

Appendix O
Alternatives Data

No-Build Projects

No-Build projects are projects that would be built in the region in absence of the 2021 Regional Plan because they are in progress or recently completed and are assumed under Alternative 1 No Project of the alternatives analysis. The No-Build projects for the 2021 Regional Plan are shown in Table O-1. After the 2019 Federal RTP expires in 2023, it is assumed that no state or federal funding would be available for future projects.

Table O-1: No-Build Projects

No-Build Projects			
Category	Project	Description/Jurisdiction	Note
Active Transportation	Bayshore Bikeway: Segments 4B and 5	San Diego, 32nd Street Naval Station, National City	Completed
Active Transportation	Inland Rail Trail: Phase 1	San Marcos, Palomar College	Completed
Active Transportation	SR 15 Commuter Bike Facility	Mission Valley, Kensington	Completed
Active Transportation	Coastal Rail Trail Encinitas: E St to Chesterfield Drive (Chesterfield–Santa Fe)	Cardiff	Completed
Active Transportation	Inland Rail Trail: Phase 2	San Marcos, Palomar College	Completed
Active Transportation	Coastal Rail Trail San Diego: Rose Creek	Pacific Beach, Bay Ho, University City	Completed
Active Transportation	North Park/Mid-City Bikeways: Georgia–Meade Bikeway	Hillcrest, North Park, University Heights, Normal Heights	Under Construction
Active Transportation	North Park/Mid-City Bikeways: Landis Bikeway	North Park, City Heights	Under Construction
Active Transportation	Uptown Bikeways: Fourth and Fifth Avenue Bikeways	Downtown, Bankers Hill, Hillcrest	Under Construction
Active Transportation	Bayshore Bikeway: Barrio Logan	Barrio Logan, Downtown, 32nd Street Naval Station	Final Design
Active Transportation	Border to Bayshore Bikeway	Imperial Beach, San Ysidro	Final Design
Active Transportation	Coastal Rail Trail: Santa Fe Undercrossing to E Street	Encinitas	Final Design
Active Transportation	Imperial Avenue Bikeway	East Village, Sherman Heights, Grant Hill, Mountain View	Final Design

No-Build Projects

Category	Project	Description/Jurisdiction	Note
Active Transportation	Inland Rail Trail: Phase 3	Vista	Final Design
Active Transportation	North Park/Mid-City Bikeways: University Bikeway	City Heights, Rolando, La Mesa	Final Design
Active Transportation	Uptown Bikeways: Eastern Hillcrest Bikeways	Hillcrest	Final Design
Active Transportation	San Diego River Trail: Stadium Segment	Mission Valley, SDSU West	Under Construction
Complete Corridors	I-5 NCC (I-5/I-805 Merge to SR 78)	1 HOV lane in each direction	CAL09 – Sept 2022
Complete Corridors	SR 94/SR 125	South to East Freeway Connector	CAL68 – Feb 2025
Complete Corridors	SR 52 Operational Improvements (I-805 to SR 125)	WB Mast to Santo Road Truck Climbing, Santo to I-15 EB Aux Lanes	CAL536 – Dec 2023
Complete Corridors	SR 11 (SR 125 to Mexico) + POE	New Roadway Between SR 125 and Mexico, plus Port of Entry (POE) Facility	
Complete Corridors	SR 11/SR 905	Freeway Connectors	CAL325A/38C
Transit	Mid-Coast Trolley	Old Town to University City	SAN25 SAN23 – Sep 2021
Transit	South Bay <i>Rapid</i>	Otay Mesa to Downtown San Diego	SAN47 – Jan 2019
Transit	LOSSAN Double Tracking	San Diego to Oceanside	SAN29, 64, 66, 73, 114, 119, 132

Table O-2: Performance Measures for Alternatives Considered in Detail in this EIR

PM ID	Performance Measure	Proposed Plan				Alternative 1			Alternative 2			Alternative 3			
		2016	2025	2035	2050	No Project			2019 Transportation Network with New Value Pricing and User Fee Policies			All Growth Focused in Mobility Hubs and More Progressive Value Pricing and User Fee Policies			
		2016	2025	2035	2050	2025	2035	2050	2025	2035	2050	2025	2035	2050	
	Total Households	1,134,848	1,219,745	1,327,588	1,374,841	1,219,745	1,327,588	1,374,841	1,219,745	1,327,588	1,374,841	1,219,745	1,327,588	1,374,841	
	Total Households within Mobility Hubs	506,081	584,052	689,581	732,086	570,267	653,202	689,956	570,267	653,202	689,956	581,457	687,146	732,992	
	% Households within Mobility Hubs	45%	48%	52%	53%	47%	49%	50%	47%	49%	50%	48%	52%	53%	
	Total Population	3,265,489	3,424,145	3,573,645	3,699,373	3,424,145	3,573,645	3,699,373	3,424,145	3,573,645	3,699,373	3,424,145	3,573,645	3,699,373	
	Total Population within Mobility Hubs	1,793,114	1,650,282	1,898,306	1,994,412	1,613,140	1,793,114	1,886,966	1,613,140	1,793,114	1,886,966	1,644,206	1,890,914	1,944,052	
	% Population within Mobility Hubs	42%	48%	53%	54%	47%	50%	51%	47%	50%	51%	48%	53%	53%	
	Total Employment	1,646,419	1,762,747	1,922,475	2,087,318	1,789,965	1,936,818	2,095,301	1,789,965	1,936,818	2,095,301	1,762,479	1,921,480	2,086,342	
	Total Employment within Mobility Hubs	1,113,109	1,213,064	1,347,193	1,484,038	1,213,630	1,311,281	1,417,136	1,213,630	1,311,281	1,417,136	1,211,964	1,344,897	1,481,997	
	% Employment within Mobility Hubs	68%	69%	70%	71%	68%	68%	68%	68%	68%	68%	69%	70%	71%	
1	Mode Share														
	Work Trips (peak period)	Bike & walk	3.3%	5.5%	6.6%	8.0%	4.0%	4.4%	4.4%	3.8%	4.4%	4.8%	5.8%	6.2%	7.6%
		Carpool	13.4%	15.9%	15.5%	16.5%	13.0%	12.7%	12.8%	12.6%	12.6%	12.5%	16.6%	15.4%	16.4%
		Drive alone	79.7%	72.4%	66.5%	62.4%	79.1%	78.6%	78.4%	78.6%	76.8%	75.5%	71.2%	64.7%	60.2%
		Other (TNC, MicroMobility, Taxi, School bus)	0.2%	0.4%	0.4%	0.5%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.4%	0.4%	0.5%
		Transit	3.3%	5.8%	11.1%	12.6%	3.6%	4.0%	4.1%	4.5%	5.9%	6.8%	6.0%	13.4%	15.3%
	Work Trips (all day)	Bike & walk	3.6%	6.1%	7.2%	8.7%	4.4%	4.7%	4.8%	4.2%	4.8%	5.2%	6.4%	6.7%	8.2%
		Carpool	13.1%	15.5%	15.1%	16.2%	12.6%	12.2%	12.4%	12.2%	12.2%	12.2%	16.1%	15.0%	16.0%
		Drive alone	79.6%	72.2%	66.0%	61.9%	79.1%	78.7%	78.4%	78.5%	76.7%	75.3%	71.0%	64.3%	59.7%
		Other (TNC, MicroMobility, Taxi, School bus)	0.2%	0.4%	0.4%	0.5%	0.3%	0.3%	0.3%	0.3%	0.3%	0.3%	0.4%	0.4%	0.5%
		Transit	3.4%	5.9%	11.3%	12.8%	3.7%	4.0%	4.1%	4.6%	6.0%	7.0%	6.1%	13.6%	15.6%
	All Trips	Bike & walk	7.7%	9.7%	11.7%	13.3%	8.7%	9.7%	10.0%	8.8%	10.0%	10.5%	10.0%	11.7%	13.6%
		Carpool	44.3%	43.6%	40.6%	40.5%	42.3%	39.7%	39.1%	42.4%	39.8%	39.2%	44.0%	40.8%	40.4%
		Drive alone	44.8%	42.3%	41.0%	39.0%	45.6%	47.0%	47.3%	45.0%	45.8%	45.6%	41.4%	39.7%	37.3%
		Other (TNC, MicroMobility, Taxi, School bus)	1.6%	2.0%	2.1%	2.2%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	2.1%	2.2%	2.4%
		Transit	1.6%	2.4%	4.5%	5.0%	1.7%	1.9%	1.8%	2.1%	2.7%	3.0%	2.5%	5.7%	6.3%
2	Number/percent of people within 0.5 miles of a commuter rail, light rail, or next gen														
	Commuter Rail (Tier 1)	Number	15,196	29,448	117,048	257,823	20,720	27,063	28,636	20,720	43,879	46,388	32,920	110,105	255,192
		Percent	0.5%	0.9%	3.3%	7.0%	0.6%	0.8%	0.8%	0.6%	1.2%	1.3%	1.0%	3.1%	6.9%
	Light Rail (Tier 2)	Number	141,814	228,088	312,424	452,087	215,729	282,200	294,864	261,805	465,549	644,034	225,095	302,344	453,196
		Percent	4.3%	6.7%	8.7%	12.2%	6.3%	7.9%	8.0%	7.6%	13.0%	17.4%	6.6%	8.5%	12.3%
	Next Gen Rapid (Tier 3)	Number	188,077	481,562	1,086,765	1,190,092	253,168	288,853	324,426	524,780	825,629	1,059,375	479,468	1,076,444	1,201,194
		Percent	5.8%	14.1%	30.4%	32.2%	7.4%	8.1%	8.8%	15.3%	23.1%	28.6%	14.0%	30.1%	32.5%
	access to any of the tiers (1-3)	Number	297,954	593,389	1,170,037	1,284,782	401,626	487,442	532,047	650,888	960,013	1,205,058	585,599	1,160,281	1,300,484
	Percent	9.1%	17.3%	32.7%	34.7%	11.7%	13.6%	14.4%	19.0%	26.9%	32.6%	17.1%	32.5%	35.2%	
3	Number/percent of jobs within 0.5 miles of a commuter rail, light rail, or next gen Rapid														
	Commuter Rail (Tier 1)	Number	33,315	55,669	119,095	217,383	36,922	43,749	46,177	36,922	73,248	77,141	55,907	118,623	216,051
		Percent	2.0%	3.2%	6.2%	10.4%	2.2%	2.3%	2.2%	2.1%	3.8%	3.7%	3.0%	6.2%	10.4%
	Light Rail (Tier 2)	Number	193,149	243,539	285,229	369,667	235,518	262,924	284,813	272,276	379,984	511,694	242,827	282,719	367,480
		Percent	11.7%	13.8%	14.8%	17.7%	13.2%	13.6%	13.6%	15.2%	19.6%	24.4%	14.7%	17.6%	
	Next Gen Rapid (Tier 3)	Number	209,879	392,856	806,790	913,431	233,976	258,850	278,577	404,681	635,018	845,535	393,085	804,465	910,351
		Percent	12.7%	22.3%	42.0%	43.8%	13.1%	13.4%	13.3%	22.6%	32.8%	40.4%	22.3%	41.9%	43.6%
	access to any of the tiers (1-3)	Number	349,992	515,234	877,947	996,012	394,437	431,024	465,534	536,126	747,189	962,807	515,066	876,065	994,154
	Percent	21.3%	29.2%	45.7%	47.7%	22.0%	22.3%	22.2%	30.0%	38.6%	46.0%	29.2%	45.6%	47.7%	
4	Number/percent of people within 0.25 miles of a bike facility (class I and II, cycletrack or bike boulevard)														
	Number	2,111,208	2,417,827	2,636,703	2,807,068	2,394,606	2,519,237	2,586,079	2,265,687	2,480,102	2,616,654	2,417,529	2,620,445	2,810,999	
		Percent	64.7%	70.6%	73.8%	75.9%	69.9%	70.5%	69.9%	66.2%	69.4%	70.7%	70.6%	73.3%	76.0%
5	Daily transit boardings														
	Region	Commuter Rail (Tier 1)	3,473	8,144	49,563	180,153	4,615	4,966	5,273	7,365	9,103	8,984	8,495	82,475	289,004
		Light Rail (Tier 2)	126,031	200,037	336,375	358,361	164,957	192,350	191,377	182,954	264,227	351,705	207,471	401,196	418,937
		Next Gen Rapid (Tier 3)	30,307	107,490	390,123	426,205	45,530	51,713	52,796	109,314	184,033	214,984	111,569	488,009	520,912
		Local Bus	216,822	300,092	416,726	430,511	224,186	244,125	245,805	252,204	278,765	283,653	311,953	526,078	543,753
		All transit boardings	376,632	615,763	1,192,786	1,395,230	439,288	493,153	495,251	551,837	736,128	859,327	639,489	1,497,757	1,772,606
	Mohub	Commuter Rail (Tier 1)	3,015	7,038	45,480	178,819	4,157	4,456	4,747	6,367	8,959	8,836	7,271	75,795	286,724
		Light Rail (Tier 2)	122,186	196,469	329,168	347,848	161,459	188,798	187,778	178,690	257,939	339,016	203,751	391,838	405,388
		Next Gen Rapid (Tier 3)	28,936	101,931	338,484	365,858	43,889	49,886	51,088	101,960	164,218	183,750	105,769	422,232	445,393
		Local Bus	172,354	238,922	325,669	420,207	179,494	197,335	200,113	195,399	212,176	214,049	247,218	406,592	420,207
		All transit boardings	326,491	544,359	1,038,802	1,228,662	388,999	440,476	443,727	482,417	643,291	745,651	564,009	1,296,457	1,557,712
6	Physical activity														
	Total time engaged in transportation related physical activity per capita	7.33	9.34	11.65	12.95	8.14	8.93	9.13	8.34	9.38	9.89	9.61	12.24	13.81	
	Percent of the population engaged in 20 min or more of transportation related physical activity	11.3%	14.4%	18.4%	20.3%	12.5%	13.7%	14.0%	13.0%	14.7%	15.6%	14.8%	19.5%	21.8%	
7	Average truck/commercial vehicle travel times to and around regional gateways and distribution hubs (minutes)														
		15.76	15.65	15.99	16.30	16.20	16.75	17.28	16.19	16.67	17.13	15.57	15.95	16.25	
8	Average Particulate Matter (PM2.5)														
	Exposure per person	5.16	5.12	5.38	5.56	5.13	5.66	5.89	5.03	5.50	5.67	4.98	5.21	5.44	
9-a	Truck travel time index														
	Highway (SHS)	1.08	1.06	1.11	1.14	1.07	1.09	1.12	1.07	1.07	1.08	1.06	1.10	1.13	
	Arterial	1.28	1.22	1.20	1.20	1.29	1.30	1.31	1.28	1.28	1.27	1.21	1.20	1.20	
	Highway (SHS) + Arterial	1.15	1.12	1.14	1.16	1.15	1.16	1.18	1.14	1.14	1.14	1.11	1.13	1.15	
9-b	Heavy Duty Truck delay by facility type (average daily)														
	All day - Heavy Heavy Duty	Highway (SHS)	1,215	1,154	2,385	3,847	1,361	2,186	3,189	1,353	1,693	2,093	1,058	2,215	3,618
		Arterial	6,063	5,268	5,612	5,831	6,898	8,052	8,653	6,708	7,477	7,843	5,175	5,533	5,899
	AM and PM peak - Heavy Heavy Duty	Highway (SHS)	805	749	1,218	1,937	888	1,343	1,919	893	927	1,092	666	1,085	1,763
		Arterial	2,845	2,454	2,554	2,618	3,206	3,683	4,006	3,080	3,350	3,514	2,361	2,452	2,591
	All day - Medium Heavy Duty	Highway (SHS)	501	446	919	1,410	528	824	1,156	529	640	753	405	860	1,314
		Arterial	3,479	2,877	2,915	3,066	3,780	4,330	4,509	3					

Table O-2- Performance Measures for Alternatives Considered in Detail in this EIR

PM ID	Performance Measure	Proposed Plan													Alternative 1			Alternative 2			Alternative 3		
		2016				2025				2050					No Project			2019 Transportation Network with New Value Pricing and User Fee Policies			All Growth Focused in Mobility Hubs and More Progressive Value Pricing and User Fee Policies		
		2016	2025	2035	2050	2025	2035	2050	2025	2035	2050	2025	2035	2050	2025	2035	2050	2025	2035	2050			
	Total Households	1,134,848	1,219,745	1,327,588	1,374,841	1,219,745	1,327,588	1,374,841	1,219,745	1,327,588	1,374,841	1,219,745	1,327,588	1,374,841	1,219,745	1,327,588	1,374,841	1,219,745	1,327,588	1,374,841			
	Total Households within Mobility Hubs	506,081	584,052	689,581	732,086	570,267	653,202	689,581	570,267	653,202	689,581	570,267	653,202	689,581	570,267	653,202	689,581	570,267	653,202	689,581			
	% Households within Mobility Hubs	45%	48%	52%	53%	47%	49%	50%	47%	49%	50%	47%	49%	50%	47%	49%	50%	47%	49%	50%			
	Total Population	3,265,489	3,424,145	3,573,645	3,699,373	3,424,145	3,573,645	3,699,373	3,424,145	3,573,645	3,699,373	3,424,145	3,573,645	3,699,373	3,424,145	3,573,645	3,699,373	3,424,145	3,573,645	3,699,373			
	Total Population within Mobility Hubs	1,793,114	1,650,282	1,898,306	1,994,412	1,613,140	1,793,114	1,886,966	1,613,140	1,793,114	1,886,966	1,613,140	1,793,114	1,886,966	1,613,140	1,793,114	1,886,966	1,613,140	1,793,114	1,886,966			
	% Population within Mobility Hubs	42%	48%	53%	54%	47%	50%	51%	47%	50%	51%	47%	50%	51%	47%	50%	51%	47%	50%	53%			
	Total Employment	1,646,419	1,762,747	1,922,475	2,087,318	1,789,965	1,936,818	2,095,301	1,789,965	1,936,818	2,095,301	1,789,965	1,936,818	2,095,301	1,762,479	1,921,480	2,086,342	1,762,479	1,921,480	2,086,342			
	Total Employment within Mobility Hubs	1,113,109	1,213,064	1,347,193	1,484,038	1,213,630	1,311,281	1,417,136	1,213,630	1,311,281	1,417,136	1,213,630	1,311,281	1,417,136	1,211,964	1,344,897	1,481,997	1,211,964	1,344,897	1,481,997			
	% Employment within Mobility Hubs	68%	69%	70%	71%	68%	68%	68%	68%	68%	68%	68%	68%	68%	69%	70%	71%	69%	70%	71%			
1	Mode Share	Work Trips (peak period)	Bike & walk	3.5%	5.7%	6.7%	8.4%	4.2%	4.6%	4.7%	4.0%	4.6%	5.0%	6.2%	6.4%	8.0%	3.7%	3.7%	3.7%	3.7%	3.7%		
			Carpool	13.4%	15.9%	15.1%	16.1%	13.1%	12.8%	13.0%	13.0%	12.4%	12.4%	17.1%	15.3%	16.2%	12.8%	13.4%	13.4%	13.4%	13.4%	13.4%	
			Drive alone	79.4%	71.9%	66.0%	61.7%	78.6%	78.1%	77.7%	78.0%	76.5%	75.2%	69.8%	63.8%	59.2%	70.3%	79.4%	79.4%	79.4%	79.4%	79.4%	
			Other (TNC, MicroMobility, Taxi, School bus)	0.3%	0.5%	0.5%	0.6%	0.3%	0.3%	0.4%	0.3%	0.3%	0.4%	0.5%	0.5%	0.7%	0.7%	0.3%	0.3%	0.3%	0.3%	0.3%	
			Transit	3.4%	6.0%	11.6%	13.2%	3.7%	4.2%	4.2%	4.7%	6.1%	7.0%	6.4%	13.9%	15.9%	10.0%	10.7%	10.7%	10.7%	10.7%	10.7%	
			Bike & walk	3.7%	6.2%	7.3%	9.0%	4.6%	5.0%	5.0%	4.3%	5.0%	5.4%	6.7%	6.9%	8.6%	8.6%	4.9%	4.9%	4.9%	4.9%	4.9%	
			Carpool	13.0%	15.5%	14.7%	15.7%	12.7%	12.3%	12.5%	12.5%	12.0%	12.0%	16.7%	14.8%	15.8%	12.9%	13.4%	13.4%	13.4%	13.4%	13.4%	
			Drive alone	79.6%	71.8%	65.8%	61.4%	78.7%	78.3%	77.9%	78.1%	76.6%	75.3%	69.6%	63.6%	58.9%	69.2%	79.6%	79.6%	79.6%	79.6%	79.6%	
			Other (TNC, MicroMobility, Taxi, School bus)	0.3%	0.5%	0.5%	0.6%	0.3%	0.4%	0.4%	0.3%	0.3%	0.4%	0.5%	0.6%	0.7%	0.7%	0.3%	0.3%	0.3%	0.3%	0.3%	
	Transit	3.4%	6.0%	11.7%	13.2%	3.7%	4.1%	4.2%	4.7%	6.1%	7.0%	6.5%	14.1%	16.1%	10.0%	10.7%	10.7%	10.7%	10.7%	10.7%			
	All Trips		Bike & walk	7.8%	9.9%	11.9%	13.6%	8.8%	9.9%	10.2%	8.9%	10.2%	10.6%	10.2%	11.9%	13.9%	13.9%	9.4%	9.4%	9.4%	9.4%	9.4%	
			Carpool	44.2%	43.5%	40.5%	40.4%	42.2%	39.6%	39.0%	42.3%	39.7%	39.1%	44.0%	40.6%	40.3%	40.3%	44.2%	44.2%	44.2%	44.2%	44.2%	
			Drive alone	44.7%	42.1%	40.7%	38.6%	45.5%	46.9%	47.2%	44.9%	45.7%	45.4%	41.0%	39.4%	36.9%	36.9%	44.7%	44.7%	44.7%	44.7%	44.7%	
			Other (TNC, MicroMobility, Taxi, School bus)	1.7%	2.1%	2.1%	2.3%	1.7%	1.7%	1.7%	1.8%	1.7%	1.7%	2.1%	2.2%	2.4%	2.4%	1.7%	1.7%	1.7%	1.7%	1.7%	
			Transit	1.6%	2.4%	4.7%	5.2%	1.7%	1.9%	1.9%	2.1%	2.7%	3.1%	2.6%	5.9%	6.5%	6.5%	1.6%	1.6%	1.6%	1.6%	1.6%	
			Number	15,196	29,448	120,201	262,593	20,720	27,063	28,636	20,720	43,879	46,388	32,920	113,325	259,758	259,758	113,325	113,325	113,325	113,325	113,325	
			Percent	0.5%	0.9%	3.4%	7.1%	0.6%	0.8%	0.8%	0.6%	1.2%	1.3%	1.0%	3.2%	7.0%	7.0%	0.5%	0.5%	0.5%	0.5%	0.5%	
			Number	141,814	232,174	324,452	462,735	217,514	283,458	296,752	261,805	465,549	644,034	227,004	310,888	463,598	463,598	227,004	227,004	227,004	227,004	227,004	
Percent			4.3%	6.8%	9.1%	12.5%	6.4%	7.9%	8.0%	7.6%	13.0%	17.4%	6.6%	8.7%	12.5%	12.5%	4.3%	4.3%	4.3%	4.3%	4.3%		
Number	187,571	486,892	1,090,842	1,199,007	257,599	294,126	329,629	524,780	825,629	1,059,375	484,682	1,079,673	1,209,474	1,209,474	484,682	484,682	484,682	484,682	484,682				
Percent	5.7%	14.2%	30.5%	32.4%	7.5%	8.2%	8.9%	15.3%	23.1%	28.6%	14.2%	30.2%	32.7%	32.7%	5.7%	5.7%	5.7%	5.7%	5.7%				
Number	297,954	603,096	1,175,654	1,293,724	408,748	493,973	539,138	650,888	960,013	1,205,058	593,416	1,162,174	1,308,796	1,308,796	593,416	593,416	593,416	593,416	593,416				
Percent	9.1%	17.6%	32.9%	35.0%	11.9%	13.8%	14.6%	19.0%	26.9%	32.6%	17.3%	32.5%	35.4%	35.4%	9.1%	9.1%	9.1%	9.1%	9.1%				
3	Number/percent of jobs within 0.5 miles of a commuter rail, light rail, or next gen Rapid	Commuter Rail (Tier 1)	Number	33,315	55,669	120,972	220,067	36,922	43,749	46,177	36,922	73,248	77,141	55,907	119,632	218,191	218,191	33,315	33,315	33,315	33,315		
			Percent	2.0%	3.2%	6.3%	10.5%	2.1%	2.3%	2.2%	2.1%	3.8%	3.7%	3.2%	6.2%	10.5%	10.5%	2.0%	2.0%	2.0%	2.0%		
			Number	193,149	246,246	290,074	374,636	238,120	265,026	287,042	272,726	379,984	511,694	245,637	286,895	371,933	371,933	193,149	193,149	193,149	193,149	193,149	
			Percent	11.7%	14.0%	15.1%	18.0%	13.3%	13.7%	13.7%	15.2%	19.6%	24.4%	13.9%	14.9%	17.8%	17.8%	11.7%	11.7%	11.7%	11.7%	11.7%	
			Number	211,072	390,385	807,071	915,452	232,996	257,788	275,690	404,681	635,018	845,535	390,797	804,636	912,544	912,544	211,072	211,072	211,072	211,072	211,072	
			Percent	12.8%	22.2%	42.0%	43.9%	13.0%	13.3%	13.2%	22.6%	32.8%	40.4%	22.2%	41.9%	43.7%	43.7%	12.8%	12.8%	12.8%	12.8%	12.8%	
			Number	349,992	513,234	876,745	996,408	394,861	430,622	463,425	536,126	747,189	962,870	513,354	874,973	994,715	994,715	349,992	349,992	349,992	349,992	349,992	
			Percent	21.3%	29.1%	45.6%	47.8%	22.1%	22.2%	22.1%	30.0%	38.6%	46.0%	29.1%	45.5%	47.7%	47.7%	21.3%	21.3%	21.3%	21.3%	21.3%	
			Light Rail (Tier 2)	Number	33,315	55,669	120,972	220,067	36,922	43,749	46,177	36,922	73,248	77,141	55,907	119,632	218,191	218,191	33,315	33,315	33,315	33,315	33,315
	Percent	2.0%		3.2%	6.3%	10.5%	2.1%	2.3%	2.2%	2.1%	3.8%	3.7%	3.2%	6.2%	10.5%	10.5%	2.0%	2.0%	2.0%	2.0%	2.0%		
	Number	193,149		246,246	290,074	374,636	238,120	265,026	287,042	272,726	379,984	511,694	245,637	286,895	371,933	371,933	193,149	193,149	193,149	193,149	193,149		
	Percent	11.7%		14.0%	15.1%	18.0%	13.3%	13.7%	13.7%	15.2%	19.6%	24.4%	13.9%	14.9%	17.8%	17.8%	11.7%	11.7%	11.7%	11.7%	11.7%		
	Number	211,072		390,385	807,071	915,452	232,996	257,788	275,690	404,681	635,018	845,535	390,797	804,636	912,544	912,544	211,072	211,072	211,072	211,072	211,072		
	Percent	12.8%		22.2%	42.0%	43.9%	13.0%	13.3%	13.2%	22.6%	32.8%	40.4%	22.2%	41.9%	43.7%	43.7%	12.8%	12.8%	12.8%	12.8%	12.8%		
	Number	349,992		513,234	876,745	996,408	394,861	430,622	463,425	536,126	747,189	962,870	513,354	874,973	994,715	994,715	349,992	349,992	349,992	349,992	349,992		
	Percent	21.3%		29.1%	45.6%	47.8%	22.1%	22.2%	22.1%	30.0%	38.6%	46.0%	29.1%	45.5%	47.7%	47.7%	21.3%	21.3%	21.3%	21.3%	21.3%		
	Next Gen Rapid (Tier 3)	Number		187,571	486,892	1,090,842	1,199,007	257,599	294,126	329,629	524,780	825,629	1,059,375	484,682	1,079,673	1,209,474	1,209,474	187,571	187,571	187,571	187,571	187,571	
		Percent	5.7%	14.2%	30.5%	32.4%	7.5%	8.2%	8.9%	15.3%	23.1%	28.6%	14.2%	30.2%	32.7%	32.7%	5.7%	5.7%	5.7%	5.7%	5.7%		
Number		297,954	603,096	1,175,654	1,293,724	408,748	493,973	539,138	650,888	960,013	1,205,058	593,416	1,162,174	1,308,796	1,308,796	297,954	297,954	297,954	297,954	297,954			
Percent		9.1%	17.6%	32.9%	35.0%	11.9%	13.8%	14.6%	19.0%	26.9%	32.6%	17.3%	32.5%	35.4%	35.4%	9.1%	9.1%	9.1%	9.1%	9.1%			
Number		33,315	55,669	120,972	220,067																		

Table O-3 SB 375 GHG Reductions for Alternatives Considered in Detail in this EIR

Database	Proposed Plan		Alternative 1		Alternative 2		Alternative 3	
	2035	2050	No Project		2019 Transportation Network with New Value Pricing and User Fee Policies		All Growth Focused in Mobility Hubs and More Progressive Value Pricing and User Fee Policies	
			2035	2050	2035	2050	2035	2050
SB 375 VMT	81,212,119.8	83,653,097	89,730,891	94,493,749	87,233,002	91,366,752	79,664,589	81,486,491
SB 375 VMT / Person	22.4	22.3	24.8	25.2	24.1	24.4	22.0	21.8
External to External VMT	984,563	1,101,363	984,561	1,101,638	984,674	1,101,421	984,561	1,101,255
External to External VMT Reduction	1.2%	1.3%	1.1%	1.2%	1.1%	1.2%	1.2%	1.4%
SB 375 Emissions (tons)	38,574.1	39,636.2	43,277.4	45,628.6	41,966.8	43,923.8	37,781.7	38,509.8
SB 375 Emissions (tons) without E-E	38,106.5	39,114.3	42,802.5	45,096.7	41,493.0	43,394.3	37,314.8	37,989.4
SB 375 Emissions / Person (lbs)	21.05	20.88	23.65	24.08	22.92	23.17	20.61	20.28
Per Capita Reduction for 2005**	-19.03%	-19.7%	-9.06%	-7.4%	-11.8%	-10.9%	-20.7%	-22.0%
Off-Model Calculators VMT Reduction								
Vanpool	308,108	329,435	-	-	309,561	334,100	308,171	329,513
Carshare	176,896	N/A*	-	-	170,006	N/A	176,896	N/A
Carpool	12,244	12,151	-	-	14,168	14,928	11,656	11,382
TDM Ordinance	393,851	632,789	-	-	453,163	755,378	367,004	573,912
Total VMT reduction	891,099	974,375	-	-	946,898	1,104,397	863,728	914,807
SB 375 VMT / Person Reduction	0.25	0.26	-	-	0.26	0.29	0.24	0.24
Off-Model Calculators - Daily Total GHG Reduction (tons)								
Vanpool	141.07	150.06	-	-	143.6	154.5	140.9	149.7
Carshare	80.60	N/A	-	-	78.5	N/A	80.5	N/A
Carpool	5.78	5.71	-	-	6.77	7.12	5.50	5.33
TDM Ordinance	183.93	293.89	-	-	214.45	356.21	171.17	265.98
EV Charging Program	1024.0	825.0	-	-	1,021.0	777.0	1030.0	836.0
SB 375 Emissions Total Reduction (tons)	1435.4	1274.7	-	-	1464.4	1294.8	1428.0	1257.0
SB 375 Emissions Reduction/ Person (lbs)	(0.79)	(0.68)	-	-	(0.81)	(0.69)	(0.79)	(0.67)
Off-Model GHG Reduction per capita	-3.05%	-2.62%	-	-	-3.11%	-2.66%	-3.03%	-2.58%
Per Capita Reduction for 2005 with Off-Model Calc	-22.1%	-22.3%	-	-	-14.9%	-13.6%	-23.7%	-24.6%
ARB Adjustment for EMFAC 2007 - 2014	1.7%	1.6%	-	-	1.7%	1.6%	1.7%	1.6%
Final Per Capita Reduction for 2005**	-20.38%	-20.7%	-9.06%	-7.4%	-13.2%	-12.0%	-22.0%	-23.0%

*The carshare program off-model GHG-reduction methodology estimates that carsharing in the region will grow to include over 25,000 members by 2035. Given the popularity of on-demand ridehailing and mobility-as-a-service, it is assumed that carsharing services may sunset before 2050.

**Baseline 2005 per capita GHG emissions are 26 lbs/person.

Table O-3 SB 375 GHG Reductions for Alternatives Considered in Detail

Database	Proposed Plan		Alternative 1		Alternative 2		Alternative 3	
	2035	2050	No Project		2019 Transportation Network with New Value Pricing and User Fee Policies		All Growth Focused in Mobility Hubs and More Progressive Value Pricing and User Fee Policies	
			2035	2050	2035	2050	2035	2050
SB 375 VMT	79,725,710	81,804,496	88,682,509	93,762,687	86,276,490	90,688,407	78,284,772	80,036,858
SB 375 VMT / Person	22.0	21.8	24.5	25.0	23.8	24.2	21.6	21.4
External to External VMT	982,673	1,095,193	980,759	1,096,737	981,390	1,097,946	982,867	1,095,082
External to External VMT Reduction	1.2%	1.3%	1.1%	1.2%	1.1%	1.2%	1.3%	1.4%
SB 375 Emissions (tons)	38,473	39,356	43,533	46,031	42,264	44,521	37,754	38,462
SB 375 Emissions (tons) without E-E	37,998	38,829	43,052	45,493	41,783	43,982	37,280	37,936
SB 375 Emissions / Person (lbs)	20.99	20.73	23.78	24.29	23.08	23.48	20.59	20.25
Per Capita Reduction for 2005**	-19.30%	-20.3%	-8.5%	-6.6%	-11.2%	-9.7%	-20.8%	-22.1%
Off-Model Calculators VMT Reduction								
Vanpool	338,685	380,619	-	-	328,514	367,645	337,811	377,583
Carshare	176,896	N/A*	-	-	170,006	N/A	176,896	N/A
Carpool	11,658	11,540	-	-	13,674	14,476	11,090	10,819
TDM Ordinance	364,337	579,172	-	-	420,995	706,692	339,631	530,782
Total VMT reduction	891,575	971,332	-	-	933,189	1,088,814	865,429	919,184
SB 375 VMT / Person Reduction	0.25	0.26	-	-	0.26	0.29	0.24	0.25
Off-Model Calculators - Daily Total GHG Reduction (tons)								
Vanpool	143.7	156.2	-	-	155.3	173.8	157.1	174.5
Carshare	82.0	N/A	-	-	80.0	N/A	81.9	N/A
Carpool	5.6	5.5	-	-	6.7	7.1	5.3	5.2
TDM Ordinance	173.9	274.5	-	-	203.1	340.7	161.3	250.5
EV Charging Program	1,010	836	-	-	1,001	782	1,024	845
SB 375 Emissions Total Reduction (tons)	1,415	1,272	-	-	1,446	1,304	1,430	1,275
SB 375 Emissions Reduction/ Person (lbs)	(0.78)	(0.68)	-	-	(0.80)	(0.70)	(0.79)	(0.68)
Off-Model GHG Reduction per capita	-3.01%	-2.61%	-	-	-3.07%	-2.68%	-3.04%	-2.62%
Per Capita Reduction for 2005 with Off-Model Calc	-22.3%	-22.9%	-8.5	-6.6	-14.3%	-12.4%	-23.8%	-24.7%
ARB Adjustment for EMFAC 2007 - 2014	1.7%	1.6%	1.7	1.6	1.7%	1.6%	1.7%	1.6%
Final Per Capita Reduction for 2005**	-20.40%	-21.0%	-6.80%	-5.0%	-12.6%	-10.8%	-22.1%	-23.1%

*The carshare program off-model GHG-reduction methodology estimates that carsharing in the region will grow to include over 25,000 members by 2035. Given the popularity of on-demand ridehailing and mobility-as-a-service, it is assumed that carsharing services may sunset before 2050.

**Baseline 2005 per capita GHG emissions are 26 lbs/person.

Table O-4 EMFAC 2017 Onroad Output Summary for Alternatives Considered in Detail in this EIR

Alternative	Annual CO2 Total	Annual PM 2.5 Total	Annual PM10 Total	Annual Gasoline	Annual Diesel	Summer ROG Total	Summer NOx Total	Winter CO Total
	tons/day	tons/day	tons/day	thousand gallons/day	thousand gallons/day	tons/day	tons/day	tons/day
2016	38,740	2.44	5.2	3,671.72	418.75	22.37	37.82	188.11
Proposed Plan-2025	30,172	2.03	4.8	2,743.56	423.94	11.94	15.4	99.75
Proposed Plan-2035	25,383	2.02	4.87	2,226.71	433.31	8.17	11.96	83.33
Proposed Plan-2050	24,789	2.08	5.06	2,149.62	444.74	6.66	11.88	79.99
Alternative 1-2025	31,589	2.12	5.01	2,899.94	416.65	12.6	15.84	102.28
Alternative 1-2035	27,543	2.2	5.3	2,473.58	411.35	9.06	12.55	83.95
Alternative 1-2050	27,345	2.3	5.59	2,441.82	420.24	7.57	12.5	81.98
Alternative 2-2025	31,196	2.09	4.93	2,850.45	425.81	12.38	15.72	102.86
Alternative 2-2035	27,140	2.15	5.19	2,411.06	434.87	8.81	12.33	87.36
Alternative 2-2050	26,899	2.24	5.45	2,367.60	451	7.31	12.26	85.73
Alternative 3-2025	29,933	2.01	4.76	2,719.16	422.88	11.82	15.31	98.82
Alternative 3-2035	24,993	1.99	4.79	2,185.14	433.15	8.01	11.88	81.95
Alternative 3-2050	24,317	2.04	4.96	2,094.27	448.94	6.49	11.9	78.29

*This table only includes onroad vehicles emissions.

Table O-4 EMFAC 2017 Onroad Output Summary for Alternatives Considered in Detail in this EIR

Alternative	Annual CO2 Total	Annual PM 2.5 Total	Annual PM10 Total	Annual Gasoline	Annual Diesel	Summer ROG Total	Summer NOx Total	Winter CO Total
	tons/day	tons/day	tons/day	thousand gallons/day	thousand gallons/day	tons/day	tons/day	tons/day
2016	38,471	2.42	5.14	3,651	411.81	22.15	37.43	184.86
Proposed Plan-2025	30,130	2.02	4.78	2,742	421.56	11.91	15.47	98.53
Proposed Plan-2035	25,058	1.99	4.79	2,197	428.42	8.03	11.83	81.27
Proposed Plan-2050	24,453	2.04	4.96	2,116	442.76	6.52	11.8	77.83
Alternative 1-2025	31,468	2.11	4.97	2,889	414.81	12.52	15.92	100.48
Alternative 1-2035	27,351	2.17	5.24	2,456	408.57	8.97	12.51	82.12
Alternative 1-2050	27,287	2.29	5.55	2,434	420.83	7.51	12.54	80.41
Alternative 2-2025	31,060	2.07	4.89	2,837	424.3	12.29	15.78	101.2
Alternative 2-2035	27,034	2.13	5.14	2,398	436.41	8.74	12.42	85.85
Alternative 2-2050	26,928	2.23	5.42	2,367	453.9	7.27	12.4	84.52
Alternative 3-2025	29,909	2.01	4.74	2,715	424.38	11.78	15.48	97.6
Alternative 3-2035	24,695	1.96	4.72	2,159	428.23	7.89	11.77	80.02
Alternative 3-2050	24,051	2.01	4.87	2,071	444.12	6.38	11.76	76.42

*This table only includes onroad vehicles emissions.

Note: From the Draft EIR to the Final EIR, SANDAG revised its ABM2+ model to reflect minor modifications to the transportation network improvements as well as minor modeling corrections. Those modeling changes result in lower VMT for baseline (2016) and Plan years (2025, 2035, and 2050), which would reduce emissions for baseline (2016) and Plan years (2025, 2035, and 2050) for the Proposed Plan and each alternative.

Appendix O-5

**2019 Federal Regional Transportation Plan;
Appendix A: Transportation Projects, Costs, and Phasing**

Appendix A

Transportation Projects, Costs, and Phasing

Appendix Contents

Revenue Constrained Projects

Unconstrained Projects

No-Build Projects

Revenue Constrained and Unconstrained Project Maps

Transportation Projects, Costs, and Phasing

This appendix includes information for both the 2019 Federal Regional Transportation Plan Revenue Constrained Plan and Unconstrained (i.e., illustrative) list of projects. Detailed transit, managed lanes and highway, goods movement, and active transportation project listings, cost estimates, and phasing are included for the Revenue Constrained Plan. For the Unconstrained Transportation scenario, detailed descriptions and cost estimates are provided for the same types of projects.

Revenue Constrained Projects

Table A.1 lists the capital improvements in the 2050 Revenue Constrained Plan in 2019 and year of expenditure (YOE) dollars. Table A.2 lists these revenue constrained projects by phase and Table A.3 includes the phased Revenue Constrained arterial projects. Table A.4 shows Revenue Constrained Freight and Goods Movement projects. Figures A.1 through A.9 depict the Revenue Constrained 2025, 2035, and 2050 transit, highway, and active transportation improvements (Regional Bike Network), respectively. Figure A.10 shows the Planned California High-Speed Train Overview. Figure A.11 shows the high frequency local bus routes by 2025 and 2035. Figures A.12, A.13, and A.14 show the 2016 Transit System, Managed Lanes and Highway Network, and Bike Network, respectively. Figure A.15 shows the Regional Arterial System. The California Coastal Trail and County of San Diego Community Trails are shown in Figure A.16. The regionally significant projects and the timing for when they are expected to be open to traffic in each conformity analysis year are documented in Appendix B in Tables B.11 through B.13.

Unconstrained Projects

Table A.5 lists the major capital improvements included in the Revenue Constrained and the Unconstrained Network which also are shown in Figures A.17, A.18, and A.19. Additionally, Figure A.20 illustrates the Unconstrained Goods Movement Strategy and Figure A.21 depicts the National Highway Freight Network (California South), which was established by the Federal Highway Administration.

No-Build Projects

Table A.6 lists the projects included in the No-Build Scenario.

Table A.1
Revenue Constrained Projects

Transit Facilities

<i>TransNet</i>	Service	Route	Description	Cost (\$2019); millions	Cost (\$YOE); millions
<i>TransNet</i>	COASTER	398	Double tracking (includes grade separations at Leucadia Blvd and two other locations, stations/platforms at Convention Center/Gaslamp Quarter and Del Mar Fairgrounds, Del Mar Tunnel, and extensions to the Convention Center and Camp Pendleton)	\$5,754	\$10,439
<i>TransNet</i>	SPRINTER	399	SPRINTER efficiency improvements and double tracking (Oceanside to Escondido and six rail grade separations at El Camino Real, Melrose Dr, Vista Village Dr/Main St, North Dr, Civic Center, Auto Parkway and Mission Ave)	\$1,287	\$1,564
	SPRINTER	399	Branch Extension to Westfield North County	\$239	\$479
	SPRINTER	588	SPRINTER Express	\$332	\$545
<i>TransNet</i>	Trolley	510	Mid-Coast Trolley Extension	\$919	\$919
	Trolley	510	Blue Line/Mid-Coast Frequency Enhancements and rail grade separations at 28th St, 32nd St, E St, H St, Palomar St, at Taylor St and Ash St, and Blue/Orange Track Connection at 12th/Imperial	\$586	\$844
	Trolley	520	Orange Line Frequency Enhancements and four rail grade separations at Euclid Ave, Broadway/ Lemon Grove Ave, Allison Ave/University Ave, Severin Dr	\$363	\$453
	Trolley	530	Green Line Frequency Enhancements	\$0	\$0
	Trolley	560	SDSU to Downtown San Diego via El Cajon Blvd/ Mid-City (transition of Mid-City <i>Rapid</i> to Trolley)	\$3,251	\$6,676
	Trolley	561	UTC to COASTER Connection (extension of Route 510)	\$467	\$581
	Trolley	562	San Ysidro to Carmel Valley via National City/ Chula Vista via Highland Ave/ 4th Ave, Southeast San Diego, Mid-City, Mission Valley, and Kearny Mesa	\$6,766	\$10,679
	Trolley	563	Pacific Beach to El Cajon Transit Center via Balboa and Kearny Mesa	\$1,579	\$3,024
	<i>Rapid</i>	2	North Park to Downtown San Diego via 30th St, Golden Hill	\$54	\$62
	<i>Rapid</i>	10	La Mesa to Ocean Beach via Mid-City, Hillcrest, Old Town	\$57	\$65
	<i>Rapid</i>	11	Spring Valley to SDSU via Southeast San Diego, Downtown, Hillcrest, Mid-City	\$154	\$199
	<i>Rapid</i>	28	Point Loma to Kearny Mesa via Old Town, Linda Vista	\$67	\$80
	<i>Rapid</i>	30	Old Town to Sorrento Mesa via Pacific Beach, La Jolla, UTC	\$143	\$172

Table A.1 (continued)
Revenue Constrained Projects

Transit Facilities (continued)

<i>TransNet</i>	<i>Service</i>	<i>Route</i>	<i>Description</i>	<i>Cost (\$2019); millions</i>	<i>Cost (\$YOE); millions</i>
	<i>Rapid</i>	41	Fashion Valley to UTC/UC San Diego via Linda Vista and Clairemont	\$75	\$90
	<i>Rapid</i>	90	El Cajon Transit Center to San Diego International Airport ITC via SR 94, City College (peak only)	\$27	\$32
	<i>Rapid</i>	103	Solana Beach to Sabre Springs Rapid station via Carmel Valley	\$91	\$152
	<i>Rapid</i>	120	Kearny Mesa to Downtown San Diego via Mission Valley	\$127	\$145
	<i>Rapid</i>	235	Temecula (peak only) Extension of Escondido to Downtown San Diego <i>Rapid</i> (formerly Route 610)	\$133	\$222
	<i>Rapid</i>	440	Carlsbad to Escondido Transit Center via Palomar Airport Rd	\$140	\$234
	<i>Rapid</i>	471	Downtown Escondido to East Escondido	\$46	\$94
	<i>Rapid</i>	473	UTC/UC San Diego to Oceanside via Hwy 101 Coastal Communities, Carmel Valley	\$176	\$267
	<i>Rapid</i>	474	Oceanside to Vista via Mission Ave/Santa Fe Rd Corridor	\$99	\$202
	<i>Rapid</i>	477	Camp Pendleton to Carlsbad Village via College Blvd, Plaza Camino Real	\$109	\$181
	<i>Rapid</i>	550	SDSU to Palomar Station via East San Diego, Southeast San Diego, National City	\$112	\$126
	<i>Rapid</i>	635	Eastlake to Palomar Trolley via Main St Corridor	\$105	\$126
	<i>Rapid</i>	636	SDSU to Spring Valley via East San Diego, Lemon Grove, Skyline	\$53	\$88
	<i>Rapid</i>	637	North Park to 32nd St Trolley via Golden Hill	\$60	\$101
	<i>Rapid</i>	638	Iris Trolley to Otay Mesa via Otay, Airway Dr, SR 905 Corridor	\$52	\$67
	<i>Rapid</i>	640A/640B	Route 640A: I-5 - San Ysidro to Old Town Transit Center via City College Route 640B: I-5 Iris Trolley/Palomar to Kearny Mesa via City College	\$208	\$229
	<i>Rapid</i>	650	Chula Vista to Palomar Airport Rd Business Park via I-805/I-5 (peak only)	\$112	\$186
	<i>Rapid</i>	653	Mid-City to Palomar Airport Rd via Kearny Mesa/ I-805/I-5	\$14	\$22
<i>TransNet</i>	<i>Rapid</i>	688/689/690	Route 688: San Ysidro to Sorrento Mesa via I-805/ I-15/SR 52 Corridors (peak only); Route 689: Otay Mesa Port of Entry (POE) to UTC/Torrey Pines via Otay Ranch/ Millennia, I-805 Corridor (Peak Only); Route 690: Mid-City to Sorrento Mesa via I-805 Corridor (Peak Only)	\$623	\$757

Table A.1 (continued)
Revenue Constrained Projects

Transit Facilities (continued)

<i>TransNet</i>	<i>Service</i>	<i>Route</i>	<i>Description</i>	<i>Cost (\$2019); millions</i>	<i>Cost (\$YOE); millions</i>
	<i>Rapid</i>	709	H St Trolley to Millennia via H St Corridor, Southwestern College	\$89	\$101
	<i>Rapid</i>	870	El Cajon to UTC via Santee, SR 52, I-805	\$100	\$190
	<i>Rapid</i>	890	El Cajon to Sorrento Mesa via SR 52, Kearny Mesa	\$16	\$31
	<i>Rapid</i>	950 (formerly 905)	Extension of Iris Trolley Station to Otay Mesa Port of Entry (POE) route with new service to Imperial Beach	\$3	\$3
	<i>Rapid</i>	910	Coronado to Downtown via Coronado Bridge	\$54	\$65
	<i>Rapid</i>	SR163 DARs	Kearny Mesa to Downtown San Diego via SR 163. Stations at Sharp/ Children's Hospital, University Ave, and Fashion Valley Transit Center	\$204	\$215
	Shuttle	448/449	San Marcos Shuttle ¹	\$0	\$0
	Streetcar	553	Downtown San Diego: Little Italy to East Village ²	\$15	\$20
	Streetcar	554	Hillcrest/Balboa Park/Downtown San Diego Loop ²	\$39	\$45
	Streetcar	555	30th St to Downtown San Diego via North Park/ Golden Hill ²	\$23	\$29
	Streetcar	565	Mission Beach to La Jolla via Pacific Beach ²	\$34	\$57
	Airport Express	--	Airport Express Routes ³	\$71	\$82
	Intermodal Transit Center	--	San Diego International Airport Intermodal Transit Center and I-5 Direct Connector Ramps	\$231	\$258
	Intermodal Transit Center	--	San Ysidro Intermodal Transit Center	\$160	\$209
	Other	--	Vehicles	\$2,740	\$4,553
	Other	--	Transit System Rehabilitation	\$2,065	\$3,777
	Other	--	Maintenance Facilities, Park and Ride, Transit Center Expansions	\$2,016	\$2,476
	Other	--	ITS, Regulatory Compliance	\$496	\$674
Subtotal				\$32,736	\$52,887

Table A.1 (continued)
Revenue Constrained Projects

Managed Lanes/Toll Lanes Projects

<i>TransNet</i>	<i>Freeway</i>	<i>From</i>	<i>To</i>	<i>Existing</i>	<i>With Improvements</i>	<i>Transit Route</i>	<i>Cost (\$2019); millions</i>	<i>Cost (\$YOE); millions</i>	
<i>TransNet</i>	I-5	SR 905	SR 54	8F	8F+2ML	640	\$542	\$627	
<i>TransNet</i>	I-5	SR 54	SR 15	8F	10F+2ML	640	\$467	\$540	
<i>TransNet</i>	I-5	I-8	La Jolla Village Dr	8F/10F	8F/10F+2ML		\$978	\$2,067	
<i>TransNet</i>	I-5	La Jolla Village Dr I-5/I-805 Merge	I-5/805 Merge SR 56	8F/14F 8F/14F+2ML	8F/14F+2ML 8F/14F+4ML	650, 653	\$422	\$513	
<i>TransNet</i>	I-5	SR 56 Manchester Ave	Manchester Ave Vandegrift Blvd	8F+2ML 8F	8F+4ML 8F+4ML	650, 653	\$2,881	\$4,537	
	I-5	Vandegrift Blvd	Orange County	8F	8F+4T		\$3,165	\$6,687	
		SR 11/ Otay Mesa East POE	SR 125	Mexico	--	4T+POE	905	\$472	\$472
		SR 15	I-5	SR 94	6F	8F+2ML	\$185	\$391	
<i>TransNet</i>	SR 15	SR 94	I-805	6F	6F+2ML	235, 610	\$41	\$59	
<i>TransNet</i>	I-15	Viaduct	--	8F	8F+2ML	235, 610, 653, 690	\$1,040	\$2,197	
<i>TransNet</i>	I-15	I-8	SR 163	8F	8F+2ML	235, 610, 653, 690	\$64	\$72	
	I-15	SR 78	Riverside County	8F	8F+4T	610	\$1,744	\$3,684	
<i>TransNet</i>	SR 52	I-805	I-15	6F	6F+2ML	653, 870, 890	\$238	\$503	
<i>TransNet</i>	SR 52	I-15	SR 125	4F/6F	4F/6F+2ML(R)	870, 890	\$405	\$856	
<i>TransNet</i>	SR 54	I-5	SR 125	6F	6F+2ML		\$151	\$319	
<i>TransNet</i>	SR 78	I-5	I-15	6F	6F+2ML		\$1,621	\$2,127	
<i>TransNet</i>	SR 94	I-5	SR 125	8F	8F+2ML	90, 225, 235, 610,	\$1,229	\$2,012	
<i>TransNet</i>	SR 125	SR 54 SR 94	SR 94 I-8	6F 8F	6F+2ML 10F+2ML	90	\$690	\$1,457	
<i>TransNet</i>	I-805	SR 905	Palomar St	8F	8F+2ML	688	\$235	\$316	
<i>TransNet</i>	I-805	SR 54	SR 94	8F+2ML	8F+4ML	225, 650, 688, 689	\$742	\$998	
<i>TransNet</i>	I-805	SR 94	Carroll Canyon Rd	8F	8F+4ML	30, 225, 650, 653, 688, 689, 690, 870, 890	\$3,295	\$5,939	
Subtotal							\$20,607	\$36,373	

Table A.1 (continued)
Revenue Constrained Projects

Highway Projects

<i>TransNet</i>	Freeway	From	To	Existing	With Improvements	Cost (\$2019); millions	Cost (\$YOE); millions
<i>TransNet</i>	I-8	2nd St	Los Coches	4F/6F	6F	\$44	\$94
	SR 52	I-5	I-805	4F	6F	\$151	\$319
<i>TransNet</i>	SR 52	Mast Blvd	SR 125	4F	6F	\$103	\$147
<i>TransNet</i>	SR 56	I-5	I-15	4F	6F	\$192	\$405
<i>TransNet</i>	SR 67	Mapleview St	Dye Rd	2C/4C	4C	\$673	\$1,340
<i>TransNet</i>	SR 94	SR 125	Avocado Blvd	4F	6F	\$190	\$401
<i>TransNet</i>	SR 94	Avocado Blvd	Jamacha	4C	6C	\$124	\$261
<i>TransNet</i>	SR 94	Jamacha	Steele Canyon Rd	2C/4C	4C	\$54	\$115
	SR 125	SR 905	San Miguel Rd	4T	8F	\$439	\$741
	SR 125	San Miguel Rd	SR 54	4F	8F	\$241	\$509
Subtotal						\$2,211	\$4,332

Operational Improvements

<i>TransNet</i>	Freeway	From	To	Existing	With Improvements	Cost (\$2019); millions	Cost (\$YOE); millions
<i>TransNet</i>	I-5	SR 15	I-8	8F	8F+Operational	\$1,985	\$4,194
	I-8	I-5	SR 125	8F/10F	8F/10F+Operational	\$907	\$1,917
	I-8	SR 125	2nd St	6F/8F	6F/8F+Operational	\$227	\$480
	SR 76	I-15	Couser Canyon	2C/4C	4C/6C+Operational	\$178	\$376
Subtotal						\$3,297	\$6,967

Table A.1 (continued)

Revenue Constrained Projects

Managed Lanes Connectors

<i>TransNet</i>	Freeway	Intersecting Freeway	Movement	Cost (\$2019); millions	Cost (\$YOE); millions	
<i>TransNet</i>	I-5	I-805	North to North and South to South	*	*	
	I-5	SR 78	South to East and West to North, North to East and West to South	\$344	\$451	
<i>TransNet</i>	SR 15	SR 94	South to West and East to North	\$97	\$127	
	SR 15	I-805	North to North and South to South	\$110	\$124	
	I-15	SR 52	West to North and South to East	\$177	\$374	
<i>TransNet</i>	I-15	SR 78	East to South and North to West	\$144	\$171	
	I-805	SR 94	North to West and East to South	\$137	\$180	
	I-805	SR 52	West to North and South to East	*	*	
* Project Cost included in associated Managed Lane Project				Subtotal	\$1,009	\$1,427

Freeway Connectors

<i>TransNet</i>	Freeway	Intersecting Freeway	Movement	Cost (\$2019); millions	Cost (\$YOE); millions	
<i>TransNet</i>	I-5	SR 56	West to North and South to East	\$371	\$487	
<i>TransNet</i>	I-5	SR 78	South to East and West to South	\$371	\$487	
	I-15	SR 56	North to West	\$104	\$219	
<i>TransNet</i>	SR 94	SR 125	South to East	\$94	\$106	
<i>TransNet</i>	SR 94	SR 125	West to North	\$110	\$134	
				Subtotal	\$1,050	\$1,433
				TOTAL	\$28,174	\$50,532

Table A.1 (continued)
Revenue Constrained Projects

Active Transportation Projects

Project	Jurisdiction(s)	Cost (\$2019) millions	Cost (\$YOE) millions
Uptown - Fashion Valley to Downtown San Diego	San Diego	\$13.0	\$13.0
Uptown - Old Town to Hillcrest	San Diego	\$1.0	\$1.0
Uptown - Hillcrest to Balboa Park	San Diego	\$2.0	\$2.0
North Park - Mid-City - City Heights	San Diego	\$7.0	\$8.0
North Park - Mid-City - Hillcrest to City Heights (City Heights – Old Town Corridor)	San Diego	\$5.0	\$6.0
North Park - Mid-City - City Heights to Rolando	San Diego	\$3.0	\$3.0
San Diego River Trail - Qualcomm Stadium	San Diego	\$1.0	\$1.0
Bayshore Bikeway - Main St to Palomar	Chula Vista/ Imperial Beach	\$1.0	\$1.0
Inland Rail Trail (Combination of four projects)	San Marcos/ Vista/ Co. of San Diego	\$35.0	\$35.0
Coastal Rail Trail Encinitas - Chesterfield to Solana Beach	Encinitas	\$0.5	\$1.0
Pershing and El Prado - North Park to Downtown San Diego	San Diego	\$7.0	\$8.0
Pershing and El Prado - Cross-Park	San Diego	\$1.0	\$1.0
San Ysidro to Imperial Beach - Bayshore Bikeway Connection	Imperial Beach/ San Diego	\$8.0	\$9.0
Terrace Dr/Central Ave - Adams to Wightman	San Diego	\$4.0	\$5.0
San Diego River Trail – I-805 to Fenton	San Diego	\$3.0	\$3.0
San Diego River Trail - Short gap connections	San Diego	\$2.0	\$2.0
Coastal Rail Trail Encinitas - Leucadia to G St	Encinitas	\$7.0	\$8.0
Bayshore Bikeway - Barrio Logan	San Diego	\$25.8	\$39.0
San Diego River Trail - Father Junipero Serra Trail to Santee	Santee	\$9.5	\$14.0
Downtown to Southeast connections	San Diego	\$8.8	\$14.0
Coastal Rail Trail San Diego - UTC	San Diego	\$0.8	\$1.0
Coastal Rail Trail San Diego - Rose Canyon	San Diego	\$8.7	\$13.0
Coastal Rail Trail San Diego - Pac Hwy (W Washington St to Laurel St)	San Diego	\$7.0	\$11.0
Coastal Rail Trail San Diego - Pac Hwy (Laurel St to Santa Fe Depot)	San Diego	\$13.9	\$21.0
Coastal Rail Trail San Diego – Pac Hwy (Taylor St to W Washington St)	San Diego	\$7.0	\$11.0
Coastal Rail Trail San Diego- Pac Hwy (Fiesta Island Rd to Taylor St)	San Diego	\$12.2	\$18.0
City Heights /Encanto/Lemon Grove	Lemon Grove/ San Diego	\$12.2	\$18.0
City Heights/Fairmount Corridor	San Diego	\$20.9	\$28.0

Table A.1 (continued)
Revenue Constrained Projects

Active Transportation Projects (continued)

Project	Jurisdiction(s)	Cost (\$2019) millions	Cost (\$YOE) millions
Rolando to Grossmont/La Mesa	La Mesa/El Cajon/ San Diego	\$3.5	\$5.0
La Mesa/Lemon Grove/El Cajon connections	Lemon Grove/ La Mesa	\$10.4	\$16.0
San Diego River Trail - Qualcomm Stadium to Ward Rd	San Diego	\$3.5	\$5.0
San Diego River Trail - Rancho Mission Rd to Camino Del Rio North	San Diego	\$0.5	\$1.0
Coastal Rail Trail San Diego - Rose Creek Mission Bay Connection	San Diego	\$7.0	\$11.0
Coastal Rail Trail Carlsbad - Reach 4 Cannon to Palomar Airport Rd	Carlsbad	\$8.7	\$13.0
Coastal Rail Trail Carlsbad - Reach 5 Palomar Airport Rd to Poinsettia Station	Carlsbad	\$5.2	\$8.0
Coastal Rail Trail Encinitas - Carlsbad to Leucadia	Encinitas	\$12.2	\$18.0
Coastal Rail Trail Del Mar	Del Mar	\$0.7	\$1.0
Coastal Rail Trail San Diego - Del Mar to Sorrento via Carmel Valley	Del Mar/ San Diego	\$0.7	\$1.0
Coastal Rail Trail San Diego - Carmel Valley to Roselle via Sorrento	San Diego	\$1.6	\$2.0
Coastal Rail Trail San Diego - Roselle Canyon	San Diego	\$8.7	\$13.0
Chula Vista/National City connections	Chula Vista/ National City	\$19.1	\$25.0
Pacific Beach to Mission Beach	San Diego	\$17.4	\$23.0
Ocean Beach to Mission Bay	San Diego	\$41.8	\$51.0
San Diego River Trail - Bridge connection (Sefton Field to Mission Valley YMCA)	San Diego	\$12.2	\$18.0
San Diego River Trail - Mast Park to Lakeside baseball park	Santee	\$17.4	\$23.0
I-8 Flyover - Camino del Rio S to Camino del Rio N	San Diego	\$17.4	\$23.0
Coastal Rail Trail Oceanside - Broadway to Eaton	Oceanside	\$0.7	\$1.0
El Cajon - Santee connections	El Cajon/La Mesa/ Santee	\$20.9	\$28.0
San Diego River Trail - Father JS Trail to West Hills Pkwy	San Diego	\$5.2	\$8.0
Inland Rail Trail Oceanside	Oceanside	\$33.1	\$40.0
Coastal Rail Trail Carlsbad - Reach 3 Tamarack to Cannon	Carlsbad	\$8.7	\$13.0
Clairemont Dr (Mission Bay to Burgener)	San Diego	\$13.9	\$21.0
Harbor Dr (Downtown to Ocean Beach)	San Diego	\$12.2	\$18.0
Mira Mesa Bike Blvd	San Diego	\$7.0	\$11.0
Sweetwater River Bikeway Ramps	National City	\$15.7	\$24.0
Coastal Rail Trail Oceanside - Alta Loma Marsh bridge	Oceanside	\$8.7	\$13.0
Coastal Rail Trail San Diego - Mission Bay (Clairemont to Tecolote)	San Diego	\$5.2	\$8.0
Bayshore Bikeway Coronado - Golf course adjacent	Coronado	\$5.2	\$8.0

Table A.1 (continued)
Revenue Constrained Projects

Active Transportation Projects (continued)

Project	Jurisdiction(s)	Cost (\$2019) millions	Cost (\$YOE) millions
San Luis Rey River Trail	Oceanside, Unincorporated	\$64.4	\$122.0
Encinitas-San Marcos Corridor – Double Peak Dr to San Marcos Blvd	San Marcos	\$20.9	\$48.0
Escondido Creek Bikeway – Quince St to Broadway	Escondido	\$3.5	\$8.0
Escondido Creek Bikeway – Escondido Creek to Washington Ave	Escondido	\$1.7	\$4.0
Escondido Creek Bikeway – 9th Ave to Escondido Creek	Escondido	\$1.7	\$4.0
Escondido Creek Bikeway – El Norte Pkwy to northern bikeway terminus	Escondido	\$10.4	\$24.0
Encinitas to San Marcos Corridor – Leucadia Blvd to El Camino Real	Carlsbad, Encinitas	\$3.5	\$8.0
I-15 Bikeway – Via Rancho Pkwy to Lost Oak Ln	Escondido	\$7.0	\$16.0
I-15 Bikeway – Rancho Bernardo Community Park to Lake Hodges Bridge	San Diego	\$5.2	\$12.0
I-15 Bikeway – Camino del Norte to Aguamiel Rd	San Diego	\$22.6	\$40.0
I-15 Bikeway – Poway Rd interchange to Carmel Mountain Rd	San Diego	\$29.6	\$52.0
SR 56 Bikeway – Azuaga St to Rancho Penasquitos Blvd	San Diego	\$3.5	\$8.0
I-15 Bikeway – Murphy Canyon Rd to Affinity Ct	San Diego	\$69.6	\$115.0
SR 56 Bikeway – El Camino Real to Caminito Pointe	San Diego	\$3.5	\$8.0
SR 52 Bikeway – I-5 to Santo Rd	San Diego	\$52.2	\$104.0
SR 52 Bikeway – SR 52/Mast Dr to San Diego River Trail	San Diego	\$3.5	\$8.0
I-8 Corridor – San Diego River Trail to Riverside Dr	Unincorporated	\$3.5	\$8.0
I-805 Connector – Bonita Rd to Floyd Ave	Chula Vista, Unincorporated	\$10.5	\$24.0
SR 125 Connector – Bonita Rd to U.S.-Mexico Border	Chula Vista, San Diego	\$67.9	\$118.0
SR 905 Connector – E Beyer Blvd to U.S.-Mexico Border	San Diego, Unincorporated	\$59.2	\$103.0
El Camino Real Bike Lanes – Douglas Dr to Mesa Dr	Oceanside	\$1.7	\$4.0
Vista Way Connector from Arcadia	Vista, Unincorporated	\$3.7	\$8.0
I-15 Bikeway – W Country Club Ln to Nutmeg St	Escondido	\$7.0	\$16.0
El Camino Real Bike Lanes – Marron Rd to SR 78 offramp	Carlsbad	\$0.5	\$1.0
Carlsbad to San Marcos Corridor – Paseo del Norte to Avenida Encinas	Carlsbad	\$0.7	\$2.0
Encinitas to San Marcos Corridor – Kristen Ct to Ecke Ranch Rd	Encinitas	\$0.7	\$2.0
Encinitas to San Marcos Corridor – Encinitas Blvd/I-5 Interchange	Encinitas	\$0.3	\$1.0
Mira Mesa Corridor – Reagan Rd to Parkdale Ave	San Diego	\$0.7	\$2.0
Mira Mesa Corridor – Scranton Rd to I-805	San Diego	\$0.7	\$2.0

Table A.1 (continued)
Revenue Constrained Projects

Active Transportation Projects (continued)

Project	Jurisdiction(s)	Cost (\$2019) millions	Cost (\$YOE) millions
Mira Mesa Corridor – Sorrento Valley Rd to Sorrento Valley Blvd	San Diego	\$1.4	\$3.0
Mid-County Bikeway – I-5/Via de la Valle Interchange	San Diego	\$0.5	\$1.0
Mid-County Bikeway – Rancho Santa Fe segment	San Diego, Unincorporated	\$5.2	\$12.0
El Camino Real Bike Lanes – Manchester Ave to Tennis Club Dr	Encinitas	\$0.9	\$2.0
Mid-County Bikeway – Manchester Ave/I-5 Interchange to San Elijo Ave	Encinitas	\$1.4	\$3.0
Central Coast Corridor – Van Nuys St to San Rafael Pl	San Diego	\$1.0	\$4.0
Clairemont – Centre-City Corridor – Coastal Rail Trail to Genesee Ave	San Diego	\$3.5	\$8.0
SR 125 Corridor – Mission Gorge Rd to Glen Vista Way	Santee	\$0.5	\$1.0
SR 125 Corridor – Prospect Ave to Weld Blvd	Santee, El Cajon	\$1.4	\$3.0
I-8 Corridor – Lakeside Ave to SR 67	Unincorporated	\$0.9	\$2.0
I-8 Corridor – Willows Rd to SR 79	Unincorporated	\$8.7	\$19.0
E County Northern Loop – N. Marshall Ave to El Cajon Blvd	El Cajon	\$0.5	\$1.0
E County Northern Loop – Washington Ave to Dewitt Ct	El Cajon	\$1.7	\$4.0
E County Northern Loop – SR 94 onramp to Del Rio Rd	Unincorporated	\$0.3	\$1.0
E County Southern Loop – Pointe Pkwy to Omega St	Unincorporated	\$1.4	\$3.0
SR 125 Corridor – SR 94 to S of Avocado St	Unincorporated	\$1.9	\$4.0
Centre City – La Mesa Corridor – Gateside Rd to Campo Rd	La Mesa, Unincorporated	\$0.7	\$2.0
Bay to Ranch Bikeway – River Ash Dr to Paseo Ranchero	Chula Vista	\$0.9	\$2.0
Mid-County Bikeway – San Elijo Ave to 101 Terminus	Encinitas	\$1.7	\$4.0
Central Coast Corridor – Van Nuys St	San Diego	\$0.3	\$1.0
E County Northern Loop – El Cajon Blvd to Washington Ave	El Cajon	\$1.7	\$4.0
E County Northern Loop – Calavo Dr to Sweetwater Springs Blvd	Unincorporated	\$1.2	\$3.0
Central Coast Corridor – Torrey Pines Rd to Nautilus St	San Diego	\$10.4	\$23.0
Central Coast Corridor – Via Del Norte to Van Nuys St	San Diego	\$8.7	\$19.0
Kearny Mesa to Beaches Corridor – Ingraham St from Garnet Ave to Pacific Beach Dr	San Diego	\$3.5	\$8.0
Kearny Mesa to Beaches Corridor – Clairemont Dr to Genesee Ave	San Diego	\$17.4	\$31.0
Kearny Mesa to Beaches Corridor – Genesee Ave to Linda Vista Dr	San Diego	\$10.4	\$23.0
Bay to Ranch Bikeway – E J St from 2nd Ave to Paseo Del Rey	Chula Vista	\$20.9	\$36.0
Chula Vista Greenbelt – Bay Blvd to Oleander Ave	Chula Vista	\$29.6	\$51.0
Safe Routes to Transit at new transit stations	Various	\$1,230	\$1,943
Local Bike and Pedestrian Projects	Various	\$1,399	\$2,211

Table A.1 (continued)
Revenue Constrained Projects

Active Transportation Projects (continued)

Project	Jurisdiction(s)	Cost (\$2019) millions	Cost (\$YOE) millions
Regional Bicycle and Pedestrian Programs	Various	\$34	\$54
Regional Safe Routes to School Implementation	Various	\$78	\$123
	Subtotal	\$3,892	\$6,226
	TOTAL	\$64,803	\$109,645

¹ Capital cost to be funded by the City of San Marcos

² Streetcar cost is representative of 10% of the total capital cost

³ Capital cost to be funded by aviation and other private funds

Table A.2
Phased Revenue Constrained Projects

Transit Facilities

Year Built	Service	Route	Description	Cost (\$2019); millions	Cost (\$YOE); millions
2025	COASTER	398	Double tracking (20-minute peak frequencies and 120-minute off-peak frequencies)	\$609	\$693
2025	Trolley	510	Mid-Coast Trolley Extension	\$919	\$919
2025	Rapid	2	North Park to Downtown San Diego via 30th St, Golden Hill	\$54	\$62
2025	Rapid	10	La Mesa to Ocean Beach via Mid-City, Hillcrest, Old Town	\$57	\$65
2025	Rapid	120	Kearny Mesa to Downtown via Mission Valley	\$127	\$145
2025	Rapid	550	SDSU to Palomar Station via East San Diego, Southeast San Diego, National City	\$112	\$126
2025	Rapid	709	H St Trolley Station to Millennia via H St Corridor, Southwestern College	\$89	\$101
2025	Rapid	950 (formerly 905)	Extension of Iris Trolley Station to Otay Mesa Port of Entry (POE) route with new service to Imperial Beach	\$3	\$3
2025	Rapid	SR 163 DARs	Kearny Mesa to Downtown via SR 163. Stations at Sharp/Children's Hospital, University Ave, and Fashion Valley Transit Center	\$204	\$215
2025	Streetcar	554	Hillcrest/Balboa Park/Downtown San Diego Loop ³	\$39	\$45
2025	Shuttle	448/449	San Marcos Shuttle ¹	\$0	\$0
2025	Airport Express	--	Airport Express Routes ²	\$71	\$82
2025	Intermodal Transit Center	--	San Diego International Airport Intermodal Transit Center and I-5 Direct Connector Ramps	\$231	\$258
2025	Other	--	Other Improvements (Vehicles, transit system rehabilitation, maintenance facilities, ITS, regulatory compliance, Park and Ride, transit center expansions)	\$721	\$798
2025	--	--	Local Bus Routes - 15 minutes in key corridors	--	--
2035	COASTER	398	Double tracking (20-minute peak frequencies and 60-minute off-peak frequencies, grade separations at Leucadia Blvd, stations/platforms at Convention Center/Gaslamp Quarter and Del Mar Fairgrounds, and extension to Camp Pendleton)	\$1,224	\$1,488
2035	SPRINTER	399	SPRINTER efficiency improvements (20-minute frequencies by 2025); double tracking Oceanside to Escondido for 10-minute frequencies and six rail grade separations at El Camino Real, Melrose Dr, Vista Village Dr/Main St, North Dr, Civic Center, Auto Pkwy and Mission Ave	\$1,287	\$1,564

Table A.2 (continued)
Phased Revenue Constrained Projects

Transit Facilities (continued)

Year Built By	Service	Route	Description	Cost (\$2019); millions	Cost (\$YOE); millions
2035	Trolley	510	Phase I - Blue Line Frequency Enhancements and rail grade separations at 28th St, 32nd St, E St, H St, Palomar St, and Blue/Orange Track Connection at 12th/Imperial	\$279	\$339
2035	Trolley	520	Orange Line Frequency Enhancements and four rail grade separations at Euclid Ave, Broadway/Lemon Grove Ave, Allison Ave/University Ave, Severin Dr	\$363	\$453
2035	Trolley	561	UTC to COASTER Connection (extension of Route 510)	\$467	\$581
2035	Trolley	562	Phase I - San Ysidro to Kearny Mesa via Chula Vista via Highland Ave/4th Ave, National City, Southeast San Diego, Mid-City, and Mission Valley	\$4,575	\$6,290
2035	Rapid	11	Spring Valley to SDSU via Southeast San Diego, Downtown, Hillcrest, Mid-City	\$154	\$199
2035	Rapid	28	Point Loma to Kearny Mesa via Old Town, Linda Vista	\$67	\$80
2035	Rapid	30	Old Town to Sorrento Mesa via Pacific Beach, La Jolla, UTC	\$143	\$172
2035	Rapid	41	Fashion Valley to UTC/UC San Diego via Linda Vista and Clairemont	\$75	\$90
2035	Rapid	90	El Cajon Transit Center to San Diego International Airport ITC via SR 94, City College (peak only)	\$27	\$32
2035	Rapid	473	Phase I - Solana Beach to UTC/UC San Diego via Hwy 101 Coastal Communities, Carmel Valley	\$58	\$70
2035	Rapid	635	Eastlake to Palomar Trolley via Main St Corridor	\$105	\$126
2035	Rapid	638	Iris Trolley Station to Otay Mesa via Otay, Airway Dr, SR 905 Corridor	\$52	\$67
2035	Rapid	640A/ 640B	Route 640A: I-5 - San Ysidro to Old Town Transit Center via City College; 640B: I-5 Iris Trolley/Palomar to Kearny Mesa via City College	\$208	\$229
2035	Rapid	688/ 689/ 690	Route 688: San Ysidro to Sorrento Mesa via I-805/I-15/SR 52 Corridors (Peak Only); Route 689: Otay Mesa Port of Entry (POE) to UTC/Torrey Pines via Otay Ranch/Millennia, I-805 Corridor (Peak Only); Route 690: Mid-City to Sorrento Mesa via I-805 Corridor (Peak Only)	\$623	\$757
2035	Rapid	910	Coronado to Downtown via Coronado Bridge	\$54	\$65
2035	Streetcar	553	Downtown San Diego: Little Italy to East Village ³	\$15	\$20
2035	Streetcar	555	30th St to Downtown San Diego via North Park/Golden Hill ³	\$23	\$29
2035	Intermodal Transit Center	--	Phase I - San Ysidro Intermodal Transit Center	\$129	\$158
2035	Other	--	Other Improvements (Vehicles, transit system rehabilitation, maintenance facilities, ITS, regulatory compliance, Park and Ride, transit center expansions)	\$2,872	\$3,843

Table A.2 (continued)
Phased Revenue Constrained Projects

Transit Facilities (continued)

Year Built By	Service	Route	Description	Cost (\$2019); millions	Cost (\$YOE); millions
2035	--	--	Local Bus Routes - 10 minutes in key corridors	--	--
2050	COASTER	398	Double tracking (completes double tracking; includes Del Mar Tunnel) plus 2 grade separations	\$3,921	\$8,258
2050	SPRINTER	399	Branch Extension to Westfield North County	\$239	\$479
2050	SPRINTER	588	SPRINTER Express	\$332	\$545
2050	Trolley	510	Phase II - Blue Line rail grade separations at Taylor St and Ash St	\$307	\$505
2050	Trolley	520	Orange Line Frequency Enhancements	\$0	\$0
2050	Trolley	530	Green Line Frequency Enhancements	\$0	\$0
2050	Trolley	560	SDSU to Downtown via El Cajon Blvd/Mid-City (transition of Mid-City <i>Rapid</i> to Trolley)	\$3,251	\$6,676
2050	Trolley	562	Phase II - Kearny Mesa to Carmel Valley	\$2,191	\$4,389
2050	Trolley	563	Pacific Beach to El Cajon Transit Center	\$1,579	\$3,024
2050	<i>Rapid</i>	103	Solana Beach to Sabre Springs <i>Rapid</i> station via Carmel Valley	\$91	\$152
2050	<i>Rapid</i>	440	Carlsbad to Escondido Transit Center via Palomar Airport Rd	\$140	\$234
2050	<i>Rapid</i>	471	Downtown Escondido to East Escondido	\$46	\$94
2050	<i>Rapid</i>	473	Phase II - Oceanside to Solana Beach via Hwy 101 Coastal Communities	\$118	\$197
2050	<i>Rapid</i>	474	Oceanside to Vista via Mission Ave/Santa Fe Rd Corridor	\$99	\$202
2050	<i>Rapid</i>	477	Camp Pendleton to Carlsbad Village via College Blvd, Plaza Camino Real	\$109	\$181
2050	<i>Rapid</i>	235	Temecula (peak only) Extension of Escondido to Downtown <i>Rapid</i> (formerly Route 610)	\$133	\$222
2050	<i>Rapid</i>	636	SDSU to Spring Valley via East San Diego, Lemon Grove, Skyline	\$53	\$88
2050	<i>Rapid</i>	637	North Park to 32nd St Trolley Station via Golden Hill	\$60	\$101
2050	<i>Rapid</i>	650	Chula Vista to Palomar Airport Rd Business Park via I-805/I-5 (peak only)	\$112	\$186
2050	<i>Rapid</i>	653	Mid-City to Palomar Airport Rd via Kearny Mesa/I-805/I-5	\$14	\$23
2050	<i>Rapid</i>	870	El Cajon to UTC via Santee, SR 52, I-805	\$100	\$190
2050	<i>Rapid</i>	890	El Cajon to Sorrento Mesa via SR 52, Kearny Mesa	\$16	\$31
2050	Streetcar	565	Mission Beach to La Jolla via Pacific Beach ³	\$34	\$57
2050	Intermodal Transit Center	--	Phase II - San Ysidro Intermodal Transit Center	\$31	\$51

Table A.2 (continued)
Phased Revenue Constrained Projects

Transit Facilities (continued)

Year Built By	Service	Route	Description	Cost (\$2019); millions	Cost (\$YOE); millions
2050	Other	--	Other Improvements (Vehicles, transit system rehabilitation, maintenance facilities, ITS, regulatory compliance, Park and Ride, transit center expansions)	\$3,724	\$6,839
Subtotal				\$32,736	\$52,887

Table A.2 (continued)
Phased Revenue Constrained Projects

Managed Lanes/Toll Lanes

Year Built By	Freeway	From	To	Existing*	With Improvements	Transit Route	Cost (\$2019); millions	Cost (\$YOE); millions
2025	I-5	Manchester Ave	SR 78	8F	8F+2ML	650, 653	\$51	\$51
2025	I-5	SR 78	Vandegrift Blvd	8F	8F+2ML		\$116	\$131
2025	SR 11/Otay Mesa East Port of Entry (POE)	SR 125	Mexico	--	4T+POE	905	\$472	\$472
2025	I-15	I-8	SR 163	8F	8F+2ML	235, 610, 653, 690	\$64	\$72
2025	I-805	SR 94	SR 15	8F	8F+2ML	225, 650, 688, 689	\$234	\$264
2035	I-5	SR 905	SR 54	8F	8F+2ML	640	\$542	\$627
2035	I-5	SR 54	SR 15	8F	10F+2ML	640	\$467	\$540
2035	I-5	La Jolla Village Dr I-5/I-805 Merge	I-5/805 Merge SR 56	8F/14F 8F/14F+ 2ML	8F/14F+2ML 8F/14F+4ML	650, 653	\$422	\$513
2035	I-5	SR 56	SR 78	8F+2ML	8F+4ML	650, 653	\$2,082	\$3,019
2035	SR 15	SR 94	I-805	6F	6F+2ML	235, 610	\$41	\$59
2035	SR 78	I-5	I-15	6F	6F+2ML		\$1,621	\$2,127
2035	SR 94	I-5	I-805	8F	8F+2ML	90, 225, 235, 610	\$728	\$955
2035	I-805	SR 905	Palomar St	8F	8F+2ML	688	\$235	\$316
2035	I-805	SR 54	SR 94	8F+2ML	8F+4ML	225, 650, 688, 689	\$742	\$998
2035	I-805	SR 163	SR 52	8F	8F+2ML	650, 688, 689, 690	\$195	\$269
2035	I-805	SR 52	Carroll Canyon Rd	8F+2ML	8F+4ML	30, 650, 653, 688, 689, 690, 870, 890	\$778	\$996
2050	I-5	I-8	La Jolla Village Dr	8F/10F	8F/10F+2ML		\$978	\$2,067
2050	I-5	SR 78	Vandegrift Blvd	8F+2ML	8F+4ML		\$632	\$1,336
2050	I-5	Vandegrift Blvd	Orange County	8F	8F+4T		\$3,165	\$6,687
2050	SR 15	I-5	SR 94	6F	8F+2ML		\$185	\$391

Table A.2 (continued)
Phased Revenue Constrained Projects

Managed Lanes/Toll Lanes (continued)

Year Built By	Freeway	From	To	Existing*	With Improvements	Transit Route	Cost (\$2019); millions	Cost (\$YOE); millions
2050	I-15	Viaduct	--	8F	8F+2ML	235, 610, 653, 690	\$1,040	\$2,197
2050	I-15	SR 78	Riverside County	8F	8F+4T	610	\$1,744	\$3,684
2050	SR 52	I-805	I-15	6F	6F+2ML	653, 870, 890	\$238	\$503
2050	SR 52	I-15	SR 125	4F/6F	4F/6F+2ML(R)	870, 890	\$405	\$856
2050	SR 54	I-5	SR 125	6F	6F+2ML		\$151	\$319
2050	SR 94	I-805	SR 125	8F	8F+2ML	90	\$501	\$1,057
2050	SR 125	SR 54 SR 94	SR 94 I-8	6F 8F	6F+2ML 10F+2ML	90	\$690	\$1,457
2050	I-805	SR 94	SR 15	8F+2ML	8F+4ML	225, 650, 688, 690	\$83	\$175
2050	I-805	SR 15	SR 163	8F/10F	8F/10F+4ML	650, 688, 689, 690	\$1,567	\$3,310
2050	I-805	SR 163	SR 52	8F+2ML	8F+4ML	650, 688, 689, 690	\$438	\$925
Subtotal							\$20,607	\$36,373

Table A.2 (continued)
Phased Revenue Constrained Projects

Highway Projects

Year Built By	Freeway	From	To	Existing*	With Improvements	Cost (\$2019); millions	Cost (\$YOE); millions
2025	SR 67	Mapleview St	Gold Bar Ln	2C	4C	\$82	\$92
2035	SR 52	Mast Blvd	SR 125	4F	6F	\$103	\$147
2050	I-8	2nd St	Los Coches	4F/6F	6F	\$44	\$94
2050	SR 52	I-5	I-805	4F	6F	\$151	\$319
2050	SR 56	I-5	I-15	4F	6F	\$192	\$405
2050	SR 67	Gold Bar Ln	Dye Rd	2C/4C	4C	\$591	\$1,248
2050	SR 94	SR 125	Avocado Blvd	4F	6F	\$190	\$401
2050	SR 94	Avocado Blvd	Jamacha	4C	6C	\$124	\$261
2050	SR 94	Jamacha	Steele Canyon Rd	2C/4C	4C	\$54	\$115
2050	SR 125	SR 905	San Miguel Rd	4T	8F	\$439	\$741
2050	SR 125	San Miguel Rd	SR 54	4F	8F	\$241	\$509
Subtotal						\$2,211	\$4,332

Operational Improvements

Year Built By	Freeway	From	To	Existing*	With Improvements	Cost (\$2019); millions	Cost (\$YOE); millions
2050	I-5	SR 15	I-8	8F	8F+Operational	\$1,985	\$4,194
2050	I-8	I-5	SR 125	8F/10F	8F/10F+Operational	\$907	\$1,917
2050	I-8	SR 125	2nd St	6F/8F	6F/8F+Operational	\$227	\$480
2050	SR 76	I-15	Couser Canyon	2C/4C	4C/6C+Operational	\$178	\$376
Subtotal						\$3,297	\$6,967

Table A.2 (continued)

Phased Revenue Constrained Projects

Managed Lanes Connectors

Year Built By	Freeway	Intersecting Freeway	Movement	Cost (\$2019); millions	Cost (\$YOE); millions
2025	SR 15	I-805	North to North and South to South	\$110	\$124
2035	I-5	SR 78	South to East and West to North, North to East and West to South	\$344	\$451
2035	I-5	I-805	North to North and South to South	*	*
2035	I-15	SR 78	East to South and North to West	\$144	\$171
2035	SR 15	SR 94	South to West and East to North	\$97	\$127
2035	I-805	SR 94	North to West and East to South	\$137	\$180
2050	I-15	SR 52	West to North and South to East	\$177	\$374
2050	I-805	SR 52	West to North and South to East	*	*
Subtotal				\$1,009	\$1,427

* Project Cost included in associated Managed Lane Project

Freeway Connectors

Year Built By	Freeway	Intersecting Freeway	Movement	Cost (\$2019); millions	Cost (\$YOE); millions
2025	SR 94	SR 125	South to East	\$94	\$106
2035	I-5	SR 56	West to North and South to East	\$371	\$487
2035	I-5	SR 78	South to East and West to South	\$371	\$487
2035	SR 94	SR 125	West to North	\$110	\$134
2050	I-15	SR 56	North to West	\$104	\$219
Subtotal				\$1,050	\$1,433

Table A.2 (continued)**Phased Revenue Constrained Projects***Active Transportation Projects*

Year Built By	Project	Jurisdiction(s)	Project Phase	Cost (\$2019); millions	Cost (\$YOE); millions
2025	Uptown - Fashion Valley to Downtown San Diego	San Diego	Const.	\$13.0	\$13.0
2025	Uptown - Old Town to Hillcrest	San Diego	Const.	\$1.0	\$1.0
2025	Uptown - Hillcrest to Balboa Park	San Diego	Const.	\$2.0	\$2.0
2025	North Park - Mid-City - City Heights	San Diego	Const.	\$7.0	\$8.0
2025	North Park - Mid-City - Hillcrest to City Heights (City Heights - Old Town Corridor)	San Diego	Const.	\$5.0	\$6.0
2025	North Park - Mid-City - City Heights to Rolando	San Diego	Const.	\$3.0	\$3.0
2025	San Diego River Trail - Qualcomm Stadium	San Diego	Const.	\$1.0	\$1.0
2025	Bayshore Bikeway - Main St to Palomar	Chula Vista/ Imperial Beach	Const.	\$1.0	\$1.0
2025	Inland Rail Trail (combination of four projects)	San Marcos, Vista, Co. of San Diego	Const.	\$35.0	\$35.0
2025	Pershing and El Prado - North Park to Downtown San Diego	San Diego	Const.	\$7.0	\$8.0
2025	Pershing and El Prado - Cross-Park	San Diego	Const.	\$1.0	\$1.0
2025	Terrace Dr/Central Ave - Adams to Wightman	San Diego	Const.	\$4.0	\$5.0
2025	San Diego River Trail – I-805 to Fenton	San Diego	Const.	\$3.0	\$3.0
2025	San Diego River Trail - Short gap connections	San Diego	Const.	\$2.0	\$2.0
2025	Coastal Rail Trail Encinitas - Leucadia to G St	Encinitas	Const.	\$7.0	\$8.0
2025	San Ysidro to Imperial Beach - Bayshore Bikeway Connection	Imperial Beach/ San Diego	Const.	\$8.0	\$9.0
2025	Bayshore Bikeway – Barrio Logan	San Diego	Const.	\$25.8	\$39.0
2025	Coastal Rail Trail San Diego – Rose Creek Mission Bay Connection	San Diego	Const.	\$7.0	\$11.0
2025	Other Active Transportation Programs and Projects ⁴	Various	Various	\$600	\$654.0
2035	Downtown to Southeast connections - East Village	San Diego	ROW	\$1.1	\$2.0
2035	Downtown to Southeast connections – Downtown San Diego to Encanto	San Diego	ROW	\$4.1	\$6.0
2035	Downtown to Southeast connections – Downtown San Diego to Golden Hill	San Diego	Const.	\$3.6	\$6.0
2035	Coastal Rail Trail San Diego - UTC	San Diego	Const.	\$0.8	\$1.0
2035	Coastal Rail Trail San Diego - Rose Canyon	San Diego	Const.	\$8.7	\$13.0
2035	Coastal Rail Trail San Diego - Pac Hwy (W Washington St to Laurel St)	San Diego	Const.	\$7.0	\$11.0
2035	Coastal Rail Trail San Diego - Pac Hwy (Laurel St to Santa Fe Depot)	San Diego	Const.	\$13.9	\$21.0
2035	Coastal Rail Trail San Diego - Encinitas Chesterfield to Solana Beach	Encinitas	Const.	\$0.5	\$1.0

Table A.2 (continued)
Phased Revenue Constrained Projects

Active Transportation Projects (continued)

Year Built By	Project	Jurisdiction(s)	Project Phase	Cost (\$2019); millions	Cost (\$YOE); millions
2035	Coastal Rail Trail San Diego – Pac Hwy (Taylor St to W Washington St)	San Diego	Const.	\$7.0	\$11.0
2035	Coastal Rail Trail San Diego- Pac Hwy (Fiesta Island Rd to Taylor St)	San Diego	Const.	\$12.2	\$18.0
2035	San Diego River Trail - Father Junipero Serra Trail to Santee	Santee	Const.	\$9.5	\$14.0
2035	City Heights /Encanto/Lemon Grove	Lemon Grove/ San Diego	Const.	\$12.2	\$18.0
2035	City Heights/Fairmount Corridor	San Diego	Const.	\$20.9	\$28.0
2035	Rolando to Grossmont/La Mesa	La Mesa/ El Cajon/ San Diego	Const.	\$3.5	\$5.0
2035	La Mesa/Lemon Grove/El Cajon connections	Lemon Grove/ La Mesa	Const.	\$10.4	\$16.0
2035	San Diego River Trail - Qualcomm Stadium to Ward Rd	San Diego	Const.	\$3.5	\$5.0
2035	San Diego River Trail - Rancho Mission Rd to Camino Del Rio North	San Diego	Const.	\$0.5	\$1.0
2035	Coastal Rail Trail Carlsbad - Reach 4 Cannon to Palomar Airport Rd	Carlsbad	Const.	\$8.7	\$13.0
2035	Coastal Rail Trail Carlsbad - Reach 5 Palomar Airport Rd to Poinsettia Station	Carlsbad	Const.	\$5.2	\$8.0
2035	Coastal Rail Trail Encinitas - Carlsbad to Leucadia	Encinitas	Const.	\$12.2	\$18.0
2035	Coastal Rail Trail Del Mar	Del Mar	Const.	\$0.7	\$1.0
2035	Coastal Rail Trail San Diego - Del Mar to Sorrento via Carmel Valley	Del Mar/ San Diego	Const.	\$0.7	\$1.0
2035	Coastal Rail Trail San Diego - Carmel Valley to Roselle via Sorrento	San Diego	Const.	\$1.6	\$2.0
2035	Coastal Rail Trail San Diego - Roselle Canyon	San Diego	Const.	\$8.7	\$13.0
2035	Chula Vista/National City connections	Chula Vista/ National City	Const.	\$19.1	\$25.0
2035	Pacific Beach to Mission Beach	San Diego	Const.	\$17.4	\$23.0
2035	Ocean Beach to Mission Bay	San Diego	Const.	\$41.8	\$51.0
2035	San Diego River Trail - Bridge connection (Sefton Field to Mission Valley YMCA)	San Diego	Const.	\$12.2	\$18.0
2035	San Diego River Trail - Mast Park to Lakeside baseball park	Santee	Const.	\$17.4	\$23.0
2035	I-8 Flyover - Camino del Rio S to Camino del Rio N	San Diego	Const.	\$17.4	\$23.0
2035	Coastal Rail Trail Oceanside - Broadway to Eaton	Oceanside	Const.	\$0.7	\$1.0
2035	El Cajon - Santee connections	El Cajon/ La Mesa/ Santee	Const.	\$20.9	\$28.0
2035	San Diego River Trail - Father JS Trail to West Hills Pkwy	San Diego	Const.	\$5.2	\$8.0
2035	Inland Rail Trail Oceanside	Oceanside	Const.	\$33.1	\$40.0

Table A.2 (continued)
Phased Revenue Constrained Projects

Active Transportation Projects (continued)

Year Built By	Project	Jurisdiction(s)	Project Phase	Cost (\$2019); millions	Cost (\$YOE); millions
2035	Coastal Rail Trail Carlsbad - Reach 3 Tamarack to Cannon	Carlsbad	Const.	\$8.7	\$13.0
2035	Clairemont Dr (Mission Bay to Burgener)	San Diego	Const.	\$13.9	\$21.0
2035	Harbor Dr (Downtown to Ocean Beach)	San Diego	Const.	\$12.2	\$18.0
2035	Mira Mesa Bike Blvd	San Diego	Const.	\$7.0	\$11.0
2035	Sweetwater River Bikeway Ramps	National City	Const.	\$15.7	\$24.0
2035	Coastal Rail Trail Oceanside - Alta Loma Marsh bridge	Oceanside	Const.	\$8.7	\$13.0
2035	Coastal Rail Trail San Diego - Mission Bay (Clairemont to Tecolote)	San Diego	Const.	\$5.2	\$8.0
2035	Bayshore Bikeway Coronado - Golf course adjacent	Coronado	Const.	\$5.2	\$8.0
2035	Other Active Transportation Programs and Projects ⁴	Various	Various	\$857.0	\$1,179
2050	San Luis Rey River Trail	Oceanside, Unincorporated	Const.	\$64.4	\$122.0
2050	Encinitas-San Marcos Corridor – Double Peak Dr to San Marcos Blvd	San Marcos	Const.	\$20.9	\$48.0
2050	Escondido Creek Bikeway – Quince St to Broadway	Escondido	Const.	\$3.5	\$8.0
2050	Escondido Creek Bikeway – Escondido Creek to Washington Ave	Escondido	Const.	\$1.7	\$4.0
2050	Escondido Creek Bikeway – 9th Ave to Escondido Creek	Escondido	Const.	\$1.7	\$4.0
2050	Escondido Creek Bikeway – El Norte Pkwy to northern bikeway terminus	Escondido	Const.	\$10.4	\$24.0
2050	Encinitas to San Marcos Corridor – Leucadia Blvd to El Camino Real	Carlsbad, Encinitas	Const.	\$3.5	\$8.0
2050	I-15 Bikeway – Via Rancho Pkwy to Lost Oak Ln	Escondido	Const.	\$7.0	\$16.0
2050	I-15 Bikeway – Rancho Bernardo Community Park to Lake Hodges Bridge	San Diego	Const.	\$5.2	\$12.0
2050	I-15 Bikeway – Camino del Norte to Aguamiel Rd	San Diego	Const.	\$22.6	\$40.0
2050	I-15 Bikeway – Poway Rd interchange to Carmel Mountain Rd	San Diego	Const.	\$29.6	\$52.0
2050	SR 56 Bikeway – Azuaga St to Rancho Peñasquitos Blvd	San Diego	Const.	\$3.5	\$8.0
2050	I-15 Bikeway – Murphy Canyon Rd to Affinity Ct	San Diego	Const.	\$69.6	\$115.0
2050	SR 56 Bikeway – El Camino Real to Caminito Pointe	San Diego	Const.	\$3.5	\$8.0
2050	SR 52 Bikeway – I-5 to Santo Rd	San Diego	Const.	\$52.2	\$104.0
2050	SR 52 Bikeway – SR 52/Mast Dr to San Diego River Trail	San Diego	Const.	\$3.5	\$8.0
2050	I-8 Corridor – San Diego River Trail to Riverside Dr	Unincorporated	Const.	\$3.5	\$8.0

Table A.2 (continued)
Phased Revenue Constrained Projects

Active Transportation Projects (continued)

Year Built By	Project	Jurisdiction(s)	Project Phase	Cost (\$2019); millions	Cost (\$YOE); millions
2050	I-805 Connector – Bonita Rd to Floyd Ave	Chula Vista, Unincorporated	Const.	\$10.5	\$24.0
2050	SR 125 Connector – Bonita Rd to U.S.-Mexico Border	Chula Vista, San Diego	Const.	\$67.9	\$118.0
2050	SR 905 Connector – E Beyer Blvd to U.S.-Mexico Border	San Diego, Unincorporated	Const.	\$59.2	\$103.0
2050	El Camino Real Bike Lanes – Douglas Dr. to Mesa Dr.	Oceanside	Const.	\$1.7	\$4.0
2050	Vista Way Connector from Arcadia	Vista Unincorporated	Const.	\$3.7	\$8.0
2050	I-15 Bikeway – W Country Club Ln to Nutmeg St	Escondido	Const.	\$7.0	\$16.0
2050	El Camino Real Bike Lanes – Marron Rd to SR 78 off ramp	Carlsbad	Const.	\$0.5	\$1.0
2050	Carlsbad to San Marcos Corridor – Paseo del Norte to Avenida Encinas	Carlsbad	Const.	\$0.7	\$2.0
2050	Encinitas to San Marcos Corridor – Kristen Ct to Ecke Ranch Rd	Encinitas	Const.	\$0.7	\$2.0
2050	Encinitas to San Marcos Corridor – Encinitas Blvd/ I-5 Interchange	Encinitas	Const.	\$0.3	\$1.0
2050	Mira Mesa Corridor – Reagan Rd to Parkdale Ave	San Diego	Const.	\$0.7	\$2.0
2050	Mira Mesa Corridor – Scranton Rd to I-805	San Diego	Const.	\$0.7	\$2.0
2050	Mira Mesa Corridor – Sorrento Valley Rd to Sorrento Valley Blvd	San Diego	Const.	\$1.4	\$3.0
2050	Mid-County Bikeway – I-5/Via de la Valle Interchange	San Diego	Const.	\$0.5	\$1.0
2050	Mid-County Bikeway – Rancho Santa Fe segment	San Diego, Unincorporated	Const.	\$5.2	\$12.0
2050	El Camino Real Bike Lanes – Manchester Ave to Tennis Club Dr	Encinitas	Const.	\$0.9	\$2.0
2050	Mid-County Bikeway – Manchester Ave/ I-5 Interchange to San Elijo Ave	Encinitas	Const.	\$1.4	\$3.0
2050	Central Coast Corridor – Van Nuys St to San Rafael Pl	San Diego	Const.	\$1.0	\$4.0
2050	Clairemont – Centre-City Corridor – Coastal Rail Trail to Genesee Ave	San Diego	Const.	\$3.5	\$8.0
2050	SR 125 Corridor – Mission Gorge Rd to Glen Vista Way	Santee	Const.	\$0.5	\$1.0
2050	SR 125 Corridor – Prospect Ave to Weld Blvd	Santee, El Cajon	Const.	\$1.4	\$3.0
2050	I-8 Corridor – Lakeside Ave to SR 67	Unincorporated	Const.	\$0.9	\$2.0
2050	I-8 Corridor – Willows Rd to SR 79	Unincorporated	Const.	\$8.7	\$19.0
2050	E County Northern Loop – N Marshall Ave to El Cajon Blvd	El Cajon	Const.	\$0.5	\$1.0
2050	E County Northern Loop – Washington Ave to Dewitt Ct	El Cajon	Const.	\$1.7	\$4.0

Table A.2 (continued)
Phased Revenue Constrained Projects

Active Transportation Projects (continued)

Year Built By	Project	Jurisdiction(s)	Project Phase	Cost (\$2019); millions	Cost (\$YOE); millions
2050	E County Northern Loop – SR 94 onramp to Del Rio Rd	Unincorporated	Const.	\$0.3	\$1.0
2050	E County Southern Loop – Pointe Pkwy to Omega St	Unincorporated	Const.	\$1.4	\$3.0
2050	SR 125 Corridor – SR 94 to S of Avocado St	Unincorporated	Const.	\$1.9	\$4.0
2050	Centre City – La Mesa Corridor – Gateside Rd to Campo Rd	La Mesa, Unincorporated	Const.	\$0.7	\$2.0
2050	Bay to Ranch Bikeway – River Ash Dr to Paseo Ranchero	Chula Vista	Const.	\$0.9	\$2.0
2050	Mid-County Bikeway – San Elijo Ave to 101 Terminus	Encinitas	Const.	\$1.7	\$4.0
2050	Central Coast Corridor – Van Nuys St	San Diego	Const.	\$0.3	\$1.0
2050	E County Northern Loop – El Cajon Blvd to Washington Ave	El Cajon	Const.	\$1.7	\$4.0
2050	E County Northern Loop – Calavo Dr to Sweetwater Springs Blvd	Unincorporated	Const.	\$1.2	\$3.0
2050	Central Coast Corridor – Torrey Pines Rd to Nautilus St	San Diego	Const.	\$10.4	\$23.0
2050	Central Coast Corridor – Via Del Norte to Van Nuys St	San Diego	Const.	\$8.7	\$19.0
2050	Kearny Mesa to Beaches Corridor – Ingraham St from Garnet Ave to Pacific Beach Dr	San Diego	Const.	\$3.5	\$8.0
2050	Kearny Mesa to Beaches Corridor – Clairemont Dr to Genesee Ave	San Diego	Const.	\$17.4	\$31.0
2050	Kearny Mesa to Beaches Corridor – Genesee Ave to Linda Vista Dr	San Diego	Const.	\$10.4	\$23.0
2050	Bay to Ranch Bikeway – E J St from 2nd Ave to Paseo Del Rey	Chula Vista	Const.	\$20.9	\$36.0
2050	Chula Vista Greenbelt – Bay Blvd to Oleander Ave	Chula Vista	Const.	\$29.6	\$51.0
2050	Other Active Transportation Programs and Projects ⁴	Various	Various	\$1,285	\$2,498
Subtotal				\$3,892	\$6,226
TOTAL				\$64,802	\$109,645

* Based on facility configuration at time of project construction.

¹ Capital cost to be funded by the City of San Marcos

² Capital cost to be funded by aviation and other private funds

³ Streetcar cost is representative of 10 percent of the total capital cost

⁴ Includes Safe Routes to Transit projects at new transit station areas, local bike projects, local pedestrian/safety/traffic calming projects, regional bicycle and pedestrian programs and Regional Safe Routes to School implementation.

Table A.3
Phased Revenue Constrained Arterial Projects¹

Year Built By	SANDAG ID	Lead Agency	Project Title	Project Description
2025	CB04B	Carlsbad	El Camino Real and Cannon Rd	Along the eastside of El Camino Real just south of Cannon Rd, widen to prime arterial standards with three through lanes, a right turn lane, and a sidewalk approaching the intersection
2025	CB12	Carlsbad	College Blvd Reach A - Badger Ln to Cannon Rd	From Badger Ln to Cannon Rd, construct a new segment of College Blvd to provide 4-lane roadway with raised median, bike lanes, and sidewalks/trails in accordance with major arterial standards
2025	CB13	Carlsbad	Poinsettia Ln Reach E - Cassia Dr to Skimmer Ct	From Cassia Dr to Skimmer Ct, construct a new 4-lane roadway with median, bike lanes, and sidewalks/trails to major arterial standards
2025	CB22	Carlsbad	Avenida Encinas, widen from Palomar Airport Rd to Encinas Water Pollution Control Facility	Avenida Encinas from Palomar Airport Rd southerly to existing improvements adjacent to the Embarcadero Lane, roadway widening to secondary arterial standards
2025	CB31	Carlsbad	El Camino Real – La Costa Ave to Arenal Rd	Along El Camino Real from 700 feet north of La Costa Ave to Arenal Rd, widening along the southbound side of the roadway to provide three travel lanes and a bike lane in accordance with prime arterial standards
2025	CB32	Carlsbad	El Camino Real Widening - Cassia to Camino Vida Roble	Widen El Camino Real from 900 feet north of Cassia Rd to Camino Vida Roble, along the northbound side of the roadway to provide three travel lanes and a bike lane in accordance with prime arterial standards
2025	CB35	Carlsbad	Palomar Airport Rd - Palomar Airport Rd to Paseo Del Norte	Lengthen the left turn pocket along eastbound Palomar Airport Rd to northbound Paseo Del Norte
2025	CHV08	Chula Vista	Willow St Bridge Project - Bonita Rd to Sweetwater Rd	Replace 2-lane bridge with 4-lane bridge (Phase II)
2025	CHV69	Chula Vista	Heritage Rd Bridge	Heritage Rd from Main St/Nirvana Ave to Entertainment Circle, widen and lengthen bridge over Otay River from 4-lane to 6-lane bridge that accommodates shoulders, sidewalk, and medial; project is on Heritage Rd from the intersection of Main St and Nirvana Ave to Entertainment Circle
2025	CNTY14A	San Diego County	South Santa Fe Ave South	South Santa Fe from 700 feet south of Woodland Dr to Smilax Rd, widening of South Santa Fe Ave to a 5-lane major road with a center left turn lane, curb, gutter, sidewalk, bike lanes, and drainage improvements.
2025	CNTY21	San Diego County	Bradley Ave Overpass at SR 67	Widen Bradley Ave from Magnolia Ave to Mollison Ave; widen from 2 lanes to 4 lanes plus sidewalks. Replace 2-lane bridge over SR 67 with a 6-lane bridge, which accommodates turn pockets.

Table A.3 (continued)

Phased Revenue Constrained Arterial Projects

Year Built By	SANDAG ID	Lead Agency	Project Title	Project Description
2025	CNTY24	San Diego County	Cole Grade Rd	Cole Grade Rd from north of Horse Creek Trail to south of Pauma Heights Rd, widen to accommodate 14-foot traffic lane in both directions, 12-foot center 2-way left turn, 6-foot bike lane and 10-foot pathway
2025	ESC02A	Escondido	East Valley/ Valley Center	Widen roadway from 4 to 6 lanes with raised medians and left turn pockets; modify signal at Lake Wohlford and Valley Center Rd; widen bridge over Escondido Creek
2025	ESC04	Escondido	Citracado Parkway II	West Valley to Harmony Grove, widen from 2 to 4 lanes with raised medians; construct bridge over Escondido Creek
2025	ESC06	Escondido	El Norte Pkwy Bridge at Escondido Creek - Kaile Ln to Key Lime Way	Construct missing 2-lane bridge at Escondido Creek
2025	ESC08	Escondido	Felicita Ave/Juniper St - from Escondido Blvd to Juniper St and from Juniper St to Chestnut St	Widen from 2 to 4 lanes with left turn pockets, raised medians on Felicita; new traffic signals at Juniper and Chestnut, Juniper and 13th Ave, Juniper and 15th Ave; modify traffic signal at Juniper and Felicita
2025	ESC24	Escondido	Centre City Pkwy	Mission Rd to SR 78, widen 4 lanes to 6 lanes with intersection improvements
2025	NC01	National City	Plaza Blvd Widening	Plaza Blvd from Highland Ave to Euclid Ave, widen from 2 to 3 lanes including a new traffic lane in each direction, new sidewalks, sidewalk widening, traffic signal upgrades, and interconnection at Plaza Blvd
2025	O22	Oceanside	College Blvd - Avenida de la Platte to Waring Road	Widen from the existing 4 lanes to 6 lanes with bike lanes and raised median
2025	SD34	San Diego	El Camino Real	In San Diego on El Camino Real from San Dieguito Rd to Via de la Valle, reconstruct and widen from 2 to 4 lanes and extend transition lane and additional grading to avoid biological impacts (CIP 52-479.0)
2025	SD70	San Diego	West Mission Bay Dr Bridge	In San Diego, replace bridge and increase from 4- to 6-lane bridge including Class II bike lane (CIP 52-643.0/S00871)
2025	SD83	San Diego	SR 163/Friars Rd. Interchange Modification	Widen and improve Friars Road and overcrossing; reconstruct interchange including improvements to ramp intersections (Phase 1); construct new connector roadways and structures (Phase 2); construct auxiliary lanes along northbound and southbound SR163 (Phase 3) (CIP Legacy#52-455.0,WBS# S-00851)
2025	SD102A	San Diego	Otay Truck Route Widening	On Otay Truck Route in San Diego from Drucker Ln to La Media, add one lane (total 3 lanes) for trucks; from Britannia to La Media, add one lane for trucks and one lane for emergency vehicles (border patrol/fire department access); along Britannia from Britannia Court to the Otay Truck Route - add one lane for trucks

Table A.3 (continued)

Phased Revenue Constrained Arterial Projects

Year Built By	SANDAG ID	Lead Agency	Project Title	Project Description
2025	SD190	San Diego	Palm Ave/I-805 Interchange	Improvements to the Palm Avenue Bridge over I-805; repairs to the bridge approaches; a new Project Study Report (PSR) and Preliminary Environmental Assessment Report (PEAR). Phase II will include widening of the bridge, realignment of existing ramps, possible addition of northbound looping entrance ramp, restriping of traffic lanes, and signal modifications.
2025	SD247	San Diego	Camino del Sur and Carmel Mountain Road	On Camino del Sur from Carmel Mountain Road to Dormouse Road, and on Camino del Sur from Torrey Santa Fe to Carmel Mountain Rd, construction of Camino del Sur as a two-lane interim roadway (S00872 and RD15000). Project also includes construction of Carmel Mountain Road, from Sundance Avenue to Camino del Sur as a four-lane major street with Class II bicycle lanes.
2025	SM19	San Marcos	Grand Ave Bridge and Street Improvements	From Discovery St to San Marcos Blvd, construct 4-lane arterial bridge and a 6-lane arterial street from Craven to Grand Ave
2025	SM22	San Marcos	South Santa Fe - Bosstick to Smilax	From Bosstick to Smilax, realign and signalize the South Santa Fe/Smilax intersection (Phase I)
2025	SM24	San Marcos	Woodland Pkwy Interchange Improvements	From La Moree Rd to Rancheros Dr, modify existing ramps at Woodland Pkwy and Barham Dr; widen and realign SR 78 undercrossing and associated work
2025	SM31	San Marcos	Discovery St Improvements	From Via Vera Cruz to Bent Ave/Craven Rd, widen roadway to 4-lane secondary arterial
2025	SM32	San Marcos	Via Vera Cruz Bridge and Street Improvements	From San Marcos Blvd to Discovery St, widen to 4-lane secondary arterial and construct a bridge at San Marcos Creek
2025	SM42	San Marcos	Street Improvements: Discovery St - Craven Rd to West of Twin Oaks Valley Rd	In the City of San Marcos, on Discovery St from Craven Rd to west of Twin Oaks Valley Rd, construct approximately 5,100 lineal feet of a new 6-lane roadway
2025	SM48	San Marcos	Creekside Dr	Construct approximately 3,000 feet of a 2-lane collector road from Via Vera Cruz to Grand Ave in the City of San Marcos. The road will include two 12-foot lanes, diagonal parking on the north side, and parallel parking on the south side. In addition, the project also will include a 10-foot bike trail meandering along the south side.
2025	CB34	Carlsbad	Palomar Airport Rd - Palomar Airport Rd to Paseo Del Norte	Widening along eastbound Palomar Airport Rd to provide a dedicated right turn lane to southbound Paseo Del Norte
2025	CNTY34	San Diego County	Dye Rd Extension	Dye Rd to San Vicente Rd - in Ramona, study, design, and construct a 2-lane community collector road with intermittent turn lanes, bike lanes, curb, gutter, and pathway/walkway

Table A.3 (continued)

Phased Revenue Constrained Arterial Projects

Year Built By	SANDAG ID	Lead Agency	Project Title	Project Description
2025	CNTY35	San Diego County	Ramona St Extension	From Boundary Ave to Warnock Dr - in the community of Ramona, construct new road extension, 2 lanes with intermittent turn lanes, bike lanes, and walkway/pathway
2025	CNTY88	San Diego County	Ashwood Street Corridor Improvements – Mapleview to Willow	Ashwood Street/Wildcat Canyon Road from Mapleview Street to 1100 feet north of Willow Road in Lakeside- traffic signal improvements at Mapleview and Ashwood; traffic signal installation at Willow and Ashwood/Wildcat Canyon; and the addition of turn lanes, addition of a passing lane in a non-urbanized area, bike lanes, and pedestrian facilities.
2025	V15	Various Agencies	I-5/Gilman Dr. Bridge	In San Diego, construct new overcrossing over I-5 between Gilman Drive and Medical Center Drive
2025	V18	Various Agencies	I-5/Voigt Drive Improvements	Between La Jolla Village Drive and Genesee Avenue - in San Diego, on Interstate 5, construction of the realignment of both Campus Point and Voigt Drive between I-5 and Genesee Avenue
2035	SD81	San Diego	Genesee Ave – Nobel Dr to SR 52	In San Diego, future widening to 6-lane major street north of Decoro St and to a 6-lane primary arterial south of Decoro St and included Class II bicycle lanes (CIP 52-458.0)
2035	SD190	San Diego	Palm Avenue/I-805 Interchange	Phase III will provide the ultimate build-out of the project which will incorporate improvements of Phase II plus the northbound and southbound entrance ramps (CIP 52-640.0)
2035	SM10	San Marcos	SR 78/Smilax	Construct new interchange at Smilax Rd interchange and SR 78 improvements

¹ The arterials listed in this table reflect locally initiated projects that were submitted by local jurisdictions in the 2018 Regional Transportation Improvement Program.

Table A.4
Revenue Constrained Freight and Goods Movement Projects

Rail Facilities (Shared Use Freight and Passengers)

Service	Route	Description	Cost (\$2019); millions	Cost (\$YOE); millions
COASTER/ BNSF	398	Double tracking (includes grade separations at Leucadia Blvd and two other locations, stations/platforms at Convention Center/Gaslamp Quarter and Del Mar Fairgrounds, Del Mar Tunnel, and extensions to the Convention Center and Camp Pendleton)	\$5,754	\$10,439
SPRINTER/ BNSF	399	SPRINTER efficiency improvements and double tracking (Oceanside to Escondido and six rail grade separations at El Camino Real, Melrose Dr, Vista Village Dr/Main St, North Dr, Civic Center, Auto Parkway and Mission Ave)	\$1,287	\$1,564
SPRINTER/ BNSF	588	SPRINTER Express	\$322	\$545
Trolley/ BNSF	510	Blue Line/Mid-Coast Frequency Enhancements and rail grade separations at 28th St, 32nd St, E St, H St, Palomar St, at Taylor St and Ash St, and Blue/Orange Track Connection at 12th/Imperial	\$586	\$844
Trolley/ BNSF	520	Orange Line Frequency Enhancements and four rail grade separations at Euclid Ave, Broadway/Lemon Grove Ave, Allison Ave/University Ave, Severin Dr	\$363	\$453
Subtotal			\$8,312	\$13,845

Managed Lanes / Toll Lanes

Freeway	From	To	Existing	With Improvements	Transit Route	Cost (\$2019); millions	Cost (\$YOE); millions
I-5	SR 905	SR 54	8F	8F+2ML	640	\$542	\$627
I-5	SR 54	SR 15	8F	10F+2ML	640	\$467	\$540
I-5	I-8	La Jolla Village Dr	8F/10F	8F/10F+2ML		\$978	\$2,067
I-5	La Jolla Village Dr I-5/I-805 Merge	I-5/I-805 Merge SR 56	8F/14F 8F/14F+2ML	8F/14F+2ML 8F/14F+4ML	650, 653	\$422	\$513
I-5	SR 56 Manchester Ave	Manchester Ave Vandegrift Blvd	8F+2ML 8F	8F+4ML 8F+4ML	650, 653 650, 653	\$2,881	\$4,537
I-5	Vandegrift Blvd	Orange County	8F	8F+4T		\$3,165	\$6,687
SR 11/ Otay Mesa East POE	SR 125	Mexico	--	4T+POE	905	\$472	\$472
SR 15	I-5	SR 94	6F	8F+2ML		\$185	\$391
SR 15	SR 94	I-805	6F	6F+2ML	235, 610	\$41	\$59
I-15	Viaduct		8F	8F+2ML	235, 610, 653, 690	\$1,040	\$2,197
I-15	I-8	SR 163	8F	8F+2ML	235, 610, 653, 690	\$64	\$72

Table A.4 (continued)

Revenue Constrained Freight and Goods Movement Projects

Managed Lanes / Toll Lanes (continued)

Freeway	From	To	Existing	With Improvements	Transit Route	Cost (\$2019); millions	Cost (\$YOE); millions
I-15	SR 78	Riverside County	8F	8F+4T	610	\$1,744	\$3,684
SR 52	I-805	I-15	6F	6F+2ML	653, 870, 890	\$238	\$503
SR 52	I-15	SR 125	4F/6F	4F/6F+2ML(R)	870, 890	\$405	\$856
SR 54	I-5	SR 125	6F	6F+2ML		\$151	\$319
SR 78	I-5	I-15	6F	6F+2ML		\$1,621	\$2,127
SR 94	I-5	SR 125	8F	8F+2ML	90, 225, 235, 610,	\$1,229	\$2,012
SR 125	SR 54 SR 94	SR 94 I-8	6F 8F	6F+2ML 10F+2ML	90	\$690	\$1,457
I-805	SR 905	Palomar St	8F	8F+2ML	688	\$235	\$316
I-805	SR 54	SR 94	8F+2ML	8F+4ML	225, 650, 688, 689	\$742	\$998
I-805	SR 94	Carroll Canyon Rd	8F	8F+4ML	30, 225, 650, 653, 688, 689, 690, 870, 890	\$3,295	\$5,939
Subtotal						\$20,607	\$36,373

Highway Projects

Freeway	From	To	Existing	With Improvements	Cost (\$2019); millions	Cost (\$YOE); millions	
I-8	2nd St	Los Coches	4F/6F	6F	\$44	\$94	
SR 52	Mast Blvd	SR 125	4F	6F	\$103	\$147	
SR 56	I-5	I-15	4F	6F	\$192	\$405	
SR 94	SR 125	Avocado Blvd	4F	6F	\$190	\$401	
SR 94	Avocado Blvd	Jamacha	4C	6C	\$124	\$261	
SR 94	Jamacha	Steele Canyon Rd	2C/4C	4C	\$54	\$115	
SR 125	SR 905	San Miguel Rd	4T	8F	\$439	\$741	
SR 125	San Miguel Rd	SR 54	4F	8F	\$241	\$509	
Subtotal						\$1,387	\$2,673

Table A.4 (continued)

Revenue Constrained Freight and Goods Movement Projects

Operational Improvements

Freeway	From	To	Existing	With Improvements	Cost (\$2019); millions	Cost (\$YOE); millions
I-5	SR 15	I-8	8F	8F+Operational	\$1,985	\$4,194
I-8	I-5	SR 125	8F/10F	8F/10F+Operational	\$907	\$1,917
I-8	SR 125	2nd St	6F/8F	6F/8F+Operational	\$227	\$480
Subtotal					\$3,119	\$6,591

Freeway Connectors

Freeway	Intersecting Freeway	Movement	Cost (\$2019); millions	Cost (\$YOE); millions
I-5	SR 56	West to North and South to East	\$371	\$487
I-5	SR 78	South to East and West to South	\$371	\$487
I-15	SR 56	North to West	\$104	\$219
SR 94	SR 125	South to East	\$94	\$106
SR 94	SR 125	West to North	\$110	\$134
Subtotal			\$1,050	\$1,433

Goods Movement

Year Built By	Air Cargo System Improvement	Cost (\$2019) millions	Cost (\$YOE) millions
2020	SDIA Interior Northside Roadway	\$5	\$5
2020	SDIA Air Cargo Facility Improvements for cargo storage and handling	\$27	\$27
Subtotal		\$32	\$32
TOTAL		\$34,507	\$60,947

Table A.5
Revenue Constrained and Unconstrained Projects^{1 A}

Transit Facilities

Service	Route	Description	Revenue Constrained Peak/Off-Peak (minutes)	Unconstrained Peak/Off-Peak (minutes)	Unconstrained Cost (\$2019); millions
HSR	598	Commuter Rail Overlay (Temecula to Airport ITC)	NA	15/15	\$462
HSR	--	Extension from Airport ITC to San Ysidro/Otay Mesa	NA	15/60	\$3,719
COASTER	398	Double tracking, grade separation at Leucadia Blvd and two other locations, stations/platforms at Convention Center/ Petco Park and Del Mar Fairgrounds, and extension to Gaslamp and Camp Pendleton	20/60	15/15	\$8,204
COASTER	398	COASTER extension to National City	NA	15/15	\$1,224
SPRINTER	399	SPRINTER efficiency improvements; double tracking Oceanside to Escondido; includes six rail grade separations at El Camino Real, Melrose Dr, Vista Village Dr/Main St, North Dr, Civic Center, Auto Pkwy and Mission Ave and a Branch Extension to Westfield North County ¹	10/10	7.5/7.5	\$1,287
SPRINTER	588	SPRINTER Express	10/15	10/15	\$332
Trolley	510	Mid-Coast Trolley Extension	7.5/7.5	7.5/7.5	\$919
Trolley	510	Blue Line/Mid-Coast Frequency Enhancements and rail grade separations at 28th St, 32nd St, E St, H St, Palomar St, Taylor and Ash St, and Blue/Orange Track Connection at 12th/Imperial	7.5/7.5	7.5/7.5	\$586
Trolley	520	Orange Line Frequency Enhancements and four rail grade separations at Euclid Ave, Broadway/Lemon Grove Ave, Allison Ave/University Ave, Severin Dr	7.5/7.5	7.5/7.5	\$363
Trolley	522	Orange Line Express - El Cajon to San Diego International Airport Intermodal Transit Center (ITC)	NA	10/10	\$269
Trolley	540	Blue Line Express - Santa Fe Depot to San Ysidro via Downtown	NA	10/10	\$532
Trolley	550	SDSU to Palomar Station via East San Diego, Southeast San Diego, National City	NA	7.5/7.5	\$2,152
Trolley	560	SDSU to Downtown San Diego via El Cajon Blvd/Mid-City (transition of Mid-City Rapid to Trolley)	7.5/7.5	7.5/7.5	\$3251
Trolley	561	UTC COASTER Connection	7.5/7.5	7.5/7.5	\$467
Trolley	561	COASTER Connection to Sorrento Mesa/Carroll Canyon (extension of Route 510)	NA	7.5/7.5	\$1,121
Trolley	562	San Ysidro to Carmel Valley via Chula Vista, National City, Southeast San Diego, Mid-City, Mission Valley, and Kearny Mesa	7.5/10	7.5/7.5	\$4,575

Table A.5 (continued)
Revenue Constrained and Unconstrained Projects

Transit Facilities (continued)

Service	Route	Description	Revenue Constrained Peak/Off-Peak (minutes)	Unconstrained Peak/Off-Peak (minutes)	Unconstrained Cost (\$2019); millions
Trolley	562	San Ysidro to Carmel Valley via Chula Vista, National City, Southeast San Diego, Mid-City, Mission Valley, and Kearny Mesa	7.5/10	7.5/7.5	\$4,575
Trolley	563	Pacific Beach to El Cajon Transit Center via Balboa and Kearny Mesa	7.5/10	7.5/7.5	\$1,579
Trolley	564	Otay Mesa Border Crossing to Western Chula Vista via Otay Ranch/Millennia	NA	7.5/7.5	\$1,362
Trolley	566	Palomar St Trolley Station to Carmel Valley via Mid-City, Kearny Mesa (Route 562 Express)	NA	10/10	\$456
Trolley	510, 520, 540, 522 and 560	Downtown Trolley Tunnel	NA	7.5/7.5	\$3,626
<i>Rapid</i>	2	North Park to Downtown San Diego via 30th St, Golden Hill	10/10	10/10	\$54
<i>Rapid</i>	10	La Mesa to Ocean Beach via Mid-City, Hillcrest, Old Town	10/10	10/10	\$57
<i>Rapid</i>	11	Spring Valley to SDSU via Southeast San Diego, Downtown, Hillcrest, Mid-City	10/10	10/10	\$154
<i>Rapid</i>	28	Point Loma to Kearny Mesa via Old Town, Linda Vista	10/10	10/10	\$67
<i>Rapid</i>	30	Old Town to Sorrento Mesa via Pacific Beach, La Jolla, UTC	10/10	10/10	\$143
<i>Rapid</i>	41	Fashion Valley to UTC/UC San Diego via Linda Vista and Clairemont	10/10	10/10	\$75
<i>Rapid</i>	90	El Cajon Transit Center to San Diego International Airport ITC via SR 94, City College (peak only)	15/NA	10/10	\$27
<i>Rapid</i>	103	Solana Beach to Sabre Springs <i>Rapid</i> station via Carmel Valley	15/15	15/15	\$91
<i>Rapid</i>	120	Kearny Mesa to Downtown via Mission Valley	10/10	10/10	\$127
<i>Rapid</i>	235	Temecula (peak only) Extension of Escondido to Downtown <i>Rapid</i> (formerly Route 610)	10/NA	10/NA	\$133
<i>Rapid</i>	430	Oceanside to Escondido (peak only)	NA	10/10	\$326
<i>Rapid</i>	440	Carlsbad to Escondido Transit Center via Palomar Airport Rd	10/10	10/10	\$140
<i>Rapid</i>	471	Downtown Escondido to East Escondido	10/10	10/10	\$46
<i>Rapid</i>	473	UTC/UC San Diego to Oceanside via Hwy 101 Coastal Communities, Carmel Valley	10/10	10/10	\$58
<i>Rapid</i>	474	Oceanside to Vista via Mission Ave/ Santa Fe Road Corridor	10/10	10/10	\$99
<i>Rapid</i>	477	Camp Pendleton to Carlsbad Village via College Blvd, Plaza Camino Real	10/10	10/10	\$109

Table A.5 (continued)
Revenue Constrained and Unconstrained Projects

Transit Facilities (continued)

Service	Route	Description	Revenue Constrained Peak/Off-Peak (minutes)	Unconstrained Peak/Off-Peak (minutes)	Unconstrained Cost (\$2019); millions
Rapid	550	SDSU to Palomar Station via East San Diego, Southeast San Diego, National City ²	10/10	NA	\$112
Rapid	635	Eastlake to Palomar Trolley via Main St Corridor	10/10	10/10	\$105
Rapid	636	SDSU to Spring Valley via East San Diego, Lemon Grove, Skyline	10/10	10/10	\$53
Rapid	637	North Park to 32nd St Trolley via Golden Hill	10/10	10/10	\$60
Rapid	638	Iris Trolley to Otay Mesa via Otay, Airway Dr, SR 905 Corridor	10/10	10/10	\$52
Rapid	639	Iris Trolley Station to North Island via Imperial Beach and Silver Strand, Coronado	NA	10/10	\$73
Rapid	640A/ 640B	Route 640A: I-5 - San Ysidro to Old Town Transit Center via City College Route 640B: I-5 Iris Trolley/Palomar to Kearny Mesa via City College	640A = 10/15 640B=15/NA	640A = 10/15 640B=15/NA	\$208
Rapid	650	Chula Vista to Palomar Airport Rd Business Park via I-805/I-5 (peak only)	15/NA	15/NA	\$112
Rapid	652	Downtown to UTC via Kearny Mesa Guideway/I-805	NA	10/10	\$4
Rapid	653	Mid-City to Palomar Airport Rd via Kearny Mesa/I-805/I-5	15/NA	15/NA	\$14
Rapid	688/ 689/ 690	San Ysidro to Sorrento Mesa via I-805/I-15/SR 52 Corridors; Otay Mesa Port of Entry (POE) to UTC/Torrey Pines via Otay Ranch/Millennia, I-805 Corridor; Mid City to Sorrento Mesa via I-805 Corridor. All Peak Only	15/NA	15/NA (no Rt 690)	\$623
Rapid	692	Grossmont Center to Otay Town Center/Millennia via Southwest College, SR125, Spring Valley	NA	10/10	\$7
Rapid	709	H St Trolley to Millennia via H St Corridor, Southwestern College	10/10	10/10	\$89
Rapid	870	El Cajon to UTC via Santee, SR 52, I-805	10/NA	10/15	\$10
Rapid	890	El Cajon to Sorrento Mesa via SR 52, Kearny Mesa	10/NA	10/NA	\$16
Rapid	950 (formerly 905)	Extension of Iris Trolley Station to Otay Mesa Port of Entry (POE) with new service to Imperial Beach	10/10	10/10	\$3
Rapid	910	Coronado to Downtown via Coronado Bridge	10/10	10/10	\$54
Rapid	940	Oceanside to Sorrento Mesa via I-5, Carlsbad, Encinitas (peak only)	NA	10/0	\$53

Table A.5 (continued)

Revenue Constrained and Unconstrained Projects

Transit Facilities (continued)

Service	Route	Description	Revenue Constrained Peak/Off-Peak (minutes)	Unconstrained Peak/Off-Peak (minutes)	Unconstrained Cost (\$2019); millions
Rapid	SR 163 DARs	Kearny Mesa to Downtown via SR 163. Stations at Sharp/Children's Hospital, University Ave, and Fashion Valley Transit Center	✓	✓	204
Shuttle	448/449	San Marcos Shuttle ³	10/10	10/10	\$0
Streetcar	551	Chula Vista Downtown ⁴	NA	10/10	\$19
Streetcar	552	National City Downtown ⁴	NA	10/10	\$56
Streetcar	553	Downtown San Diego: Little Italy to East Village ⁴	10/10	10/10	\$15
Streetcar	554	Hillcrest/Balboa Park/Downtown San Diego Loop ⁴	10/10	10/10	\$39
Streetcar	555	30th St to Downtown San Diego via North Park/Golden Hill ⁴	10/10	10/10	\$23
Streetcar	557	El Cajon Downtown ⁴	NA	10/10	\$22
Streetcar	558	Escondido Downtown ⁴	NA	10/10	\$69
Streetcar	559	Oceanside Downtown ⁴	NA	10/10	\$63
Streetcar	565	Mission Beach to La Jolla via Pacific Beach ⁴	10/10	10/10	\$34
Airport Express	-	Airport Express Routes ⁵	30/30	30/30	\$71
Local	-	Local Bus Routes - 15 minutes in key corridors	15/15	15/15	NA
Local	-	Local Bus Routes - 10 minutes in key corridors	10/10	10/10	NA
Intermodal Transit Center	-	San Diego International Airport Intermodal Transit Center	✓	✓	\$231
Intermodal Transit Center	-	San Ysidro Intermodal Transit Center	✓	✓	\$161
Intermodal Transit Center	-	Otay Mesa East Intermodal Transit Center	NA	✓	\$0
Other	-	Other Improvements (Vehicles, transit system rehabilitation, maintenance facilities, ITS, regulatory compliance, park and ride, and transit center expansions)	✓	✓	\$7,317
Subtotal					\$48,164

Table A.5 (continued)

Revenue Constrained and Unconstrained Projects

Managed Lanes / Toll Lanes / Highway Projects / Operational Improvements

Freeway	From	To	Existing or Planned Phase	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
I-5	SR 905	SR 54	8F	8F+2ML	8F+2ML	\$542
I-5	SR 54	SR 15	8F	10F+2ML	10F+2ML	\$467
I-5	I-15	I-8	8F	8F+Operational	8F+Operational	\$1985
I-5	I-8	La Jolla Village Dr	8F/10F	8F/10F+2ML	8F/10F+2ML	\$978
I-5	La Jolla Village Dr	I-5/805 Merge	8F/14F	8F/14F+2ML+conn	8F/14F+2ML+conn	\$422
I-5	I-5/I-805 Merge	SR 56	8F/14F +2ML	8F/14F+4ML	8F/14F+4ML	
I-5	SR 56	Manchester Ave	8F+2ML	8F+4ML	8F+4ML	\$2881
I-5	Manchester Ave	Vandegrift Blvd	8F	8F+4ML	8F+4ML	
I-5	Vandegrift Blvd	Orange County	8F	8F+4T	8F+4T	\$3,165
I-8	I-5	SR 125	8F/10F	8F/10F+Operational	8F/10F+Operational	\$907
I-8	SR 125	2nd St	6F/8F	6F/8F+Operational	6F/8F+Operational	\$227
I-8	2nd St	Los Coches	4F/6F	6F	6F	\$44
I-8	Los Coches	Dunbar Rd ⁶	4F/6F	4F/6F	6F	\$178
SR 11/ Otay Mesa East POE	SR 125	Mexico	--	4T + POE	4T + POE	\$472
SR 15	I-5	SR 94	6F	8F+2ML	8F+2ML	\$185
SR 15	SR 94	I-805	6F	6F+2ML	6F+2ML	\$41
I-15	Viaduct		8F	8F+2ML	8F+2ML	\$1040
I-15	I-8	SR 163	8F	8F+2ML	8F+2ML	\$64
I-15	Centre City Pkwy	SR 78	8F/10F+4ML	8F/10F+4ML	10F+4ML	\$316
I-15	SR 78	Riverside County	8F	8F+4T	8F+4T	\$1,744
SR 52	I-5	I-805	4F	6F	6F	\$151
SR 52	I-805	I-15	6F	6F+2ML+Conn.	6F+2ML+Conn.	\$238
SR 52	I-15	SR 125 ⁶	6F	6F+2ML(R)	6F+3ML(R)	\$516
SR 52	Mast Blvd	SR 125	4F	6F	6F	\$103
SR 52	SR 125	SR 67 ⁶	4F	4F	6F	\$344
SR 54	I-5	SR 125 ⁶	6F	6F+2ML	6F/8F+2ML	\$313
SR 56	I-5	I-15	4F	6F	6F +2ML	\$1,084
SR 67	I-8	Mapleview St ⁶	4F/6F	4F/6F	6F/8F	\$192

Table A.5 (continued)

Revenue Constrained and Unconstrained Projects

Managed Lanes / Toll Lanes / Highway Projects / Operational Improvements (continued)

Freeway	From	To	Existing or Planned Phase	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
SR 67	Mapleview St	Dye Rd	2C/4C	4C	4C	\$673
SR 76	I-5	Melrose	4E	4E	6E	\$316
SR 76	I-15	Couser Canyon	2C/4C	4C/6C+ Operational	4C/6C+ Operational	\$178
SR 76	Couser Canyon	SR 79	2C	2C	2C+Operational	\$861
SR 78	I-5	I-15	6F	6F+2ML+ Operational	6F+2ML+ Operational	\$1,621
SR 94	I-5	I-805	8F	8F+2ML	8F+2ML	\$728
SR 94	I-805	College Ave ⁶	8F	8F+2ML	8F/10F+2ML	\$673
SR 94	College Ave	SR 125	8F	8F+2ML	8F+2ML	\$234
SR 94	SR 125	Avocado Blvd	4F	6F	6F	\$190
SR 94	Avocado Blvd	Jamacha	4C	6C	6C	\$124
SR 94	Jamacha	Steele Canyon Rd	2C/4C	4C	6C	\$54
SR 125	SR 905	San Miguel Rd	4T	8F	8F	\$439
SR 125	San Miguel Rd	SR 54	4F	8F	8F	\$241
SR 125	SR 54	SR 94 ⁶	6F	6F+2ML	8F+2ML	\$199
SR 125	SR 94	I-8	8F	10F+2ML	10F+2ML	\$399
SR 125	I-8	SR 52 ⁶	6F	6F	6F+2ML	\$358
SR 163	I-805	I-15	8F	8F	8F+2ML	\$453
SR 241	Orange County	I-5	--	--	6T	\$652
I-805	SR 905	Palomar St	8F	8F+2ML	8F+2ML	\$235
I-805	SR 54	SR 94	8F +2ML	8F+4ML	8F+4ML	\$742
I-805	SR 94	Carroll Canyon Rd	8F	8F+4ML	8F+4ML	\$3,295
SR 905	I-5	I-805 ⁶	4F	4F	8F	\$214
SR 905	I-805	Mexico ⁶	6F	6F	8F	\$275
Subtotal						\$31,753

Managed Lanes Connectors

Freeway	Intersecting Freeway	Movement	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
I-5	SR 15	North to North and South to South		✓	\$268
I-5	SR 54	West to South and North to East		✓	\$165
I-5	SR 54	South to East and West to North		✓	\$165
I-5	SR 56	South to East and West to North		✓	\$241
I-5	SR 56	North to East and West to South		✓	\$207

Table A.5 (continued)
Revenue Constrained and Unconstrained Projects

Managed Lanes Connectors (continued)

Freeway	Intersecting Freeway	Movement	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
I-5	SR 78	South to East and West to North, North to East and West to South	✓	✓	\$344
I-5	I-805	North to North and South to South	✓	✓	*
I-15	SR 52	West to North and South to East	✓	✓	\$177
I-15	SR 52	West to South and North to East		✓	\$192
I-15	SR 56	East to North and South to West		✓	\$234
I-15	SR 78	East to South and North to West	✓	✓	\$144
I-15	SR 163	North to North and South to South		✓	\$220
SR 15	SR 94	South to West and East to North	✓	✓	\$97
SR 15	I-805	North to North and South to South	✓	✓	\$110
SR 52	SR 125	North to West and East to South		✓	\$151
SR 94	SR 125	East to North and South to West		✓	\$199
I-805	SR 52	West to North and South to East	✓	✓	*
I-805	SR 54	North to West and East to South		✓	\$214
I-805	SR 94	North to West and East to South	✓	✓	\$137
I-805	SR 94	West to South and North to East		✓	\$295
I-805	SR 94	East to North and South to East		✓	\$288
I-805	SR 163	North to North and South to South		✓	\$261
				Subtotal	\$4,109

Freeway Connectors

Freeway	Intersecting Freeway	Movement	Revenue Constrained	Unconstrained	Unconstrained Costs (\$2019) millions
I-5	I-8	East to North and South to West ⁷		✓	\$439
I-5	SR 56	West to North and South to East	✓	✓	\$371
I-5	SR 78	South to East and West to South	✓	✓	\$371
I-5	SR 94	North to East ⁷		✓	\$178
I-15	SR 56	North to West	✓	✓	\$104
SR 94	SR 125	South to East and West to North	✓	✓	\$204
SR 11/ SR 905	SR 125	EB SR 11 and WB SR 11 to NB SR 125, NB SR 905 to NB SR 125	✓	✓	\$35
SR 11/ SR 905	SR 125	SB 125 to WB SR 905, SB SR 125 to EB SR 11, SB SR 125 to SB SR 905	✓	✓	\$101
				Subtotal	\$1,803

Table A.5 (continued)
Revenue Constrained and Unconstrained Projects

Goods Movement

Maritime System Improvements	Revenue Constrained	Unconstrained	Unconstrained Costs (\$2019) millions
Tenth Ave Marine Terminal (TAMT) Marine Cargo Staging and Handling Projects, including but not limited to: enhanced open storage, shed demolition, cargo handling infrastructure improvements, wharf reinforcements, additional crane, on-dock shorepower, improvements to facilitate "marine highway" cargo, and front gate technology enhancements. ⁸		✓	\$120
TAMT Freight Rail Improvements, including but not limited to: track upgrades and increased staging area for rail cargo and loading ⁸		✓	\$38
National City Marine Terminal (NCMT) Marine Cargo Staging and Handling Projects, including but not limited to: construct garages for additional roll-on/roll-off cargo storage, wharf extension to create two new berths, and improvements to facilitate "marine highway" cargo. ⁸		✓	\$129
NCMT Freight Rail Improvements, including but not limited to: additional rail storage facilities in the vicinity of the balloon track. ⁸		✓	\$4
Harbor Dr Multimodal Corridor Improvements, including but not limited to: improvements at 32nd St and Vesta St; pedestrian crossings and bridges; various truck improvements; bikeway accommodations; streetscape, safety, and parking improvements. ⁸		✓	\$371
<i>Rail Mainline Capacity</i>			
Desert Line Basic Service, Rehabilitation ⁹		✓	\$248
<i>Rail Intermodal System Improvements</i>			
Logistics Center Mid County ⁸		✓	\$2,897
Logistics Center North County ⁸		✓	\$226
<i>Rail Safety, Tunnels</i>			
LOSSAN Grade Separations (locations TBD)		✓	\$354
<i>Pipeline</i>			
I-15 Access to Kinder Morgan (KM) MV Terminal ⁸		✓	NA
KM, New Miramar Junction/Terminal/Tanks ⁹		✓	NA
KM Expand to 16 Pipe/Extend to Mexico ⁹		✓	NA
<i>Border System Improvements</i>			
Otay Mesa Southbound Truck Route Improvements ⁹		✓	\$48
Jacumba Port of Entry (POE) ⁹		✓	NA
Otay Mesa Port of Entry Modernization Project ⁹		✓	\$86
<i>Truck Rest Stop</i>			
Truck parking at SR 76/I-15 ⁸		✓	\$19
Truck staging at border ⁸		✓	\$41
Truck rest stop with restrooms, location TBD ⁸		✓	NA

Table A.5 (continued)

Revenue Constrained and Unconstrained Projects

Goods Movement (continued)

Maritime System Improvements	Revenue Constrained	Unconstrained	Unconstrained Costs (\$2019) millions
<i>Mexican Freight Projects</i>			
Mesa de Otay II Port of Entry and Related Roads ⁸		✓	NA
Tijuana Intermodal Terminal/Distribution Center ⁹		✓	NA
Ensenada Port Expansion ⁹		✓	NA
Mexican Rail Yard Bicentennial Multi-modal Center in Tijuana ⁹		✓	NA
Jacumé Port of Entry (POE) ⁹		✓	NA
Expansion of Tecate Port of Entry Cargo Inspection Facility ⁹		✓	NA
Tijuana-Tecate Rail Line Improvements ⁹		✓	\$27
		Subtotal	\$4,608

Table A.5 (continued)

Revenue Constrained and Unconstrained Projects

Active Transportation Projects

Project	Jurisdiction(s)	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
Uptown - Fashion Valley to Downtown San Diego	San Diego	✓	✓	\$13.0
Uptown - Old Town to Hillcrest	San Diego	✓	✓	\$1.0
Uptown - Hillcrest to Balboa Park	San Diego	✓	✓	\$2.0
North Park - Mid-City - City Heights	San Diego	✓	✓	\$7.0
North Park - Mid-City - Hillcrest to City Heights (City Heights - Old Town Corridor)	San Diego	✓	✓	\$5.0
North Park - Mid-City - City Heights to Rolando	San Diego	✓	✓	\$3.0
Bayshore Bikeway - Main St to Palomar	Chula Vista/ Imperial Beach	✓	✓	\$1.0
Coastal Rail Trail Encinitas - Chesterfield to Solana Beach	Encinitas	✓	✓	\$4.8
Pershing and El Prado - Cross-Park	San Diego	✓	✓	\$1.0
San Ysidro to Imperial Beach - Bayshore Bikeway Connection	Imperial Beach/ San Diego	✓	✓	\$8.0
Terrace Dr/Central Ave - Adams to Wightman	San Diego	✓	✓	\$4.0
San Diego River Trail – I-805 to Fenton	San Diego	✓	✓	\$3.0
San Diego River Trail - Short gap connections	San Diego	✓	✓	\$2.0
Coastal Rail Trail Encinitas - Leucadia to G St	Encinitas	✓	✓	\$7.0
San Diego River Trail - Father Junipero Serra Trail to Santee	Santee	✓	✓	\$9.5
Downtown to Southeast connections	San Diego	✓	✓	\$8.8
Coastal Rail Trail San Diego - UTC	San Diego	✓	✓	\$0.8
Coastal Rail Trail San Diego - Rose Canyon	San Diego	✓	✓	\$8.7
Coastal Rail Trail San Diego - Pac Hwy (W Washington St to Laurel St)	San Diego	✓	✓	\$7.0
Coastal Rail Trail San Diego - Pac Hwy (Laurel St to Santa Fe Depot)	San Diego	✓	✓	\$13.9
Coastal Rail Trail San Diego – Pac Hwy (Taylor St to W Washington St)	San Diego	✓	✓	\$7.0
Coastal Rail Trail San Diego- Pac Hwy (Fiesta Island Rd to Taylor St)	San Diego	✓	✓	\$12.2
City Heights /Encanto/Lemon Grove	Lemon Grove/ San Diego	✓	✓	\$12.2
City Heights/Fairmount Corridor	San Diego	✓	✓	\$20.9
Rolando to Grossmont/La Mesa	La Mesa/El Cajon/ San Diego	✓	✓	\$3.5
La Mesa/Lemon Grove/El Cajon connections	Lemon Grove/ La Mesa	✓	✓	\$10.4

Table A.5 (continued)
Revenue Constrained and Unconstrained Projects

Active Transportation Projects (continued)

Project	Jurisdiction(s)	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
San Diego River Trail - Qualcomm Stadium to Ward Rd	San Diego	✓	✓	\$3.5
San Diego River Trail - Rancho Mission Rd to Camino Del Rio North	San Diego	✓	✓	\$0.5
Coastal Rail Trail Carlsbad - Reach 4 Cannon to Palomar Airport Rd	Carlsbad	✓	✓	\$8.7
Coastal Rail Trail Carlsbad - Reach 5 Palomar Airport Rd to Poinsettia Station	Carlsbad	✓	✓	\$5.2
Coastal Rail Trail Encinitas - Carlsbad to Leucadia	Encinitas	✓	✓	\$12.2
Coastal Rail Trail Del Mar	Del Mar	✓	✓	\$0.7
Coastal Rail Trail San Diego - Del Mar to Sorrento via Carmel Valley	Del Mar/ San Diego	✓	✓	\$0.7
Coastal Rail Trail San Diego - Carmel Valley to Roselle via Sorrento	San Diego	✓	✓	\$1.6
Coastal Rail Trail San Diego - Roselle Canyon	San Diego	✓	✓	\$8.7
Chula Vista National City connections	Chula Vista/ National City	✓	✓	\$19.1
Pacific Beach to Mission Beach	San Diego	✓	✓	\$17.4
Ocean Beach to Mission Bay	San Diego	✓	✓	\$41.8
San Diego River Trail - Bridge connection (Sefton Field to Mission Valley YMCA)	San Diego	✓	✓	\$12.2
San Diego River Trail - Mast Park to Lakeside baseball park	Santee	✓	✓	\$17.4
I-8 Flyover - Camino del Rio S to Camino del Rio N	San Diego	✓	✓	\$17.4
Coastal Rail Trail Oceanside - Broadway to Eaton	Oceanside	✓	✓	\$0.7
El Cajon - Santee connections	El Cajon/ La Mesa/Santee	✓	✓	\$20.9
San Diego River Trail - Father JS Trail to West Hills Parkway	San Diego	✓	✓	\$5.2
Inland Rail Trail Oceanside	Oceanside	✓	✓	\$33.1
Coastal Rail Trail Carlsbad - Reach 3 Tamarack to Cannon	Carlsbad	✓	✓	\$8.7
Clairemont Dr (Mission Bay to Burgener)	San Diego	✓	✓	\$13.9
Harbor Dr (Downtown to Ocean Beach)	San Diego	✓	✓	\$12.2
Mira Mesa Bike Blvd	San Diego	✓	✓	\$7.0
Sweetwater River Bikeway Ramps	National City	✓	✓	\$15.7
Coastal Rail Trail Oceanside - Alta Loma Marsh bridge	Oceanside	✓	✓	\$8.7
Coastal Rail Trail San Diego - Mission Bay (Clairemont to Tecolote)	San Diego	✓	✓	\$5.2
Bayshore Bikeway Coronado - Golf course adjacent	Coronado	✓	✓	\$5.2

Table A.5 (continued)

Revenue Constrained and Unconstrained Projects

Active Transportation Projects (continued)

Project	Jurisdiction(s)	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
San Luis Rey River Trail	Oceanside, Unincorporated	✓	✓	\$64.4
Encinitas-San Marcos Corridor – Double Peak Dr to San Marcos Blvd	San Marcos	✓	✓	\$20.9
Escondido Creek Bikeway – Quince St to Broadway	Escondido	✓	✓	\$3.5
Escondido Creek Bikeway – Escondido Creek to Washington Ave	Escondido	✓	✓	\$1.7
Escondido Creek Bikeway – 9th Ave to Escondido Creek	Escondido	✓	✓	\$1.7
Escondido Creek Bikeway – El Norte Pkwy to northern bikeway terminus	Escondido	✓	✓	\$10.4
Encinitas to San Marcos Corridor – Leucadia Blvd to El Camino Real	Carlsbad, Encinitas	✓	✓	\$3.5
I-15 Bikeway – Via Rancho Pkwy to Lost Oak Ln	Escondido	✓	✓	\$7.0
I-15 Bikeway – Rancho Bernardo Community Park to Lake Hodges Bridge	San Diego	✓	✓	\$5.2
I-15 Bikeway – Camino del Norte to Aguamiel Rd	San Diego	✓	✓	\$22.6
I-15 Bikeway – Poway Rd interchange to Carmel Mountain Rd	San Diego	✓	✓	\$29.6
SR 56 Bikeway – Azuaga St to Rancho Penasquitos Blvd	San Diego	✓	✓	\$3.5
I-15 Bikeway – Murphy Canyon Rd to Affinity Ct	San Diego	✓	✓	\$69.6
SR 56 Bikeway – El Camino Real to Caminito Pointe	San Diego	✓	✓	\$3.5
SR 52 Bikeway – I-5 to Santo Rd	San Diego	✓	✓	\$52.2
SR 52 Bikeway – SR 52/Mast Dr to San Diego River Trail	San Diego	✓	✓	\$3.5
I-8 Corridor – San Diego River Trail to Riverside Dr	Unincorporated	✓	✓	\$3.5
I-805 Connector – Bonita Rd to Floyd Ave	Chula Vista, Unincorporated	✓	✓	\$10.5
SR 125 Connector – Bonita Rd to U.S.-Mexico Border	Chula Vista, San Diego	✓	✓	\$67.9
SR 905 Connector – E Beyer Blvd to U.S.-Mexico Border	San Diego, Unincorporated	✓	✓	\$59.2
El Camino Real Bike Lanes – Douglas Dr to Mesa Dr	Oceanside	✓	✓	\$1.7
Vista Way Connector from Arcadia	Vista, Unincorporated	✓	✓	\$3.7
I-15 Bikeway – W. Country Club Ln to Nutmeg St	Escondido	✓	✓	\$7.0
El Camino Real Bike Lanes – Marron Rd to SR 78 offramp	Carlsbad	✓	✓	\$0.5
Carlsbad to San Marcos Corridor – Paseo del Norte to Avenida Encinas	Carlsbad	✓	✓	\$0.7

Table A.5 (continued)

Revenue Constrained and Unconstrained Projects

Active Transportation Projects (continued)

Project	Jurisdiction(s)	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
Encinitas to San Marcos Corridor – Kristen Ct to Ecke Ranch Rd	Encinitas	✓	✓	\$0.7
Encinitas to San Marcos Corridor – Encinitas Blvd/ I-5 Interchange	Encinitas	✓	✓	\$0.3
Mira Mesa Corridor – Reagan Rd to Parkdale Ave	San Diego	✓	✓	\$0.7
Mira Mesa Corridor – Scranton Rd to I-805	San Diego	✓	✓	\$0.7
Mira Mesa Corridor – Sorrento Valley Rd to Sorrento Valley Blvd	San Diego	✓	✓	\$1.4
Mid-County Bikeway – I-5/Via de la Valle Interchange	San Diego	✓	✓	\$0.5
Mid-County Bikeway – Rancho Santa Fe segment	San Diego, Unincorporated	✓	✓	\$5.2
El Camino Real Bike Lanes – Manchester Ave to Tennis Club Dr	Encinitas	✓	✓	\$0.9
Mid-County Bikeway – Manchester Ave/ I-5 Interchange to San Elijo Ave	Encinitas	✓	✓	\$1.4
Central Coast Corridor – Van Nuys St to San Rafael Pl	San Diego	✓	✓	\$1.7
Clairemont – Centre-City Corridor – Coastal Rail Trail to Genesee Ave	San Diego	✓	✓	\$3.5
SR 125 Corridor – Mission Gorge Rd to Glen Vista Way	Santee	✓	✓	\$0.5
SR 125 Corridor – Prospect Ave to Weld Blvd	Santee, El Cajon	✓	✓	\$1.4
I-8 Corridor – Lakeside Ave to SR 67	Unincorporated	✓	✓	\$0.9
I-8 Corridor – Willows Rd to SR 79	Unincorporated	✓	✓	\$8.7
E County Northern Loop – N Marshall Ave to El Cajon Blvd	El Cajon	✓	✓	\$0.5
E County Northern Loop – Washington Ave to Dewitt Ct	El Cajon	✓	✓	\$1.7
E County Northern Loop – SR 94 onramp to Del Rio Rd	Unincorporated	✓	✓	\$0.3
E County Southern Loop – Pointe Pkwy to Omega St	Unincorporated	✓	✓	\$1.4
SR 125 Corridor – SR 94 to S of Avocado St	Unincorporated	✓	✓	\$1.9
Centre City – La Mesa Corridor – Gateside Rd to Campo Rd	La Mesa, Unincorporated	✓	✓	\$0.7
Bay to Ranch Bikeway – River Ash Dr to Paseo Ranchero	Chula Vista	✓	✓	\$0.9
Mid-County Bikeway – San Elijo Ave to 101 Terminus	Encinitas	✓	✓	\$1.7
Central Coast Corridor – Van Nuys St	San Diego	✓	✓	\$0.3
E County Northern Loop – El Cajon Blvd to Washington Ave	El Cajon	✓	✓	\$1.7

Table A.5 (continued)
Revenue Constrained and Unconstrained Projects

Active Transportation Projects (continued)

Project	Jurisdiction(s)	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
E County Northern Loop – Calavo Dr to Sweetwater Springs Blvd	Unincorporated	✓	✓	\$1.2
Central Coast Corridor – Torrey Pines Rd to Nautilus St	San Diego	✓	✓	\$10.4
Central Coast Corridor – Via Del Norte to Van Nuys St	San Diego	✓	✓	\$8.7
Kearny Mesa to Beaches Corridor – Ingraham St from Garnet Ave to Pacific Beach Dr	San Diego	✓	✓	\$3.5
Kearny Mesa to Beaches Corridor – Clairemont Dr to Genesee Ave	San Diego	✓	✓	\$17.4
Kearny Mesa to Beaches Corridor – Genesee Ave to Linda Vista Dr	San Diego	✓	✓	\$10.4
Bay to Ranch Bikeway – E J St from 2nd Ave to Paseo Del Rey	Chula Vista	✓	✓	\$20.9
Chula Vista Greenbelt – Bay Blvd to Oleander Ave	Chula Vista	✓	✓	\$29.6
Safe Routes to Transit	Various	✓	✓	\$1,230.1
Local Bike Projects/Local Pedestrian/Safety/Traffic Calming	Various	✓	✓	\$1,399.4
Regional Bicycle and Pedestrian Programs	Various	✓	✓	\$34.3
Safe Routes to School	Various	✓	✓	\$77.7
			Subtotal	\$3,821

Active Transportation Retrofits - Safe Routes to Transit at Existing Stations

Project	Jurisdiction(s)	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
Plaza Camino Real Transit Center	Carlsbad		✓	
El Camino Real at Cannon/College	Carlsbad		✓	
Carlsbad Poinsettia COASTER Station	Carlsbad		✓	
Carlsbad Village COASTER Station	Carlsbad		✓	
E St Trolley Station	Chula Vista		✓	
Old Highway 80 between El Cajon and Alpine	County - Fallbrook		✓	

Table A.5 (continued)

Revenue Constrained and Unconstrained Projects

Active Transportation Retrofits - Safe Routes to Transit at Existing Stations (continued)

Project	Jurisdiction(s)	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
Fallbrook High School	County - Fallbrook		✓	
WB Jamacha Blvd at Sweetwater Springs Blvd	County - Spring Valley		✓	
Jamacha Blvd at Lamplighter Village Dr	County - Spring Valley		✓	
SB Sweetwater Rd at Troy St	County - Spring Valley		✓	
Sweetwater Rd between Jamacha Blvd and Broadway	County - Spring Valley		✓	
Buena Creek SPRINTER Station	County of San Diego		✓	
Encinitas COASTER Station	Encinitas		✓	
Encinitas pedestrian undercrossing connections	Encinitas		✓	
Escondido Transit Center	Escondido		✓	
Del Lago Transit Station	Escondido		✓	
Amaya Trolley Station	La Mesa		✓	
70th St Trolley Station	La Mesa		✓	
National City Blvd and E 32nd St/W 33rd St	National City		✓	
Oceanside Transit Center	Oceanside		✓	
Coast Highway SPRINTER Station	Oceanside		✓	
Crouch St SPRINTER Station	Oceanside		✓	
El Camino Real SPRINTER Station	Oceanside		✓	
Rancho Del Oro SPRINTER Station	Oceanside		✓	
College Blvd SPRINTER Station	Oceanside		✓	
Oceanside High School	Oceanside		✓	
San Luis Rey Transit Center	Oceanside		✓	
Tri-City Medical Center	Oceanside		✓	
32nd and Commercial Trolley Station	San Diego - Barrio Logan		✓	
Euclid Ave between Home Ave and Roselawn Ave	San Diego - City Heights		✓	
Alvarado Trolley Station	San Diego - College Area		✓	
70th St between El Cajon Blvd and Alvarado Rd	San Diego - College Area		✓	
12th and Imperial Transit Center	San Diego - Downtown		✓	

Table A.5 (continued)

Revenue Constrained and Unconstrained Projects

Active Transportation Retrofits - Safe Routes to Transit at Existing Stations (continued)

Project	Jurisdiction(s)	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
Harbor Dr Pedestrian Bridge	San Diego - Downtown		✓	
Harborside Trolley Station	San Diego - Harborside		✓	
Pacific Fleet Trolley Station	San Diego - Harborside		✓	
Washington St at Hancock St/I-5 Overcrossing	San Diego - Mission Hills		✓	
WB Hotel Circle S. at Bachman Pl	San Diego - Mission Valley		✓	
Fenton Parkway Trolley Station	San Diego - Mission Valley		✓	
Grantville Trolley Station	San Diego - Mission Valley		✓	
Morena/Linda Vista Trolley Station	San Diego - Mission Valley		✓	
54th St between Euclid Ave and Chollas Pkwy	San Diego - Oak Park		✓	
EB Airway Rd at Dublin Dr	San Diego - Otay Mesa		✓	
EB Airway Rd at Excellante St (Southwestern College)	San Diego - Otay Mesa		✓	
La Media Rd at Airway Rd	San Diego - Otay Mesa		✓	
WB Siempre Vida Rd at La Media Rd	San Diego - Otay Mesa		✓	
SB Hollister St at Conifer Ave (Palm St Trolley Station)	San Diego - Palm City		✓	
NB S. Vista Ave at Beyer Blvd Trolley Station	San Diego - San Ysidro		✓	
Calle Primera between Willow Rd and Via de San Ysidro	San Diego - San Ysidro		✓	
Sorrento Valley COASTER Station	San Diego - Sorrento Valley		✓	
SB Gilman Dr at Villa La Jolla Dr	San Diego - University City		✓	
EB Eastgate Mall between I-805 and Miramar Rd	San Diego - University City		✓	
Palomar College SPRINTER Station	San Marcos		✓	
San Marcos Civic Center SPRINTER Station	San Marcos		✓	
Cal State San Marcos SPRINTER Station	San Marcos		✓	
Nordahl Rd SPRINTER Station	San Marcos		✓	

Table A.5 (continued)

Revenue Constrained and Unconstrained Projects

Active Transportation Retrofits - Safe Routes to Transit at Existing Stations (continued)

Project	Jurisdiction(s)	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
Rancheros Dr/State Department of Rehabilitation	San Marcos		✓	
Solana Beach COASTER Station	Solana Beach		✓	
Melrose Dr SPRINTER Station	Vista		✓	
Vista Transit Center	Vista		✓	
Civic Center-Vista SPRINTER Station	Vista		✓	
Sweetwater Rd between Jamacha Blvd and Broadway	County - Spring Valley		✓	
			Subtotal	\$558¹⁰

Active Transportation Retrofits - Bicycle/Pedestrian Improvements at Freeway Interchanges

Project	Jurisdiction(s)	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
Navajo Rd at SR 125	El Cajon		✓	
Fletcher Parkway/Graves Rd at SR 67	El Cajon		✓	
West Bernardo / Pomerado Rd at I-15	San Diego		✓	
Rancho Bernardo Rd at I-15	San Diego		✓	
Bernardo Center Dr at I-15	San Diego		✓	
Balboa Ave at SR 163	San Diego		✓	
Friars Rd at SR 163	San Diego		✓	
Quince St at SR 163	San Diego		✓	
6th St / University Ave at SR 163	San Diego		✓	
Washington St at SR 163	San Diego		✓	
Richmond St at SR 163	San Diego		✓	
SR 905 / Tocayo Ave at I-5	San Diego		✓	
Dairy Mart Rd / San Ysidro Rd at I-5	San Diego		✓	
Via De San Ysidro at I-5	San Diego		✓	
Camino De La Plaza at I-5, I-805	San Diego		✓	
West Mission Bay Dr at I-8	San Diego		✓	
E San Ysidro Blvd at I-805	San Diego		✓	
SR 905 at I-805	San Diego		✓	
Picador Blvd/ Smythe Ave at SR 905	San Diego		✓	
Camino Del Rio West at I-5 NB/I-8 EB	San Diego		✓	
Camino Del Rio West at I-5 SB	San Diego		✓	
Winter Gardens Blvd at SR 67	San Diego County		✓	

Table A.5 (continued)

Revenue Constrained and Unconstrained Projects

Active Transportation Retrofits - Bicycle/Pedestrian Improvements at Freeway Interchanges (continued)

Project	Jurisdiction(s)	Revenue Constrained	Unconstrained	Unconstrained Cost (\$2019) millions
Riverford Rd at SR 67	San Diego County		✓	
Bradley Ave at SR 67	San Diego County		✓	
Tavern Rd at I-8	San Diego County		✓	
Willows Rd at I-8	San Diego County		✓	
Japatul Valley Rd at I-8	San Diego County		✓	
Sunrise Highway at I-8	San Diego County		✓	
Pine Valley Rd at I-8	San Diego County		✓	
Buckman Springs Rd at I-8	San Diego County		✓	
Kitchen Creek Rd at I-8	San Diego County		✓	
Crestwood Rd at I-8	San Diego County		✓	
Campo Blvd at I-8	San Diego County		✓	
Jacumba at I-8	San Diego County		✓	
In-Ko-Pah Park Rd at I-8	San Diego County		✓	
Magnolia Ave at SR 52	Santee		✓	
Prospect Ave at SR 67	Santee		✓	
			Subtotal	\$62¹¹
			Subtotal Active Transportation	\$4,441
			TOTAL	\$94,878

¹ Unconstrained rail facilities (shared use freight and passengers)

² *Rapid* Route 550 appeared only as a Trolley route in the Unconstrained Network

³ Capital cost to be funded by the City of San Marcos

⁴ Streetcar cost is representative of 10 percent of the total capital cost

⁵ Capital cost to be funded by aviation and other private funds

⁶ Unconstrained Managed Lanes/Highway (shared use freight and passengers)

⁷ Unconstrained Freeway Connectors (shared use freight and passengers)

⁸ Projects that require innovative financing strategies which require development with multiple parties

⁹ Projects of interest to SANDAG; to be financed by other parties

¹⁰ The subtotal reflects estimated Safe Routes to Transit Retrofit project costs ranging from \$186,000 to \$7.5 million per stop area or station area

¹¹ The subtotal reflects estimated Freeway Interchange Retrofit project costs ranging from \$500,000 to \$3 million per interchange

^A Projects included in the Unconstrained transportation network show a check mark in the Unconstrained column. Projects which are included in the Revenue Constrained network show check marks in both the Revenue Constrained and Unconstrained columns. Between both networks, for Transit Facilities, some projects show different service frequencies. For Managed Lanes/Toll Lanes/Highway Projects/Operational Improvements, some projects show different number of lanes between the Constrained and Unconstrained networks.

Table A.6
No-Build Projects

Transit Services

Route #	Description	Note
225	South Bay <i>Rapid</i> Otay Mesa to Downtown	In Service
398	LOSSAN Double Tracking (selected segments)	Under Construction
510	Mid-Coast LRT Old Town to University Towne Center	Under Construction

Managed Lanes / Highway Projects

Segment	From	To	Improvement	Note
I-5	Manchester	SR 78	+2ML	Design/Construction
SR 11 (Phase I)	SR 125	Enrico Fermi Dr	+4T	In Service
SR 11/Otay Mesa East POE	Enrico Fermi Dr	Mexico	+4T+POE	Under Construction
SR 11/ SR 905	SR 11/ SR 905	SR 125	SB 125 to SB SR 905, SB SR 125 to EB SR 11, SB SR 125 to SB SR 905	Design/Construction
SR 11/ SR 905	SR 11/ SR 905	SR 125	EB SR 905 and WB SR 11 to NB SR 125, NB SR 905 to NB SR 125	In Service
SR 15	I-805	I-8	+2TL	In Service
SR 76	Mission Rd	I-15	+2C	In Service
I-805	SR 52	Carroll Canyon Rd	+2ML	In Service

NOTE: "No-Build Projects" are projects that were either open to traffic or in service since the adoption of the 2015 Regional Plan in October 2015 or are projects that are substantially underway.

Tables A.1 - A.6 Legend

BNSF: Burlington Northern Santa Fe Railway

Const: Construction

C: Conventional Highway

DAR: Direct Access Ramp

Eng: Engineering

F: Freeway Lanes

ML: Managed Lanes

POE: Port of Entry

R: Reversible

ROW: Right-of-Way

SDIA: San Diego International Airport

SDIV: San Diego and Imperial Valley Railroad

T: Toll Lanes

TL: Transit Lanes

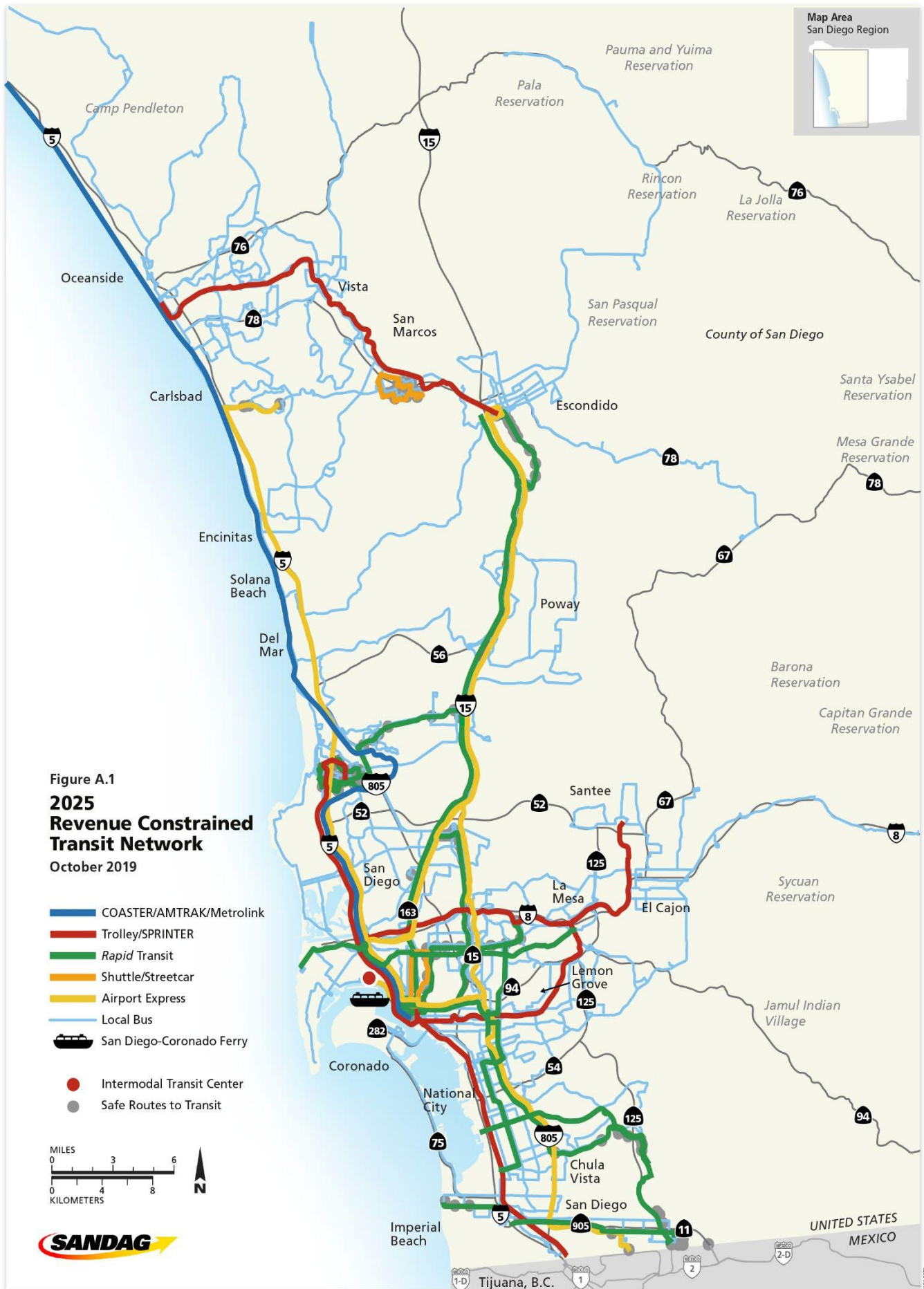


Figure A.1
2025 Revenue Constrained Transit Network
 October 2019

- COASTER/AMTRAK/Metrolink
- Trolley/SPRINTER
- Rapid Transit
- Shuttle/Streetcar
- Airport Express
- Local Bus
- San Diego-Coronado Ferry
- Intermodal Transit Center
- Safe Routes to Transit



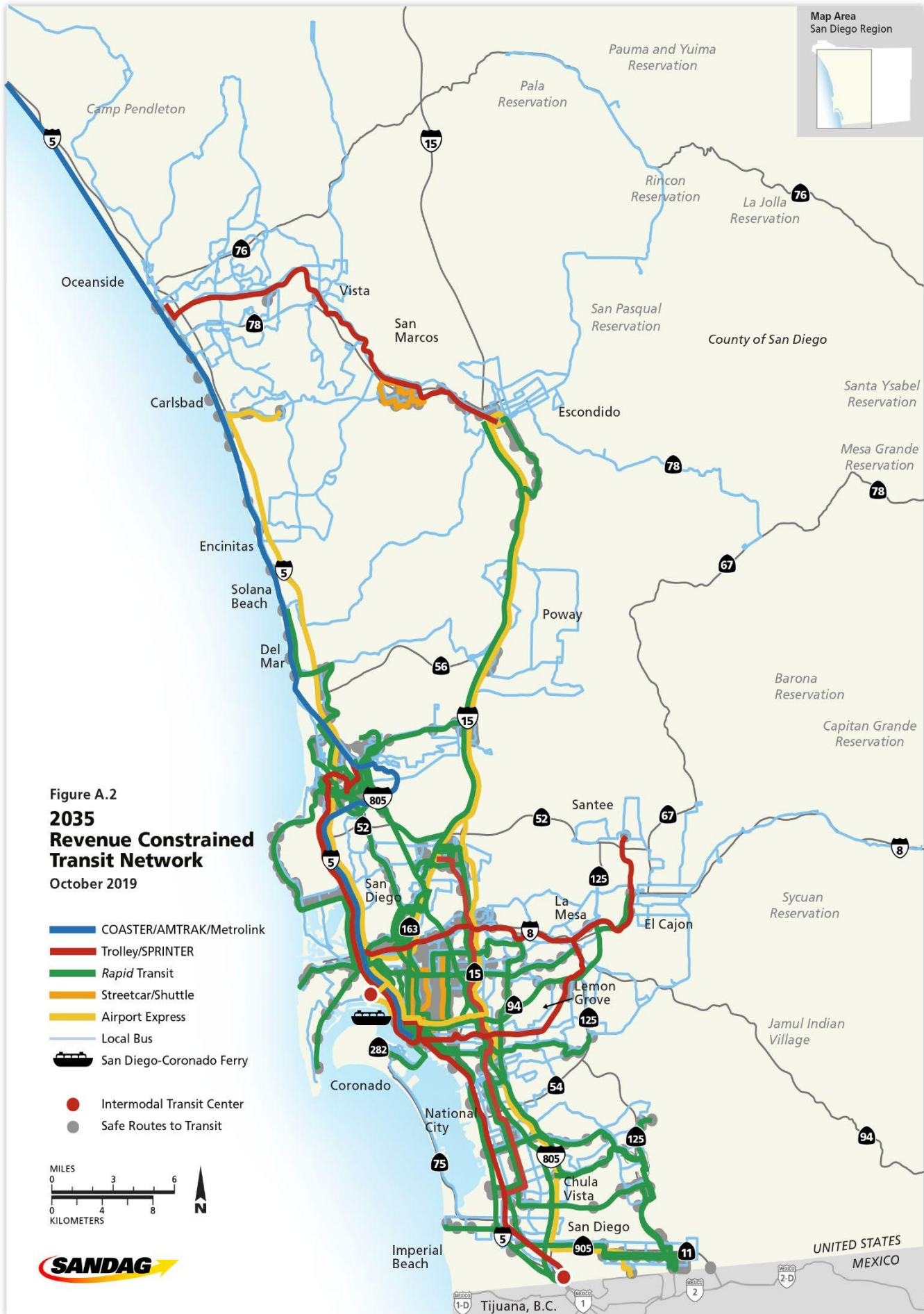
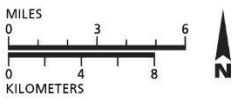


Figure A.2
2035 Revenue Constrained Transit Network
 October 2019

- COASTER/AMTRAK/Metrolink
- Trolley/SPRINTER
- Rapid Transit
- Streetcar/Shuttle
- Airport Express
- Local Bus
- San Diego-Coronado Ferry
- Intermodal Transit Center
- Safe Routes to Transit



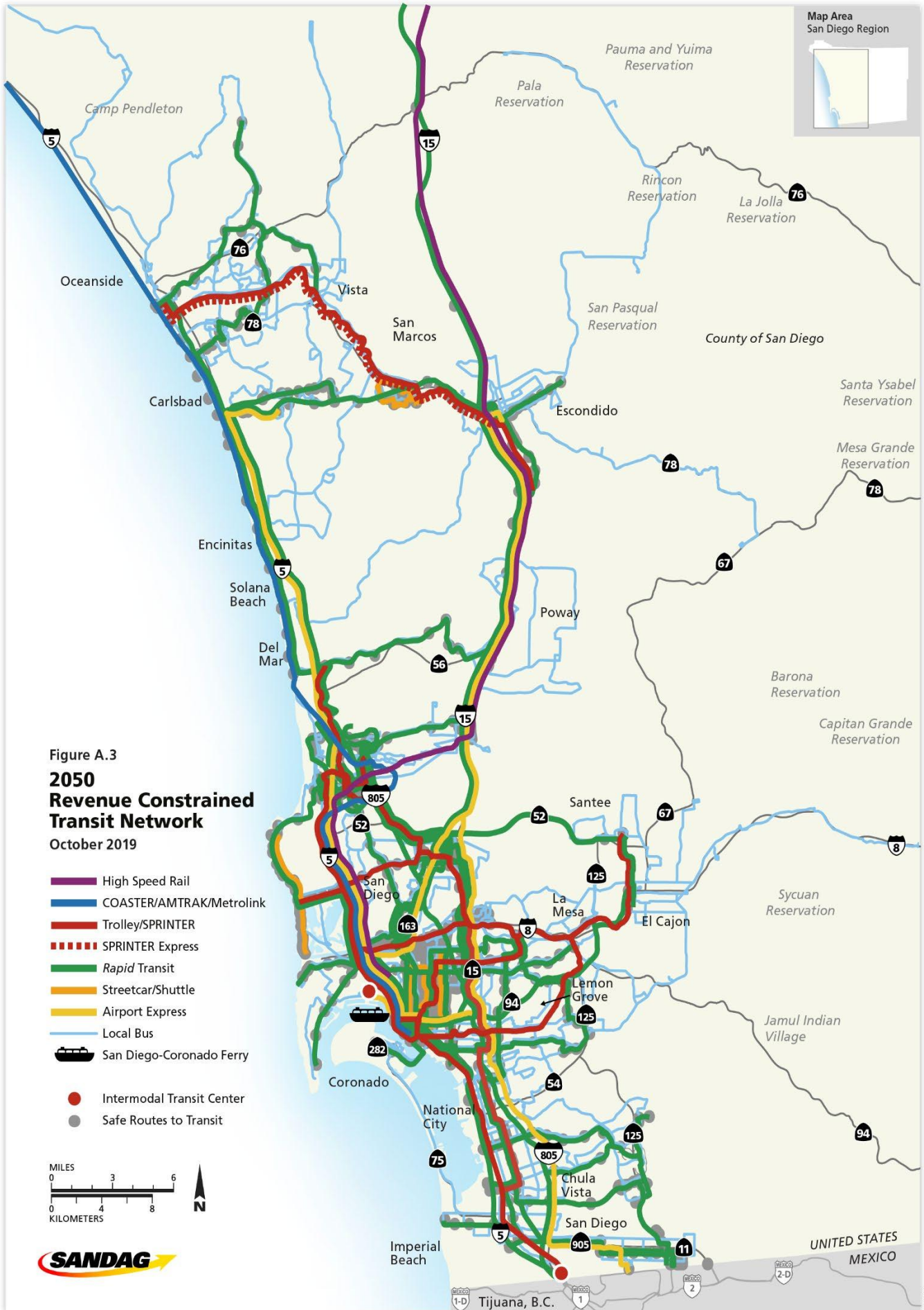


Figure A.3
**2050
 Revenue Constrained
 Transit Network**
 October 2019

- High Speed Rail
- COASTER/AMTRAK/Metrolink
- Trolley/SPRINTER
- - - SPRINTER Express
- Rapid Transit
- Streetcar/Shuttle
- Airport Express
- Local Bus
- San Diego-Coronado Ferry
- Intermodal Transit Center
- Safe Routes to Transit

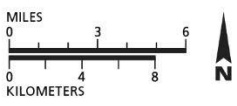




Figure A.4
2025 Revenue Constrained
Managed Lanes and
Highway Network
October 2019

- Existing Managed Lanes
 - Managed Lanes
 - General Purpose Lanes
 - Toll Lanes
 - Existing Facility
 - Bicycle/Pedestrian Improvements at Freeway Interchanges
 - Freeway Connectors
 - Managed Lanes Connectors
- C = Conventional Highway
F = Freeway
ML = Managed Lanes
T = Toll Lanes
TL = Transit Lanes

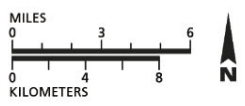
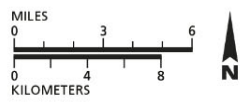




Figure A.5
2035
Revenue Constrained
Managed Lanes and
Highway Network
October 2019

- Existing Managed Lanes
 - Managed Lanes
 - General Purpose Lanes
 - Toll Lanes
 - Existing Facility
 - Bicycle/Pedestrian Improvements at Freeway Interchanges
 - Freeway Connectors
 - Managed Lanes Connectors
 - Freeway & Managed Lanes Connectors
- C = Conventional Highway
F = Freeway
ML = Managed Lanes
T = Toll Road
TL = Transit Lanes



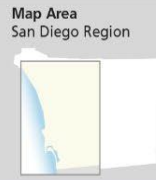
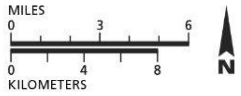


Figure A.7
2025 Revenue Constrained Regional Bike Network
 October 2019

- Class I - Bike Path
- Cycle Track
- Bike Boulevard
- Enhanced Class II - Bike Lane
- Enhanced Class III - Bike Route
- Freeways and Highways
- Regional Arterials



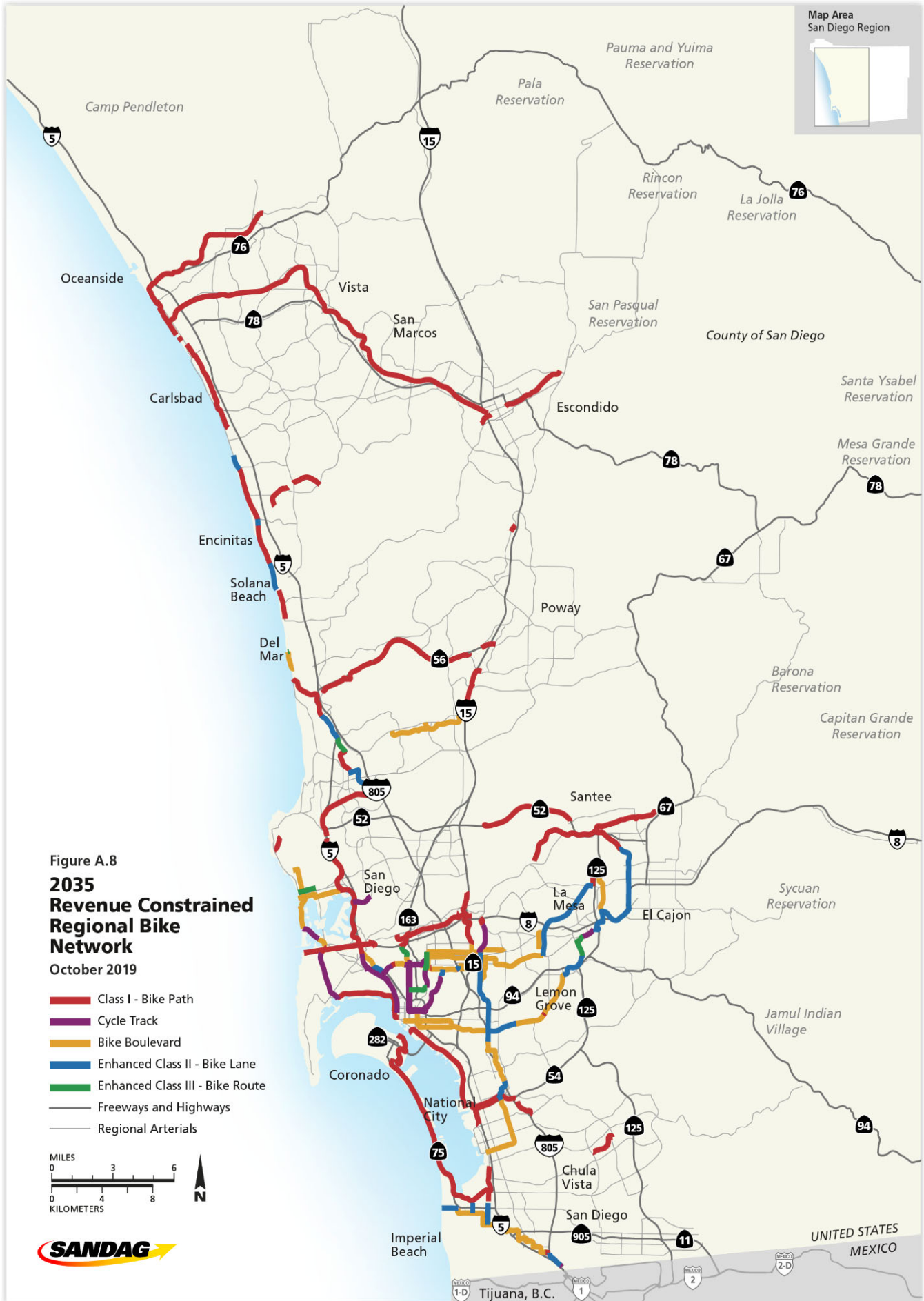


Figure A.8
2035 Revenue Constrained Regional Bike Network
 October 2019

- Class I - Bike Path
- Cycle Track
- Bike Boulevard
- Enhanced Class II - Bike Lane
- Enhanced Class III - Bike Route
- Freeways and Highways
- Regional Arterials





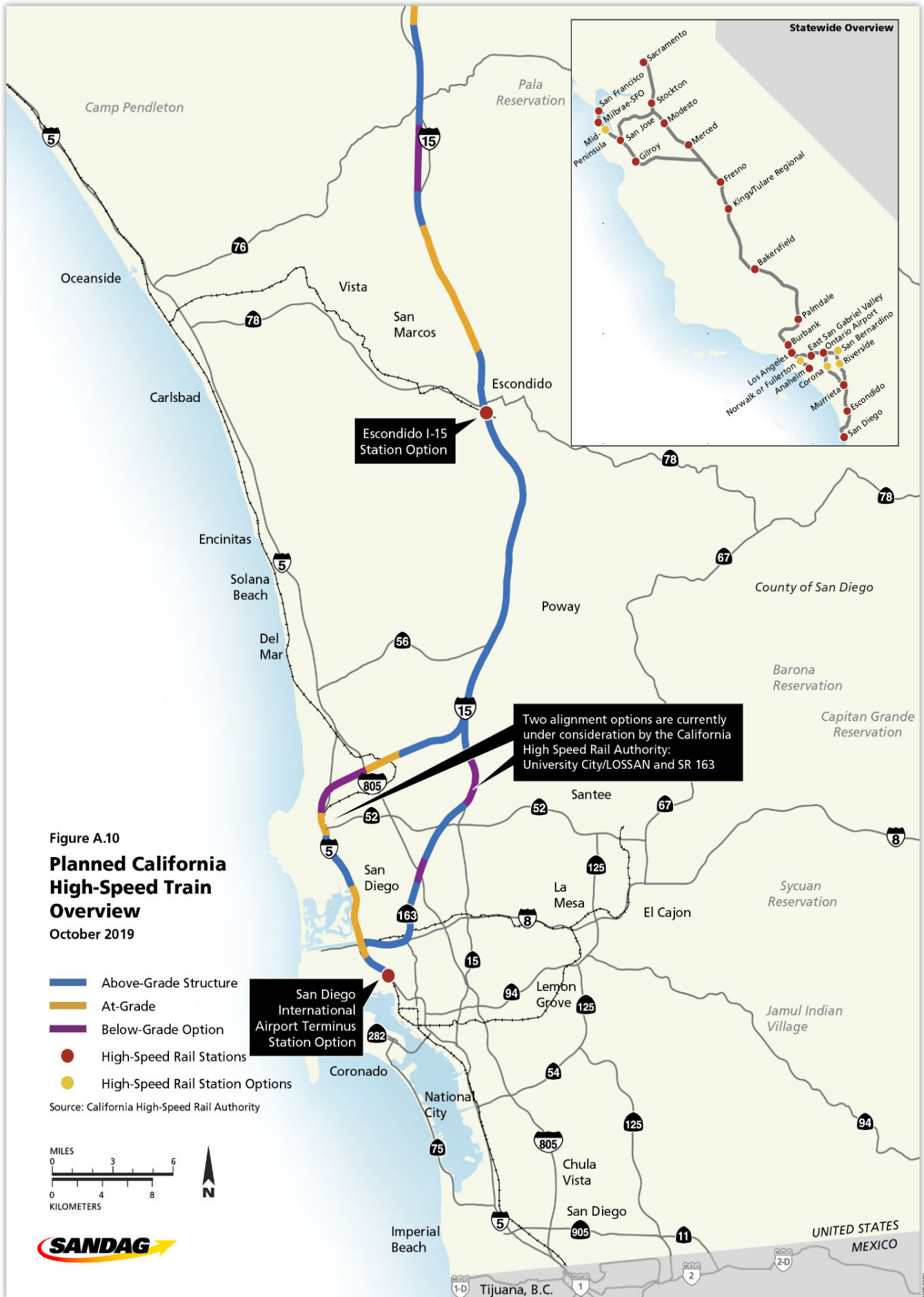




Figure A.11
**2025 and 2035
 High Frequency
 Local Bus Routes**
 October 2019

— High Frequency Local Bus
by 2025: 15 minutes (peak period)
by 2035: 10 minutes (peak period)

— Regional and Corridor Routes

MILES
 0 3 6

KILOMETERS
 0 4 8

N



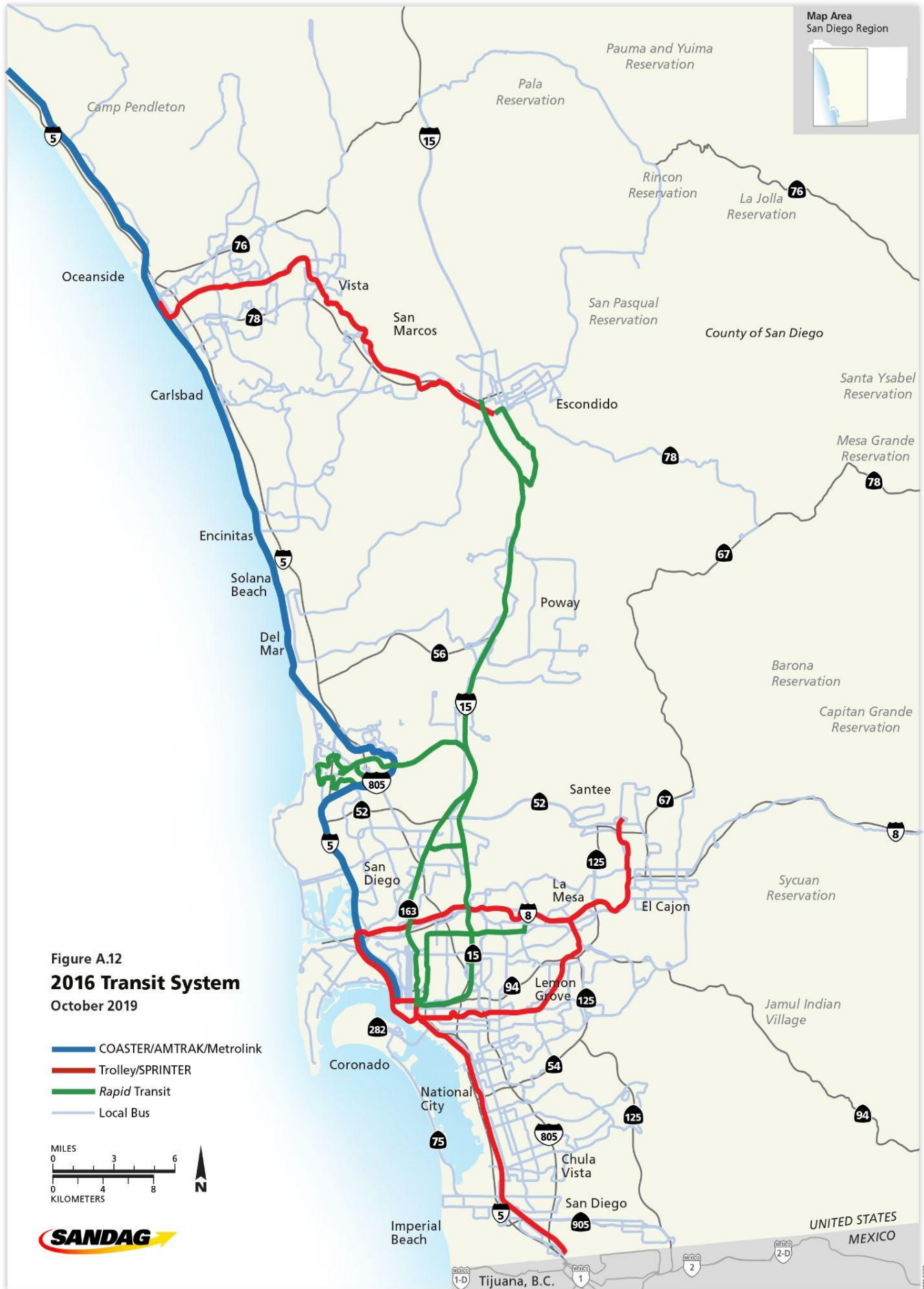




Figure A.13
**2016
 Managed Lanes and
 Highway Network**
 October 2019

Existing Managed Lanes

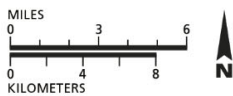
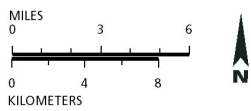


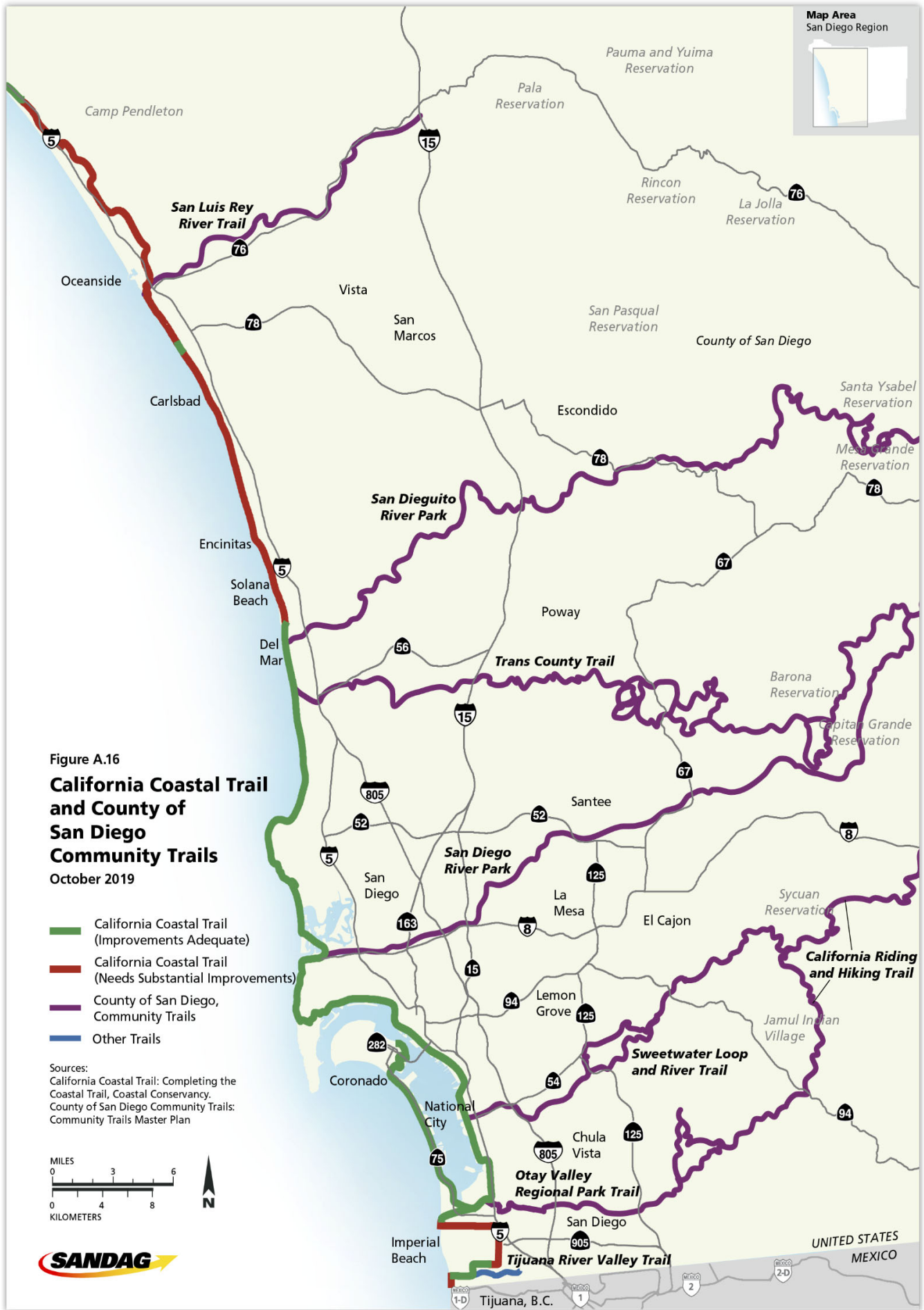




Figure A.15
Regional Arterial System
 October 2019

- Freeways and Highways
- Regional Arterials





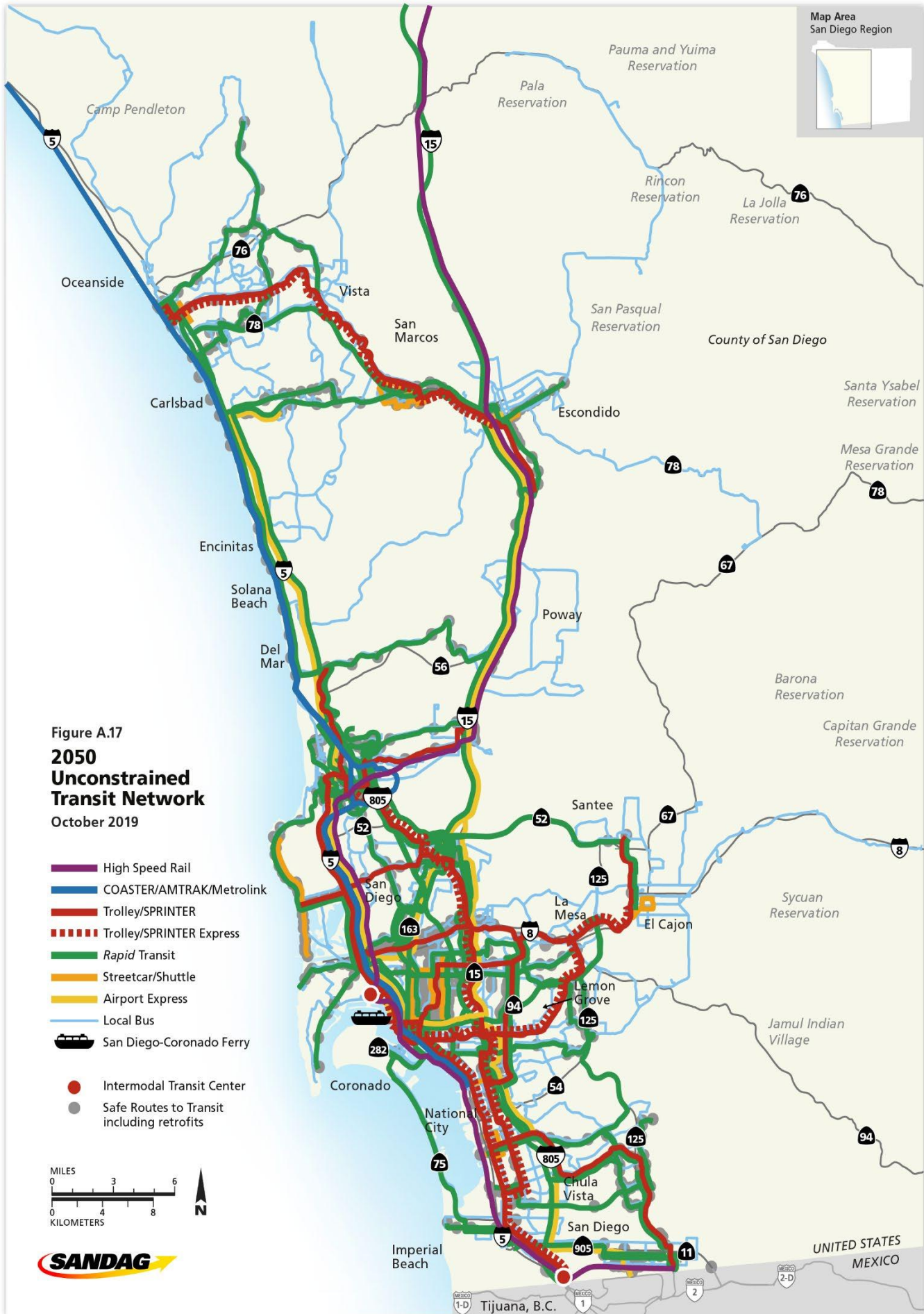


Figure A.17
**2050
 Unconstrained
 Transit Network**
 October 2019

- High Speed Rail
- COASTER/AMTRAK/Metrolink
- Trolley/SPRINTER
- - - Trolley/SPRINTER Express
- Rapid Transit
- Streetcar/Shuttle
- Airport Express
- Local Bus
- San Diego-Coronado Ferry
- Intermodal Transit Center
- Safe Routes to Transit including retrofits

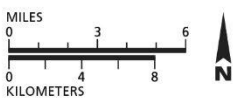




Figure A.18
2050
Unconstrained
Managed Lanes and
Highway Network
October 2019

- Existing Managed Lanes
 - Managed Lanes
 - General Purpose Lanes
 - Toll Lanes
 - Operational Improvements
 - Existing Facility
 - Freeway Connectors
 - ML Connectors
 - Freeway & ML Connectors
 - Bicycle/Pedestrian Improvements at Freeway Interchanges
- C = Conventional Highway
F = Freeway
ML = Managed Lanes
T = Toll Road
R = Reversible Lanes
OPS = Operational Improvements
E = Expressway





Figure A.19
2050 Unconstrained Regional Bike Network
 October 2019

- Class I - Bike Path
- Cycle Track
- Bike Boulevard
- Enhanced Class II - Bike Lane
- Enhanced Class III - Bike Route
- Freeways and Highways
- Regional Arterials





Figure A.21
National Highway
Freight Network:
California (South)
 December 2015

LEGEND

NHFN Features

Primary Highway Freight System (PHFS)

Remainder of the Interstate System
(not part of PHFS)

Border Crossings

Cities

State Capital

Airport

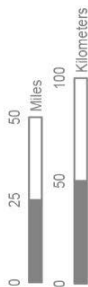
Port Terminal

Truck/Pipeline Terminal

Truck/Rail Facility

Water

Census Urbanized Areas



U.S. Department of Transportation,
 Federal Highway Administration,
 Office of Freight Management and Operations

