Avenue to City Limit	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC141	Active Transportation - N Magnolia Avenue Class II Bike Lanes	El Cajon City Limit to Fletcher Parkway	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC142	Active Transportation - N Johnson Avenue Class II Bike Lanes	West Bradley Avenue to Fletchery Parkway	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC143	Active Transportation - Buena Terrace/Peatree Street/Jackman Street Class III Bike Route	Fletcher Parkway to N Johnson Avenue	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC144	Active Transportation - Arnele Avenue Class III Bike Route	Marshall Avenue to N Johnson Avenue	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
CC145	Active Transportation - Cuyamaca Street Class III Bike Route	W Bradely Avenue to Fletcher Parkway	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC146	Active Transportation - Marshall Avenue Class IV Cycle Track	Fletcher Parkway to W Main Street	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC147	Active Transportation - Johnson Avenue Class I Bike Path	Fletcher Parkway to El Cajon Boulevard	n/a	n/a	High	Medium	Medium	Medium	Low	0	Yes	10	Long
CC148	Active Transportation - Riverside Drive Class I Bike Path	Marathon Parkway/Piney Grove to Riverford Road	n/a	n/a	High	Medium	Medium	Medium	Low	0	Yes	10	Long
CC149	Active Transportation - Riverside Drive Class IV Cycle Track	Riverford Road to Lakeside Avenue	n/a	n/a	High	Medium	Medium	Medium	Low	0	Yes	10	Medium
CC150	Active Transportation - Riverford Road Class IV Cycle Track	Riverside Drive to Woodside Avenue	n/a	n/a	High	Medium	High	Medium	Low	0	Yes	9	Medium
CC151	Active Transportation - Woodside Avenue Class IV Cycle Track	Woodside Avenue from Woodside Trail to Vine Street	n/a	n/a	High	Medium	High	Medium	Low	0	Yes	9	Medium
CC152	Active Transportation - Winter Gardens Boulevard Class IV Cycle Track	Industry Road to Gardena Way	n/a	n/a	High	Medium	High	Medium	Low	0	Yes	9	Medium
CC153	Active Transportation - Mapleview Street Class IV Cycle Track	Channel Road to Pino Drive	n/a	n/a	High	Low	Medium	Medium	Low	0	Yes	11	Medium
CC154	Active Transportation - Vine Street Class IV Cycle Track	Mapleview Street to Woodside Avenue	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Medium
CC155	Active Transportation - Lakeside Avenue Class IV Cycle Track	Riverside Drive to SR-67	n/a	n/a	High	Medium	High	Medium	Low	0	Yes	9	Medium
CC156	Active Transportation - Channel Road Class IV Cycle Track	Lakeside Avenue to Julian Avenue	n/a	n/a	High	Medium	High	Medium	Low	0	Yes	9	Medium
CC157	Active Transportation - Maine Avenue Class III Bike Route	Mapleview Street to Woodside Avenue	n/a	n/a	Low	Low	Low	Low	Low	0	Yes	15	Short
CC158	Active Transportation - Pedestrian Hybrid Beacon at San Diego	Pedestrian Hybrid Beacon at San Diego	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Short

Refined Strategy ID	Strategy Name	Description	Start	Finish	Implementation Criteria (Scoring)					Additional Implementation Factors		Points & Phasing	
					Construction/Design Complexity	Environmental Clearance	ROW	Cost	Policy Considerations	Dependencies (if Yes, list)	Implementation Readiness (Yes/No)	Points (5-15)	Phasing
	River Trail/Cuyamaca Street	River Trail/Cuyamaca Street											
CC159	Active Transportation - Pedestrian Hybrid Beacon at Forrester Creek Trail/Mission Gorge Road	Pedestrian Hybrid Beacon at Forrester Creek Trail/Mission Gorge Road	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Short
CC160	Active Transportation - Pedestrian Hybrid Beacon at Forrester Creek Trail/Prospect Avenue	Pedestrian Hybrid Beacon at Forrester Creek Trail/Prospect Avenue	n/a	n/a	Medium	Low	Low	Medium	Low	0	Yes	13	Short
CC161	Active Transportation - Jutland Drive Class I Bike Path to Santa Fe Street/Rose Creek Bikeway	Class I connection from Jutland Drive/Morena Boulevard to Santa Fe Street/Rose Creek Bikeway	n/a	n/a	High	High	High	Medium	Low	0	Yes	8	Long

## E4. Funding Sources

Funding for transportation improvements and enhancements is available through several federal, state, local, and non-traditional sources and programs. Depending on the source, eligible projects vary by transportation mode, scope, and project phase. agencies.

There are two main types of grants available for transportation solutions within the Coast, Canyons, and Trails CMCP: discretionary and formula. Discretionary grants permit the agency to exercise judgment in selecting recipients through a competitive grant process. For formula funds, the award amount is calculated by formulas and statutes that favor in statistical criteria for specific types of work. Formula funds are distributed by formula to state, regional, or local public agencies.

### FEDERAL FUNDING SOURCES

Federal transportation funding is administered by the U.S. Department of Transportation (DOT) and authorized by federal transportation bills. The most recent federal transportation funding bill—the Infrastructure Investment and Jobs Act (IIJA)—was signed into law in 2021. A significant portion of the funding available through the U.S. DOT's Highway Trust Fund is allocated to California based on the state's population.

The state of California distributes U.S. DOT funds to local agencies, by formula or by discretionary means, through competitive grant programs. The majority of federal resources in California are available through the Surface Transportation Improvement Program (STIP). Additionally, federal and state funding sources for bicycle and pedestrian projects are consolidated under California's Active Transportation Program (ATP) and distributed through a competitive process.

There are several federal discretionary grant programs available for local agencies to apply for funding, including Rebuilding American Infrastructure with Sustainability and Equity (RAISE), Infrastructure for Rebuilding America (INFRA), Rural Surface Transportation Grant (RURAL), the Mega Grant (MEGA; statutorily known as the National Infrastructure Project Assistance Program), among others. All of these programs have received significant levels of funding through the IIJA, and many of the TSS in this CMCP are eligible for these funds. Furthermore, the IIJA introduces new funding programs such as the Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation (PROTECT) program, the Strengthening Mobility and Revolutionizing Transportation (SMART) program, and the Reconnecting Communities Pilot Program (RCP), all of which can be used to fund TSS in the CCT CMCP.

The Transportation Infrastructure Finance and Innovation Act (TIFIA) Program is an available option to help finance transportation projects. The TIFIA Program provides federal credit assistance to eligible surface transportation projects, including highway and transit projects of regional or national significance. These grant programs—and others available from specific

U.S. DOT operating administrations—provide opportunities for local and regional agencies to apply for substantial funding for regionally significant projects.

## STATE FUNDING SOURCES

In addition to federal grant programs, there are several state funding sources for local and regional transportation projects that are available to public agencies. This CMCP makes Coast, Canyons, and Trails corridor transportation solutions eligible for funding from California Senate Bill 1 (SB 1), the Road Repair and Accountability Act of 2017, which is a \$54 billion-dollar landmark investment package that spans a 10-year period. It is focused on fixing roads, freeways, and bridges in communities across California and increasing funding to transit and safety.

SB 1 augmented other sources of funding, such as the Active Transportation Program (ATP) and State Highway Operation and Protection Program (SHOPP) and created new and relevant funding programs such as the Solutions for Congested Corridors Program (SCCP) and Trade Corridor Enhancement Program (TCEP). Both SCCP and TCEP have statutory requirements for comprehensive corridor plans utilized by agencies to apply for funding.

## LOCAL FUNDING SOURCES

The primary local funding source for transportation solutions in the San Diego Region is the *TransNet* program, which is a voter-approved half-cent sales tax used for transportation purposes. Originally approved in 1987, voters approved an extension ordinance in 2004 that prolongs the *TransNet* program to 2048. *TransNet*, administered by SANDAG, has funded more than 650 highway, transit, bicycle and pedestrian, habitat conservation, and local street repair projects totaling more than \$13.7 billion.

As part of the *TransNet* program, SANDAG has identified a variety of high-priority, *TransNet*-funded transportation improvements for the region. These prioritized infrastructure projects are part of the Early Action Program to accelerate the implementation of roadway, structures, and transit projects.

*TransNet* also provides funding for two competitive grant programs that support local efforts to increase walking, biking, and the use of transit throughout the region: the Smart Growth Incentive Program (SGIP) and Active Transportation Grant Program (ATGP). The SGIP provides funding for transportation-related services and infrastructure improvements and planning efforts that will assist local agencies in better integrating transportation and land use, consistent with the Regional Plan and Sustainable Communities Strategy and community planning efforts related to smart growth and improved land use/transportation coordination. The goal of the ATGP is to encourage local jurisdictions to plan and build facilities that promote multiple travel choices and increase connectivity to transit, schools, retail centers, parks, work, and other bike parking, education, encouragement, and awareness programs that support pedestrian and bike infrastructure.

Another local sales tax funding source includes the Transportation Development Act (TDA), which is a statewide one-quarter percent sales tax to be used for transportation purposes. In the San Diego region, the TDA program is administered by SANDAG and used exclusively for transit, non-motorized, and regional planning purposes. Other local funding mechanisms include developer impact fees, city-county gas taxes, and general fund revenues.

**Table E-14** Funding Table

Source	Program	Type	Eligible Projects
Federal	Rebuilding American Infrastructure with Sustainability and Equity (RAISE)	Discretionary	Helps communities fix and modernize their infrastructure and can be used for a wide variety of transportation projects that have a significant local or regional impact.
Federal	Infrastructure for Rebuilding America (INFRA)	Discretionary	Funds highway, multimodal freight and rail projects that are focused on improving safety, generation economic benefits, reducing congestion and enhancing resiliency
Federal	National Infrastructure Project Assistance (MEGA)	Discretionary	Major projects that are too large or complex for traditional funding programs including multijurisdictional or regional projects of significance that may cut across multiple modes of transportation. Eligible modes include highway, bridge, freight, port, passenger rail, and public transportation projects.
Federal	Rural Surface Transportation Grant (RURAL)	Discretionary	Highway, bridge, and tunnel projects that help improve freight, safety, and provide or increase access to an agricultural, commercial, energy, or transportation facilities that support the economy of a rural area.
Federal	Promoting Resilient Operations for Transformative, Efficient, Cost-saving Transportation (PROTECT)	Formula	Public transit, passenger rail, bridge, drinking and wastewater infrastructure. Clean energy transmission and electric vehicle infrastructure. Helps communities ensure access to reliable high-speed internet.
Federal	Advanced Transportation and Innovative	Discretionary	Provides grants to deploy, install, and operate advanced transportation technologies to improve safety, mobility, efficiency, system

Source	Program	Type	Eligible Projects
	Mobility Deployment (ATTAIN)		performance, intermodal connectivity, and infrastructure return on investment.
State	Active Transportation Program (ATP)	Discretionary	Bicycle and pedestrian improvements and planning focused on safety and benefits for disadvantaged communities.
State	State Highway Operation and Protection Program (SHOPP)	Formula	Capital improvements relative to the maintenance, safety, operation and rehabilitation of the state highway system that do not add capacity.
State	Solutions for Congested Corridors (SCCP)	Discretionary	Projects listed in a Comprehensive Corridor Plan that achieve a balanced set of transportation, environmental and community access improvements to reduce congestion.
Local	SANDAG Smart Growth Incentive Program (SGIP)	Discretionary	Comprehensive public infrastructure projects and planning activities that facilitate compact, mixed-use, transit-oriented development and increase housing and transportation choices.
Local	SANDAG Active Transportation Grant Program (ATGP)	Discretionary	Pedestrian and bicycle infrastructure
Local	Transportation Development Act (TDA)	Tax	One quarter percent state and local sales tax collected in San Diego County is allocated to transit, bicycle, pedestrian and other non-motorized projects.