

Hazus: Earthquake Global Risk Report

Region Name: HaywardHNHSHE

Earthquake Scenario: haywardhnhsheshaw09m_m7p36_se

Print Date: May 01, 2024

Disclaimer:

Totals only reflect data for those census tracts/blocks included in the user's study region.

The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific earthquake. These results can be improved by using enhanced inventory, geotechnical, and observed ground motion data.

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General Description of the Region

Hazus-MH is a regional earthquake loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences. The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The earthquake loss estimates provided in this report was based on a region that includes 37 county(ies) from the following state(s):

California

Note:

Appendix A contains a complete listing of the counties contained in the region.

The geographical size of the region is 59,774.91 square miles and contains 3,560 census tracts. There are over 5,426 thousand households in the region which has a total population of 15,553,323 people. The distribution of population by Total Region and County is provided in Appendix B.

There are an estimated 4,831 thousand buildings in the region with a total building replacement value (excluding contents) of (millions of dollars). Approximately 90.00 % of the buildings (and % of the building value) are associated with residential housing.

The replacement value of the transportation and utility lifeline systems is estimated to be 249,576 and 183,598 (millions of dollars) , respectively.

Building and Lifeline Inventory

Building Inventory

Hazus estimates that there are 4,831 thousand buildings in the region which have an aggregate total replacement value of (millions of dollars) . Appendix B provides a general distribution of the building value by Total Region and County.

In terms of building construction types found in the region, wood frame construction makes up 87% of the building inventory. The remaining percentage is distributed between the other general building types.

Critical Facility Inventory

Hazus breaks critical facilities into two (2) groups: essential facilities and high potential loss facilities (HPL). Essential facilities include hospitals, medical clinics, schools, fire stations, police stations and emergency operations facilities. High potential loss facilities include dams, levees, military installations, nuclear power plants and hazardous material sites.

For essential facilities, there are 265 hospitals in the region with a total bed capacity of 40,929 beds. There are 5,822 schools, 1,567 fire stations, 515 police stations and 92 emergency operation facilities. With respect to high potential loss facilities (HPL), there are no dams identified within the inventory. The inventory also includes no hazardous material sites, no military installations and no nuclear power plants.

Transportation and Utility Lifeline Inventory

Within Hazus, the lifeline inventory is divided between transportation and utility lifeline systems. There are seven (7) transportation systems that include highways, railways, light rail, bus, ports, ferry and airports. There are six (6) utility systems that include potable water, wastewater, natural gas, crude & refined oil, electric power and communications. The lifeline inventory data are provided in Tables 1 and 2.

The total value of the lifeline inventory is over 433,174.00 (millions of dollars). This inventory includes over 11,175.36 miles of highways, 12,686 bridges, 254,588.75 miles of pipes.

Table 1: Transportation System Lifeline Inventory

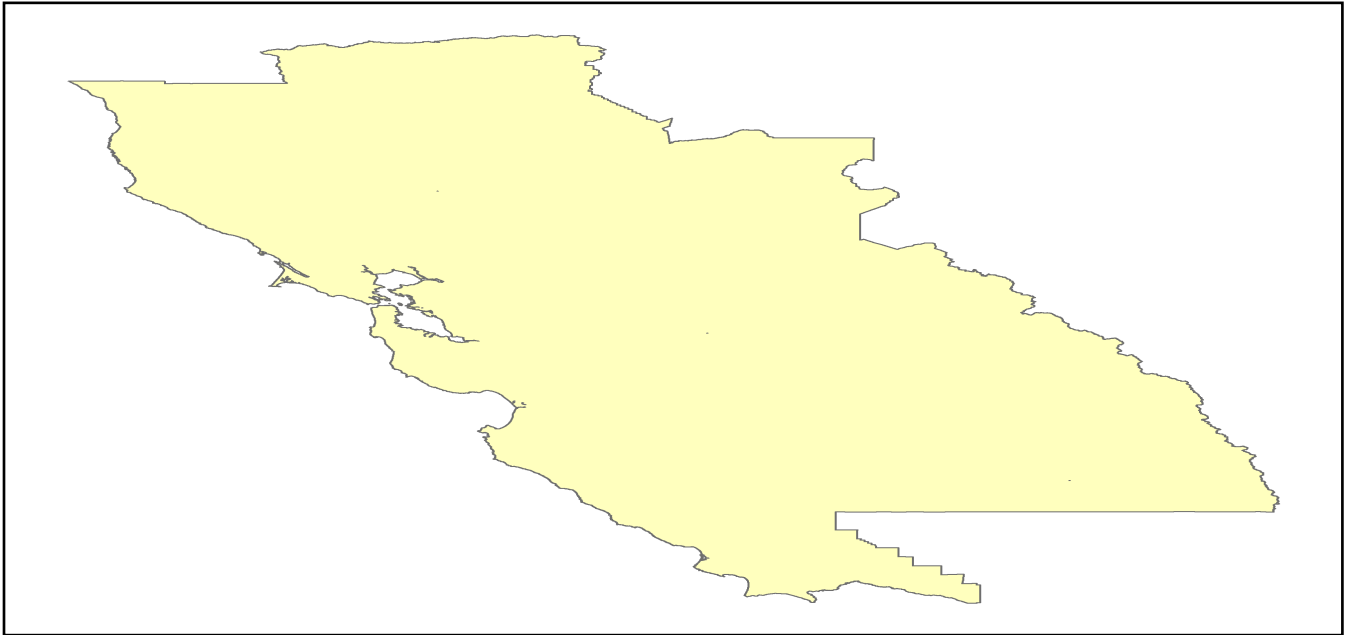
System	Component	# Locations/ # Segments	Replacement value (millions of dollars)
Highway	Bridges	12,686	60384.2095
	Segments	7,425	96099.1862
	Tunnels	47	985.3863
	Subtotal		157468.7820
Railways	Bridges	1,824	10378.5600
	Facilities	89	237.0070
	Segments	3,149	65969.0224
	Tunnels	3	1.8495
	Subtotal		76586.4389
Light Rail	Bridges	112	15.3529
	Facilities	255	4154.0000
	Segments	15	5403.2756
	Tunnels	0	0.0000
	Subtotal		9572.6285
Bus	Facilities	53	119.8908
	Subtotal		119.8908
Ferry	Facilities	25	33.2750
	Subtotal		33.2750
Port	Facilities	370	1410.3825
	Subtotal		1410.3825
Airport	Facilities	118	2904.7833
	Runways	163	1479.8151
	Subtotal		4384.5984
		Total	249,576.00

Table 2: Utility System Lifeline Inventory

System	Component	# Locations / Segments	Replacement value (millions of dollars)
Potable Water	Distribution Lines	NA	5065.4234
	Facilities	24	943.0560
	Pipelines	0	0.0000
		Subtotal	6008.4794
Waste Water	Distribution Lines	NA	3039.2540
	Facilities	196	33702.5528
	Pipelines	0	0.0000
		Subtotal	36741.8068
Natural Gas	Distribution Lines	NA	2026.1693
	Facilities	5	224.9769
	Pipelines	1,041	15805.9896
		Subtotal	18057.1358
Oil Systems	Facilities	20	2.3600
	Pipelines	0	0.0000
		Subtotal	2.3600
Electrical Power	Facilities	406	122731.0675
		Subtotal	122731.0675
Communication	Facilities	485	57.2300
		Subtotal	57.2300
	Total		183,598.10

Earthquake Scenario

Hazus uses the following set of information to define the earthquake parameters used for the earthquake loss estimate provided in this report.



Scenario Name	haywardhnhsheshaw09m_m7p36_se
Type of Earthquake	User-defined
Fault Name	NA
Historical Epicenter ID #	NA
Probabilistic Return Period	NA
Longitude of Epicenter	NA
Latitude of Epicenter	NA
Earthquake Magnitude	7.36
Depth (km)	NA
Rupture Length (Km)	NA
Rupture Orientation (degrees)	NA
Attenuation Function	NA

Direct Earthquake Damage

Building Damage

Hazus estimates that about 225,613 buildings will be at least moderately damaged. This is over 5.00 % of the buildings in the region. There are an estimated 11,720 buildings that will be damaged beyond repair. The definition of the 'damage states' is provided in Volume 1: Chapter 5 of the Hazus technical manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 below summarizes the expected damage by general building type.

Damage Categories by General Occupancy Type

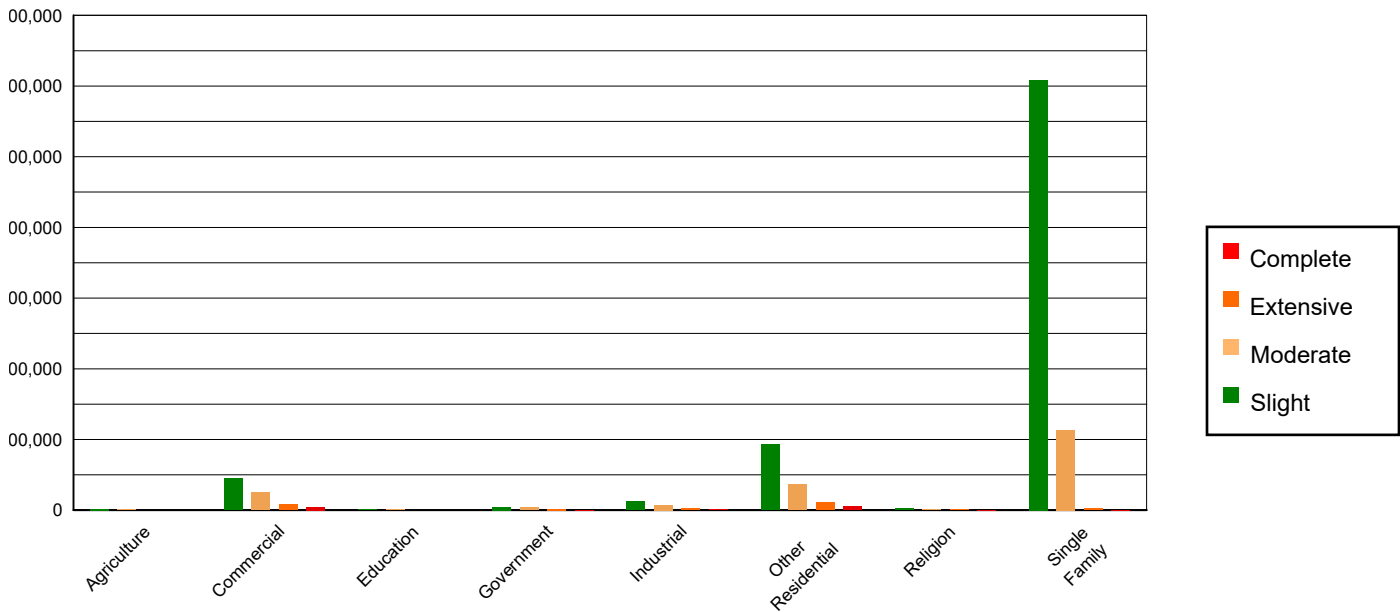


Table 3: Expected Building Damage by Occupancy

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	30880.18	0.80	1636.96	0.21	681.01	0.36	163.89	0.63	75.96	0.65
Commercial	230493.30	6.01	44264.68	5.76	25031.81	13.31	7894.32	30.52	4523.89	38.60
Education	8096.55	0.21	1068.86	0.14	426.94	0.23	103.11	0.40	99.54	0.85
Government	11881.43	0.31	4672.60	0.61	4100.76	2.18	1670.35	6.46	381.86	3.26
Industrial	62305.73	1.62	12387.65	1.61	7284.63	3.87	2200.88	8.51	1116.11	9.52
Other Residential	472315.14	12.31	93040.06	12.12	35714.78	18.99	10475.58	40.49	4935.44	42.11
Religion	13788.53	0.36	2254.09	0.29	1505.40	0.80	580.15	2.24	328.83	2.81
Single Family	3008028.47	78.38	608614.22	79.25	113277.81	60.25	2781.20	10.75	259.30	2.21
Total	3,837,789		767,939		188,023		25,869		11,721	

Table 4: Expected Building Damage by Building Type (All Design Levels)

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Wood	3370016.82	87.81	687812.97	89.57	126296.20	67.17	2926.71	11.31	346.85	2.96
Steel	73160.41	1.91	14669.66	1.91	14104.69	7.50	5892.12	22.78	2921.06	24.92
Concrete	82673.43	2.15	19397.45	2.53	12754.30	6.78	4903.52	18.95	3585.31	30.59
Precast	48659.66	1.27	9211.94	1.20	6349.81	3.38	1208.20	4.67	190.87	1.63
RM	147722.23	3.85	20904.55	2.72	12287.85	6.54	2251.83	8.70	91.64	0.78
URM	21075.74	0.55	9221.71	1.20	8876.62	4.72	3700.52	14.30	3334.28	28.45
MH	94481.05	2.46	6720.85	0.88	7353.66	3.91	4986.59	19.28	1250.93	10.67
Total	3,837,789		767,939		188,023		25,869		11,721	

*Note:

- RM Reinforced Masonry
- URM Unreinforced Masonry
- MH Manufactured Housing

Essential Facility Damage

Before the earthquake, the region had 40,929 hospital beds available for use. On the day of the earthquake, the model estimates that only 31,331 hospital beds (77.00%) are available for use by patients already in the hospital and those injured by the earthquake. After one week, 86.00% of the beds will be back in service. By 30 days, 94.00% will be operational.

Table 5: Expected Damage to Essential Facilities

Classification	Total	# Facilities		
		At Least Moderate Damage > 50%	Complete Damage > 50%	With Functionality > 50% on day 1
Hospitals	265	31	5	208
Schools	5,822	708	71	4,605
EOCs	92	7	1	75
PoliceStations	515	45	1	423
FireStations	1,567	107	11	1,358

Transportation Lifeline Damage

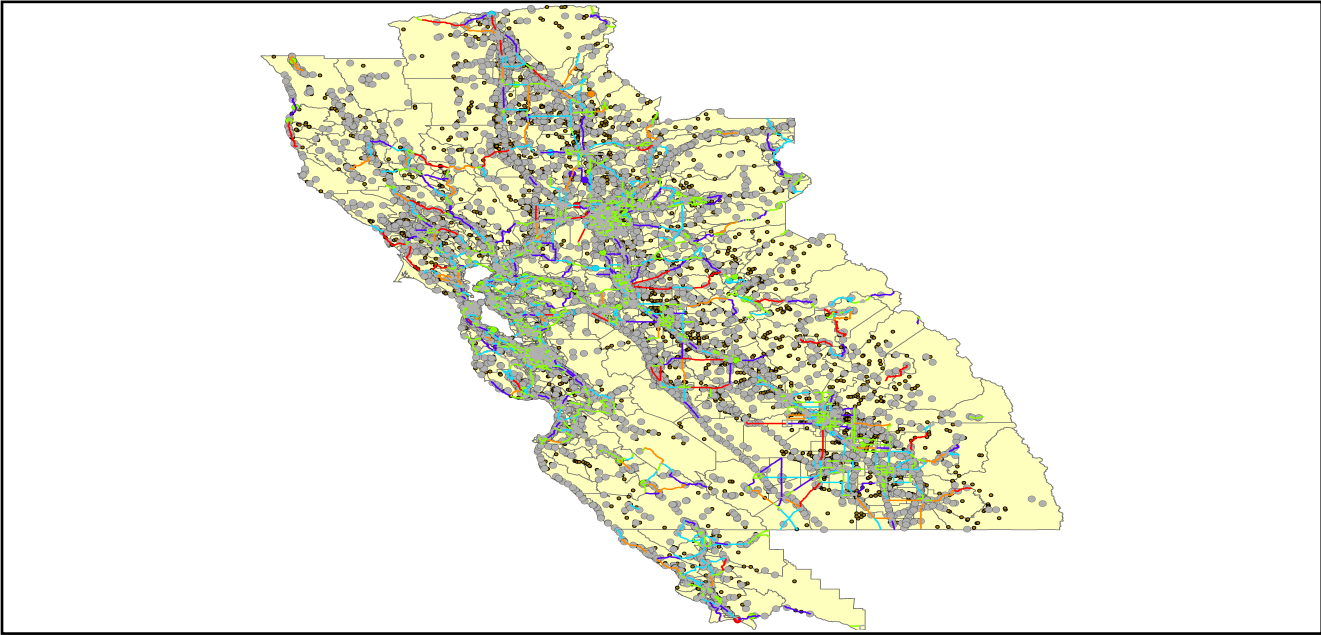


Table 6: Expected Damage to the Transportation Systems

System	Component	Number of Locations_				
		Locations/ Segments	With at Least Mod. Damage	With Complete Damage	With Functionality > 50 %	
					After Day 1	After Day 7
Highway	Segments	7,425	0	0	7,425	7,425
	Bridges	12,686	87	3	12,611	12,654
	Tunnels	47	0	0	47	47
Railways	Segments	3,149	0	0	3,149	3,149
	Bridges	1,824	2	0	1,822	1,824
	Tunnels	3	0	0	3	3
	Facilities	89	8	0	89	89
Light Rail	Segments	15	0	0	15	15
	Bridges	112	0	0	112	112
	Tunnels	0	0	0	0	0
	Facilities	255	8	0	255	255
Bus	Facilities	53	0	0	53	53
Ferry	Facilities	25	0	0	25	25
Port	Facilities	370	3	0	370	370
Airport	Facilities	118	1	0	118	118
	Runways	163	0	0	163	163

Table 6 provides damage estimates for the transportation system.

Note: Roadway segments, railroad tracks and light rail tracks are assumed to be damaged by ground failure only. If ground failure maps are not provided, damage estimates to these components will not be computed.

Tables 7-9 provide information on the damage to the utility lifeline systems. Table 7 provides damage to the utility system facilities. Table 8 provides estimates on the number of leaks and breaks by the pipelines of the utility systems. For electric power and potable water, Hazus performs a simplified system performance analysis. Table 9 provides a summary of the system performance information.

Table 7 : Expected Utility System Facility Damage

System	# of Locations				
	Total #	With at Least Moderate Damage	With Complete Damage	with Functionality > 50 %	
				After Day 1	After Day 7
Potable Water	24	9	0	14	24
Waste Water	196	23	0	138	196
Natural Gas	5	0	0	5	5
Oil Systems	20	5	0	14	20
Electrical Power	406	47	0	367	404
Communication	485	43	0	466	485

Table 8 : Expected Utility System Pipeline Damage (Site Specific)

System	Total Pipelines Length (miles)	Number of Leaks	Number of Breaks
Potable Water	157,375	15479	3870
Waste Water	94,425	7775	1944
Natural Gas	2,789	0	0
Oil	0	0	0

Table 9: Expected Potable Water and Electric Power System Performance

	Total # of Households	Number of Households without Service				
		At Day 1	At Day 3	At Day 7	At Day 30	At Day 90
Potable Water	5,426,475	791,395	745,012	664,269	289,699	0
Electric Power		753,278	520,114	240,368	28,399	957

Induced Earthquake Damage

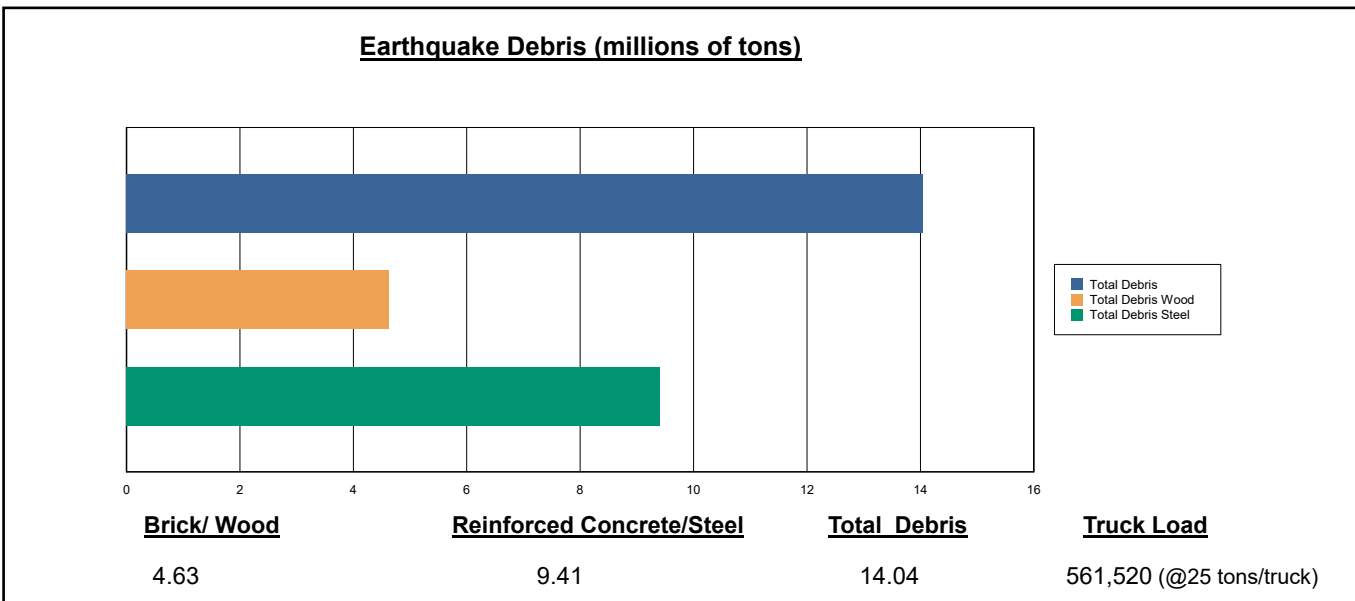
Fire Following Earthquake

Fires often occur after an earthquake. Because of the number of fires and the lack of water to fight the fires, they can often burn out of control. Hazus uses a Monte Carlo simulation model to estimate the number of ignitions and the amount of burnt area. For this scenario, the model estimates that there will be 96 ignitions that will burn about 3.03 sq. mi 0.01 % of the region's total area.) The model also estimates that the fires will displace about 28,415 people and burn about 3,956 (millions of dollars) of building value.

Debris Generation

Hazus estimates the amount of debris that will be generated by the earthquake. The model breaks the debris into two general categories: a) Brick/Wood and b) Reinforced Concrete/Steel. This distinction is made because of the different types of material handling equipment required to handle the debris.

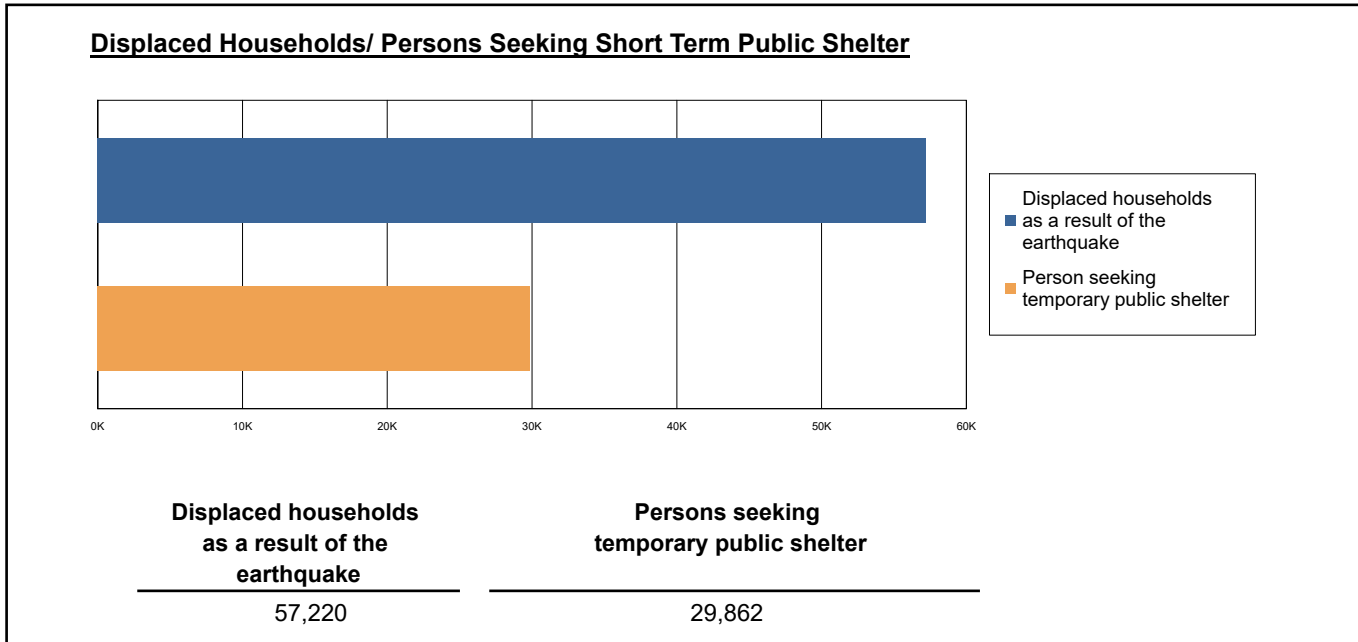
The model estimates that a total of 14,038,000 tons of debris will be generated. Of the total amount, Brick/Wood comprises 33.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 561,520 truckloads (@25 tons/truck) to remove the debris generated by the earthquake.



Social Impact

Shelter Requirement

Hazus estimates the number of households that are expected to be displaced from their homes due to the earthquake and the number of displaced people that will require accommodations in temporary public shelters. The model estimates 57,220 households to be displaced due to the earthquake. Of these, 29,862 people (out of a total population of 15,553,323) will seek temporary shelter in public shelters.



Casualties

Hazus estimates the number of people that will be injured and killed by the earthquake. The casualties are broken down into four (4) severity levels that describe the extent of the injuries. The levels are described as follows;

- Severity Level 1: Injuries will require medical attention but hospitalization is not needed.
- Severity Level 2: Injuries will require hospitalization but are not considered life-threatening
- Severity Level 3: Injuries will require hospitalization and can become life threatening if not promptly treated.
- Severity Level 4: Victims are killed by the earthquake.

The casualty estimates are provided for three (3) times of day: 2:00 AM, 2:00 PM and 5:00 PM. These times represent the periods of the day that different sectors of the community are at their peak occupancy loads. The 2:00 AM estimate considers that the residential occupancy load is maximum, the 2:00 PM estimate considers that the educational, commercial and industrial sector loads are maximum and 5:00 PM represents peak commute time.

Table 10 provides a summary of the casualties estimated for this earthquake

Table 10: Casualty Estimates

		Level 1	Level 2	Level 3	Level 4
2 AM	Commercial	190.87	48.91	7.27	14.33
	Commuting	1.27	1.71	2.87	0.56
	Educational	0.00	0.00	0.00	0.00
	Hotels	7.33	1.28	0.13	0.26
	Industrial	162.71	39.76	5.82	11.46
	Other-Residential	6037.31	1461.78	206.49	405.64
	Single Family	1937.50	138.84	4.54	8.79
	Total	8,337	1,692	227	441
2 PM	Commercial	13049.19	3369.95	505.84	987.68
	Commuting	11.46	15.35	25.83	5.01
	Educational	2607.61	617.32	88.12	171.09
	Hotels	1.41	0.25	0.03	0.05
	Industrial	1199.75	293.92	43.32	84.40
	Other-Residential	2027.13	506.94	75.14	140.73
	Single Family	555.00	42.32	1.70	3.11
	Total	19,452	4,846	740	1,392
5 PM	Commercial	9195.23	2383.28	361.34	694.31
	Commuting	227.82	304.03	513.01	99.35
	Educational	357.04	68.61	8.44	16.14
	Hotels	2.19	0.38	0.04	0.08
	Industrial	749.84	183.70	27.07	52.75
	Other-Residential	2367.65	585.06	85.95	161.03
	Single Family	721.10	53.95	2.01	3.67
	Total	13,621	3,579	998	1,027

Economic Loss

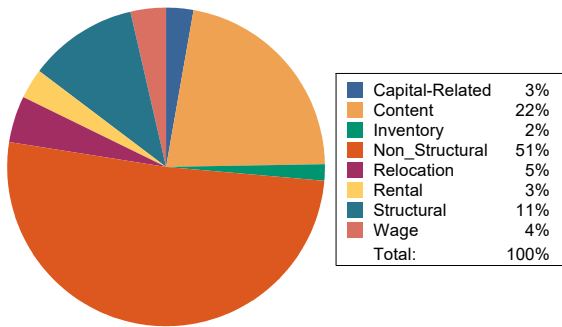
The total economic loss estimated for the earthquake is 103,816.37 (millions of dollars), which includes building and lifeline related losses based on the region's available inventory. The following three sections provide more detailed information about these losses.

Building-Related Losses

The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the earthquake. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the earthquake.

The total building-related losses were 93,935.13 (millions of dollars); 14 % of the estimated losses were related to the business interruption of the region. By far, the largest loss was sustained by the residential occupancies which made up over 46 % of the total loss. Table 11 below provides a summary of the losses associated with the building damage.

Earthquake Losses by Loss Type (\$ millions)



Earthquake Losses by Occupancy Type (\$ millions)

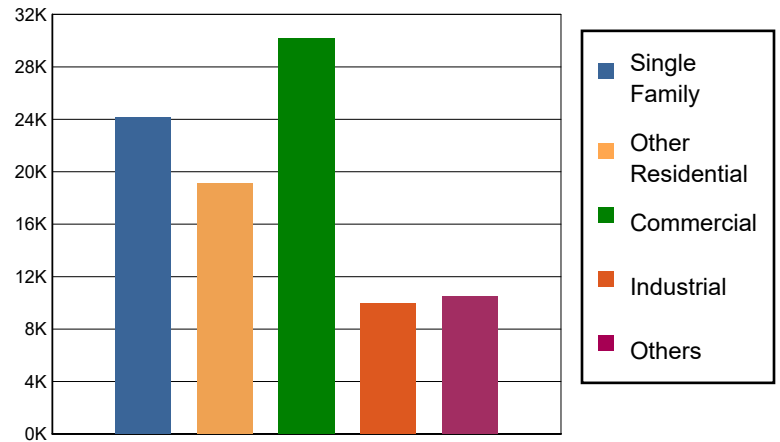


Table 11: Building-Related Economic Loss Estimates
(Millions of dollars)

Category	Area	Single Family	Other Residential	Commercial	Industrial	Others	Total
Income Losses							
	Wage	0.0000	385.3123	2533.6878	113.8582	367.4394	3,400.2977
	Capital-Related	0.0000	163.8082	2283.1156	68.8403	61.6881	2,577.4522
	Rental	225.0896	1134.3976	1109.9686	59.9745	228.1123	2,757.5426
	Relocation	768.0587	695.2821	1643.8573	273.0448	1115.2487	4,495.4916
	Subtotal	993.1483	2378.8002	7570.6293	515.7178	1772.4885	13230.7841
Capital Stock Losses							
	Structural	2489.0383	2183.7714	3481.0606	1090.7558	1278.7603	10,523.3864
	Non_Structural	14920.3800	11700.4645	11861.5474	4646.9147	4945.1279	48,074.4345
	Content	5735.6374	2872.0693	6320.1007	3232.4646	2453.4837	20,613.7557
	Inventory	0.0000	0.0000	957.4043	458.7693	76.5960	1,492.7696
	Subtotal	23145.0557	16756.3052	22620.1130	9428.9044	8753.9679	80704.3462
	Total	24138.20	19135.11	30190.74	9944.62	10526.46	93935.13

Transportation and Utility Lifeline Losses

For the transportation and utility lifeline systems, Hazus computes the direct repair cost for each component only. There are no losses computed by Hazus for business interruption due to lifeline outages. Tables 12 & 13 provide a detailed breakdown in the expected lifeline losses.

Table 12: Transportation System Economic Losses
(Millions of dollars)

System	Component	Inventory Value	Economic Loss	Loss Ratio (%)
Highway	Segments	96099.1862	0.0000	0.00
	Bridges	60384.2095	1207.3556	2.00
	Tunnels	985.3863	26.4196	2.68
	Subtotal	157468.7820	1233.7752	
Railways	Segments	65969.0224	0.0000	0.00
	Bridges	10378.5600	182.4125	1.76
	Tunnels	1.8495	0.0347	1.88
	Facilities	237.0070	29.5927	12.49
	Subtotal	76586.4389	212.0399	
Light Rail	Segments	5403.2756	0.0000	0.00
	Bridges	15.3529	1.5903	10.36
	Tunnels	0.0000	0.0000	0.00
	Facilities	4154.0000	650.3422	15.66
	Subtotal	9572.6285	651.9325	
Bus	Facilities	119.8908	6.9508	5.80
	Subtotal	119.8908	6.9508	
Ferry	Facilities	33.2750	4.9668	14.93
	Subtotal	33.2750	4.9668	
Port	Facilities	1410.3825	232.8621	16.51
	Subtotal	1410.3825	232.8621	
Airport	Facilities	2904.7833	379.5328	13.07
	Runways	1479.8151	0.0000	0.00
	Subtotal	4384.5984	379.5328	
Total		249,576.00	2,722.06	

Table 13: Utility System Economic Losses
(Millions of dollars)

System	Component	Inventory Value	Economic Loss	Loss Ratio (%)
Potable Water	Pipelines	0.0000	0.0000	0.00
	Facilities	943.0560	108.1748	11.47
	Distribution Lines	5065.4234	69.6540	1.38
	Subtotal	6008.4794	177.8288	
Waste Water	Pipelines	0.0000	0.0000	0.00
	Facilities	33702.5528	1731.1841	5.14
	Distribution Lines	3039.2540	34.9890	1.15
	Subtotal	36741.8068	1766.1731	
Natural Gas	Pipelines	15805.9896	0.0000	0.00
	Facilities	224.9769	0.0945	0.04
	Distribution Lines	2026.1693	11.9870	0.59
	Subtotal	18057.1358	12.0815	
Oil Systems	Pipelines	0.0000	0.0000	0.00
	Facilities	2.3600	0.2129	9.02
	Subtotal	2.3600	0.2129	
Electrical Power	Facilities	122731.0675	5199.0328	4.24
	Subtotal	122731.0675	5199.0328	
Communication	Facilities	57.2300	3.8537	6.73
	Subtotal	57.2300	3.8537	
	Total	183,598.08	7,159.18	

Appendix A: County Listing for the Region

Alameda,CA
Amador,CA
Butte,CA
Calaveras,CA
Colusa,CA
Contra Costa,CA
El Dorado,CA
Fresno,CA
Glenn,CA
Kings,CA
Lake,CA
Madera,CA
Marin,CA
Mariposa,CA
Mendocino,CA
Merced,CA
Monterey,CA
Napa,CA
Nevada,CA
Placer,CA
Sacramento,CA
San Benito,CA
San Francisco,CA
San Joaquin,CA
San Luis Obispo,CA
San Mateo,CA
Santa Clara,CA
Santa Cruz,CA
Solano,CA

Sonoma, CA

Stanislaus, CA

Sutter, CA

Tehama, CA

Tulare, CA

Tuolumne, CA

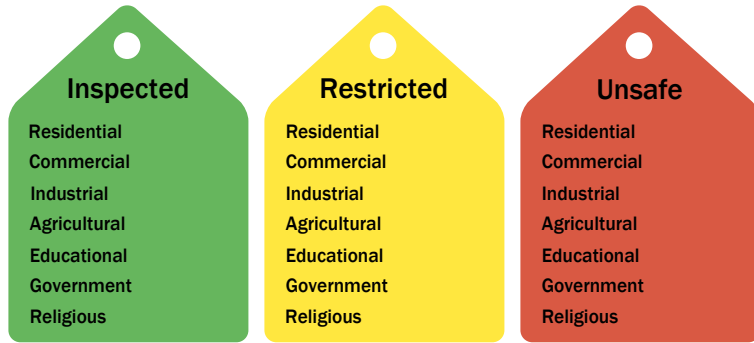
Yolo, CA

Yuba, CA

Appendix B: Regional Population and Building Value Data

State	County Name	Population	Building Value (millions of dollars)			
			Residential	Non-Residential	Total	
California	Alameda	1,682,353	209,951	122,639	332,590	
	Amador	40,474	5,608	2,517	8,125	
	Butte	211,632	25,875	16,639	42,514	
	Calaveras	45,292	8,305	4,893	13,199	
	Colusa	21,839	2,244	2,024	4,268	
	Contra Costa	1,165,927	158,118	60,339	218,458	
	El Dorado	191,185	34,907	9,704	44,611	
	Fresno	1,008,654	98,532	61,772	160,304	
	Glenn	28,917	2,791	3,717	6,508	
	Kings	152,486	13,719	7,861	21,581	
	Lake	68,163	9,699	4,530	14,229	
	Madera	156,255	18,025	9,641	27,667	
	Marin	262,321	47,738	15,030	62,769	
	Mariposa	17,131	3,299	1,141	4,441	
	Mendocino	91,601	14,237	8,510	22,748	
	Merced	281,202	25,194	26,098	51,292	
	Monterey	439,035	47,655	28,750	76,405	
	Napa	138,019	20,517	13,045	33,563	
	Nevada	102,241	17,908	6,108	24,016	
	Placer	404,739	69,985	24,193	94,179	
	Sacramento	1,585,055	179,811	83,911	263,723	
	San Benito	64,209	9,440	3,799	13,239	
	San Francisco	873,965	108,848	46,020	154,869	
	San Joaquin	779,233	82,706	56,882	139,589	
	San Luis Obispo	282,424	41,720	20,896	62,616	
	San Mateo	764,442	110,372	44,995	155,368	
	Santa Clara	1,936,259	261,111	120,471	381,582	
	Santa Cruz	270,861	36,147	18,805	54,952	
	Solano	453,491	55,802	26,393	82,195	
	Sonoma	488,863	68,827	35,781	104,609	
	Stanislaus	552,878	62,937	37,511	100,449	
	Sutter	99,633	10,618	6,448	17,066	
	Tehama	65,829	7,705	5,113	12,818	
	Tulare	473,117	43,262	31,210	74,472	
	Tuolumne	55,620	8,964	3,507	12,471	
	Yolo	216,403	24,130	18,343	42,473	
	Yuba	81,575	8,161	4,677	12,839	
	Total Region		15,553,323	1,954,868	993,913	2,948,797



Building Inspection Tagging (Counts)

Total Economic Loss
Total:

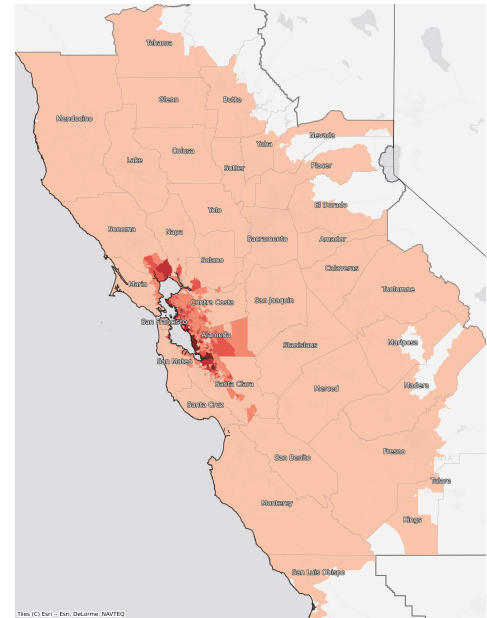
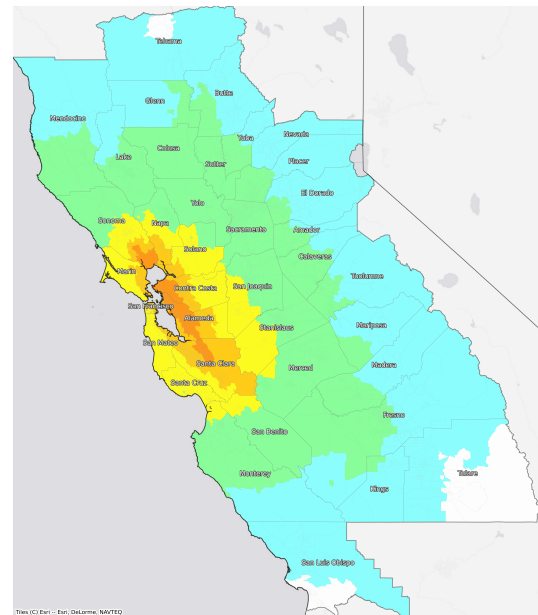
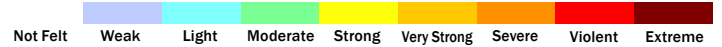
Top Counties	State	Total

Injuries & Fatalities
**Total Day:
Total Night:**

Top Counties	State	Injuries (day/night)	Fatalities (day/night)

Displaced Households & Short-Term Shelter Needs
**Total Displaced:
Total Needing Shelter:**

Top Counties	State	Displaced	Needing Shelter

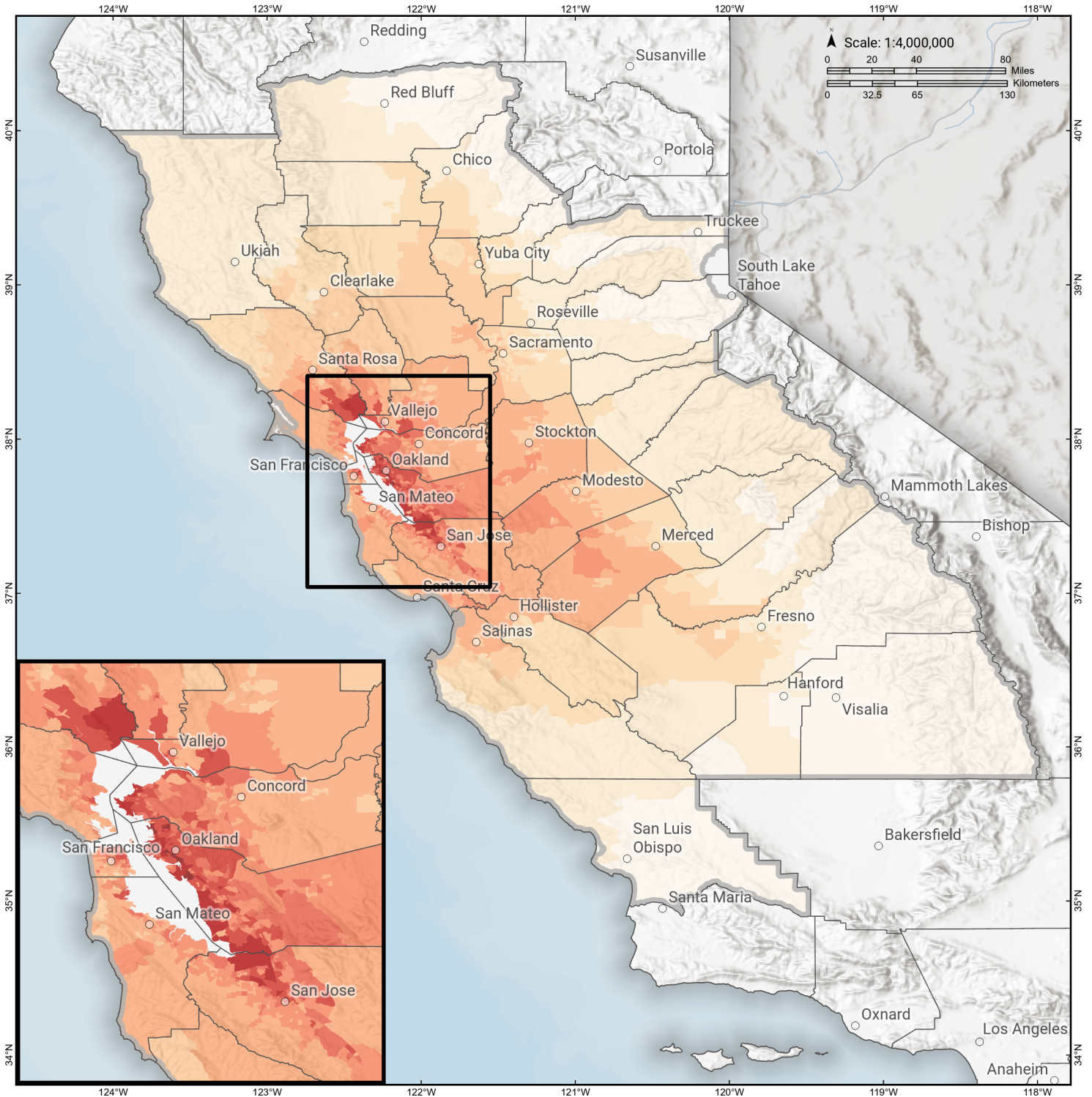
Economic Impacts by Census Tract

Ground Shaking

Debris
**Total Tons:
Total Truckloads:**

Type	Tons

The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific earthquake.

Hayward: HN+HS+HE

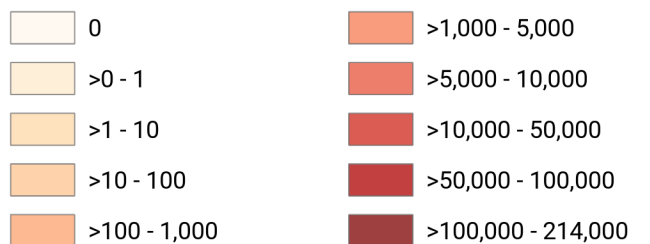
Debris Generated by Census Tract



Study Region: Hayward: HN+HS+HE
Scenario: haywardhnhsheshaw09m_m7p36_se

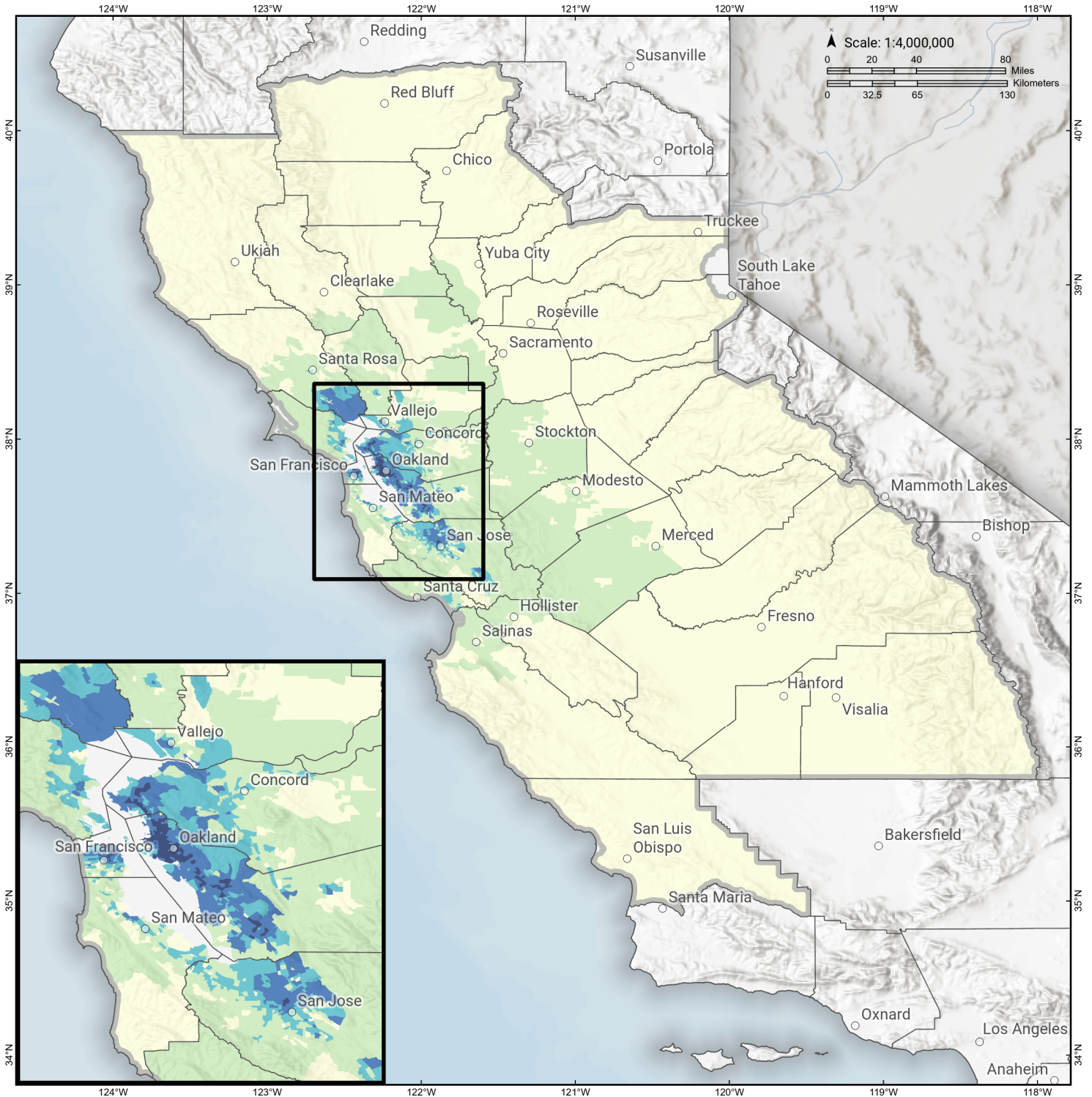


Debris Generated (in tons)



Hayward: HN+HS+HE

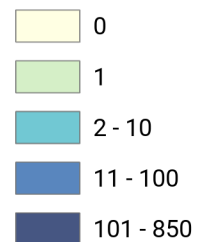
Displaced Households by Census Tract



Study Region: Hayward: HN+HS+HE
Scenario: haywardhnhsheshaw09m_m7p36_se

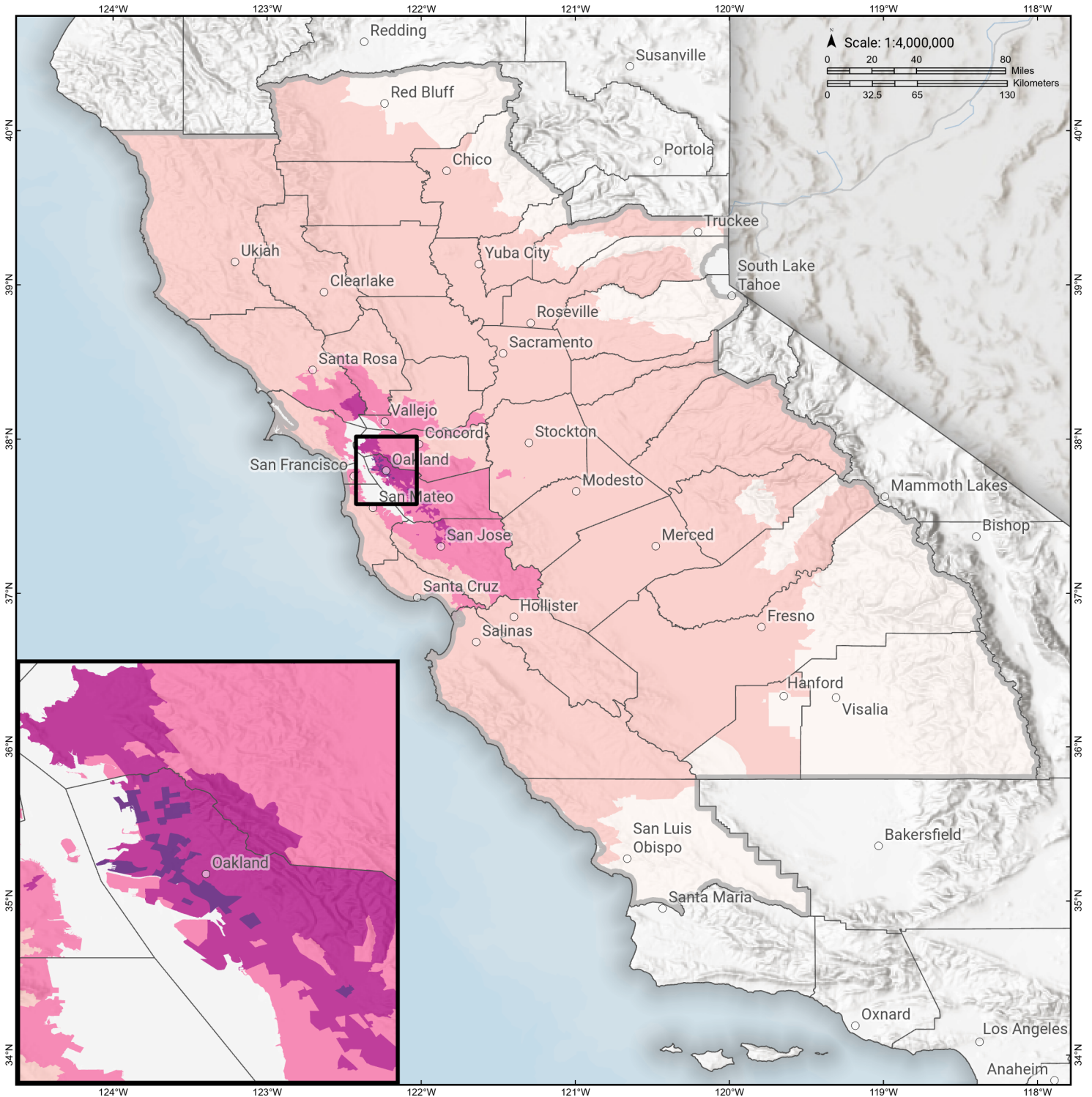


Displaced Households



Hayward: HN+HS+HE

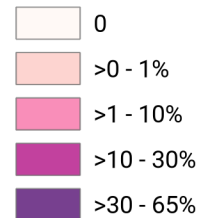
Loss Ratio by Census Tract



Study Region: Hayward: HN+HS+HE
Scenario: haywardhnhsheshaw09m_m7p36_se

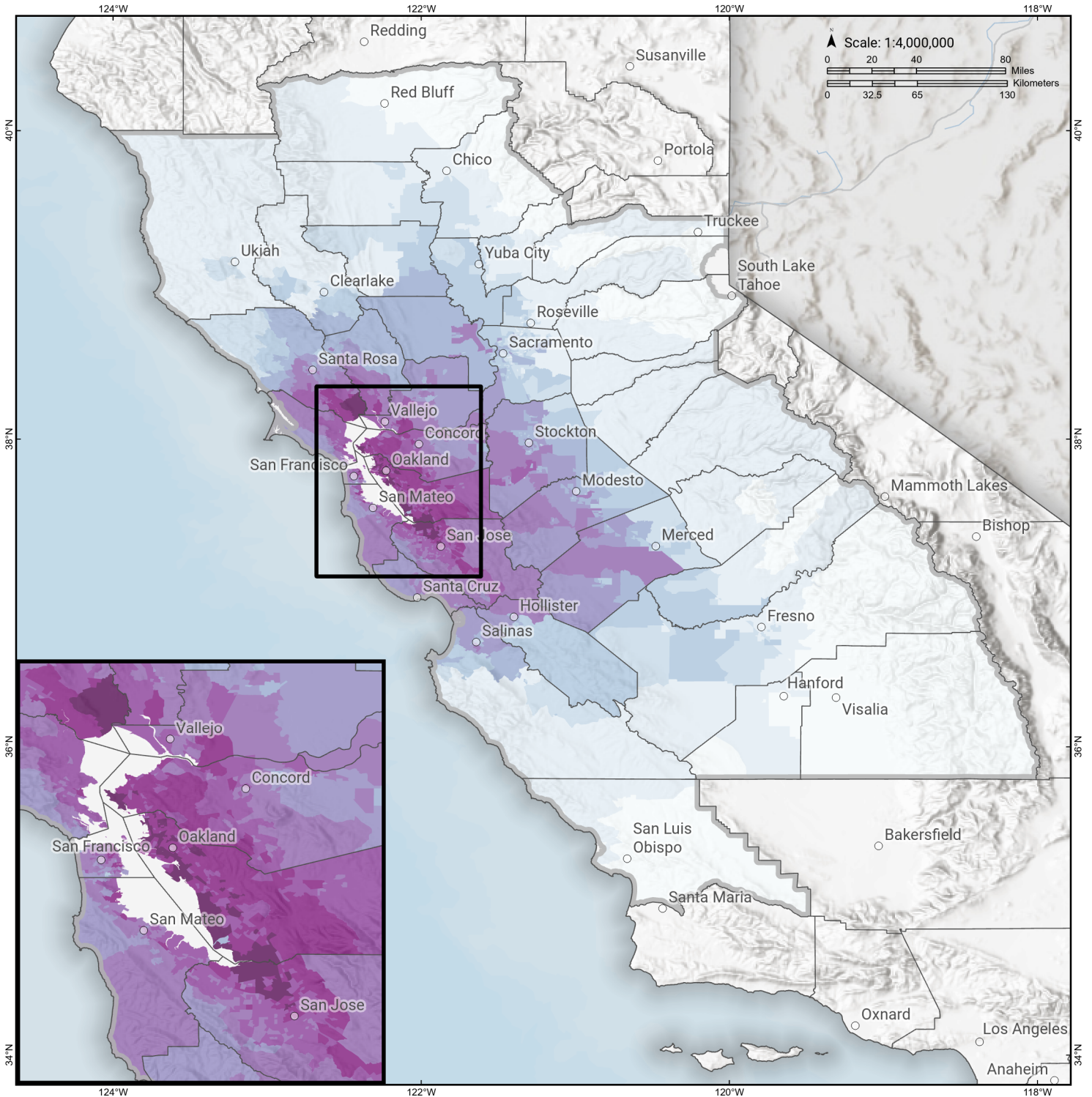


Loss Ratio (ratio of building related economic loss to exposed value of buildings)



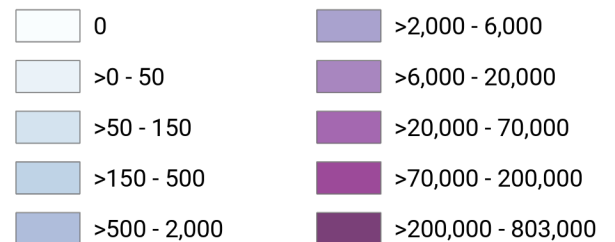
Hayward: HN+HS+HE

Total Building Related Economic Loss by Census Tract



Study Region: Hayward: HN+HS+HE
Scenario: haywardhnhsheshaw09m_m7p36_se

Economic Loss (in thousands of USD \$)



Building Damage by Count by General Occupancy

May 01, 2024

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
California						
Alameda						
<i>Government</i>	2,617	3,070	3,147	1,374	320	10,528
<i>Agriculture</i>	92	138	106	48	37	422
<i>Commercial</i>	5,758	9,427	8,681	4,386	3,737	31,989
<i>Religion</i>	253	498	609	357	270	1,986
<i>Single Family</i>	91,869	191,145	59,781	1,234	144	344,173
<i>Other Residential</i>	10,532	27,976	14,495	4,553	3,840	61,396
<i>Education</i>	388	383	196	60	90	1,117
<i>Industrial</i>	2,256	3,172	2,687	1,207	883	10,205
Amador						
<i>Industrial</i>	235	0	0	0	0	235
<i>Single Family</i>	14,962	0	0	0	0	14,962
<i>Other Residential</i>	1,037	0	0	0	0	1,037
<i>Education</i>	23	0	0	0	0	23
<i>Government</i>	32	0	0	0	0	32
<i>Agriculture</i>	44	0	0	0	0	44
<i>Religion</i>	45	0	0	0	0	45
<i>Commercial</i>	1,368	0	0	0	0	1,368
Butte						

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Government</i>	147	0	0	0	0	147
<i>Religion</i>	531	0	0	0	0	531
<i>Agriculture</i>	510	0	0	0	0	510
<i>Commercial</i>	6,384	1	0	0	0	6,385
<i>Industrial</i>	1,522	0	0	0	0	1,522
<i>Single Family</i>	50,283	0	0	0	0	50,283
<i>Other Residential</i>	21,494	4	0	0	0	21,498
<i>Education</i>	172	0	0	0	0	172
Calaveras						
<i>Government</i>	84	0	0	0	0	84
<i>Other Residential</i>	2,558	1	0	0	0	2,559
<i>Education</i>	35	0	0	0	0	35
<i>Religion</i>	130	0	0	0	0	130
<i>Agriculture</i>	2,207	0	0	0	0	2,207
<i>Commercial</i>	1,413	0	0	0	0	1,413
<i>Industrial</i>	466	0	0	0	0	466
<i>Single Family</i>	22,148	0	0	0	0	22,148
Colusa						
<i>Agriculture</i>	141	1	0	0	0	142
<i>Religion</i>	58	0	0	0	0	58
<i>Commercial</i>	790	4	0	0	0	794
<i>Industrial</i>	113	0	0	0	0	113
<i>Other Residential</i>	949	5	0	0	0	954
<i>Single Family</i>	5,947	7	0	0	0	5,954
<i>Government</i>	32	0	0	0	0	32

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Education</i>	33	0	0	0	0	33
Contra Costa						
<i>Commercial</i>	9,217	5,021	2,666	773	314	17,991
<i>Agriculture</i>	427	199	91	22	9	749
<i>Religion</i>	552	307	231	98	37	1,226
<i>Single Family</i>	170,616	93,111	17,908	290	10	281,935
<i>Other Residential</i>	14,335	10,365	3,482	663	280	29,124
<i>Industrial</i>	2,332	1,299	799	233	85	4,749
<i>Government</i>	2,908	1,110	711	247	48	5,024
<i>Education</i>	446	143	54	6	3	653
El Dorado						
<i>Other Residential</i>	10,420	0	0	0	0	10,420
<i>Industrial</i>	1,199	0	0	0	0	1,199
<i>Education</i>	128	0	0	0	0	128
<i>Single Family</i>	71,424	0	0	0	0	71,424
<i>Commercial</i>	4,768	0	0	0	0	4,768
<i>Government</i>	100	0	0	0	0	100
<i>Religion</i>	180	0	0	0	0	180
<i>Agriculture</i>	161	0	0	0	0	161
Fresno						
<i>Commercial</i>	21,047	6	0	0	0	21,054
<i>Religion</i>	1,506	1	0	0	0	1,507
<i>Agriculture</i>	3,419	1	0	0	0	3,421
<i>Industrial</i>	5,346	2	0	0	0	5,348
<i>Government</i>	291	0	0	0	0	291

		# of Buildings					
		None	Slight	Moderate	Extensive	Complete	Total
Glenn	<i>Other Residential</i>	40,957	16	0	0	0	40,973
	<i>Single Family</i>	226,423	2	0	0	0	226,425
	<i>Education</i>	602	0	0	0	0	602
	<i>Other Residential</i>	2,150	2	0	0	0	2,152
	<i>Government</i>	99	0	0	0	0	99
	<i>Education</i>	35	0	0	0	0	35
	<i>Industrial</i>	254	0	0	0	0	254
	<i>Single Family</i>	7,417	0	0	0	0	7,417
	<i>Commercial</i>	884	1	0	0	0	885
Kings	<i>Agriculture</i>	1,364	1	0	0	0	1,365
	<i>Religion</i>	89	0	0	0	0	89
	<i>Commercial</i>	2,318	0	0	0	0	2,318
	<i>Religion</i>	210	0	0	0	0	210
	<i>Agriculture</i>	306	0	0	0	0	306
	<i>Government</i>	72	0	0	0	0	72
	<i>Industrial</i>	555	0	0	0	0	555
	<i>Single Family</i>	36,245	0	0	0	0	36,245
	<i>Other Residential</i>	4,342	0	0	0	0	4,342
Lake	<i>Education</i>	103	0	0	0	0	103
	<i>Agriculture</i>	161	0	0	0	0	161
	<i>Single Family</i>	21,624	9	0	0	0	21,633
	<i>Other Residential</i>	14,497	99	5	0	0	14,601

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Education</i>	68	0	0	0	0	68
<i>Industrial</i>	353	1	0	0	0	354
<i>Commercial</i>	2,087	4	0	0	0	2,091
<i>Religion</i>	140	0	0	0	0	140
<i>Government</i>	78	0	0	0	0	78
Madera						
<i>Commercial</i>	2,903	2	0	0	0	2,905
<i>Religion</i>	119	0	0	0	0	119
<i>Government</i>	111	0	0	0	0	111
<i>Agriculture</i>	632	1	0	0	0	634
<i>Other Residential</i>	6,630	5	0	0	0	6,635
<i>Single Family</i>	38,909	3	0	0	0	38,912
<i>Education</i>	115	0	0	0	0	115
<i>Industrial</i>	902	1	0	0	0	903
Marin						
<i>Other Residential</i>	5,416	1,839	465	159	11	7,890
<i>Government</i>	93	35	13	2	0	143
<i>Education</i>	225	40	9	1	0	274
<i>Commercial</i>	5,032	2,303	828	99	9	8,270
<i>Religion</i>	204	85	27	3	0	319
<i>Agriculture</i>	111	51	23	4	1	190
<i>Single Family</i>	55,365	20,243	1,115	2	0	76,724
<i>Industrial</i>	789	478	235	30	3	1,535
Mariposa						
<i>Single Family</i>	8,084	0	0	0	0	8,084

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Other Residential</i>	307	0	0	0	0	307
<i>Education</i>	27	0	0	0	0	27
<i>Industrial</i>	94	0	0	0	0	94
<i>Commercial</i>	689	0	0	0	0	689
<i>Agriculture</i>	29	0	0	0	0	29
<i>Religion</i>	36	0	0	0	0	36
<i>Government</i>	33	0	0	0	0	33
Mendocino						
<i>Commercial</i>	3,436	0	0	0	0	3,436
<i>Religion</i>	216	0	0	0	0	216
<i>Agriculture</i>	184	0	0	0	0	184
<i>Single Family</i>	25,969	0	0	0	0	25,969
<i>Other Residential</i>	7,059	1	0	0	0	7,060
<i>Government</i>	83	0	0	0	0	83
<i>Education</i>	101	0	0	0	0	101
<i>Industrial</i>	869	0	0	0	0	869
Merced						
<i>Education</i>	162	1	0	0	0	163
<i>Government</i>	169	2	0	0	0	171
<i>Commercial</i>	4,681	67	6	0	0	4,754
<i>Agriculture</i>	7,266	302	80	4	0	7,653
<i>Religion</i>	340	5	0	0	0	345
<i>Industrial</i>	1,005	16	1	0	0	1,022
<i>Single Family</i>	63,155	442	1	0	0	63,598

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Other Residential</i>	10,547	217	23	0	0	10,787
Monterey						
<i>Single Family</i>	89,734	1,138	4	0	0	90,876
<i>Industrial</i>	1,777	62	10	0	0	1,850
<i>Other Residential</i>	19,028	695	86	1	0	19,809
<i>Education</i>	238	1	0	0	0	239
<i>Government</i>	181	4	0	0	0	185
<i>Agriculture</i>	1,802	11	2	0	0	1,815
<i>Commercial</i>	8,965	250	31	1	0	9,246
<i>Religion</i>	564	14	2	0	0	580
Napa						
<i>Commercial</i>	2,754	930	283	50	4	4,021
<i>Agriculture</i>	271	57	19	2	0	349
<i>Religion</i>	101	33	12	2	0	148
<i>Single Family</i>	29,272	9,098	391	0	0	38,761
<i>Other Residential</i>	4,437	1,835	639	62	3	6,978
<i>Government</i>	68	24	9	1	0	103
<i>Education</i>	106	18	5	2	0	132
<i>Industrial</i>	927	320	107	12	1	1,367
Nevada						
<i>Commercial</i>	2,835	0	0	0	0	2,835
<i>Religion</i>	189	0	0	0	0	189
<i>Government</i>	60	0	0	0	0	60
<i>Agriculture</i>	132	0	0	0	0	132
<i>Single Family</i>	43,280	0	0	0	0	43,280

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
Placer						
Other Residential	6,384	0	0	0	0	6,384
Education	108	0	0	0	0	108
Industrial	1,161	0	0	0	0	1,161
Education	231	0	0	0	0	231
Commercial	8,536	2	0	0	0	8,538
Government	377	0	0	0	0	377
Agriculture	258	0	0	0	0	258
Religion	382	0	0	0	0	382
Industrial	2,702	1	0	0	0	2,703
Other Residential	14,838	5	0	0	0	14,843
Single Family	134,708	11	0	0	0	134,719
Sacramento						
Single Family	386,147	689	3	0	0	386,840
Industrial	6,723	30	3	0	0	6,756
Other Residential	56,097	286	29	0	0	56,413
Education	828	1	0	0	0	829
Agriculture	617	3	1	0	0	621
Religion	1,688	13	1	0	0	1,702
Government	608	10	1	0	0	619
Commercial	26,105	167	21	1	0	26,295
San Benito						
Other Residential	1,274	91	9	0	0	1,375
Single Family	14,259	466	1	0	0	14,726
Industrial	306	17	3	0	0	326

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Education</i>	41	1	0	0	0	42
<i>Government</i>	41	3	1	0	0	45
<i>Commercial</i>	1,005	64	11	0	0	1,080
<i>Religion</i>	59	5	1	0	0	64
<i>Agriculture</i>	246	6	1	0	0	253
San Francisco						
<i>Single Family</i>	112,961	31,418	5,384	882	57	150,703
<i>Other Residential</i>	25,460	12,146	5,783	1,080	60	44,529
<i>Government</i>	105	89	77	17	1	289
<i>Education</i>	400	92	61	18	1	572
<i>Industrial</i>	1,945	1,027	703	172	13	3,860
<i>Commercial</i>	9,767	6,062	4,395	1,048	72	21,344
<i>Religion</i>	712	369	221	40	2	1,345
<i>Agriculture</i>	90	41	26	4	0	162
San Joaquin						
<i>Commercial</i>	12,387	431	46	1	0	12,864
<i>Agriculture</i>	723	27	3	0	0	753
<i>Religion</i>	844	30	3	0	0	877
<i>Government</i>	291	11	2	0	0	304
<i>Single Family</i>	181,567	6,814	527	14	0	188,922
<i>Other Residential</i>	20,761	933	109	2	0	21,805
<i>Education</i>	390	5	0	0	0	395
<i>Industrial</i>	4,715	191	22	0	0	4,928
San Luis Obispo						
<i>Religion</i>	360	0	0	0	0	360

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Agriculture</i>	421	0	0	0	0	421
<i>Government</i>	185	0	0	0	0	185
<i>Commercial</i>	9,375	0	0	0	0	9,375
<i>Single Family</i>	85,639	0	0	0	0	85,639
<i>Industrial</i>	2,556	0	0	0	0	2,556
<i>Other Residential</i>	20,216	0	0	0	0	20,216
<i>Education</i>	182	0	0	0	0	182
San Mateo						
<i>Religion</i>	534	155	45	3	0	736
<i>Agriculture</i>	421	84	29	5	0	539
<i>Government</i>	216	64	18	1	0	299
<i>Commercial</i>	10,516	3,008	809	60	2	14,395
<i>Industrial</i>	3,121	999	324	26	1	4,472
<i>Other Residential</i>	16,722	4,746	873	106	5	22,453
<i>Single Family</i>	133,692	25,309	928	2	0	159,931
<i>Education</i>	434	45	9	1	0	489
Santa Clara						
<i>Other Residential</i>	25,381	22,342	7,350	3,405	681	59,160
<i>Single Family</i>	221,818	179,692	25,310	353	47	427,219
<i>Government</i>	215	160	96	23	9	502
<i>Education</i>	799	278	81	12	4	1,173
<i>Industrial</i>	3,581	3,383	1,932	433	104	9,433
<i>Commercial</i>	15,642	12,279	6,002	1,216	330	35,469
<i>Religion</i>	674	508	279	61	17	1,540
<i>Agriculture</i>	406	284	149	42	13	895

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
Santa Cruz						
<i>Religion</i>	314	37	8	1	0	359
<i>Agriculture</i>	699	107	31	3	0	840
<i>Single Family</i>	64,002	4,819	48	0	0	68,870
<i>Other Residential</i>	12,856	1,742	283	10	0	14,892
<i>Industrial</i>	1,552	211	52	4	0	1,819
<i>Education</i>	212	10	2	0	0	225
<i>Commercial</i>	5,861	689	137	7	0	6,694
<i>Government</i>	111	12	4	0	0	127
Solano						
<i>Religion</i>	314	90	37	11	2	454
<i>Agriculture</i>	206	28	8	2	1	245
<i>Government</i>	122	23	6	0	0	152
<i>Commercial</i>	5,459	1,237	431	122	19	7,268
<i>Single Family</i>	99,479	20,670	816	2	0	120,968
<i>Industrial</i>	1,520	397	144	33	7	2,101
<i>Other Residential</i>	8,631	2,671	782	213	20	12,317
<i>Education</i>	202	18	4	1	0	225
Sonoma						
<i>Other Residential</i>	19,263	4,285	1,231	220	35	25,033
<i>Government</i>	262	34	14	5	4	319
<i>Education</i>	329	30	6	2	1	367
<i>Religion</i>	460	84	26	5	1	576
<i>Commercial</i>	9,393	1,909	640	130	38	12,110
<i>Agriculture</i>	927	236	102	25	13	1,304

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Single Family</i>	120,115	20,857	1,053	3	0	142,028
<i>Industrial</i>	2,891	626	243	48	18	3,825
Stanislaus						
<i>Other Residential</i>	18,942	566	61	1	0	19,569
<i>Single Family</i>	140,472	2,245	6	0	0	142,724
<i>Education</i>	305	2	0	0	0	307
<i>Government</i>	659	19	2	0	0	680
<i>Industrial</i>	3,326	130	18	1	0	3,475
<i>Commercial</i>	10,013	318	37	1	0	10,369
<i>Religion</i>	439	15	2	0	0	456
<i>Agriculture</i>	1,185	45	8	0	0	1,239
Sutter						
<i>Other Residential</i>	3,098	14	1	0	0	3,113
<i>Industrial</i>	634	2	0	0	0	636
<i>Education</i>	62	0	0	0	0	62
<i>Government</i>	77	0	0	0	0	77
<i>Single Family</i>	24,497	15	0	0	0	24,512
<i>Commercial</i>	2,047	4	0	0	0	2,052
<i>Agriculture</i>	1,119	6	1	0	0	1,125
<i>Religion</i>	154	0	0	0	0	154
Tehama						
<i>Religion</i>	110	0	0	0	0	110
<i>Agriculture</i>	299	0	0	0	0	299
<i>Industrial</i>	552	0	0	0	0	552
<i>Other Residential</i>	3,991	0	0	0	0	3,991

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Single Family</i>	21,222	0	0	0	0	21,222
<i>Education</i>	57	0	0	0	0	57
<i>Commercial</i>	1,270	0	0	0	0	1,270
<i>Government</i>	50	0	0	0	0	50
Tulare						
<i>Commercial</i>	8,873	0	0	0	0	8,873
<i>Agriculture</i>	3,555	0	0	0	0	3,555
<i>Religion</i>	827	0	0	0	0	827
<i>Government</i>	461	0	0	0	0	461
<i>Single Family</i>	112,034	0	0	0	0	112,034
<i>Other Residential</i>	20,022	0	0	0	0	20,022
<i>Industrial</i>	2,148	0	0	0	0	2,148
<i>Education</i>	269	0	0	0	0	269
Tuolumne						
<i>Education</i>	57	0	0	0	0	57
<i>Government</i>	143	0	0	0	0	143
<i>Commercial</i>	1,576	0	0	0	0	1,576
<i>Religion</i>	121	0	0	0	0	121
<i>Agriculture</i>	82	0	0	0	0	82
<i>Industrial</i>	383	0	0	0	0	383
<i>Other Residential</i>	4,962	0	0	0	0	4,962
<i>Single Family</i>	21,645	0	0	0	0	21,645
Yolo						
<i>Industrial</i>	1,093	22	2	0	0	1,117
<i>Other Residential</i>	9,707	146	8	0	0	9,861

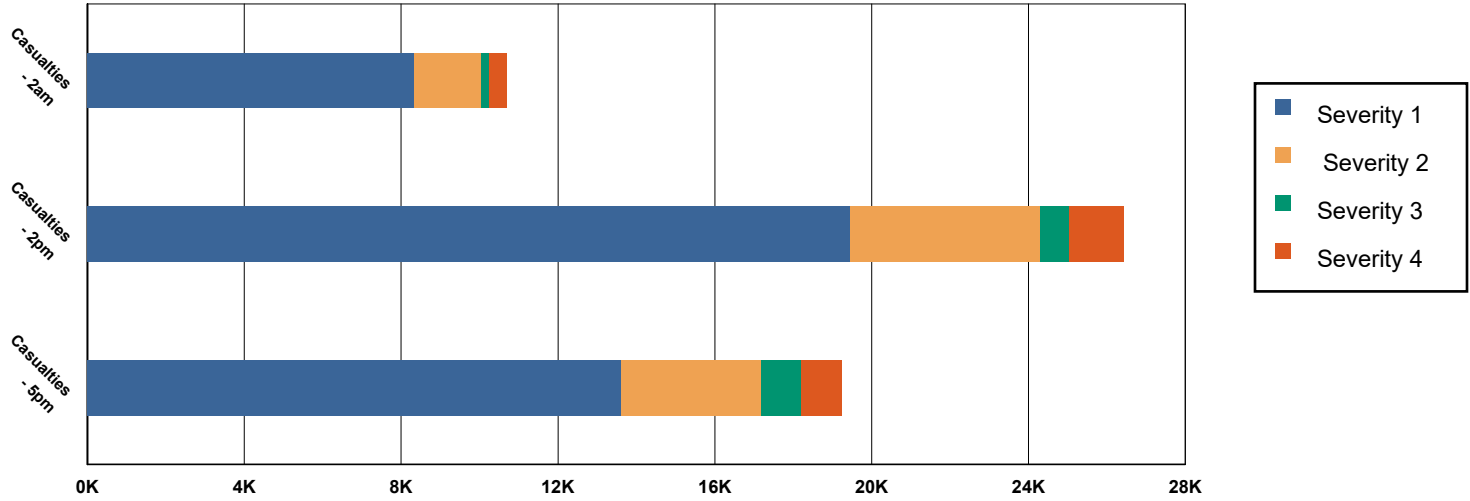
		# of Buildings					
		None	Slight	Moderate	Extensive	Complete	Total
Yuba	<i>Education</i>	130	1	0	0	0	131
	<i>Government</i>	109	2	0	0	0	111
	<i>Single Family</i>	42,180	409	0	0	0	42,589
	<i>Commercial</i>	4,141	77	7	0	0	4,225
	<i>Agriculture</i>	275	5	1	0	0	281
	<i>Religion</i>	238	4	0	0	0	242
	<i>Government</i>	591	0	0	0	0	591
	<i>Education</i>	54	0	0	0	0	54
	<i>Other Residential</i>	7,015	6	0	0	0	7,021
	<i>Religion</i>	98	0	0	0	0	98
	<i>Commercial</i>	1,198	1	0	0	0	1,199
	<i>Agriculture</i>	92	0	0	0	0	92
	<i>Single Family</i>	18,865	2	0	0	0	18,867
	<i>Industrial</i>	404	0	0	0	0	404
Total	3,837,789	767,939	188,023	25,869	11,721	4,831,342	
Region Total	3,837,789	767,939	188,023	25,869	11,721	4,831,342	

Totals only reflect data for those census tracts/blocks included in the user's study region and will reflect the entire county/state only if all of the census blocks for that county/states were selected at the time of study region creation.

Casualties Summary Report

May 01, 2024

Region Total Casualties



Injury Severity Level

Severity 1	Severity 2	Severity 3	Severity 4	Total
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California

Alameda

Casualties - 2am

	Severity 1	Severity 2	Severity 3	Severity 4	Total
Single Family	804	71	2	5	882
Hotels	2	1	0	0	3
Commuting	1	1	1	0	3
Educational	0	0	0	0	0
Industrial	105	29	5	9	148
Commercial	135	38	6	12	191
Other-Residential	4,204	1,153	174	342	5,873
Total Casualties - 2am	5,250	1,293	188	368	7,100

Casualties - 2pm

Industrial	774	216	34	67	1,091
Educational	1,923	506	76	147	2,651
Other-Residential	1,442	405	64	119	2,030
Single Family	232	22	1	2	257
Hotels	0	0	0	0	1
Commuting	6	8	13	2	29
Commercial	9,375	2,653	417	815	13,260

Injury Severity Level

	Severity 1	Severity 2	Severity 3	Severity 4	Total
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California

Alameda

	Severity 1	Severity 2	Severity 3	Severity 4	Total
Total Casualties - 2pm	13,753	3,809	604	1,152	19,319
Casualties - 5pm					
<i>Commuting</i>	111	147	249	48	555
<i>Single Family</i>	302	28	1	2	332
<i>Commercial</i>	6,681	1,884	298	573	9,435
<i>Hotels</i>	1	0	0	0	1
<i>Educational</i>	245	53	7	14	319
<i>Industrial</i>	484	135	21	42	682
<i>Other-Residential</i>	1,661	463	72	136	2,333
Total Casualties - 5pm	9,484	2,711	649	814	13,658

Amador

	Severity 1	Severity 2	Severity 3	Severity 4	Total
Casualties - 2am					
<i>Commercial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0

	Severity 1	Severity 2	Severity 3	Severity 4	Total
Casualties - 2pm					
<i>Single Family</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0

	Severity 1	Severity 2	Severity 3	Severity 4	Total
Casualties - 5pm					
<i>Commercial</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0

Butte

	Severity 1	Severity 2	Severity 3	Severity 4	Total
Casualties - 2am					
<i>Industrial</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Butte					
Casualties - 2am					
Commercial	0	0	0	0	0
Other-Residential	0	0	0	0	0
Single Family	0	0	0	0	0
Commuting	0	0	0	0	0
Educational	0	0	0	0	0
Hotels	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
Single Family	0	0	0	0	0
Educational	0	0	0	0	0
Commuting	0	0	0	0	0
Other-Residential	0	0	0	0	0
Hotels	0	0	0	0	0
Commercial	0	0	0	0	0
Industrial	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
Industrial	0	0	0	0	0
Other-Residential	0	0	0	0	0
Single Family	0	0	0	0	0
Commercial	0	0	0	0	0
Commuting	0	0	0	0	0
Hotels	0	0	0	0	0
Educational	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Calaveras					
Casualties - 2am					
Other-Residential	0	0	0	0	0
Commuting	0	0	0	0	0
Commercial	0	0	0	0	0
Single Family	0	0	0	0	0
Hotels	0	0	0	0	0
Educational	0	0	0	0	0
Industrial	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
Hotels	0	0	0	0	0
Single Family	0	0	0	0	0
Educational	0	0	0	0	0
Commuting	0	0	0	0	0
Commercial	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Calaveras					
Casualties - 2pm					
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Industrial</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Colusa					
Casualties - 2am					
<i>Other-Residential</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Hotels</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Industrial</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0

Injury Severity Level

Severity 1	Severity 2	Severity 3	Severity 4	Total
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California

Contra Costa

Casualties - 2am

<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	10	2	0	1	14
<i>Other-Residential</i>	296	62	8	16	382
<i>Single Family</i>	286	18	0	0	304
<i>Commercial</i>	14	3	0	1	19
<i>Commuting</i>	0	0	0	0	1
Total Casualties - 2am	607	86	9	18	720

Casualties - 2pm

<i>Other-Residential</i>	94	20	3	5	121
<i>Industrial</i>	77	17	2	5	101
<i>Hotels</i>	0	0	0	0	0
<i>Single Family</i>	86	6	0	0	92
<i>Educational</i>	249	54	7	14	324
<i>Commuting</i>	2	3	4	1	10
<i>Commercial</i>	1,066	258	38	73	1,435
Total Casualties - 2pm	1,573	358	54	98	2,083

Casualties - 5pm

<i>Educational</i>	38	8	1	2	49
<i>Commuting</i>	37	53	86	17	193
<i>Single Family</i>	106	7	0	0	113
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	48	11	2	3	63
<i>Other-Residential</i>	113	24	3	6	147
<i>Commercial</i>	799	195	29	55	1,078
Total Casualties - 5pm	1,142	298	120	83	1,643

El Dorado

Casualties - 2am

<i>Commuting</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0

Casualties - 2pm

<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
El Dorado					
Casualties - 2pm					
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Commercial</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Fresno					
Casualties - 2am					
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Commercial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Fresno					
Total Casualties - 5pm	0	0	0	0	0
Glenn					
Casualties - 2am					
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Kings					
Casualties - 2am					
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Single Family</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Kings					
Casualties - 2pm					
<i>Other-Residential</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Single Family</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Lake					
Casualties - 2am					
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Industrial</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Other-Residential</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Lake					
Casualties - 5pm					
Single Family	0	0	0	0	0
Hotels	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Madera					
Casualties - 2am					
Hotels	0	0	0	0	0
Educational	0	0	0	0	0
Single Family	0	0	0	0	0
Commuting	0	0	0	0	0
Industrial	0	0	0	0	0
Commercial	0	0	0	0	0
Other-Residential	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
Industrial	0	0	0	0	0
Commercial	0	0	0	0	0
Other-Residential	0	0	0	0	0
Commuting	0	0	0	0	0
Single Family	0	0	0	0	0
Hotels	0	0	0	0	0
Educational	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
Industrial	0	0	0	0	0
Commercial	0	0	0	0	0
Single Family	0	0	0	0	0
Educational	0	0	0	0	0
Other-Residential	0	0	0	0	0
Commuting	0	0	0	0	0
Hotels	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Marin					
Casualties - 2am					
Commercial	1	0	0	0	1
Commuting	0	0	0	0	0
Other-Residential	22	2	0	0	25
Educational	0	0	0	0	0
Single Family	33	1	0	0	34
Hotels	0	0	0	0	0
Industrial	1	0	0	0	2

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Marin					
Total Casualties - 2am	58	3	0	0	62
Casualties - 2pm					
<i>Hotels</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	1
<i>Educational</i>	8	1	0	0	9
<i>Industrial</i>	10	1	0	0	11
<i>Other-Residential</i>	7	1	0	0	8
<i>Commercial</i>	65	8	1	1	75
<i>Single Family</i>	10	0	0	0	11
Total Casualties - 2pm	101	11	1	2	115
Casualties - 5pm					
<i>Commuting</i>	3	5	8	1	17
<i>Commercial</i>	41	5	0	1	47
<i>Other-Residential</i>	8	1	0	0	9
<i>Single Family</i>	12	0	0	0	12
<i>Industrial</i>	6	1	0	0	7
<i>Educational</i>	1	0	0	0	1
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 5pm	71	12	8	2	94
Mariposa					
Casualties - 2am					
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Other-Residential</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Mariposa					
Casualties - 5pm					
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Mendocino					
Casualties - 2am					
<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Hotels</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Merced					
Casualties - 2am					
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Single Family</i>	1	0	0	0	1
<i>Other-Residential</i>	1	0	0	0	1

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Merced					
Casualties - 2am					
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
Total Casualties - 2am	1	0	0	0	1
Casualties - 2pm					
<i>Other-Residential</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Commercial</i>	5	0	0	0	5
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 2pm	6	0	0	0	6
Casualties - 5pm					
<i>Industrial</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commercial</i>	4	0	0	0	4
<i>Other-Residential</i>	0	0	0	0	0
Total Casualties - 5pm	5	0	0	0	5
Monterey					
Casualties - 2am					
<i>Other-Residential</i>	3	0	0	0	3
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Single Family</i>	2	0	0	0	2
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 2am	5	0	0	0	5
Casualties - 2pm					
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	3	0	0	0	3
<i>Single Family</i>	1	0	0	0	1
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	1	0	0	0	1
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	1	0	0	0	1
Total Casualties - 2pm	5	0	0	0	5

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Monterey					
Casualties - 5pm					
<i>Commercial</i>	2	0	0	0	2
<i>Other-Residential</i>	1	0	0	0	1
<i>Industrial</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	1	0	0	0	1
Total Casualties - 5pm	4	0	0	0	4
Napa					
Casualties - 2am					
<i>Commercial</i>	1	0	0	0	1
<i>Other-Residential</i>	14	1	0	0	16
<i>Educational</i>	0	0	0	0	0
<i>Single Family</i>	15	0	0	0	15
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	1	0	0	0	1
Total Casualties - 2am	30	2	0	0	32
Casualties - 2pm					
<i>Educational</i>	9	1	0	0	10
<i>Hotels</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Industrial</i>	4	1	0	0	5
<i>Other-Residential</i>	4	0	0	0	4
<i>Single Family</i>	4	0	0	0	4
<i>Commercial</i>	33	4	0	1	38
Total Casualties - 2pm	54	6	1	1	62
Casualties - 5pm					
<i>Commercial</i>	21	3	0	0	24
<i>Single Family</i>	5	0	0	0	5
<i>Other-Residential</i>	5	1	0	0	6
<i>Commuting</i>	1	1	2	0	5
<i>Industrial</i>	3	0	0	0	3
<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 5pm	35	5	2	1	43
Nevada					
Casualties - 2am					
<i>Single Family</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Nevada					
Casualties - 2am					
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Placer					
Casualties - 2am					
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Other-Residential</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Placer					
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
Single Family	0	0	0	0	0
Hotels	0	0	0	0	0
Commuting	0	0	0	0	0
Educational	0	0	0	0	0
Commercial	0	0	0	0	0
Industrial	0	0	0	0	0
Other-Residential	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Sacramento					
Casualties - 2am					
Industrial	0	0	0	0	0
Other-Residential	1	0	0	0	1
Commercial	0	0	0	0	0
Single Family	1	0	0	0	1
Hotels	0	0	0	0	0
Commuting	0	0	0	0	0
Educational	0	0	0	0	0
Total Casualties - 2am	2	0	0	0	2
Casualties - 2pm					
Other-Residential	0	0	0	0	0
Commuting	0	0	0	0	0
Single Family	0	0	0	0	0
Commercial	5	0	0	0	5
Hotels	0	0	0	0	0
Educational	0	0	0	0	0
Industrial	0	0	0	0	0
Total Casualties - 2pm	6	0	0	0	6
Casualties - 5pm					
Industrial	0	0	0	0	0
Educational	0	0	0	0	0
Hotels	0	0	0	0	0
Commercial	3	0	0	0	3
Commuting	0	0	0	0	0
Other-Residential	0	0	0	0	0
Single Family	0	0	0	0	0
Total Casualties - 5pm	4	0	0	0	4
San Benito					
Casualties - 2am					
Other-Residential	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
San Benito					
Casualties - 2am					
<i>Commercial</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Single Family</i>	1	0	0	0	1
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 2am	1	0	0	0	1
Casualties - 2pm					
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	1	0	0	0	1
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Commercial</i>	1	0	0	0	1
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 2pm	2	0	0	0	2
Casualties - 5pm					
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	1	0	0	0	1
<i>Other-Residential</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 5pm	1	0	0	0	1
San Francisco					
Casualties - 2am					
<i>Industrial</i>	8	1	0	0	10
<i>Hotels</i>	3	0	0	0	4
<i>Commercial</i>	18	3	0	0	21
<i>Other-Residential</i>	607	81	6	11	705
<i>Commuting</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Single Family</i>	128	13	1	2	144
Total Casualties - 2am	765	99	7	13	884
Casualties - 2pm					
<i>Commercial</i>	953	141	11	21	1,125
<i>Industrial</i>	60	9	1	2	71
<i>Other-Residential</i>	199	27	2	4	232
<i>Single Family</i>	40	4	0	1	45
<i>Hotels</i>	1	0	0	0	1

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
San Francisco					
Casualties - 2pm					
<i>Commuting</i>	0	0	0	0	0
<i>Educational</i>	104	12	1	1	118
Total Casualties - 2pm	1,356	193	15	28	1,592
Casualties - 5pm					
<i>Educational</i>	37	4	0	0	41
<i>Hotels</i>	1	0	0	0	1
<i>Industrial</i>	37	6	1	1	45
<i>Commuting</i>	1	1	3	1	6
<i>Commercial</i>	550	81	6	12	649
<i>Other-Residential</i>	241	33	3	4	281
<i>Single Family</i>	50	5	0	1	56
Total Casualties - 5pm	917	130	13	19	1,079
San Joaquin					
Casualties - 2am					
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Single Family</i>	17	1	0	0	17
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	4	0	0	0	4
Total Casualties - 2am	21	1	0	0	22
Casualties - 2pm					
<i>Industrial</i>	2	0	0	0	2
<i>Other-Residential</i>	1	0	0	0	1
<i>Educational</i>	1	0	0	0	1
<i>Single Family</i>	5	0	0	0	6
<i>Hotels</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	7	0	0	0	7
Total Casualties - 2pm	17	1	0	0	18
Casualties - 5pm					
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	6	0	0	0	7
<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	1	0	0	0	1
<i>Commercial</i>	5	0	0	0	5
<i>Other-Residential</i>	2	0	0	0	2
Total Casualties - 5pm	14	1	0	0	15

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
San Luis Obispo					
Casualties - 2am					
Commercial	0	0	0	0	0
Other-Residential	0	0	0	0	0
Industrial	0	0	0	0	0
Single Family	0	0	0	0	0
Commuting	0	0	0	0	0
Educational	0	0	0	0	0
Hotels	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
Single Family	0	0	0	0	0
Educational	0	0	0	0	0
Other-Residential	0	0	0	0	0
Hotels	0	0	0	0	0
Commuting	0	0	0	0	0
Commercial	0	0	0	0	0
Industrial	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
Industrial	0	0	0	0	0
Other-Residential	0	0	0	0	0
Commuting	0	0	0	0	0
Single Family	0	0	0	0	0
Commercial	0	0	0	0	0
Hotels	0	0	0	0	0
Educational	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
San Mateo					
Casualties - 2am					
Industrial	2	0	0	0	2
Other-Residential	51	4	0	0	55
Single Family	48	1	0	0	49
Commercial	2	0	0	0	2
Educational	0	0	0	0	0
Commuting	0	0	0	0	0
Hotels	0	0	0	0	0
Total Casualties - 2am	102	5	0	0	108
Casualties - 2pm					
Other-Residential	15	1	0	0	16
Single Family	13	0	0	0	13
Commuting	0	0	0	0	1
Commercial	94	8	0	0	102

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
San Mateo					
Casualties - 2pm					
<i>Educational</i>	14	1	0	0	15
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	13	1	0	0	14
Total Casualties - 2pm	149	11	1	1	162
Casualties - 5pm					
<i>Commercial</i>	62	5	0	0	67
<i>Industrial</i>	8	1	0	0	9
<i>Other-Residential</i>	19	1	0	0	21
<i>Single Family</i>	17	0	0	0	17
<i>Educational</i>	1	0	0	0	1
<i>Commuting</i>	4	5	8	2	18
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 5pm	111	12	8	2	134
Santa Clara					
Casualties - 2am					
<i>Commuting</i>	0	0	1	0	2
<i>Educational</i>	0	0	0	0	0
<i>Single Family</i>	526	33	1	2	562
<i>Hotels</i>	1	0	0	0	1
<i>Industrial</i>	31	6	1	1	38
<i>Commercial</i>	19	4	1	1	24
<i>Other-Residential</i>	747	146	17	34	944
Total Casualties - 2am	1,323	189	20	38	1,571
Casualties - 2pm					
<i>Industrial</i>	225	41	5	9	281
<i>Commercial</i>	1,266	266	35	68	1,635
<i>Single Family</i>	141	9	0	1	152
<i>Commuting</i>	3	4	7	1	16
<i>Hotels</i>	0	0	0	0	0
<i>Other-Residential</i>	236	49	6	12	302
<i>Educational</i>	258	38	4	7	307
Total Casualties - 2pm	2,130	407	57	98	2,693
Casualties - 5pm					
<i>Industrial</i>	141	26	3	6	175
<i>Hotels</i>	0	0	0	0	0
<i>Other-Residential</i>	284	57	7	13	361
<i>Commercial</i>	906	190	25	48	1,168
<i>Commuting</i>	66	85	147	28	326
<i>Single Family</i>	194	13	0	1	208
<i>Educational</i>	30	3	0	0	33

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Santa Clara					
Total Casualties - 5pm	1,620	373	182	96	2,271
Santa Cruz					
Casualties - 2am					
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	7	0	0	0	8
<i>Single Family</i>	7	0	0	0	7
<i>Commercial</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
Total Casualties - 2am	15	0	0	0	15
Casualties - 2pm					
<i>Industrial</i>	2	0	0	0	2
<i>Other-Residential</i>	2	0	0	0	2
<i>Commercial</i>	13	1	0	0	13
<i>Commuting</i>	0	0	0	0	0
<i>Educational</i>	3	0	0	0	4
<i>Single Family</i>	2	0	0	0	2
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 2pm	22	1	0	0	23
Casualties - 5pm					
<i>Industrial</i>	1	0	0	0	1
<i>Other-Residential</i>	3	0	0	0	3
<i>Commercial</i>	9	1	0	0	9
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	2	0	0	0	2
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
Total Casualties - 5pm	15	1	0	0	17
Solano					
Casualties - 2am					
<i>Industrial</i>	1	0	0	0	1
<i>Other-Residential</i>	39	6	1	1	47
<i>Commercial</i>	1	0	0	0	1
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	34	1	0	0	34
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 2am	74	7	1	2	84
Casualties - 2pm					
<i>Single Family</i>	9	0	0	0	10

Injury Severity Level

Severity 1 Severity 2 Severity 3 Severity 4 Total

California

Solano

Casualties - 2pm

<i>Other-Residential</i>	13	2	0	1	16
<i>Commercial</i>	62	11	1	2	76
<i>Educational</i>	14	2	0	1	17
<i>Commuting</i>	0	0	0	0	1
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	8	1	0	0	10
Total Casualties - 2pm	107	17	2	4	130

Casualties - 5pm

<i>Commercial</i>	47	8	1	2	57
<i>Other-Residential</i>	15	2	0	1	18
<i>Single Family</i>	12	0	0	0	12
<i>Educational</i>	2	0	0	0	2
<i>Commuting</i>	2	3	5	1	12
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	5	1	0	0	6
Total Casualties - 5pm	83	15	7	4	108

Sonoma

Casualties - 2am

<i>Single Family</i>	32	1	0	0	33
<i>Other-Residential</i>	38	5	0	1	44
<i>Commercial</i>	2	0	0	0	2
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Industrial</i>	3	1	0	0	4
Total Casualties - 2am	74	7	1	1	83

Casualties - 2pm

<i>Single Family</i>	9	0	0	0	10
<i>Commuting</i>	0	0	0	0	1
<i>Educational</i>	20	3	0	1	24
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	22	5	1	1	30
<i>Other-Residential</i>	12	2	0	0	14
<i>Commercial</i>	97	20	3	5	124
Total Casualties - 2pm	160	30	4	8	202

Casualties - 5pm

<i>Single Family</i>	11	0	0	0	12
<i>Commercial</i>	63	12	2	3	80
<i>Commuting</i>	2	3	5	1	12
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	2	0	0	0	3

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Sonoma					
Casualties - 5pm					
<i>Industrial</i>	14	3	0	1	19
<i>Other-Residential</i>	14	2	0	0	16
Total Casualties - 5pm	107	21	8	5	142
Stanislaus					
Casualties - 2am					
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Single Family</i>	3	0	0	0	3
<i>Other-Residential</i>	2	0	0	0	3
<i>Commuting</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
Total Casualties - 2am	6	0	0	0	6
Casualties - 2pm					
<i>Industrial</i>	1	0	0	0	1
<i>Other-Residential</i>	1	0	0	0	1
<i>Commercial</i>	5	0	0	0	5
<i>Commuting</i>	0	0	0	0	0
<i>Educational</i>	1	0	0	0	1
<i>Single Family</i>	1	0	0	0	1
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 2pm	8	0	0	0	8
Casualties - 5pm					
<i>Industrial</i>	1	0	0	0	1
<i>Other-Residential</i>	1	0	0	0	1
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	1	0	0	0	1
<i>Commercial</i>	3	0	0	0	3
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
Total Casualties - 5pm	6	0	0	0	6
Sutter					
Casualties - 2am					
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Sutter					
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
Industrial	0	0	0	0	0
Commuting	0	0	0	0	0
Other-Residential	0	0	0	0	0
Single Family	0	0	0	0	0
Commercial	0	0	0	0	0
Hotels	0	0	0	0	0
Educational	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
Commuting	0	0	0	0	0
Commercial	0	0	0	0	0
Educational	0	0	0	0	0
Single Family	0	0	0	0	0
Hotels	0	0	0	0	0
Industrial	0	0	0	0	0
Other-Residential	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Tehama					
Casualties - 2am					
Hotels	0	0	0	0	0
Industrial	0	0	0	0	0
Commercial	0	0	0	0	0
Other-Residential	0	0	0	0	0
Educational	0	0	0	0	0
Commuting	0	0	0	0	0
Single Family	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
Other-Residential	0	0	0	0	0
Commercial	0	0	0	0	0
Industrial	0	0	0	0	0
Single Family	0	0	0	0	0
Educational	0	0	0	0	0
Commuting	0	0	0	0	0
Hotels	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
Hotels	0	0	0	0	0
Educational	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Tehama					
Casualties - 5pm					
<i>Industrial</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Tulare					
Casualties - 2am					
<i>Commercial</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Industrial</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Other-Residential</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Tuolumne					
Casualties - 2am					
<i>Other-Residential</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Tuolumne					
Casualties - 2am					
<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Other-Residential</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Yolo					
Casualties - 2am					
<i>Single Family</i>	1	0	0	0	1
<i>Other-Residential</i>	1	0	0	0	1
<i>Commercial</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 2am	1	0	0	0	1
Casualties - 2pm					
<i>Industrial</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	1	0	0	0	1
<i>Other-Residential</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 2pm	2	0	0	0	2

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Yolo					
Casualties - 5pm					
<i>Other-Residential</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	1	0	0	0	1
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 5pm	1	0	0	0	1
Yuba					
Casualties - 2am					
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Commercial</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Hotels</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Region Total	NA	NA	NA	NA	NA

Injury Severity Level

Severity 1

Severity 2

Severity 3

Severity 4

Total

Totals only reflect data for those census tracts/blocks included in the user's study region and will reflect the entire county/state only if all of the census blocks for that county/states were selected at the time of study region creation.

Debris Summary Report

May 01, 2024

All values are in thousands of tons.

	Brick, Wood & Others	Concrete & Steel	Total
California			
Alameda	2,362	6,138	8,499
Amador	0	0	0
Butte	0	0	0
Calaveras	0	0	0
Colusa	0	0	0
Contra Costa	368	790	1,159
El Dorado	0	0	0
Fresno	0	0	0
Glenn	0	0	0
Kings	0	0	0
Lake	0	0	0
Madera	0	0	0
Marin	54	66	120
Mariposa	0	0	0
Mendocino	0	0	0
Merced	3	4	7
Monterey	5	4	8
Napa	29	46	74
Nevada	0	0	0

	Brick, Wood & Others	Concrete & Steel	Total
Placer	0	0	0
Sacramento	3	2	5
San Benito	1	1	2
San Francisco	783	669	1,452
San Joaquin	28	11	40
San Luis Obispo	0	0	0
San Mateo	73	98	171
Santa Clara	756	1,293	2,049
Santa Cruz	16	17	33
Solano	59	89	148
Sonoma	79	172	251
Stanislaus	8	7	15
Sutter	0	0	0
Tehama	0	0	0
Tulare	0	0	0
Tuolumne	0	0	0
Yolo	2	1	3
Yuba	0	0	0
Total	4,630	9,408	14,038
Region Total	4,630	9,408	14,038

Totals only reflect data for those census tracts/blocks included in the user's study region and will reflect the entire county/state only if all of the census blocks for that county/states were selected at the time of study region creation.

Direct Economic Losses For Buildings

May 1, 2024

All values are in thousands of dollars

	Capital Stock Losses				Loss Ratio %	Income Losses				Total Loss
	Cost Structural Damage	Cost Non-struct. Damage	Cost Contents Damage	Inventory Loss		Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	
California										
Contra Costa	1,041,543	5,401,230	2,345,090	169,470	2.95	444,568	204,755	284,807	229,495	10,120,958
Mendocino	2	210	133	17	0.00	0	0	0	0	363
Napa	69,040	401,431	194,989	18,549	1.40	23,845	16,395	20,865	16,405	761,518
Colusa	64	703	410	77	0.02	11	20	22	18	1,325
Tehama	0	5	4	1	0.00	0	0	0	0	10
Alameda	5,629,916	24,642,934	10,003,521	696,672	9.10	2,594,026	1,399,254	1,964,237	1,484,733	48,415,293
Nevada	0	2	1	0	0.00	0	0	0	0	3
San Joaquin	32,880	253,761	138,858	16,954	0.21	7,725	3,550	4,364	5,210	463,301
Tuolumne	0	32	22	2	0.00	0	0	0	0	56

	Capital Stock Losses				Loss Ratio %	Income Losses				Total Loss
	Cost Structural Damage	Cost Non-struct. Damage	Cost Contents Damage	Inventory Loss		Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	
Tulare	0	0	0	0	0.00	0	0	0	0	0
Madera	82	1,091	657	142	0.00	7	4	5	12	1,999
Butte	25	399	283	46	0.00	3	2	3	4	766
Fresno	113	3,251	2,154	373	0.00	12	18	19	26	5,966
Kings	0	20	12	2	0.00	0	0	0	0	34
San Luis Obispo	0	1	0	0	0.00	0	0	0	0	1
Solano	121,999	698,580	319,268	26,751	1.00	42,215	30,631	38,877	28,858	1,307,178
San Mateo	204,080	1,380,732	656,683	45,107	1.02	57,978	41,552	50,701	51,166	2,488,000
Yolo	2,813	43,050	26,436	2,831	0.11	414	515	623	576	77,257
Glenn	17	216	152	46	0.00	1	2	2	2	437
San Benito	2,788	22,925	11,311	1,200	0.19	545	420	490	395	40,074
San Francisco	1,021,885	2,449,994	1,030,566	55,270	2.24	470,030	298,147	357,923	415,885	6,099,701
Stanislaus	14,402	132,529	74,014	10,346	0.15	2,823	1,616	1,906	2,568	240,205
Sutter	158	1,943	1,079	243	0.01	16	11	13	19	3,482
Santa Clara	1,984,438	10,361,363	4,703,601	336,481	3.24	733,295	479,517	559,784	442,020	19,600,499
Sonoma	199,672	993,288	475,509	58,048	1.14	61,935	54,334	62,234	39,321	1,944,342
Calaveras	6	129	96	30	0.00	0	2	1	1	266
Yuba	22	511	299	40	0.00	2	5	5	6	889

	Capital Stock Losses				Loss Ratio %	Income Losses				Total Loss
	Cost Structural Damage	Cost Non-struct. Damage	Cost Contents Damage	Inventory Loss		Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	
Merced	10,618	36,303	22,753	9,345	0.09	1,368	510	455	474	81,827
Placer	57	1,926	1,139	110	0.00	3	6	6	9	3,256
Marin	140,249	906,018	431,393	21,317	1.67	43,456	36,012	40,595	30,533	1,649,574
El Dorado	0	59	43	3	0.00	0	0	0	0	105
Lake	106	1,585	733	60	0.01	15	13	12	20	2,544
Santa Cruz	34,099	215,919	107,566	14,770	0.45	8,502	7,754	9,457	6,683	404,750
Mariposa	0	7	5	0	0.00	0	0	0	0	12
Amador	0	50	35	4	0.00	0	0	0	0	90
Sacramento	4,738	53,742	27,935	2,554	0.02	1,045	1,325	1,637	1,433	94,409
Monterey	7,572	68,497	37,007	5,908	0.10	1,649	1,084	1,255	1,669	124,641
Total	10,523,387	48,074,435	20,613,756	1,492,770	0.68	4,495,492	2,577,452	3,400,298	2,757,543	93,935,132
Region Total	10,523,387	48,074,435	20,613,756	1,492,770	0.68	4,495,492	2,577,452	3,400,298	2,757,543	93,935,132

Totals only reflect data for those census tracts/blocks included in the user's study region and will reflect the entire county/state only if all of the census blocks for that county/states were selected at the time of study region creation.

Direct Economic Loss For Transportation

May 01, 2024

All values are in thousands of dollars

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
California								
Alameda								
Segments	0	0	0					0
Bridges	510,697	116,799	1,261					628,757
Tunnels	16,728	0	0					16,728
Facilities		14,801	0	800	49,909	1,115	99,865	166,490
Total	527,425	131,601	1,261	800	49,909	1,115	99,865	811,976
Amador								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	51	51
Total	0	0	0	0	0	0	51	51
Butte								
Segments	0	0	0					0
Bridges	5	0	0					5
Tunnels	0	0	0					0
Facilities		26	0	0	0	0	26	51

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	5	26	0	0	0	0	26	57
Calaveras								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	102	102
Total	0	0	0	0	0	0	102	102
Colusa								
Segments	0	0	0					0
Bridges	14	0	0					14
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	51	51
Total	14	0	0	0	0	0	51	65
Contra Costa								
Segments	0	0	0					0
Bridges	166,994	29,715	272					196,982
Tunnels	7,576	35	0					7,610
Facilities		7,187	1,695	0	63,581	656	2,961	76,080
Total	174,570	36,936	1,967	0	63,581	656	2,961	280,671
El Dorado								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		0	0	7	0	0	191	198

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	0	0	0	7	0	0	191	198
Fresno								
Segments	0	0	0					0
Bridges	44	0	0					44
Tunnels	0	0	0					0
Facilities		208	0	21	0	0	1,004	1,233
Total	44	208	0	21	0	0	1,004	1,276
Glenn								
Segments	0	0	0					0
Bridges	16	0	0					16
Tunnels	0	0	0					0
Facilities		0	0	0	37	0	102	139
Total	16	0	0	0	37	0	102	155
Kings								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		14	0	41	0	0	85	141
Total	0	14	0	41	0	0	85	141
Lake								
Segments	0	0	0					0
Bridges	1	0	0					1
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	102	102

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	1	0	0	0	0	0	102	103
Madera								
Segments	0	0	0					0
Bridges	15	0	0					15
Tunnels	0	0	0					0
Facilities		26	0	21	0	0	102	149
Total	15	26	0	21	0	0	102	164
Marin								
Segments	0	0	0					0
Bridges	33,187	231	0					33,417
Tunnels	204	0	0					204
Facilities		0	0	1,785	23,432	1,190	1,199	27,607
Total	33,390	231	0	1,785	23,432	1,190	1,199	61,228
Mariposa								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		0	0	10	0	0	51	61
Total	0	0	0	10	0	0	51	61
Mendocino								
Segments	0	0	0					0
Bridges	1	0	0					1
Tunnels	0	0	0					0
Facilities		0	0	68	4	0	164	236

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	1	0	0	68	4	0	164	237
Merced								
Segments	0	0	0					0
Bridges	461	9	0					470
Tunnels	0	0	0					0
Facilities		51	0	21	0	0	909	982
Total	461	60	0	21	0	0	909	1,452
Monterey								
Segments	0	0	0					0
Bridges	195	11	0					206
Tunnels	0	0	0					0
Facilities		109	0	407	110	0	1,582	2,208
Total	195	120	0	407	110	0	1,582	2,414
Napa								
Segments	0	0	0					0
Bridges	3,550	2,682	0					6,232
Tunnels	0	0	0					0
Facilities		0	0	423	2,133	0	2,891	5,448
Total	3,550	2,682	0	423	2,133	0	2,891	11,680
Nevada								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		3	0	0	0	0	11	14

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	0	3	0	0	0	0	11	14
Placer								
Segments	0	0	0					0
Bridges	2	0	0					2
Tunnels	0	0	0					0
Facilities		80	0	2	0	0	159	241
Total	2	80	0	2	0	0	159	243
Sacramento								
Segments	0	0	0					0
Bridges	413	0	0					413
Tunnels	0	0	0					0
Facilities		109	5,175	181	5,036	55	17,294	27,851
Total	413	109	5,175	181	5,036	55	17,294	28,264
San Benito								
Segments	0	0	0					0
Bridges	128	20	0					148
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	800	800
Total	128	20	0	0	0	0	800	947
San Francisco								
Segments	0	0	0					0
Bridges	91,191	275	0					91,466
Tunnels	1,482	0	0					1,482
Facilities		0	494,243	942	40,928	993	4,958	542,065

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	92,673	275	494,243	942	40,928	993	4,958	635,013
San Joaquin								
Segments	0	0	0					0
Bridges	2,265	58	0					2,323
Tunnels	0	0	0					0
Facilities		1,748	0	91	9,087	402	2,605	13,932
Total	2,265	1,806	0	91	9,087	402	2,605	16,255
San Luis Obispo								
Segments	0	0	0					0
Bridges	1	0	0					1
Tunnels	0	0	0					0
Facilities		3	0	2	20	0	17	43
Total	1	3	0	2	20	0	17	43
San Mateo								
Segments	0	0	0					0
Bridges	74,855	375	0					75,230
Tunnels	166	0	0					166
Facilities		0	0	0	10,017	0	134,571	144,589
Total	75,021	375	0	0	10,017	0	134,571	219,984
Santa Clara								
Segments	0	0	0					0
Bridges	290,271	19,718	56					310,046
Tunnels	264	0	0					264
Facilities		2,835	149,229	624	5,070	0	97,133	254,890

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	290,536	22,553	149,285	624	5,070	0	97,133	565,200
Santa Cruz								
<i>Segments</i>	0	0	0					0
<i>Bridges</i>	631	29	0					659
<i>Tunnels</i>	0	0	0					0
<i>Facilities</i>		0	0	352	288	0	2,016	2,655
Total	631	29	0	352	288	0	2,016	3,314
Solano								
<i>Segments</i>	0	0	0					0
<i>Bridges</i>	17,593	1,607	0					19,201
<i>Tunnels</i>	0	0	0					0
<i>Facilities</i>		1,192	0	763	17,661	557	1,625	21,797
Total	17,593	2,799	0	763	17,661	557	1,625	40,998
Sonoma								
<i>Segments</i>	0	0	0					0
<i>Bridges</i>	13,663	10,860	0					24,523
<i>Tunnels</i>	0	0	0					0
<i>Facilities</i>		0	0	178	2,891	0	4,891	7,959
Total	13,663	10,860	0	178	2,891	0	4,891	32,482
Stanislaus								
<i>Segments</i>	0	0	0					0
<i>Bridges</i>	533	22	0					554
<i>Tunnels</i>	0	0	0					0
<i>Facilities</i>		655	0	183	0	0	999	1,837

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	533	677	0	183	0	0	999	2,391
Sutter								
Segments	0	0	0					0
Bridges	24	0	0					24
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	129	129
Total	24	0	0	0	0	0	129	152
Tehama								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	6	6
Total	0	0	0	0	0	0	6	6
Tulare								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		0	0	7	0	0	17	24
Total	0	0	0	7	0	0	17	24
Tuolumne								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	108	108

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	0	0	0	0	0	0	108	108
Yolo								
Segments	0	0	0					0
Bridges	604	2	0					606
Tunnels	0	0	0					0
Facilities		546	0	0	2,658	0	652	3,857
Total	604	548	0	0	2,658	0	652	4,463
Yuba								
Segments	0	0	0					0
Bridges	1	0	0					1
Tunnels	0	0	0					0
Facilities		0	0	22	0	0	102	124
Total	1	0	0	22	0	0	102	125
Total	1,233,775	212,040	651,932	6,951	232,862	4,967	379,533	2,722,060
Region Total	1,233,775	212,040	651,932	6,951	232,862	4,967	379,533	2,722,060

Totals only reflect data for those census tracts/blocks included in the user's study region and will reflect the entire county/state only if all of the census blocks for that county/states were selected at the time of study region creation.

Direct Economic Loss For Utilities

May 01, 2024

All values are in thousands of dollars

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
California							
Alameda							
<i>Facilities</i>	34,267	556,220	0	0	894,483	1,270	1,486,240
<i>Pipelines</i>	30,284	15,212	0	0			45,496
Total	64,551	571,432	0	0	894,483	1,270	1,531,736
Amador							
<i>Facilities</i>	0	3	0	0	5,624	0	5,626
<i>Pipelines</i>	21	11	0	0			32
Total	21	13	0	0	5,624	0	5,658
Butte							
<i>Facilities</i>	1	492	0	0	2,633	0	3,126
<i>Pipelines</i>	52	26	0	0			78
Total	53	518	0	0	2,633	0	3,204
Calaveras							
<i>Facilities</i>	28	492	0	0	25,137	0	25,657

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
<i>Pipelines</i>	42	21	0	0			63
Total	70	513	0	0	25,137	0	25,721
Colusa							
<i>Facilities</i>	0	369	0	75	6,525	0	6,969
<i>Pipelines</i>	57	28	0	0			85
Total	57	397	0	75	6,525	0	7,054
Contra Costa							
<i>Facilities</i>	55,018	366,184	183	0	1,403,071	288	1,824,744
<i>Pipelines</i>	11,309	5,681	0	0			16,990
Total	66,327	371,865	183	0	1,403,071	288	1,841,735
El Dorado							
<i>Facilities</i>	1	251	0	0	1,532	1	1,784
<i>Pipelines</i>	53	27	0	0			80
Total	54	278	0	0	1,532	1	1,864
Fresno							
<i>Facilities</i>	0	251	0	13	18,809	3	19,077
<i>Pipelines</i>	244	123	0	0			367
Total	244	374	0	13	18,809	3	19,444
Glenn							
<i>Facilities</i>	0	123	0	0	136	0	259
<i>Pipelines</i>	38	19	0	0			57

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
Total	38	142	0	0	136	0	316
Kings							
<i>Facilities</i>	0	0	0	4	2,232	0	2,236
<i>Pipelines</i>	77	38	0	0			115
Total	77	38	0	4	2,232	0	2,351
Lake							
<i>Facilities</i>	56	0	0	0	5,226	1	5,284
<i>Pipelines</i>	77	38	0	0			115
Total	133	38	0	0	5,226	1	5,399
Madera							
<i>Facilities</i>	0	0	0	0	1,347	0	1,347
<i>Pipelines</i>	66	33	0	0			98
Total	66	33	0	0	1,347	0	1,445
Marin							
<i>Facilities</i>	6,781	162,967	0	0	8,198	203	178,150
<i>Pipelines</i>	1,614	811	0	0			2,425
Total	8,396	163,778	0	0	8,198	203	180,575
Mariposa							
<i>Facilities</i>	0	131	0	0	2,808	2	2,940
<i>Pipelines</i>	31	16	0	0			47
Total	31	146	0	0	2,808	2	2,987

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
Mendocino							
<i>Facilities</i>	0	497	0	0	350	2	849
<i>Pipelines</i>	102	51	0	0			153
Total	102	548	0	0	350	2	1,002
Merced							
<i>Facilities</i>	0	4,819	0	0	352,965	20	357,804
<i>Pipelines</i>	329	165	0	0			494
Total	329	4,984	0	0	352,965	20	358,298
Monterey							
<i>Facilities</i>	0	13,719	0	0	200,191	72	213,982
<i>Pipelines</i>	306	154	0	0			460
Total	306	13,873	0	0	200,191	72	214,441
Napa							
<i>Facilities</i>	0	57,459	0	0	4,314	41	61,814
<i>Pipelines</i>	637	320	0	0			957
Total	637	57,778	0	0	4,314	41	62,770
Nevada							
<i>Facilities</i>	0	18	0	0	44	0	62
<i>Pipelines</i>	24	12	0	0			35
Total	24	30	0	0	44	0	98
Placer							

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
<i>Facilities</i>	0	1,229	0	0	4,168	1	5,399
<i>Pipelines</i>	58	29	0	0			87
Total	58	1,259	0	0	4,168	1	5,486
Sacramento							
<i>Facilities</i>	0	2,631	0	0	22,625	30	25,286
<i>Pipelines</i>	249	125	0	0			373
Total	249	2,756	0	0	22,625	30	25,659
San Benito							
<i>Facilities</i>	0	12,719	0	0	0	29	12,748
<i>Pipelines</i>	145	73	0	0			218
Total	145	12,792	0	0	0	29	12,966
San Francisco							
<i>Facilities</i>	0	112,236	0	0	7,714	363	120,313
<i>Pipelines</i>	739	371	0	0			1,110
Total	739	112,607	0	0	7,714	363	121,423
San Joaquin							
<i>Facilities</i>	1,101	16,451	3	0	116,395	48	133,999
<i>Pipelines</i>	543	273	0	0			816
Total	1,645	16,724	3	0	116,395	48	134,815
San Luis Obispo							
<i>Facilities</i>	1	10	0	0	1,362	0	1,373

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
<i>Pipelines</i>	64	32	0	0			96
Total	64	42	0	0	1,362	0	1,469
San Mateo							
<i>Facilities</i>	0	141,800	0	0	27,264	276	169,340
<i>Pipelines</i>	1,277	641	0	0			1,918
Total	1,277	142,442	0	0	27,264	276	171,258
Santa Clara							
<i>Facilities</i>	10,920	83,813	0	0	1,212,051	888	1,307,672
<i>Pipelines</i>	15,195	7,633	0	0			22,828
Total	26,115	91,446	0	0	1,212,051	888	1,330,499
Santa Cruz							
<i>Facilities</i>	0	17,659	0	0	1,884	50	19,594
<i>Pipelines</i>	490	246	0	0			736
Total	490	17,906	0	0	1,884	50	20,330
Solano							
<i>Facilities</i>	0	64,922	27	0	486,742	54	551,745
<i>Pipelines</i>	1,784	896	0	0			2,680
Total	1,784	65,818	27	0	486,742	54	554,425
Sonoma							
<i>Facilities</i>	0	94,871	0	0	273,354	133	368,357
<i>Pipelines</i>	3,027	1,521	0	0			4,548

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
Total	3,027	96,392	0	0	273,354	133	372,905
Stanislaus							
<i>Facilities</i>	0	11,878	0	0	78,971	60	90,910
<i>Pipelines</i>	327	164	0	0			491
Total	327	12,043	0	0	78,971	60	91,401
Sutter							
<i>Facilities</i>	0	246	0	0	6,808	1	7,055
<i>Pipelines</i>	45	23	0	0			68
Total	45	269	0	0	6,808	1	7,123
Tehama							
<i>Facilities</i>	0	3	0	3	2	0	8
<i>Pipelines</i>	43	22	0	0			65
Total	43	24	0	3	2	0	73
Tulare							
<i>Facilities</i>	1	8	0	0	25	0	34
<i>Pipelines</i>	82	41	0	0			124
Total	83	49	0	0	25	0	157
Tuolumne							
<i>Facilities</i>	0	123	0	0	16,265	1	16,390
<i>Pipelines</i>	43	22	0	0			65
Total	43	145	0	0	16,265	1	16,455

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
Yolo							
<i>Facilities</i>	0	6,097	0	0	6,937	14	13,049
<i>Pipelines</i>	155	78	0	0			232
Total	155	6,175	0	0	6,937	14	13,281
Yuba							
<i>Facilities</i>	0	492	0	0	840	0	1,332
<i>Pipelines</i>	26	13	0	0			39
Total	26	505	0	0	840	0	1,371
Total	177,829	1,766,173	213	94	5,199,033	3,854	7,147,196
Region Total	177,829	1,766,173	213	94	5,199,033	3,854	7,147,196

Totals only reflect data for those census tracts/blocks included in the user's study region and will reflect the entire county/state only if all of the census blocks for that county/states were selected at the time of study region creation.

Hazus Quick Assessment Report

Estimated Economic Loss (\$ Billions)

Category	Description	Range
General Building Stock	Building Damage	29.30 - 117.20
	Building Contents	3.20 - 13.00
	Business Interruption	6.60 - 26.50
Infrastructure	Lifelines Damage	
Total		47.00 - 187.90

Preliminary Damage Assessment (PDA) Estimates

Description	Residential	Commercial	Other	Total
Affected	701,700	44,300	20,800	766,800
Minor	149,000	25,000	13,100	187,100
Major	13,300	7,900	4,700	25,900
Destroyed	5,200	4,500	2,000	11,700
Total	869,200	81,700	40,600	991,500

Estimated Casualties : Night Time

Severity Level	Description	# Persons
Level 1	Medical Aid	4,000 - 17,000
Level 2	Hospital Care	800 - 3,000
Level 3	Life-threatening	110 - 500
Level 4	Fatalities	200 - 900

Estimated Shelter Needs

Type	Households	People
Displaced Households	29,000 - 114,000	72,500 - 285,000
Public Shelter	11,950	29,860

Comments :

*Hazus damage estimates are presented using FEMA Preliminary Damage Assessment (PDA) categories. These estimates should be used for planning purposes and may not reflect actual observed damages from the PDA process.

Disclaimer:

The estimates of social and economic impacts contained in this report were produced using HAZUS loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific earthquake. These results can be improved by using enhanced inventory, geotechnical, and observed ground motion data.

Earthquake Information

Location :

Origin Time:

Magnitude : 7.36

Epicenter Latitude/Longitude :
/

Depth & Type : /U

Name :
NA

Ground Motion /Attenuation :

Maximum PGA: 1.00

Information Sources:

Comments :

Population and Building Exposure

Population: 15,553,323

Building Exposure : (\$ Millions)

Residential	1,954,886
Commercial	528,960
Other	464,970
Total	2,948,816

Counties : See Appendix

Major Metro Area :

Hazus Quick Assessment Report

Estimated Economic Loss (\$ Billions)

Category	Description	Range
General Building Stock	Building Damage	28.90 - 115.80
	Building Contents	3.20 - 12.70
	Business Interruption	6.60 - 26.50
Infrastructure	Lifelines Damage	
Total		46.40 - 185.50

Preliminary Damage Assessment (PDA) Estimates

Description	Residential	Commercial	Other	Total
Affected	701,700	44,300	20,800	766,800
Minor	149,000	25,000	13,100	187,100
Major	13,300	7,900	4,700	25,900
Destroyed	5,200	4,500	2,000	11,700
Total	869,200	81,700	40,600	991,500

Estimated Casualties : Night Time

Severity Level	Description	# Persons
Level 1	Medical Aid	4,000 - 17,000
Level 2	Hospital Care	800 - 3,000
Level 3	Life-threatening	110 - 500
Level 4	Fatalities	200 - 900

Estimated Shelter Needs

Type	Households	People
Displaced Households	29,000 - 114,000	72,500 - 285,000
Public Shelter	11,950	29,860

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Earthquake Information

Location :

Origin Time:

Magnitude : 7.36

Epicenter Latitude/Longitude :
/

Depth & Type : /U

Name :
NA

Ground Motion /Attenuation :

Maximum PGA: 1.00

Information Sources:

Comments :

Population and Building Exposure

Population: 15,553,323

Building Exposure : (\$ Millions)

Residential	1,954,886
Commercial	528,960
Other	464,970
Total	2,948,816

Counties : See Appendix

Major Metro Area :

Hazus Quick Assessment Report

Estimated Economic Loss (\$ Billions)

Category	Description	Range
General Building Stock	Building Damage	29.30 - 117.20
	Building Contents	3.20 - 13.00
	Business Interruption	6.60 - 26.50
Infrastructure	Lifelines Damage	
Total		47.00 - 187.90

Preliminary Damage Assessment (PDA) Estimates

Description	Residential	Commercial	Other	Total
Affected	701,700	44,300	20,800	766,800
Minor	149,000	25,000	13,100	187,100
Major	13,300	7,900	4,700	25,900
Destroyed	5,200	4,500	2,000	11,700
Total	869,200	81,700	40,600	991,500

Estimated Casualties : Day Time

Severity Level	Description	# Persons
Level 1	Medical Aid	10,000 - 39,000
Level 2	Hospital Care	2,000 - 10,000
Level 3	Life-threatening	400 - 1,500
Level 4	Fatalities	700 - 3,000

Estimated Shelter Needs

Type	Households	People
Displaced Households	29,000 - 114,000	72,500 - 285,000
Public Shelter	11,950	29,860

Comments :

*Hazus damage estimates are presented using FEMA Preliminary Damage Assessment (PDA) categories. These estimates should be used for planning purposes and may not reflect actual observed damages from the PDA process.

Disclaimer:

The estimates of social and economic impacts contained in this report were produced using HAZUS loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific earthquake. These results can be improved by using enhanced inventory, geotechnical, and observed ground motion data.

Earthquake Information

Location :

Origin Time:

Magnitude : 7.36

Epicenter Latitude/Longitude :
/

Depth & Type : /U

Name :
NA

Ground Motion /Attenuation :

Maximum PGA: 1.00

Information Sources:

Comments :

Population and Building Exposure

Population: 15,553,323

Building Exposure : (\$ Millions)

Residential	1,954,886
Commercial	528,960
Other	464,970
Total	2,948,816

Counties : See Appendix

Major Metro Area :

Hazus Quick Assessment Report

Estimated Economic Loss (\$ Billions)

Category	Description	Range
General Building Stock	Building Damage	29.30 - 117.20
	Building Contents	3.20 - 13.00
	Business Interruption	6.60 - 26.50
Infrastructure	Lifelines Damage	
Total		47.00 - 187.90

Preliminary Damage Assessment (PDA) Estimates

Description	Residential	Commercial	Other	Total
Affected	701,700	44,300	20,800	766,800
Minor	149,000	25,000	13,100	187,100
Major	13,300	7,900	4,700	25,900
Destroyed	5,200	4,500	2,000	11,700
Total	869,200	81,700	40,600	991,500

Estimated Casualties : Commute Time

Severity Level	Description	# Persons
Level 1	Medical Aid	7,000 - 27,000
Level 2	Hospital Care	1,800 - 7,000
Level 3	Life-threatening	500 - 2,000
Level 4	Fatalities	500 - 2,000

Estimated Shelter Needs

Type	Households	People
Displaced Households	29,000 - 114,000	72,500 - 285,000
Public Shelter	11,950	29,860

Comments :

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Earthquake Information

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Information Sources:

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Population and Building Exposure

Population: 15,553,323

Building Exposure : (\$ Millions)

Residential	1,954,886
Commercial	528,960
Other	464,970
Total	2,948,816

Counties : See Appendix

Major Metro Area :

Shelter Summary Report

May 01, 2024

	# of Displaced Households	# of People Needing Short Term Shelter
California		
Alameda	38,092	20,778
Amador	0	0
Butte	0	0
Calaveras	0	0
Colusa	0	0
Contra Costa	3,297	1,839
El Dorado	0	0
Fresno	0	0
Glenn	0	0
Kings	0	0
Lake	0	0
Madera	0	0
Marin	164	79
Mariposa	0	0
Mendocino	0	0
Merced	0	0
Monterey	1	1
Napa	73	37
Nevada	0	0
Placer	0	0
Sacramento	0	0
San Benito	0	0
San Francisco	10,815	4,483
San Joaquin	6	4
San Luis Obispo	0	0
San Mateo	265	129
Santa Clara	3,925	2,216
Santa Cruz	19	12
Solano	337	186
Sonoma	224	97
Stanislaus	1	1
Sutter	0	0

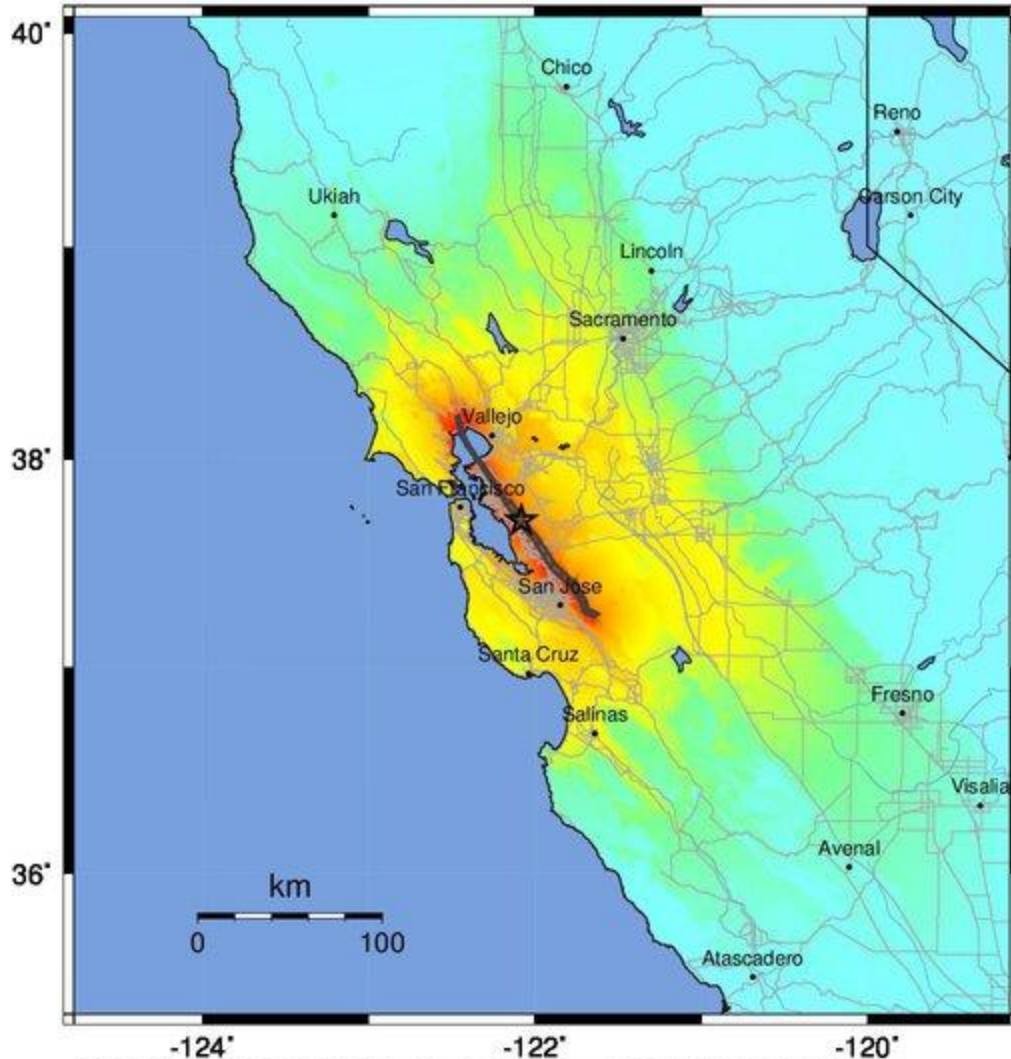
	# of Displaced Households	# of People Needing Short Term Shelter
Tehama	0	0
Tulare	0	0
Tuolumne	0	0
Yolo	0	0
Yuba	0	0
Total	57,221	29,863
Region Total	57,221	29,863

Totals only reflect data for those census tracts/blocks included in the user's study region and will reflect the entire county/state only if all of the census blocks for that county/states were selected at the time of study region creation.

-- Earthquake Planning Scenario --

ShakeMap for Hayward: HN+HS+HE - Median ground motions Scenario

Scenario Date: Jun 30, 2017 10:03:47 AM MDT M 7.4 N37.70 W122.08 Depth: 8.8km



PLANNING SCENARIO ONLY -- Map Version 13 Processed 2017-07-03 09:15:44 AM MDT

PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	none	none	none	Very light	Light	Moderate	Mod./Heavy	Heavy	Very Heavy
PEAK ACC. (%g)	<0.05	0.3	2.8	6.2	12	22	40	75	>139
PEAK VEL. (cm/s)	<0.02	0.1	1.4	4.7	9.6	20	41	86	>178
INSTRUMENTAL INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

Scale based upon Worden et al. (2012)