

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality

429 E. Cotati Ave
Cotati, CA 94931

Tel: 707-794-0400
www.illingworthrodkin.com

Fax: 707-794-0405
illro@illingworthrodkin.com

M E M O

Date: March 11, 2026
Revised April 7, 2026

To: **Fiona Phung**
David J. Powers & Associates, Inc.
1871 The Alameda, Suite 200
San José, CA 95126
fphung@davidjpowers.com

From: James A. Reyff
Illingworth & Rodkin, Inc.
429 E. Cotati Ave
Cotati, CA 94931

RE: East Tasman Specific Plan, Santa Clara, CA

SUBJECT: Updated Operational CalEEMod Modeling of Air Pollutant and GHG Emissions
Job#16-239

This memo addresses updates in the modeled emissions that would be generated by buildout of the Tasman East Specific Plan (TESP). The City of Santa Clara adopted the TESP and associated Final Environmental Impact Report (FEIR) in 2018. The FEIR addressed air quality impacts associated with implementation of the plan. Mitigation measures applicable to individual projects were included in the FEIR to reduce impacts from construction and operation. That FEIR analyzed the development of up to 4,500 dwelling units, approximately 106,000 square feet of retail space (including a 25,000 square foot grocery store) and a 600-student school in the City of Santa Clara, while assuming the removal of the existing land uses.

The City is proposing to update the TESP to accommodate an additional 1,500 dwelling units, approximately 20,000 square feet of retail, 20,000 square feet of co-working space, and a 10,000 square foot day care. At buildout, the update to TESP would support a total maximum of 6,000 new residential units. Operational emissions for this update were modeled and reported in 2022¹. The modeling was conducted using the latest modeling techniques and guidance available at the time. The Bay Area Air District (Air District) has updated their thresholds for greenhouse gas (GHG) emissions and the City adopted codes that restrict new infrastructure construction for natural gas. The modeling for both the original TESP and proposed updated TESP was updated to reflect the newer modeling methods and reflect policies regarding new natural gas infrastructure.

¹ Illingworth & Rodkin, Inc. 2022. *Update to the Tasman East Specific Plan FEIR – Air Quality and Greenhouse Gas Assessment – Santa Clara, CA*. December 22 (revised May 23, 2023).

Updated Emission Modeling Methodology

Modeling was conducted using the current version of the California Emissions Estimator Model (i.e., CalEEMod, Version 2022.1.1.39). This model was developed and released after approval of the 2018 TESP.

CalEEMod Land Uses

An operational model scenario that included only the proposed land use changes for year 2030 was developed using CalEEMod. TESP land uses described in Table 1 were input to the model.

Table 1. Operational Land Uses Entered into CalEEMod

Proposed Land Use Changes	Size	Units
2018 TESP		
Apartments Mid Rise	4,500	Dwellings
Strip Mall (Commercial)	106	1,000 sf
School	600	Student
2026 Proposed Expansion of TESP		
Apartments Mid Rise	1,500	Dwellings
Day Care Facility	10	1,000 sf
General Office (Office/Coworking space)	20	1,000 sf
Strip Mall (Commercial)	20	1,000 sf

Operational Trip Generation Rates and VMT

The updated total weekday trip generation provided by the traffic consultant² for each change in land use, based on ITE trip generation rates, was reduced by 32 percent as required by the adopted TESP. Total trips for each land use type were then divided by their size (i.e., either dwelling units or square footage) to develop a specific trip rate for use in CalEEMod. Saturday and Sunday trip rates were adjusted by multiplying the ratio of the CalEEMod default rates for Saturday and Sunday trips to the default weekday rate with the project-specific daily weekday trip rate. Specific average trip lengths were derived by dividing the number of daily trips produced by the plan update by the VMT forecasted in the Traffic Study. Both the trip generation rates and VMT reflect TDM requirements. Traffic inputs are shown in *Attachment 1*.

The Advanced Clean Cars Program, originally adopted by CARB in 2012, was designed to bring together CARB's traditional passenger vehicle requirements to meet federal air quality standards and also support California's AB 32 goals to develop and implement programs to reduce GHG emissions back down to 1990 levels by 2020, a goal achieved in 2016 as a result of numerous emissions reduction programs. Advanced Clean Cars Phase II (ACC II) is phase two of the original rule and establishes a year-by-year process, starting in 2026, so all new cars and light trucks sold in California will be zero-emission vehicles by 2035, including plug-in hybrid electric vehicles. The regulation codifies the light-duty vehicle goals set out in Governor Newsom's Executive Order N-79-20. Currently, 16 percent of new light-duty vehicles sold in California are zero emissions or plug-in hybrids. By 2030, 68 percent of new vehicles sold in California would be zero emissions

² Fehr & Peers Transportation Consultants, 2022. *Memorandum Subject: Trip Generation Estimates for Tasman East Specific Plan Update*. April 27, 2022.

and 100 percent by 2035. The US EPA granted CARB its Clean Air Act waiver request on December 18, 2024. However, Public Law 119-16, enacted on June 12, 2025, disapproves of this regulation under the Congressional Review Act, retroactively revoking the ACC II waiver. Therefore, adjustments to CalEEMod were not made to account for this rule.

CalEEMod uses the California Air Resources Board's (CARB) EMFAC2021 model to predict traffic emissions, assuming a mix of different vehicles. This model assumes implementation of California's heavy-duty vehicle regulations. The United States Congress rescinded the waiver for such regulations in June 2025 through Public Law 119-15 and Public Law 119-17, and the recent repeal of the U.S. EPA's Endangerment Finding. The CalEEMod model used may underpredict emissions from trucks in the future due to this federal action. At this time, CARB is evaluating modeling methodologies to update the EMFAC model to more accurately reflect future truck emissions. These adjustments are not expected to be substantial and only affect the vehicle emission modeling slightly, because they are not substantial in terms of overall truck emissions and TESP would generate mostly light-duty automobile traffic that is not affected by the action.

Roadway Silt Loading

CalEEMod's default roadway silt loading factor is unsubstantiated. Fugitive dust generated by vehicles traveling on roadways generates PM10 and PM2.5 emissions. The roadway silt loading factor in CalEEMod is the key input along with traffic travel distances. The roadway silt loading factor input into CalEEMod is based on CARB's method to calculate emissions inventories for different counties. CARB provides the silt loading factor for each roadway type and the estimated fraction of travel on those roadways for each county. The overall silt loading factor for Santa Clara County was calculated to be 0.04351 grams per square meter. Computations supporting this factor are included in Attachment 1.

Consumer Products

The TESP area sources for operational ROG emissions would include consumer products. These products include cleaning supplies, kitchen aerosols, cosmetics, toiletries, and other solvents. The default CalEEMod emission factor for these consumer products has been updated to reflect more recent Santa Clara County conditions including the change in total county ROG emissions, building square footage, and county population. An updated consumer products ROG emission factor of 1.84 E-05 pounds per square foot per day was calculated and used for this analysis. This was based on the CARB 2030 emission inventory for consumer products under solvent evaporation, the population estimates past, present and future) for Santa Clara County from the California Department of Finance, and the total building square footage from the most recent version of the FEMA HAZUS-MH software. The development of this updated factor follows the methodology used by CalEEMod. Data sources used to compute the consumer product ROG factor are included in Attachment 1.

Energy

Residential and office buildings were assumed to be powered by electricity using Santa Clara's Silicon Valley Power (SVP) as the default provider. This analysis assumed the default rate assigned by CalEEMod for SVCE. They provide different CO₂e intensity factors for residential

and nonresidential. The residential rate is 0 pounds of equivalent carbon dioxide (CO₂e) per megawatt of electricity produced (lb/MW). The nonresidential rate is 483 lb/MW.

The City's Reach Code, which became in effect on January 1, 2023, prohibits natural gas usage in new residential developments and most businesses. Much of the TESP projects included in the 2018 FEIR were approved prior to the Reach Code adoption. Because of litigation subsequent to the code adoption, enforcement for approved uses subsequent to 2023 is not certain. Therefore, two scenarios were analyzed:

1. Build out of TESP assuming CalEEMod default electricity and natural gas consumption rates.
2. Build out of TESP assuming CalEEMod default electricity and natural gas consumption rates for TESP 2018 projects approved prior to 2023 and no natural gas usage for all projects that are or would be approved after 2022. In this case, there is the assumption that all development approved prior to 2023 is a mix of electric and natural gas use, reflected in the default CalEEMod model assumptions. The 2018 FEIR uses that had project specific approval after 2022.

Fireplaces and Wood-Burning Devices

CalEEMod default inputs assume new residential construction would include woodburning fireplaces and stoves. Woodstoves would not be included in this type of development. The project would not include wood-burning fireplaces, as these devices are prohibited by Bay Area Air District Regulation 6, Rule 3. Therefore, the number of woodburning fireplaces in CalEEMod were set to zero and assigned as natural gas.

Existing Uses

The 2018 FEIR reported emissions for existing uses that would be replaced by the TESP.

Service Population

Service population was calculated for the 2018 TESP based on the following assumptions:

- 2.5 workers per 1,000 square feet of non-residential land use
- 50 school employees
- 2.73 persons per dwelling unit

For existing uses prior to TESP, there were 236 workers. The service population with the 2018 TESP was 12,600 people. The update to the TESP would add an additional 4,095 people.

Emission of Criteria Air Pollutants and GHG

TESP Emissions that Include Natural Gas Infrastructure

Emissions were modeled assuming natural gas usage based on CalEEMod model default

conditions. Annual and daily emissions associated with the approved TESP and proposed update are reported in Table 2 for criteria air pollutants. There are no emission thresholds that apply to potential emissions generated by a plan, such as the TESP. However, the emissions estimates are compared against project-level Air District thresholds to determine significance.

There were 10 CalEEMod model runs to develop these results. Due to the voluminous output, the model output is available only in digital form.

TABLE 2 Updated Operational Emissions (with Natural Gas Usage)

Scenario	ROG	NO _x	PM ₁₀	PM _{2.5}
Annual Emissions				
2018 TESP Annual Emissions	32.91 tons	9.72 tons	9.10 tons	2.53 tons
Update Additional Emissions	9.35 tons	2.59 tons	2.65 tons	0.74 tons
Existing Emissions	3.11 tons	3.03 tons	1.38 tons	0.46 tons
Total Net TESP Emissions (tons)	39.15 tons	9.28 tons	10.37 tons	2.82 tons
<i>Air District Thresholds (tons per year)</i>	<i>10 tons project</i>	<i>10 tons project</i>	<i>15 tons project</i>	<i>10 tons project</i>
Average Daily Emissions¹				
Total Net TESP (Both 2018 + Update)	214.52 lbs.	50.86 lbs.	56.83 lbs.	15.43 lbs.
TESP Update Only	51.22 lbs.	14.21 lbs.	14.51 lbs.	4.06 lbs.
<i>Air District Thresholds (pounds per day)</i>	<i>54 lbs. project</i>	<i>54 lbs. project</i>	<i>82 lbs. project</i>	<i>54 lbs. project</i>

¹ Assumes 365-day operation.

GHG emissions assuming natural gas usage under default modeling conditions are reported in Table 3. These emissions include indirect emissions associated with electricity generation that are based on CO₂e intensity factor reported by SVP for both residential and non-residential uses. Total GHG emissions are divided by the service population to compute the per capita emissions.

TABLE 3 Updated Operational GHG Emissions in MT of CO₂e (with Natural Gas Usage)

Source Category	Existing Uses in 2018	Approved TESP Emissions	Additional Emissions from TESP Update	Total TESP Build Out
Mobile	2,490	16,214	4,620	20,834
Area	<1	58	19	78
Energy Consumption	2,776	2,512	901	3,413
Water Usage	321	120	45	165
Solid Waste Generation	442	1,108	363	1,470
Refrigerants	-	5	2	7
Total	6,028	20,017	5,950	25,967
Net Increase				19,940
Service Population (residents + workers)	236	12,600	4,095	16,695
Efficiency Metric	25.5	1.59	1.45	1.56
TESP Threshold			2.6 -> 1.7 MT CO ₂ e/year/SP	

TESP Emissions Based on All Electrical after 2022

The 2018 TESP FEIR assumed the plan could be built out assuming natural gas infrastructure

could be included in new buildings. In 2022, the City adopted a Reach Code that prohibited new natural gas infrastructure in most new developments. At this time, much of the 2018 TESP land use projects were reviewed and approved by the City. It is estimated that 3,549 of the 4,500 proposed residences and 72,150 sf of the proposed 106,000 sf non-residential uses were approved. These uses were assumed to include natural gas usage rates that are based on CalEEMod model default settings. All uses that would be approved subsequent to 2022, including the TESP update uses, were assumed to not have any natural gas infrastructure. Criteria air pollutant emissions are reported in Table 4 and GHG emissions are reported in Table 5.

Scenario	ROG	NO _x	PM ₁₀	PM _{2.5}
Annual Emissions				
2018 TESP Annual Emissions	32.88 tons	9.22 tons	9.06 tons	2.49 tons
Update Additional Emissions	9.31 tons	1.94 tons	2.60 tons	0.69 tons
Existing Emissions	3.11 tons	3.03 tons	1.38 tons	0.46 tons
Total Net TESP Emissions (tons)	39.08 tons	8.13 tons	10.28 tons	2.72 tons
<i>Air District Thresholds (tons per year)</i>	<i>10 tons project</i>	<i>10 tons project</i>	<i>15 tons project</i>	<i>10 tons project</i>
Average Daily Emissions¹				
Total Net TESP (Both 2018 + Update)	214.15 lbs.	44.54 lbs.	56.33 lbs.	14.92 lbs.
TESP Update Only	51.01 lbs.	10.61 lbs.	14.22 lbs.	3.77 lbs.
<i>Air District Thresholds (pounds per day)</i>	<i>54 lbs. project</i>	<i>54 lbs. project</i>	<i>82 lbs. project</i>	<i>54 lbs. project</i>
¹ Assumes 365-day operation.				

GHG emissions, assuming no new natural gas infrastructure, are reported in Table 5. These emissions include indirect emissions associated with electricity generation that are based on CO₂e intensity factor reported by SVP for both residential and non-residential uses. Total GHG emissions are divided by the service population to compute the per capita emissions.

TABLE 5 Updated Operational GHG Emissions in MT of CO₂e (all Electrical post 2022)

Source Category	Existing Uses in 2018	Approved TESP Emissions	Additional Emissions from TESP Update	Total TESP Build Out
Mobile	2,490	16,214	4,620	20,834
Area	<1	58	19	78
Energy Consumption	2,776	2,094	359	2,453
Water Usage	321	190	45	234
Solid Waste Generation	442	1,108	363	1,470
Refrigerants	-	5	2	7
Total	6,028	19,669	5,408	25,076
Net Increase				19,049
Population (residents + workers)	236	12,600	4,095	16,695
Efficiency Metric	25.5	1.56	1.32	1.50
TESP Threshold			2.6 -> 1.7 MT CO ₂ e/year/SP	

Supporting Documentation

Attachment 1 includes the CalEEMod modeling assumptions. The CalEEMod modeling is too voluminous to provide in this report. It is made available digitally.

Attachment 1: CalEEMod Input Assumptions and Outputs

TOTAL w Natural Gas Operational Criteria Air Pollutants				
<i>Unmitigated</i>	ROG	NOX	Total PM10	Total PM2.5
Year	Tons			
Total	42.26	12.31	11.75	3.28
	Existing Use Emissions			
Total	3.11	3.03	1.38	0.46
	Net Annual Operational Emissions			
Tons/year	39.15	9.28	10.37	2.82
Threshold - Tons/year	10.0	10.0	15.0	10.0
	Average Daily Emissions			
Pounds Per Day	214.52	50.86	56.83	15.43
Threshold - lbs/day	54.0	54.0	82.0	54.0
Category	CO2e			
	Project	Existing	Project 2030	Existing
Mobile	20834.46	2490		
Area	77.59	1		
Energy	3413.02	2776		
Water	165.13	321		
Waste	1470.41	442		
Refrig.	7.01			
TOTAL	25967.62	6028	0.00	0.00
Net GHG Emissions		19939.62		0.00

2018 w Natural Gas Operational Criteria Air Pollutants				
<i>Unmitigated</i>	ROG	NOX	Total PM10	Total PM2.5
Year	Tons			
Total	32.91	9.72	9.10	2.53
	Existing Use Emissions			
Total				
	Net Annual Operational Emissions			
Tons/year	32.91	9.72	9.10	2.53
Threshold - Tons/year	10.0	10.0	15.0	10.0
	Average Daily Emissions			
Pounds Per Day	180.34	53.25	49.88	13.89
Threshold - lbs/day	54.0	54.0	82.0	54.0
Category	CO2e			
	Project	Existing	Project 2030	Existing
Mobile	16214.11			
Area	58.22			
Energy	2511.99			
Water	120.23			
Waste	1107.73			
Refrig.	5.26			
TOTAL	20017.55	0.00	0.00	0.00
Net GHG Emissions		20017.55		0.00

2022 w Natural Gas Operational Criteria Air Pollutants				
<i>Unmitigated</i>	ROG	NOX	Total PM10	Total PM2.5
Year	Tons			
Total	9.35	2.59	2.65	0.74
	Existing Use Emissions			
Total				
	Net Annual Operational Emissions			
Tons/year	9.35	2.59	2.65	0.74
Threshold - Tons/year	10.0	10.0	15.0	10.0
	Average Daily Emissions			
Pounds Per Day	51.22	14.21	14.51	4.06
Threshold - lbs/day	54.0	54.0	82.0	54.0
Category	CO2e			
	Project	Existing	Project 2030	Existing
Mobile	4620.34			
Area	19.38			
Energy	901.03			
Water	44.90			
Waste	362.69			
Refrig.	1.74			
TOTAL	5950.07	0.00	0.00	0.00
Net GHG Emissions		5950.07		0.00

TOTAL All-Electric Operational Criteria Air Pollutants				
Unmitigated	ROG	NOX	Total PM10	Total PM2.5
Year	Tons			
Total	42.19	11.16	11.66	3.18
Existing Use Emissions				
Total	3.11	3.03	1.38	0.46
Net Annual Operational Emissions				
Tons/year	39.08	8.13	10.28	2.72
Threshold - Tons/year	10.0	10.0	15.0	10.0
Average Daily Emissions				
Pounds Per Day	214.15	44.54	56.33	14.92
Threshold - lbs/day	54.0	54.0	82.0	54.0
Category				
CO2e				
	Project	Existing	Project 2030	Existing
Mobile	20834.46	2490.00		
Area	77.59	1.00		
Energy	2452.83	2776.00		
Water	234.49	321.00		
Waste	1470.41	442.00		
Refrig.	7.01			
TOTAL	25076.78	6028.00	0.00	0.00
Net GHG Emissions		6028.00		0.00

2018 All-Electric + Natural Gas Operational Criteria Air Pollutants				
Unmitigated	ROG	NOX	Total PM10	Total PM2.5
Year	Tons			
Total	32.88	9.22	9.06	2.49
Existing Use Emissions				
Total				
Net Annual Operational Emissions				
Tons/year	32.88	9.22	9.06	2.49
Threshold - Tons/year	10.0	10.0	15.0	10.0
Average Daily Emissions				
Pounds Per Day	180.18	50.53	49.67	13.67
Threshold - lbs/day	54.0	54.0	82.0	54.0
Category				
CO2e				
	Project	Existing	Project 2030	Existing
Mobile	16214.11			
Area	58.22			
Energy	2094.15			
Water	189.59			
Waste	1107.73			
Refrig.	5.26			
TOTAL	19669.06	0.00	0.00	0.00
Net GHG Emissions		19669.06		0.00

2022 All-Electric Operational Criteria Air Pollutants				
Unmitigated	ROG	NOX	Total PM10	Total PM2.5
Year	Tons			
Total	9.31	1.94	2.60	0.69
Existing Use Emissions				
Total				
Net Annual Operational Emissions				
Tons/year	9.31	1.94	2.60	0.69
Threshold - Tons/year	10.0	10.0	15.0	10.0
Average Daily Emissions				
Pounds Per Day	51.01	10.61	14.22	3.77
Threshold - lbs/day	54.0	54.0	82.0	54.0
Category				
CO2e				
	Project			
Mobile	4620.34			
Area	19.38			
Energy	358.68			
Water	44.90			
Waste	362.69			
Refrig.	1.74			
TOTAL	5407.72	0.00	0.00	0.00
Net GHG Emissions		5407.72		0.00

Tasman East 2018 Uses Traffic Information

E. Tasman Plan Area

Trip and VMT Estimates

Land Use	Size	Size Metric	Default	Daily Trip Rate			Trip Length by Purpose (mi)						Trip Type (%)			Trip Purpose (%)					
				Weekday	Saturday	Sunday	Res H-W	Res H-S	Res H-O	NR C-C	NR C-C	NR C-NW	Primary	Diverted	Passby	Res H-W	Res H-S	Res H-O	NR C-C	NR C-C	NR C-NW
Apartments Mid Rise	4500	Dwelling Unit	6.65	5.31	5.11	4.68	5.265	5.265	5.265	0	0	0	100%	0%	0%	31%	15%	54%	0%	0%	0%
Elementary School	600	Student	1.05	1.05	0.00	0.00	0	0	0	7.3	9.5	7.3	100%	0%	0%	0%	0%	0%	30%	65%	5%
Strip Mall	106	1000sqft	44.32	58.10	55.11	26.78	0	0	0	2.3305	2.3305	2.3305	100%	0%	0%	0%	0%	0%	64%	17%	19%

Daily Trips

Apartments Mid Rise
Elementary School
Strip Mall

Total Daily Trips	Primary Trips			Diverted Trips (25% of Primary)			Passby Trips (0.1mi)		
23,915	22,980	21,074		-	-	-	-	-	-
630	-	-		-	-	-	-	-	-
6,159	5,842	2,839		-	-	-	-	-	-

Daily VMT

Apartments Mid Rise
Elementary School
Strip Mall

Total VMT	Primary			Diverted (25% of Primary)			Passby (0.1mi)		
125,912	120,990	110,954		-	-	-	-	-	-
5,500	-	-		-	-	-	-	-	-
14,354	13,615	6,616		-	-	-	-	-	-

Daily Weekday Trips	30,704		
Annual Trips	10,754,735		
Daily Weekday VMT:	145,766		
Annual VMT	51,152,419	avg trip length	4.76
CalEEMod			

Population:	12,285
Employment :	315
VMT per Capita	11.57
VMT per Populatic	11.87

CalEEMod Default

Trip Length by Purpose (mi)						Trip Type (%)			Trip Purpose (%)					
Res H-W	Res H-S	Res H-O	NR C-C	NR C-C	NR C-NW	Primary	Diverted	Passby	Res H-W	Res H-S	Res H-O	NR C-C	NR C-C	NR C-NW
10.8	4.8	5.7	0	0	0	86%	11%	3%	31%	15%	54%	0%	0%	0%
0	0	0	7.3	9.5	7.3	63%	25%	12%	0%	0%	0%	30%	65%	5%
0	0	0	7.3	9.5	7.3	45%	40%	15%	0%	0%	0%	64%	17%	19%

Revised Table 7-1: Daily Project Trips and Vehicle Miles Tra

	Internal ¹	External	Total	Computed Rate	
Housing (Project) ²					
Daily Number of Trips (a)	2,678	21,237	23,915	5.31	trip/day
Average Trip Length (b)	1	5.8	-		
(1) VMT (a x b) ³	2,678	123,175	125,853	5.26	mi/trip
Retail (Project) ²					
Daily Number of Trips (a)	696	5,463	6,159	58.10	trip/day
Average Trip Length (b)	1	2.5	-		
(2) VMT (a x b) ³	696	13,658	14,354	2.33	mi/trip
Total Trips			30,074		
Total VMT (1 + 2)	3,374	136,833	140,207		

Notes:

1. The number of trips internalized to the site is obtained from mainstreet as described in the trip generation section of the report. School trips are excluded from this analysis because school VMT is assumed to be part of residential VMT totals. As a result, no additional school-specific VMT is expected to be generated beyond the total residential VMT
2. The trip length for retail and residential land uses is obtained from the California Household Travel Survey data for northern Santa Clara. Retail average vehicle trip length based on typical vehicle trip distance to nearby retail centers. Trip lengths rounded to the nearest tenth of a mile.

3. VMT is calculated by multiplying the average trip length for each land use by the total number of auto trips for each land use.

Table 3-4: Project Trip Generation: Existing Conditions

Land Uses	ITE Code	Units	Quantity	Daily Trips	AM			PM		
					In	Out	Total	In	Out	Total
Proposed Uses										
Resident ial	220	Dwelling Units	4,500	27,395	445	1,765	2,210	1,620	875	2,495
Shoppin g Center (Retail)	820	ksf	106	7,055	100	60	160	295	330	625
Subtotal				34,450	545	1,825	2,370	1,915	1,205	3,120
Internalization and Transit Trip Reduction %s				12.70%	16.20%			18.90%		
Trip Reductions				-4,380	-90	-295	-385	-360	-235	-595
School	NA	students	600	965	325	270	595	180	190	370
Walk/Bike Reduction (35%)				-340	-115	-95	-210	-60	-70	-130
Total				30,695	665	1,705	2,370	1,675	1,090	2,765
Existing Uses										
Light Industrial	110	ksf	708	4,935	575	75	650	85	605	690
Trip Reductions (%)				9.60%	12.40%			11.60%		
				475	75	5	80	15	65	80
Total				4,460	500	70	570	70	540	610
Net-Added Traffic										
				26,235	165	1,635	1,800	1,605	550	2,155

6.29944

Tasman East Plan Update Trip Generation

Traffic Consultant Trip Gen						CalEEMod Default			VTM	Trip Length	Daily Trips
Land Use	Size	Daily Trips	New Trips	Weekday Trip Gen	Weekday	Sat	Sun				
Strip Mall	ksf	20	1074	734	36.71	44.32	42.04	20.43	2281	3.11	1074
MXD % Reduction	24%	-258			Rev	34.82	16.92				-258
TDM Reduction	10%	-82									-82
Day Care Center	ksf	10	476	326	32.58	47.62	6.22	5.84	0.00	0.0	476
MXD % Reduction	24%	-114			Rev	4.25	4.00				-114
TDM Reduction	10%	-36									-36
Apartments Mid Rise	DU	1500	7109	4863	3.24	5.44	4.91	4.09	33436	6.88	7109
MXD % Reduction	24%	-1706			Rev	2.93	2.44				-1706
TDM Reduction	10%	-540									-540
General Office Building	ksf	20	286	195	9.77	9.74	2.21	0.7	8768	44.87	286
MXD % Reduction	24%	-69			Rev	2.22	0.70				-69
TDM Reduction	10%	-22									-22
											6118

Table 3-4: Project Vehicle Trip Generation

Land Uses	ITE Code	Units	Quantity	Daily Trips	AM			PM		
					In	Out	Total	In	Out	Total
Proposed Uses										
Strip Retail Plaza (<40k) (Adj Streets, 7-9A, 4-6P)	822	KSF	20	1,074	27	18	45	64	64	128
Day Care Center (Adj Streets, 7-9A, 4-6P)	565	KSF	10	476	58	52	110	52	59	111
Multifamily Housing (Mid- Rise) Not Close to Rail Transit (Adj Streets, 7-9A, 4-6P)	221	Dwelling Units	1,500	7,109	149	499	648	357	228	585
General Office Building (Adj Streets, 7-9A, 4-6P)	710	KSF	20	286	37	5	42	7	37	44
Total Added Trips				8,945	271	574	845	480	388	868
MXD % Reduction				24%	31%			37%		
MXD Trip Reductions				(2,147)	(84)	(178)	(262)	(178)	(144)	(321)
Net New Project Trips without TDM				6,798	187	396	583	302	244	547
Tasman East Required TDM % Reduction				10%	10%			10%		
TDM Trip Reductions				(680)	(19)	(40)	(58)	(30)	(24)	(55)
Net New Project Trips with TDM Reduction				6,118	168	356	525	272	220	492

Source: Fehr & Peers, 2022.

Project VMT Estimates and Population/Employment Numbers

Land Use	Housing	Retail	Cowork+Daycare	Total Employment
Size	1,500	20	30	N/A
Population Density (persons/unit or emp/ksf)	2.73	2.5	4	N/A
Population (persons or employees)	4,095	50	120	
VMT (project generated)	33,436	2,281	8,768	
VMT/Capita	8.2			

Calculated SL

Air Basin	County	Air District	2017 VMT (Million VMT per year)	2017 HPMS Travel Fraction				
				Freeway	Major	Collector	Local, Local Urban	Local Rural ³
NEP	Siskiyou	SIS	1,341	0.46	0.24	0.15	0.15	
SC	Los Angeles	SC	80,869	0.44	0.44	0.07	0.05	
SC	Orange	SC	29,362	0.50	0.39	0.04	0.08	
SC	Riverside	SC	17,927	0.50	0.29	0.12	0.08	
SC	San Bernardino	SC	15,526	0.52	0.32	0.09	0.07	
SCC	San Luis Obispo	SLO	2,848	0.49	0.30	0.10	0.11	
SCC	Santa Barbara	SB	4,026	0.37	0.37	0.15	0.10	
SCC	Ventura	VEN	7,549	0.24	0.57	0.11	0.09	
SD	San Diego	SD	30,217	0.58	0.27	0.09	0.06	
SF	Alameda	BA	14,328	0.57	0.26	0.07	0.09	
SF	Contra Costa	BA	8,276	0.50	0.37	0.09	0.04	
SF	Marin	BA	2,313	0.63	0.16	0.14	0.08	
SF	Napa	BA	1,119	0.18	0.57	0.16	0.09	
SF	San Francisco	BA	3,341	0.39	0.41	0.07	0.13	
SF	San Mateo	BA	5,960	0.63	0.27	0.05	0.05	
SF	Santa Clara	BA	14,706	0.49	0.37	0.06	0.07	
SF	Solano	BA	2,966	0.20	0.50	0.15	0.15	
SF	Sonoma	BA	3,083	0.42	0.28	0.19	0.11	

Santa Clara 0.03569 1.000
0.04351 0.99

Table 3.a. - California Default Statewide Silt Loading Values

Roadway Category	Silt Loading (sL) (g/m ²)	Source of sL Value
Freeway	0.015	U.S. EPA default value ⁽¹⁾
Major	0.032	Geometric mean of 31 California samples ^[2,3,4,5]
Collector	0.032	Geometric mean of 31 California samples ^[2,3,4,5]
Local	0.32	Average of 11 California BACM samples ^[5]

Note - no specific silt loading factor for SFBAAB

Air Basin	County	Air District	Silt Loadings (SL, g/m ²) and PM ₁₀ Emission Factors (EF; lbs PM ₁₀ /10 ⁶ VMT)										Ave. Vehicle Weight (tons)
			Freeway		Major		Collector ⁴		Local, Local Urban ^{Error!} Bookmark not defined.		Local Rural ⁵ , Sand/Gravel Proc.		
			SL	EF	SL	EF	SL	EF	SL	EF	SL	EF	
SC	San Bernardino	SC	0.015	113.2	0.080	519.2	0.080	519.2	0.840	4,411.9			2.4
SCC	San Luis Obispo	SLO	0.015	113.3	0.032	225.8	0.032	225.8	0.320	1,835.3			2.4
SCC	Santa Barbara	SB	0.015	113.8	0.032	226.7	0.032	226.7	0.320	1,842.9			2.4
SCC	Ventura	VEN	0.015	114.1	0.032	227.4	0.032	227.4	0.320	1,848.5			2.4
SD	San Diego	SD	0.015	113.3	0.032	225.8	0.032	225.8	0.320	1,835.5			2.4
SF	Alameda	BA	0.015	112.4	0.032	224.1	0.032	224.1	0.320	1,821.4			2.4
SF	Contra Costa	BA	0.015	112.4	0.032	224.0	0.032	224.0	0.320	1,820.9			2.4
SF	Marin	BA	0.015	111.7	0.032	222.6	0.032	222.6	0.320	1,809.5			2.4
SF	Napa	BA	0.015	112.1	0.032	223.5	0.032	223.5	0.320	1,816.5			2.4
SF	San Francisco	BA	0.015	112.4	0.032	224.0	0.032	224.0	0.320	1,820.9			2.4
SF	San Mateo	BA	0.015	111.7	0.032	222.5	0.032	222.5	0.320	1,808.8			2.4
SF	Santa Clara	BA	0.015	112.6	0.032	224.3	0.032	224.3	0.320	1,823.0			2.4
SF	Solano	BA	0.015	112.4	0.032	224.1	0.032	224.1	0.320	1,821.4			2.4
SF	Sonoma	BA	0.015	111.7	0.032	222.6	0.032	222.6	0.320	1,809.5			2.4
SF	Essex	SJU	0.015	112.0	0.032	223.2	0.032	223.2	0.320	1,814.2	1,400	2,848.1	2.4

Air Basin	County	Air District	Annual Rainfall Days
SF	Alameda	BA	64
SF	Contra Costa	BA	65
SF	Marin	BA	73
SF	Napa	BA	68
SF	San Francisco	BA	65
SF	San Mateo	BA	74
SF	Santa Clara	BA	63
SF	Solano	BA	64
SF	Sonoma	BA	73
SC IV	Freeway	SC III	70

Santa Clara County Consumer ROG Factor

Year	Emissions SC County Emissions	County Population	County Building Square footage	ROG Consumer Factor
2010	11.06 tpd	1781642		
2020	13.71 tpd	1,936,259		
2022	14.022 interpolated	1,970,020	1,554,944,100 sf from HAZUS	1.80354E-05
2030	15.27 tpd	2,105,066	1,661,536,072 sf interpolated	1.83806E-05 lbs/ft/day

0.156

from CalEEMod

Appendix D3 - Consumer Products Use

Data Grouping	Total VOC (tons/day)	Population*	Total VOC (lbs/person-day)	Total Building Area (Square Feet)
2003 Survey Commercial (45.3% of 2003 Land Use Total)	47.4			
2003 Survey Residential (48.0% of 2003 Land Use Total)	50.3			
2003 Survey Industrial (6.7% of 2003 Land Use Total)	7.0			
2003 Survey Land Use Total (42.3% of Grand Total)	104.7			
2003 Survey CARB Data Total	186.3	34,650,690	1.08E-02	8,600,000,000 from South Coast AQMD draft staff report for consumer products rule
2006 Survey CARB Data Total	61.1	36,457,549	3.35E-03	
Grand Total	247.3		1.41E-02	22,435,267,518 from HAZUS-MH, data from late 1990's - early 2000's

*Data from American Communities Survey from the US Census

2008 ARB Emission Inventory (Consumer Products)	239.6	Total VOC (lbs/building sq. ft.)	
South Coast AQMD Rule 1143 reduction to 300 g/l (as of 1/1/11) if 25 g/L gets upheld by the courts	11.3	2.14E-05	Statewide Factor
	17.5	2.04E-05	South Coast AQMD
		1.98E-05	

Emissions for User Defined Query

CEPAM2019v1.03 Emission Projection Data

2010 Estimated Annual Average Emissions

SANTA CLARA COUNTY

All emissions are represented in Tons per Day and reflect the most current data provided to ARB.

[Download these results \(as a comma delimited file\).](#)

[Download more detailed data \(as a comma delimited file\).](#)

[Start a new query.](#)

AREAWIDE SOURCES	TOG	ROG	CO	NOX	SOX	PM	PM10	PM2.5	NH3
SOLVENT EVAPORATION									
CONSUMER PRODUCTS	13.94	11.06	-	-	-	-	-	-	-
ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS	6.21	5.74	-	-	-	-	-	-	-
PESTICIDES/FERTILIZERS	0.58	0.58	-	-	-	-	-	-	0.07
ASPHALT PAVING / ROOFING	0.27	0.21	-	-	-	-	-	-	-
* TOTAL SOLVENT EVAPORATION	21.00	17.59	-	-	-	-	-	-	0.07

Emissions for User Defined Query

CEPAM2019v1.03 Emission Projection Data

2020 Estimated Annual Average Emissions

SANTA CLARA COUNTY

All emissions are represented in Tons per Day and reflect the most current data provided to ARB.

[Download these results \(as a comma delimited file\).](#)

[Download more detailed data \(as a comma delimited file\).](#)

[Start a new query.](#)

AREAWIDE SOURCES	TOG	ROG	CO	NOX	SOX	PM	PM10	PM2.5	NH3
SOLVENT EVAPORATION									
CONSUMER PRODUCTS	17.24	13.71	-	-	-	-	-	-	-
ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS	4.98	4.61	-	-	-	-	-	-	-
PESTICIDES/FERTILIZERS	0.44	0.44	-	-	-	-	-	-	0.06
ASPHALT PAVING / ROOFING	0.33	0.26	-	-	-	-	-	-	-
* TOTAL SOLVENT EVAPORATION	22.99	19.02	-	-	-	-	-	-	0.06

Emissions for User Defined Query

CEPAM2019v1.03 Emission Projection Data

2030 Forecasted Annual Average Emissions

Forecasted emissions are based on the 2017 base year inventory and the growth and control data maintained by the ARB and Districts. Control reflects only those rules already adopted.

SANTA CLARA COUNTY

All emissions are represented in Tons per Day and reflect the most current data provided to ARB.

[Download these results \(as a comma delimited file\).](#)

[Download more detailed data \(as a comma delimited file\).](#)

[Start a new query.](#)

AREAWIDE SOURCES	TOG	ROG	CO	NOX	SOX	PM	PM10	PM2.5	NH3
SOLVENT EVAPORATION									
CONSUMER PRODUCTS	19.14	15.27	-	-	-	-	-	-	-
ARCHITECTURAL COATINGS AND RELATED PROCESS SOLVENTS	5.45	5.04	-	-	-	-	-	-	-
PESTICIDES/FERTILIZERS	0.40	0.40	-	-	-	-	-	-	0.05
ASPHALT PAVING / ROOFING	0.39	0.30	-	-	-	-	-	-	-
* TOTAL SOLVENT EVAPORATION	25.39	21.02	-	-	-	-	-	-	0.05

	Tract	Residential	Commercial	Industrial	Agriculture	Religion	Government	Education	Total
1	06085500100	3,107.0	1,866.4	1,010.5	45.6	14.1	19.9	0.0	6,063.5
2	06085500200	2,527.3	1,395.4	354.6	3.0	53.8	827.9	131.8	5,293.0
3	06085500300	1,677.6	3,221.2	987.8	25.9	71.3	34	34	6,070.4
4	06085500400	1,489.3	571.0	99.1	6.3	78.8	14.5	45.8	2,304.9
5	06085500500	3,534.1	1,403.3	67.6	0.7	12.4	0.0	488.0	5,506.1
6	06085500600	2,770.2	946.4	182.2	0.7	19.5	70.4	85.0	4,074.4
7	06085500800	2,454.4	4,366.5	573.9	0.2	73.7	314.9	82.2	7,865.8
8	06085500901	2,271.1	1,842.0	438.1	8.9	11.1	672.2	8,880.3	14,124.4
9	06085500902	950.8	140.1	11.8	0.0	24.3	0.0	0.0	1,127.0
10	06085501000	2,593.6	874.8	68.5	0.0	146.1	17.3	150.3	3,850.8
11	06085501101	2,238.6	435.5	90.0	1.8	84.4	6.6	0.0	2,856.9
12	06085501102	1,791.8	154.8	43.1	2.0	18.7	0.0	125.0	2,135.4
13	06085501200	1,726.2	337.6	6.4	2.9	7.4	3.1	0.0	2,083.6
14	06085501300	3,389.5	245.1	7.4	1.2	65.9	1.4	2.8	3,693.1
15	06085501401	893.5	337.2	559.9	0.5	33.9	43.5	275.9	2,144.4
16	06085501402	955.7	324.9	167.7	1.1	12.9	0.0	0.0	1,462.3
17	06085501501	1,449.7	65.5	27.3	1.1	23.3	0.0	0.0	1,545.9
18	06085501502	1,662.1	68.8	117.3	3.8	0.0	0.0	130.1	1,982.1
19	06085501601	1,991.2	432.4	93.9	18.9	72.8	0.0	0.0	2,699.2
20	06085501602	2,503.5	196.1	26.3	0.0	2.8	0.0	77.1	2,805.8
21	06085501700	1,792.9	1,395.2	239.3	0.0	21.7	143.1	181.1	3,773.7
22	06085501800	2,272.7	282.3	91.6	0.0	12.5	0.0	54.2	2,713.3
23	06085501901	1,380.5	798.6	542.9	34.1	5.5	8.9	63.9	2,834.4
24	06085501902	1,466.6	1,039.4	820.7	1.4	106.9	0.0	24	3,468.8
25	06085502001	1,972.6	659.3	36.5	3.4	55.1	0.0	37.1	3,084.5
26	06085502002	1,570.1	355.5	123.9	0.5	43.8	82.9	4.0	2,180.7
27	06085502101	2,857.1	2,628.8	226.1	15.2	79.2	20.1	39.8	5,866.3
28	06085502103	1,752.6	171.3	10.8	0.0	38.8	30.4	566.3	2,570.7
29	06085502104	1,172.6	431.6	23.6	0.0	19.7	12.4	281.3	1,941.8
30	06085502202	2,119.0	672.9	43.6	0.0	22.0	106.2	2,964.1	3,964.1
31	06085502203	1,772.7	392.5	31.5	0.9	10.4	0.0	0.0	2,208.0
32	06085502204	965.0	220.9	9.9	0.0	0.0	0.0	1.4	1,197.4
33	06085502301	2,310.6	410.6	67.6	6.3	89.5	0.0	2.7	2,887.3
34	06085502302	1,647.2	143.7	21.6	0.0	17.8	0.0	3.3	1,833.5
35	06085502400	4,910.8	303.0	177.3	19.3	103.2	0.0	157.3	5,958.7
36	06085502500	4,409.9	325.2	100.6	4.1	98.3	0.0	529.1	5,418.2
37	06085502601	2,520.6	449.5	183.2	4.0	57.2	0.0	31.2	3,245.7
38	06085502603	1,897.8	366.1	39.9	2.6	4.9	0.0	105.2	2,416.5
39	06085502604	2,133.6	2,000.3	631.9	19.2	12.7	36.3	9.9	4,843.9
40	06085502701	311.84	958.0	462.6	10.3	54.9	0.0	62.8	4,667.0
41	06085502703	2,597.4	779.0	129.9	24.8	42.6	0.0	183.3	3,757.2
42	06085502704	2,284.5	634.3	514.4	9.0	14.7	0.0	20.8	3,477.8
43	06085502800	2,521.2	422.7	82.8	12.5	20.3	0.0	99.3	3,158.8
44	06085502901	3,363.9	303.1	57.9	0.9	2.5	25.8	284.4	4,038.5
45	06085502902	4,766.0	681.2	37.7	0.8	102.3	0.0	85.8	5,673.6
46	06085502903	3,513.5	91.8	39.3	5.1	91.8	0.0	26.3	3,680.0
47	06085502906	2,254.4	206.0	39.3	0.9	85.5	4.5	412.8	3,083.2
48	06085502907	2,188.9	166.7	35.2	0.0	13.9	0.0	95.3	2,500.0
49	06085502908	3,594.9	460.5	82.7	2.9	35.9	0.0	139.1	4,316.4
50	06085502909	2,457.4	160.1	19.5	0.0	10.3	0.0	254.0	2,901.3
51	06085502910	1,855.9	732.9	38.3	0.0	74.5	10.7	65.3	2,777.4
52	06085503001	3,247.5	125.7	63.6	63.5	1.0	27.9	279.5	3,763.9
53	06085503002	2,282.5	214.3	38.3	1.2	134.0	0.0	127.4	2,797.7
54	06085503003	2,943.1	268.0	124.9	6.7	11.7	0.0	103.4	3,457.8
55	06085503105	851.7	1,389.0	439.3	2.2	88.5	19.0	2.5	2,792.2
56	06085503110	1,295.0	240.0	646.4	0.0	11.7	0.0	50.0	2,243.1
57	06085503111	1,418.1	46.3	96.9	18.9	27.0	0.0	23.1	1,570.3
58	06085503112	1,520.1	922.0	291.2	7.1	16.5	144.1	3.1	2,944.1
59	06085503113	1,391.9	272.5	49.7	3.2	3.9	1.5	0.3	1,723.4
60	06085503116	4,050.0	669.7	210.7	4.0	6.8	1.0	32.5	4,982.7
#	06085503117	797.1	184.6	15.5	1.6	46.7	0.0	28.1	1,073.6
#	06085503118	1,709.2	47.1	41.1	0.0	0.0	3.2	0.0	1,770.6
#	06085503121	1,510.1	3,073.5	2,280.0	30.3	65.3	0.0	95.3	7,162.8
#	06085503122	1,246.7	5,521.2	3,196.0	97.0	112.2	121.2	278.3	10,572.8
#	06085503123	1,367.5	250.6	417.0	7.1	14.1	0.0	0.0	2,056.3
#	06085503124	2,013.1	642.9	77.8	0.0	118.0	0.0	218.7	3,070.5
#	06085503125	2,182.4	28.0	8.7	0.0	0.0	0.0	85.8	2,304.9
#	06085503126	2,699.3	509.1	126.2	1.3	2.1	0.0	0.0	3,338.0
#	06085503127	4,175.3	176.5	264.5	0.0	40.6	0.0	483.3	4,853.9
#	06085503207	1,786.7	18.1	15.5	0.0	33.3	3.1	62.8	1,919.5
#	06085503208	1,092.0	38.5	25.8	1.0	20.5	0.0	98.3	1,276.1
#	06085503210	1,394.9	19.1	13.7	0.8	21.8	0.0	249.0	1,699.9
#	06085503211	1,743.0	159.3	81.2	0.9	25.3	0.0	0.0	2,009.7
#	06085503212	1,659.5	287.2	22.6	0.0	22.6	0.0	12.5	2,186.3
#	06085503213	3,098.4	74.9	13.5	6.0	15.5	25.5	0.0	3,223.8
#	06085503217	1,194.8	147.8	16.2	0.0	24.4	0.0	421.8	1,805.0
#	06085503218	1,161.3	210.7	14.7	3.1	0.0	0.0	88.3	1,478.1
#	06085503219	910.8	161.8	82.6	0.0	17.4	0.0	0.0	1,172.6
#	06085503220	1,696.2	104.0	52.7	0.9	7.5	2.9	115.8	1,979.2
#	06085503221	1,514.6	1,514.6	0.0	412.3	3.6	8.4	127.3	3,098.3
#	06085503222	2,458.9	500.1	889.3	7.8	1.8	35.5	1.3	3,893.7
#	06085503304	2,628.8	1,266.0	50.5	2.1	43.4	0.0	127.1	4,117.9
#	06085503305	2,437.1	1,715.7	73.3	6.0	65.7	0.0	189.0	4,486.8
#	06085503306	1,352.3	324.2	6.5	18.2	55.9	0.0	295.8	2,052.9
#	06085503312	2,280.6	81.3	25.4	0.0	7.1	12.2	1.9	2,557.6
#	06085503313	2,873.1	36.1	25.3	0.0	11.2	0.0	1.2	2,910.9
#	06085503315	2,878.8	233.5	60.5	0.9	23.9	0.0	111.1	3,308.3
#	06085503321	2,403.3	240.7	10.9	0.0	58.6	0.0	2.3	2,715.8
#	06085503322	1,809.4	15.2	11.1	0.0	0.0	0.0	87.9	1,923.6
#	06085503323	2,031.2	43.8	5.2	1.1	10.9	10.5	38.3	2,131.9
#	06085503324	1,702.5	18.4	10.6	0.0	2.3	0.0	119.1	1,845.6
#	06085503325	1,736.4	244.1	9.5	1.2	0.8	1.0	267.8	2,260.8
#	06085503326	4,311.0	47.4	25.4	0.0	117.7	0.0	529.1	5,030.8
#	06085503327	2,266.6	140.0	10.8	4.7	5.4	19.0	129.0	2,576.1
#	06085503329	2,303.0	81.9	10.4	1.7	6.8	24.9	147.7	2,576.6
#	06085503330	5,015.7	420.4	78.4	1.5	1.5	0.0	848.0	6,465.9
#	06085503331	2,231.4	63.0	13.8	0.0	0.0	0.0	1.8	2,310.1
#	06085503332	5,362.8	117.5	19.7	2.3	1.6	4.9	0.0	5,508.8
#	06085503333	2,726.3	39.3	18.6	3.5	0.0	0.0	114.1	2,901.8
100	06085503336	1,108.9	63.5	12.3	2.6	0.0	0.0	515.9	1,703.2
101	06085503337	1,638.9	94.5	2.7	5.1	0.0	0.0	127.8	1,870.0
102	06085503338	4,253.0	184.7	2.6	1.6	26.7	7.3	6.3	4,582.2
103	06085503339	4,206.1	74.2	58.4	0.0	53.1	0.0	125.4	4,517.2
104	06085503401	1,102.5	212.9	95.3	1.1	0.0	0.0	52.8	1,464.6
105	06085503402	1,267.8	133.3	2.2	0.9	0.0	0.0	42.1	1,446.4
106	06085503504	1,347.7	202.6	10.8	2.9	0.5	0.0	507.8	2,071.5
107	06085503506	1,561.5	139.3	2.1	0.0	8.8	0.0	2.8	1,734.3
108	06085503507	522.0	43.4	1.2	0.0	0.0	0.0	0.0	566.6
109	06085503508	1,593.4	90.9	8.8	0.6	1.0	0.0	44.3	1,739.0
110	06085503509	1,259.1	119.2	35.3	0.6	7.8	0.0	497.4	1,919.0
111	06085503510	1,590.2	229.2	10.1	0.8	35.4	0.0	89.9	1,955.6
112	06085503511	1,180.0	98.8	4.5	1.2	0.0	0.0	58.2	1,342.7
113	06085503601	1,096.3	1,335.5	1,087.5	9.0	44.6	51.7	35.3	3,569.8
114	06085503602	1,517.9	139.5	69.7	2.8	9.8	5.3	55.8	1,800.0
115	06085503703	996.3	297.6	8.1	0.7	0.0	0.0	2.0	1,304.7
116	06085503707	1,584.5	232.7	141.1	0.0	3.7	0.0	0.0	1,962.0
117	06085503708	913.4	263.4	14.5	0.9	0.0	38.6	612.8	1,843.7
118	06085503709								

129	96085504316	2,044.6	19.0	3.2	0.0	0.0	0.0	0.0	2,066.8
140	96085504317	2,023.0	219.4	14.4	0.0	0.0	0.0	2.3	2,259.1
141	96085504318	3,504.7	3,452.9	4,084.2	39.8	39.8	445.9	454.4	12,021.7
142	96085504319	4,043.2	784.5	81.5	1.1	0.0	0.0	0.0	4,892.9
143	96085504320	1,587.5	14.1	10.9	0.7	0.0	0.0	0.0	1,614.1
144	96085504321	2,380.0	307.4	10.4	3.9	3.3	0.0	0.0	2,777.6
145	96085504322	2,545.8	4,789.7	4,000.5	73.9	295.4	94.2	799.4	12,599.1
146	96085504323	2,457.0	230.3	226.7	0.0	79.3	15.8	84.3	3,093.6
147	96085504410	1,545.1	3.5	3.5	0.0	11.1	0.0	5.0	1,925.6
148	96085504411	2,326.3	91.9	10.0	0.0	1.8	0.0	71.9	2,501.9
149	96085504412	1,603.2	53.7	7.8	35.8	29.4	0.0	281.8	2,011.7
150	96085504413	1,124.8	350.7	4.8	0.0	0.0	0.0	0.0	1,480.3
151	96085504414	3,433.7	419.7	36.3	0.0	8.1	137.9	36.8	4,072.5
152	96085504415	2,866.1	29.0	0.0	0.9	20.3	0.0	36.9	2,953.2
153	96085504416	1,659.9	532.9	87.3	1.0	75.8	0.0	127.4	2,484.3
154	96085504418	1,570.0	199.6	19.1	0.0	19.5	0.0	76.0	1,884.2
155	96085504421	2,364.0	62.6	4.1	0.0	1.9	0.0	665.0	3,097.6
156	96085504422	1,668.0	100.3	13.1	0.0	16.7	0.0	55.2	1,853.3
157	96085504423	1,000.0	5.6	5.3	0.0	0.0	0.0	0.0	1,010.9
158	96085504424	3,385.5	192.0	15.9	0.9	34.7	0.0	0.0	3,772.0
159	96085504505	5,330.7	875.3	448.8	6.2	19.3	9.7	3.3	6,695.5
160	96085504506	2,858.0	1,232.9	642.8	0.0	156.7	63.8	84.8	5,039.0
161	96085504507	2,248.9	580.6	141.8	0.0	22.9	0.0	149.4	3,143.6
162	96085504508	1,009.9	449.7	273.1	0.0	0.0	51.2	4.2	1,848.1
163	96085504509	2,281.0	2,281.0	3,080.1	6.3	131.8	129.9	113.9	11,051.9
164	96085504510	1,685.0	2,550.0	341.0	3.4	91.5	35.6	8.9	4,715.4
165	96085504601	796.9	3,689.9	2,380.4	13.0	26.2	90.3	295.4	7,290.9
166	96085504602	1,341.6	6,866.9	7,598.1	32.0	167.4	303.5	57.1	16,366.8
167	96085504700	397.5	302.9	32.6	8.3	64.2	872.1	366.2	1,983.8
168	96085504802	2,587.2	1,099.8	1,178.9	22.5	1.8	0.0	43.8	4,933.8
169	96085504805	4,901.3	171.7	149.3	0.2	1.0	0.0	0.0	5,240.6
170	96085504806	1,011.6	62.8	8.2	0.0	23.7	0.0	54.1	1,163.0
171	96085504807	3,439.9	428.5	161.7	10.0	96.6	0.0	0.0	4,136.7
172	96085504808	614.9	241.2	65.6	0.0	0.0	0.0	0.0	921.7
173	96085504902	2,062.8	746.2	246.4	0.0	1.6	0.0	13.6	3,070.6
174	96085504903	2,386.0	243.9	1.3	0.0	0.0	0.0	11.1	2,652.3
175	96085505006	5,429.9	16,542.1	14,564.9	99.5	288.6	595.6	638.1	38,069.3
176	96085505007	2,002.1	3,004.1	3,844.7	26.2	212.7	18.4	45.3	9,153.7
177	96085505010	2,767.1	7,723.6	3,878.5	65.3	127.7	141.3	569.4	15,273.1
178	96085505011	2,318.7	140.8	17.6	0.7	0.0	0.0	27.2	2,505.5
179	96085505012	1,183.7	710.5	969.9	0.0	0.0	0.0	0.0	2,864.1
180	96085505013	1,479.2	89.0	46.6	0.0	0.0	1.3	0.0	2,336.5
181	96085505014	2,430.8	641.5	85.42	0.0	0.0	0.0	83.1	3,969.6
182	96085505015	2,003.4	1,129.4	1,132.9	0.0	20.9	20.8	135.2	4,442.6
183	96085505100	2,538.9	5,184.0	1,205.3	6.6	116.8	1,099.5	128.8	10,279.9
184	96085505202	3,121.2	11,061.0	8,855.4	61.5	361.8	135.7	265.1	23,861.7
185	96085505203	1,763.6	937.0	305.6	3.4	21.0	0.0	2,152.7	5,185.3
186	96085505301	2,015.8	69.4	12.8	0.0	1.1	0.0	0.0	2,100.4
187	96085505302	2,189.1	248.6	28.9	0.8	20.9	61.0	155.3	2,704.6
188	96085505303	2,469.5	251.1	4.8	11.0	0.0	0.0	82.2	2,818.6
189	96085505304	1,536.3	125.5	8.8	0.6	1.1	0.0	93.8	1,766.1
190	96085505305	2,817.2	359.7	7.2	1.1	44.3	0.0	168.7	3,398.2
191	96085505401	2,886.9	328.2	27.9	1.1	53.2	2.4	162.2	3,322.4
192	96085505402	1,401.4	327.6	5.1	0.0	0.0	0.0	15.1	1,778.9
193	96085505403	3,537.8	549.9	26.6	0.8	20.1	5.6	484.4	4,625.2
194	96085505500	2,182.3	448.5	2.5	0.6	45.3	0.0	78.3	2,757.7
195	96085505600	1,929.7	746.5	52.3	10.4	41.2	69.5	35.0	2,884.6
196	96085505700	2,811.8	356.9	105.6	2.0	12.7	3.9	28.3	3,341.2
197	96085505800	2,979.6	1,983.8	54.1	0.0	38.3	9.1	40.1	4,183.0
198	96085505901	2,039.7	731.4	49.7	3.8	0.0	6.8	70.8	2,901.4
199	96085505902	1,901.6	228.7	29.7	6.9	59.1	4.5	4.9	2,235.4
200	96085506000	2,406.7	224.0	7.2	0.0	0.0	0.0	3.2	2,641.1
201	96085506001	2,614.3	223.9	13.3	2.8	16.3	0.0	57.8	2,928.4
202	96085506102	2,380.8	279.1	17.8	0.0	11.8	0.0	49.1	2,751.0
203	96085506103	2,467.7	550.5	33.7	1.7	0.0	0.0	60.1	3,114.3
204	96085506202	4,098.1	529.6	86.2	0.7	14.2	24.1	201.8	4,954.5
205	96085506203	2,288.2	1,061.4	27.8	5.0	5.7	1.6	37.8	3,426.7
206	96085506204	3,165.4	322.6	26.9	0.6	115.5	0.0	123.3	3,754.5
207	96085506301	2,608.6	772.3	78.2	2.1	17.2	2.1	86.1	3,656.6
208	96085506302	3,679.8	323.4	8.7	0.0	14.7	0.0	13.4	4,376.5
209	96085506304	2,051.4	615.8	145.8	1.7	71.7	0.5	386.8	3,273.5
210	96085506305	2,648.3	269.2	76.8	2.3	51.1	22.6	396.7	3,467.0
211	96085506401	2,890.7	2,200.1	92.6	6.5	12.5	1.1	45.1	5,248.6
212	96085506402	2,782.9	479.9	47.4	1.9	13.3	8.5	115.3	3,449.2
213	96085506402	2,676.0	3,096.3	1,485.5	41.6	106.6	86.0	391.6	7,518.8
214	96085506503	3,256.6	626.7	103.4	2.6	139.2	0.0	385.4	4,714.0
215	96085506604	784.1	170.0	8.5	0.0	3.4	0.0	0.0	966.0
216	96085506605	1,783.8	188.2	6.3	0.0	1.5	0.0	69.2	2,049.0
217	96085506601	2,210.8	1,038.1	17.5	17.9	22.4	18.2	135.3	3,460.4
218	96085506603	2,346.6	45.3	39.8	0.0	18.7	0.5	6.2	2,460.1
219	96085506604	3,965.8	376.3	44.5	1.2	20.9	0.0	180.1	4,650.0
220	96085506605	2,107.6	108.9	32.7	1.8	5.3	6.4	2.4	2,264.9
221	96085506606	2,351.4	364.2	14.3	2.2	37.6	9.3	52.1	2,831.1
222	96085506701	2,437.0	35.0	4.7	3.6	6.9	0.0	272.4	2,759.6
223	96085506702	3,088.1	166.3	47.1	1.9	12.7	0.0	23.7	3,339.8
224	96085506703	2,289.2	705.3	51.2	4.2	0.0	12.5	41.4	3,025.8
225	96085506801	4,158.9	1,225.1	111.3	36.9	33.9	10.5	5.8	5,582.2
226	96085506802	3,091.3	744.3	73.1	6.2	39.2	0.0	124.1	4,078.8
227	96085506803	3,675.9	244.6	85.1	0.9	14.4	0.0	405.4	4,425.9
228	96085506804	2,474.3	56.9	25.0	0.0	1.1	0.0	217.5	2,774.8
229	96085506900	6,777.3	300.6	103.4	16.7	147.9	0.0	265.7	7,611.2
230	96085507002	2,984.9	62.5	89.9	6.2	80.4	0.0	1.3	3,198.0
231	96085507003	3,347.5	154.2	192.3	3.4	15.1	0.0	1.1	3,713.6
232	96085507004	3,360.5	1,870.9	215.3	1.5	146.8	95.5	609.8	6,300.3
233	96085507100	2,063.3	1,157.4	199.5	6.9	2.5	0.0	100.7	3,530.3
234	96085507203	1,769.4	1,114.7	260.3	1.5	68.9	47.4	78.7	3,340.9
235	96085507205	4,058.8	232.2	115.2	21.8	21.8	122.0	49.3	4,503.1
236	96085507206	3,485.7	53.5	17.6	0.0	20.6	-4.3	0.0	3,501.7
237	96085507301	7,549.8	204.2	79.5	0.5	112.4	0.0	759.8	8,706.2
238	96085507302	3,473.0	452.3	139.4	8.2	27.3	16.8	84.8	4,201.8
239	96085507401	4,628.5	259.7	66.8	0.9	87.2	0.0	117.7	5,160.8
240	96085507402	3,134.7	504.5	41.0	1.9	45.2	0.0	250.3	3,977.4
241	96085507500	5,223.7	243.2	7.5	0.0	43.7	0.0	386.2	5,854.5
242	96085507600	6,378.3	73.3	154.8	8.8	2.7	0.0	68.1	6,686.6
243	96085507701	2,841.7	1,205.1	390.2	3.6	61.7	4.9	1,727.4	6,234.6
244	96085507702	4,850.2	102.6	59.5	1.1	0.0	1.2	598.2	5,572.8
245	96085507704	2,391.1	112.0	11.0	5.1	9.0	0.0	156.3	2,684.7
246	96085507705	3,439.2	74.5	16.8	0.0	19.4	0.0	0.0	3,549.9
247	96085507805	2,614.1	884.2	94.1	0.0	10.0	0.0	21.2	3,223.6
248	96085507806	3,236.4	1,075.1	168.7	1.5	28.8	26.5	28.8	4,565.8
249	96085507807	1,772.3	348.7	5.4	0.0	54.9	0.0	12.1	2,193.6
250	96085507808	3,208.5	336.0	13.8	0.0	21.9	21.9	2.7	3,604.8
251	96085507903	2,960.2	199.2	3.2	4.7	0.7	0.0	143.9	3,311.0
252	96085507904	2,176.8	5.1	0.6	5.1	0.6	0.0	350.1	2,554.2
253	96085507905	2,994.7	458.3	59.1	1.2	0.7	0.0	64.2	3,578.2
254	96085507906	2,587.2	65.						

278	66085508601	2,041.5	396.9	222.9	0.0	9.5	97.6	0.0	2,768.4
279	66085508602	2,605.1	1,845.0	183.4	0.0	38.4	10.0	102.1	4,784.0
280	66085508705	2,018.2	115.3	27.6	0.0	0.0	5.2	0.0	2,166.3
281	66085508706	2,089.0	160.6	21.3	0.0	0.0	0.0	0.0	2,269.9
282	66085508707	1,806.1	336.9	1,816.6	0.0	8.8	30.7	0.0	4,000.0
283	66085508708	2,867.8	6,001.2	5,300.3	15.3	147.2	38.2	286.4	14,656.8
284	66085508800	1,407.7	311.0	1.7	2.7	0.3	0.0	27.3	1,750.7
285	66085508900	2,005.4	166.8	10.0	0.6	10.7	0.0	71.3	2,265.0
286	66085509001	1,340.6	301.2	82.1	0.0	0.0	0.0	138.3	1,862.8
287	66085509002	1,512.7	76.4	26.4	0.7	7.3	0.0	0.0	1,623.5
288	66085509102	2,729.6	2,661.8	2,236.7	5.2	66.4	49.5	54.4	7,803.6
289	66085509106	2,177.0	273.3	154.6	2.0	33.6	0.0	100.3	2,740.8
290	66085509107	1,636.9	415.5	2.4	2.6	0.0	0.6	0.0	2,058.0
291	66085509108	2,308.4	2,472.5	872.8	0.0	10.6	44.9	27.7	5,736.9
292	66085509109	1,208.5	1,503.8	1,094.9	8.1	64.5	50.4	15.3	5,945.7
293	66085509110	1,691.2	435.2	11.1	0.0	0.0	0.0	0.0	2,137.5
294	66085509111	2,645.0	179.5	63.8	0.0	0.7	0.0	12.9	2,901.0
295	66085509201	2,433.0	576.3	442.4	24.5	134.8	32.2	23.1	3,666.3
296	66085509202	2,266.8	692.8	465.6	16.1	76.4	0.0	35.6	3,553.3
297	66085509202	1,629.7	671.4	1.9	1.3	21.2	0.0	162.2	2,487.7
298	66085509303	1,884.4	78.7	3.5	0.0	71.7	0.0	0.0	2,038.3
299	66085509304	1,707.1	2,405.7	1,202.5	12.0	60.0	15.6	32.8	5,435.5
300	66085509401	1,797.9	325.0	98.4	0.0	9.9	11.4	0.0	2,242.6
301	66085509403	1,597.0	310.5	29.3	1.6	5.7	3.3	87.1	2,034.5
302	66085509404	2,900.6	1,266.5	49.2	0.0	41.5	0.0	12.9	4,270.7
303	66085509500	2,483.6	132.2	36.1	11.8	34.6	0.0	24.7	2,922.6
304	66085509600	2,120.6	1,539.2	117.6	2.0	34.9	162.8	4.8	3,981.9
305	66085509700	1,925.8	301.9	13.3	0.0	2.5	0.0	17.1	2,260.6
306	66085509801	3,463.7	535.4	49.5	0.0	57.0	0.0	73.3	4,179.1
307	66085509902	1,633.8	131.0	20.8	0.0	11.0	0.0	30.1	1,826.7
308	66085509901	1,511.4	1,020.9	30.7	1.3	37.3	0.0	131.1	2,741.3
309	66085509902	413.66	907.6	38.5	16.6	2.3	5.8	144	4,822.0
310	66085510001	5,149.3	421.4	77.0	0.5	54.5	0.0	249.3	5,951.9
311	66085510002	3,014.1	154.4	45.5	0.0	52.2	0.0	11.7	3,277.9
312	66085510100	2,771.6	41.7	10.5	0.0	4.1	1.0	38.9	2,867.8
313	66085510200	4,010.1	159.5	37.5	0.0	32.9	0.0	49.3	4,289.7
314	66085510300	3,884.1	1,349.0	92.8	7.6	60.7	39.5	42.3	5,475.9
315	66085510400	2,865.5	344.9	128.4	1.0	24.8	0.8	407.3	3,773.3
316	66085510500	4,707.3	468.1	119.6	2.3	20.0	0.9	64.8	5,382.8
317	66085510600	3,990.7	508.0	25.2	1.1	4.1	2.3	525.3	5,056.7
318	66085510700	3,067.9	1,004.5	31.6	2.8	40.1	0.0	17.7	4,164.6
319	66085510801	3,567.4	843.3	582.2	12.2	103.9	1.5	899.3	5,599.7
320	66085510901	1,280.1	189.1	7.2	25.4	29.7	0.0	39.3	1,562.1
321	66085510803	1,492.1	138.0	14.9	0.0	15.0	0.0	114.1	1,774.1
322	66085510900	3,490.9	129.3	4.1	0.0	85.1	0.0	55.3	3,765.3
323	66085511000	3,835.7	372.9	17.9	1.3	25.1	0.0	145.7	4,398.6
324	66085511100	4,081.9	144.5	26.1	2.3	29.7	0.3	26.8	4,311.3
325	66085511200	4,408.8	4,408.8	36.7	0.0	11.0	0.0	74.7	4,713.2
326	66085511301	2,925.5	659.0	36.3	0.0	69.8	1.6	21.3	3,741.1
327	66085511302	3,094.9	2,179.0	127.1	2.3	37.0	182.4	29.4	5,652.3
328	66085511400	3,667.1	93.1	11.3	0.0	17.3	0.0	82.1	3,870.9
329	66085511501	3,049.9	1,249.9	87.8	3.0	72.8	28.5	334.4	4,826.5
330	66085511402	2,789.8	78.1	1.7	0.0	0.0	0.0	4.0	2,874.2
331	66085511608	1,580.0	405.4	78.1	0.0	2.7	45.4	127.6	2,239.2
332	66085511609	1,905.5	3,556.7	112.1	0.8	2.1	0.0	4,405.9	9,983.1
333	66085511701	5,788.0	185.8	55.7	0.0	136.9	16.6	91.2	6,274.2
334	66085511702	2,922.9	120.6	14.0	0.9	93.8	0.0	26.3	3,178.4
335	66085511704	7,027.9	98.5	122.4	4.7	6.8	0.0	1,018.3	8,278.6
336	66085511705	1,334.8	5,525.1	1,813.6	3.9	106.6	6.5	93.1	8,591.4
337	66085511707	3,491.9	182.1	115.2	32.6	60.7	4.5	304.4	4,191.5
338	66085511800	2,982.3	140.8	318.4	14.6	29.8	11.3	46.1	3,543.3
339	66085511905	2,267.8	210.8	18.0	0.0	11.1	2.7	13.0	2,523.4
340	66085511907	2,634.8	377.7	25.0	0.0	55.2	0.0	347.9	3,440.5
341	66085511910	2,757.1	25.7	0.0	0.0	75.9	0.0	393.1	3,168.5
342	66085511911	4,205.7	278.6	153.7	35.1	18.7	8.9	0.0	4,700.7
343	66085511912	4,084.5	43.9	15.1	0.0	4.3	0.0	314.4	4,462.2
344	66085511913	3,062.8	142.9	27.8	2.6	2.7	0.0	91.3	3,330.3
345	66085511914	4,427.6	244.1	49.8	0.0	29.5	1.5	223.6	4,976.1
346	66085511915	1,359.8	441.9	22.3	4.5	18.2	0.0	334.9	2,180.7
347	66085511916	2,715.1	129.4	48.5	0.0	128.4	0.0	126.3	3,020.1
348	66085511917	4,705.7	61.0	100.7	0.0	0.0	1.2	106.8	4,974.6
349	66085511918	2,811.8	36.8	19.0	0.0	0.0	0.0	0.0	2,867.6
350	66085512001	4,540.3	2,678.9	1,788.4	4.3	79.9	0.0	177.1	9,268.9
351	66085512005	3,792.8	343.7	49.6	0.8	1.1	0.0	162.3	4,350.3
352	66085512019	2,440.1	179.8	17.7	0.8	0.0	0.0	125.4	2,753.8
353	66085512021	3,925.1	132.1	32.2	3.1	0.0	0.0	93.1	4,185.6
354	66085512022	3,663.0	168.1	30.7	1.1	2.8	0.0	3.8	3,869.5
355	66085512023	2,182.0	199.6	19.3	0.0	10.9	0.0	335.1	2,746.9
356	66085512024	2,431.2	549.0	39.4	0.0	10.5	0.0	180.3	3,210.6
357	66085512025	2,140.6	48.8	23.2	0.0	1.1	0.0	172.1	2,394.8
358	66085512026	1,785.9	280.6	39.3	0.0	19.7	0.0	94.9	2,238.3
359	66085512027	2,201.0	2,017.8	46.0	0.0	1.9	0.0	7.3	4,274.4
360	66085512029	3,583.7	366.8	38.5	2.4	1.2	0.0	161.2	4,154.3
361	66085512030	1,839.1	64.1	19.3	0.0	7.5	0.0	467.3	2,397.3
362	66085512031	2,405.2	116.0	18.0	2.7	0.0	0.0	95.0	2,636.9
363	66085512032	1,957.3	2,028.6	1,506.5	5.3	76.5	40.5	256.8	5,871.3
364	66085512034	1,650.1	146.7	8.0	0.9	0.0	0.0	238.3	2,042.6
365	66085512035	2,329.2	81.9	28.4	1.1	8.0	0.0	1.3	2,449.9
366	66085512036	2,549.2	130.9	28.9	2.1	42.4	0.0	68.9	2,822.4
367	66085512037	1,590.5	17.6	20.8	1.7	0.0	0.0	123.2	1,753.8
368	66085512038	1,898.7	84.9	81.4	0.0	0.0	5.6	0.0	2,070.6
369	66085512039	2,713.6	50.5	90.5	0.0	5.3	0.0	2.0	2,985.0
370	66085512042	1,263.0	123.6	11.6	0.0	0.0	0.0	125.9	1,524.1
371	66085512043	2,295.8	84.5	22.6	0.0	43.8	0.0	83.1	2,529.8
372	66085512045	2,836.0	193.8	30.1	1.5	53.3	0.0	183.4	3,298.3
373	66085512047	2,849.9	402.7	38.2	0.8	26.9	7.3	205.4	3,531.2
374	66085512052	3,046.0	1,012.9	152.0	10.4	0.0	12.1	183.8	4,416.4
375	66085512053	2,209.5	88.0	55.6	2.3	10.1	0.0	0.0	2,365.5
376	66085512054	1,743.5	7.3	2.3	0.0	0.0	75.4	0.0	1,829.5
377	66085512055	1,530.1	209.8	12.2	0.0	0.0	0.0	1.8	1,753.9
378	66085512056	1,644.4	22.3	22.4	2.5	0.0	0.0	73.3	1,764.9
379	66085512057	1,602.9	154.0	27.3	1.8	40.6	0.0	472.9	2,299.5
380	66085512058	2,804.4	1,577.9	226.6	5.7	0.0	0.0	0.0	4,702.6
381	66085512059	3,417.8	746.9	121.6	2.0	37.9	7.0	159.4	4,512.6
382	66085512100	2,302.6	697.8	1,085.9	1,265.2	18.0	20.6	183.0	5,573.1
383	66085512200	5,022.0	628.0	113.3	36.8	9.1	19.0	4.3	5,832.5
384	66085512305	4,295.0	57.9	66.1	0.0	20.9	0.0	0.0	4,439.9
385	66085512307	5,062.2	546.1	61.1	43.1	90.3	0.0	178.8	5,980.8
386	66085512308	7,490.2	101.4	46.7	101.4	3.0	0.9	48.0	7,782.6
387	66085512309	3,999.0	161.2	122.7	263.0	53.7	0.0	74.2	4,673.8
388	66085512310	3,515.2	1,534.4	1,746.0	108.2	85.0	109.0	153.1	7,251.6
389	66085512311	3,208.2	2,416.9	2,621.3	575.9	102.7	0.0	261.1	9,186.1
390	66085512312	2,504.9	195.1	18.0	1.0	0.0	0.0	37.0	4,276.0
391	66085512313	2,825.5	676.9	34.5	4.5	20.5	1.3	48.2	2,816.2
392	66085512314	3,869.2	840.4	115.4	2.7	164.9	66.2	607.3	5,665.9
393	66085512401	4,434.7	982.8	608.8					

Table 1: E-4 Population Estimates for Counties and State 2011-2020 with 2010 Benchmark

COUNTY	Historical 4/1/2010	2020 censu 1/1/2020	Projection 2022	Projection 2030
Alameda	1,510,271	1,682,353		
Alpine	1,175	1,204		
Amador	38,091	40,474		
Butte	220,000	211,632		
Calaveras	45,578	45,292		
Colusa	21,419	21,839		
Contra Cos	1,049,025	1,165,927		
Del Norte	28,610	27,743		
El Dorado	181,058	191,185		
Fresno	930,450	1,008,654		
Glenn	28,122	28,917		
Humboldt	134,623	136,463		
Imperial	174,528	179,702		
Inyo	18,546	19,016		
Kern	839,631	909,235		
Kings	152,982	152,486		
Lake	64,665	68,163		
Lassen	34,895	32,730		
Los Angele	9,818,605	#####		
Madera	150,865	156,255		
Marin	252,409	262,321		
Mariposa	18,251	17,131		
Mendocinc	87,841	91,601		
Merced	255,793	281,202		
Modoc	9,686	8,700		
Mono	14,202	13,195		
Monterey	415,057	439,035		
Napa	136,484	138,019		
Nevada	98,764	102,241		
Orange	3,010,232	3,186,989		
Placer	348,432	404,739		
Plumas	20,007	19,790		
Riverside	2,189,641	2,418,185		
Sacramenti	1,418,788	1,585,055		
San Benito	55,269	64,209		
San Bernar	2,035,210	2,181,654		
San Diego	3,095,313	3,298,634		
San Francis	805,235	873,965		
San Joaquir	685,306	779,233		
San Luis Ot	269,637	282,424		
San Mateo	718,451	764,442		800006
Santa Barb	423,895	448,229		
Santa Clara	1,781,642	1,936,259	1970020	2105066
Santa Cruz	262,382	270,861		

16,881

Shasta	177,223	182,155
Sierra	3,240	3,236
Siskiyou	44,900	44,076
Solano	413,344	453,491
Sonoma	483,878	488,863
Stanislaus	514,453	552,878
Sutter	94,737	99,633
Tehama	63,463	65,829
Trinity	13,786	16,112
Tulare	442,179	473,117
Tuolumne	55,365	55,620
Ventura	823,318	843,843
Yolo	200,849	216,403
Yuba	72,155	81,575
State Total	#####	#####