
Hazus: Earthquake Global Risk Report

Region Name: SantaYnezwest

Earthquake Scenario: bssc2014santaynezwestshaw09m_m7p11_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 11 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 56,630.75 square miles and contains 4,638 census tracts. There are over 6,617 thousand households in the region which has a total population of 19,939,675 people. The distribution of population by Total Region and County is provided in Appendix B.

There are an estimated 5,530 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 244,452 and 172,344 (millions of dollars) , respectively.

Building and Lifeline Inventory

Building Inventory

Hazus estimates that there are 5,530 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 88% 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 292 hospitals in the region with a total bed capacity of 55,370 beds. There are 6,608 schools, 1,128 fire stations, 411 police stations and 101 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 416,796.00 (millions of dollars). This inventory includes over 10,765.87 miles of highways, 10,150 bridges, 231,210.91 miles of pipes.

Table 1: Transportation System Lifeline Inventory

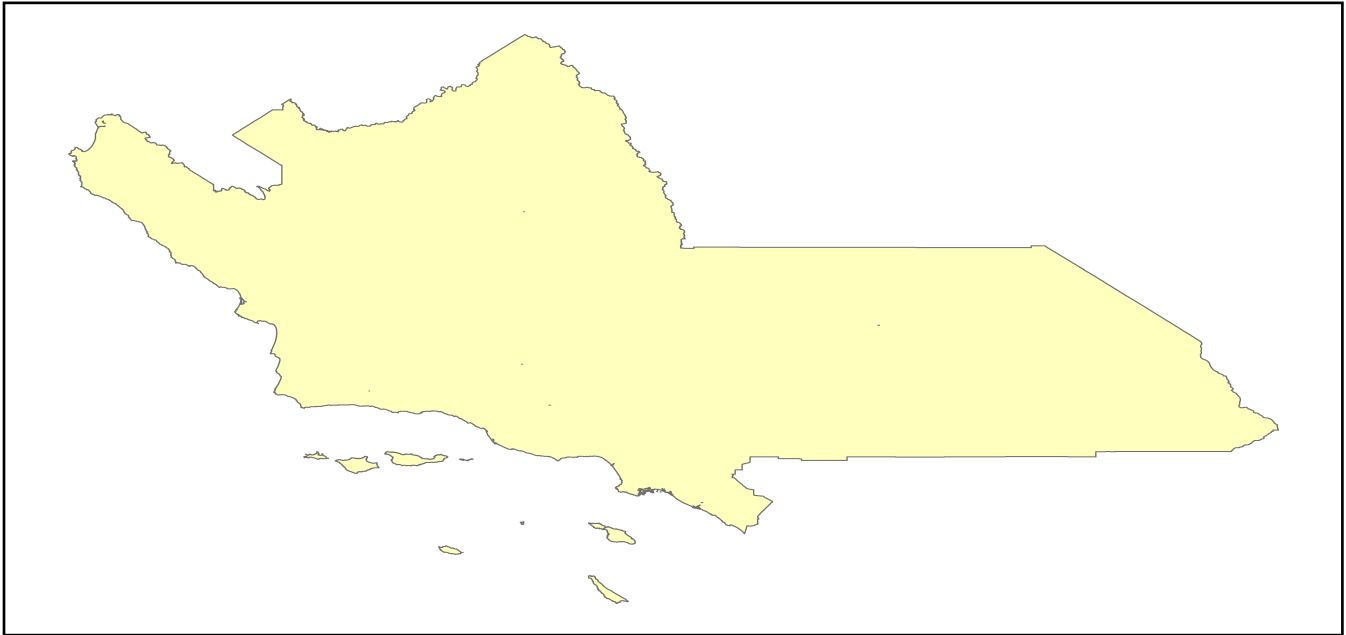
System	Component	# Locations/ # Segments	Replacement value (millions of dollars)
Highway	Bridges	10,150	54971.0204
	Segments	9,042	107997.3631
	Tunnels	58	547.6912
	Subtotal		163516.0747
Railways	Bridges	1,670	9502.3000
	Facilities	110	292.9300
	Segments	1,834	59421.2729
	Tunnels	0	0.0000
	Subtotal		69216.5029
Light Rail	Bridges	28	6.1737
	Facilities	80	2293.5200
	Segments	4	2829.7483
	Tunnels	0	0.0000
	Subtotal		5129.4420
Bus	Facilities	45	98.0407
	Subtotal		98.0407
Ferry	Facilities	19	25.2890
	Subtotal		25.2890
Port	Facilities	257	979.6441
	Subtotal		979.6441
Airport	Facilities	137	3872.6014
	Runways	139	1615.2633
	Subtotal		5487.8647
		Total	244,452.90

Table 2: Utility System Lifeline Inventory

System	Component	# Locations / Segments	Replacement value (millions of dollars)
Potable Water	Distribution Lines	NA	4585.7735
	Facilities	36	1414.5840
	Pipelines	0	0.0000
		Subtotal	6000.3575
Waste Water	Distribution Lines	NA	2751.4641
	Facilities	92	15819.5656
	Pipelines	0	0.0000
		Subtotal	18571.0297
Natural Gas	Distribution Lines	NA	1834.3094
	Facilities	42	1493.7967
	Pipelines	422	18442.1811
		Subtotal	21770.2872
Oil Systems	Facilities	68	8.0240
	Pipelines	0	0.0000
		Subtotal	8.0240
Electrical Power	Facilities	507	125942.2670
		Subtotal	125942.2670
Communication	Facilities	447	52.7460
		Subtotal	52.7460
	Total		172,344.70

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	bssc2014santaynezwestshaw09m_m7p11_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	7.11
Depth (km)	NA
Rupture Length (Km)	NA
Rupture Orientation (degrees)	NA
Attenuation Function	NA

Direct Earthquake Damage

Building Damage

Hazus estimates that about 13,167 buildings will be at least moderately damaged. This is over 0.00 % of the buildings in the region. There are an estimated 107 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

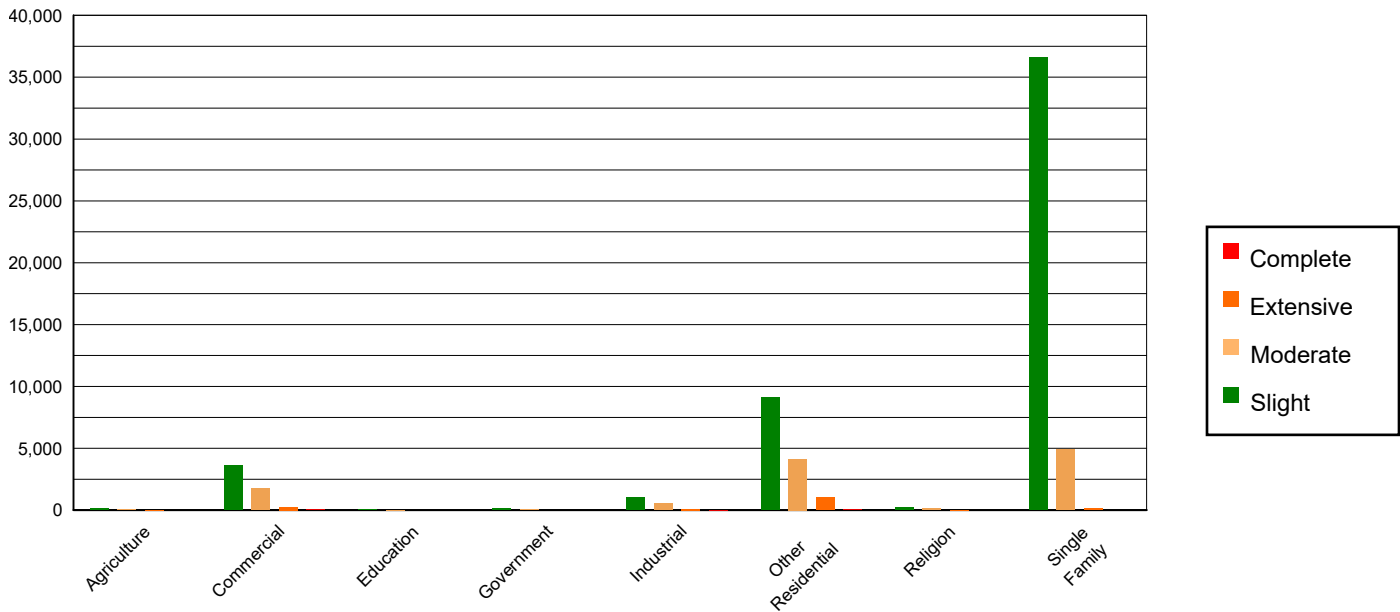


Table 3: Expected Building Damage by Occupancy

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	19961.36	0.37	152.33	0.30	73.05	0.63	16.95	1.10	3.31	3.07
Commercial	384807.44	7.04	3626.98	7.12	1719.02	14.93	265.31	17.18	29.24	27.12
Education	10915.54	0.20	76.26	0.15	19.18	0.17	2.19	0.14	0.84	0.78
Government	7649.40	0.14	102.09	0.20	39.19	0.34	5.01	0.32	0.32	0.29
Industrial	107143.72	1.96	1039.82	2.04	541.31	4.70	99.69	6.45	11.46	10.63
Other Residential	861992.56	15.77	9141.28	17.94	4142.65	35.97	1035.85	67.07	53.65	49.75
Religion	21507.93	0.39	210.70	0.41	105.09	0.91	18.39	1.19	1.89	1.75
Single Family	4052447.65	74.13	36595.15	71.83	4875.91	42.34	101.15	6.55	7.13	6.61
Total	5,466,426		50,945		11,515		1,545		108	

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

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Wood	4795420.70	87.72	43346.44	85.09	5837.90	50.70	114.70	7.43	6.45	5.98
Steel	108112.35	1.98	1161.37	2.28	868.30	7.54	204.33	13.23	23.59	21.88
Concrete	112376.81	2.06	1399.83	2.75	721.24	6.26	145.20	9.40	19.68	18.25
Precast	57020.67	1.04	810.20	1.59	528.84	4.59	64.03	4.15	1.82	1.69
RM	247129.51	4.52	1262.81	2.48	743.77	6.46	70.16	4.54	0.60	0.56
URM	30092.06	0.55	392.54	0.77	96.23	0.84	60.40	3.91	22.69	21.04
MH	116273.51	2.13	2571.44	5.05	2719.12	23.61	885.70	57.34	33.00	30.60
Total	5,466,426		50,945		11,515		1,545		108	

*Note:

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

Essential Facility Damage

Before the earthquake, the region had 55,370 hospital beds available for use. On the day of the earthquake, the model estimates that only 54,456 hospital beds (98.00%) are available for use by patients already in the hospital and those injured by the earthquake. After one week, 99.00% of the beds will be back in service. By 30 days, 100.00% 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	292	0	0	286
Schools	6,608	31	0	6,525
EOCs	101	0	0	100
PoliceStations	411	3	0	401
FireStations	1,128	7	0	1,108

Transportation Lifeline Damage

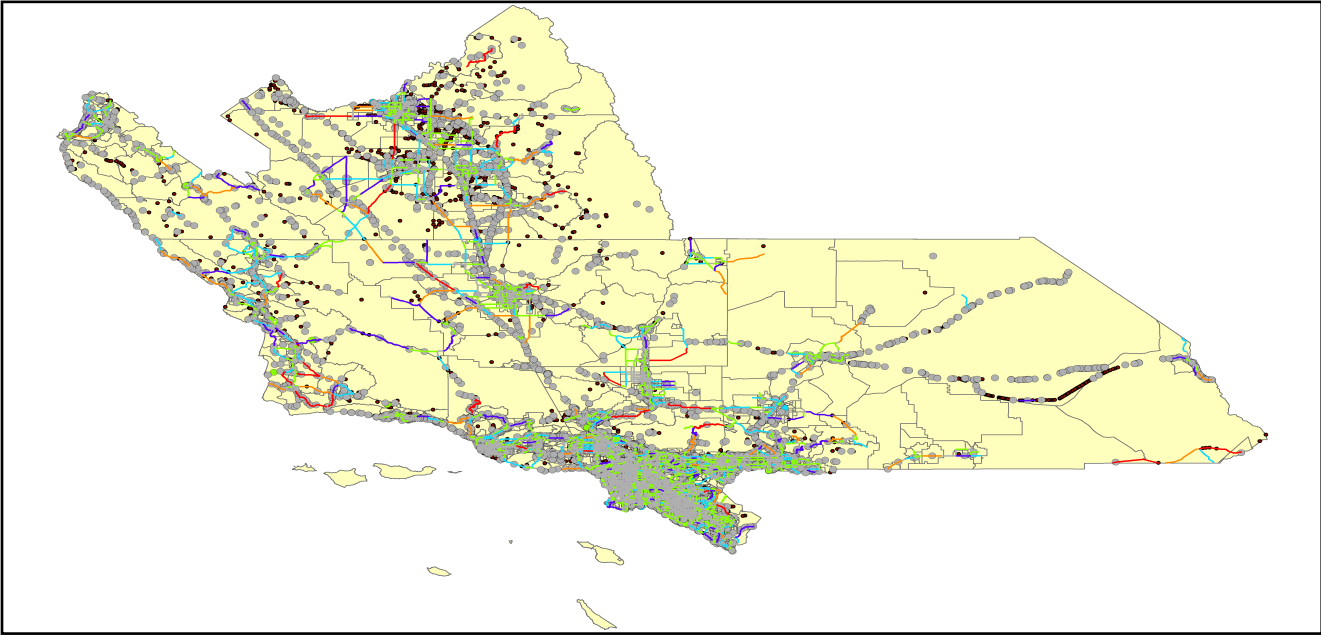


Table 6: Expected Damage to the Transportation Systems

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	9,042	0	0	9,042	9,042
	Bridges	10,150	4	0	10,145	10,149
	Tunnels	58	0	0	58	58
Railways	Segments	1,834	0	0	1,834	1,834
	Bridges	1,670	0	0	1,670	1,670
	Tunnels	0	0	0	0	0
	Facilities	110	0	0	110	110
Light Rail	Segments	4	0	0	4	4
	Bridges	28	0	0	28	28
	Tunnels	0	0	0	0	0
	Facilities	80	0	0	80	80
Bus	Facilities	45	0	0	45	45
Ferry	Facilities	19	0	0	19	19
Port	Facilities	257	0	0	257	257
Airport	Facilities	137	0	0	137	137
	Runways	139	0	0	139	139

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	36	0	0	36	36
Waste Water	92	3	0	86	92
Natural Gas	42	3	0	39	42
Oil Systems	68	1	0	67	68
Electrical Power	507	4	0	503	506
Communication	447	22	0	432	447

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

System	Total Pipelines Length (miles)	Number of Leaks	Number of Breaks
Potable Water	142,473	1746	436
Waste Water	85,484	877	219
Natural Gas	3,254	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	6,617,104	20,137	14,203	4,504	0	0
Electric Power		41,597	25,277	9,653	762	58

Induced Earthquake Damage

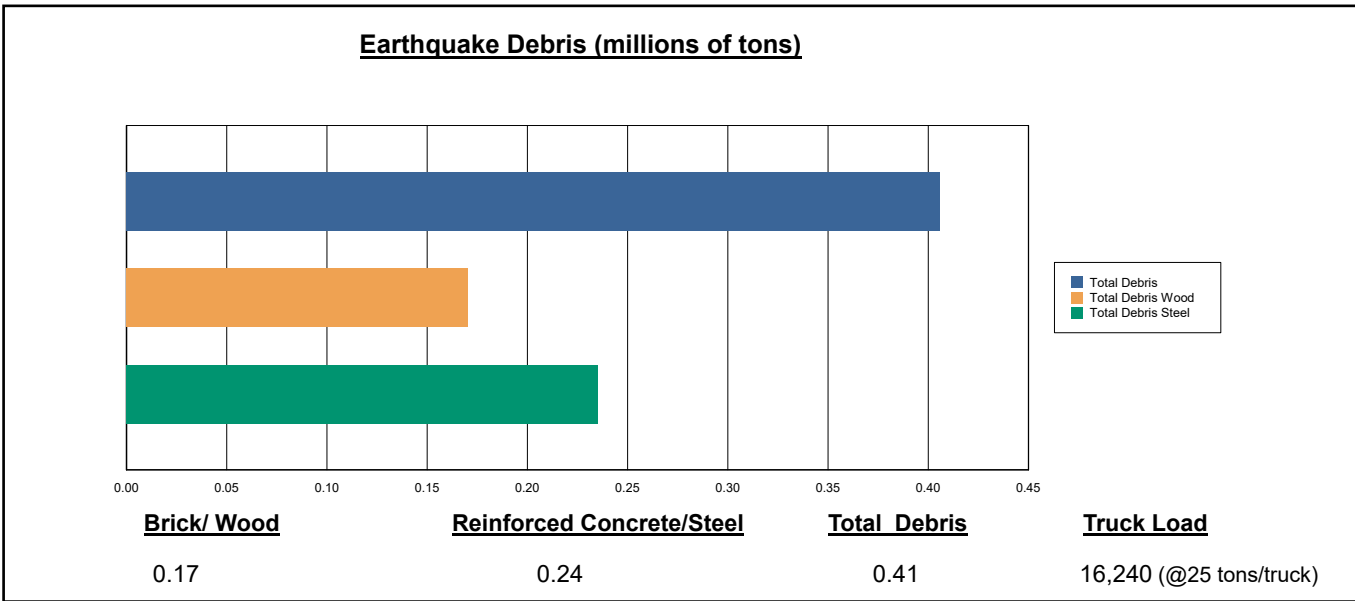
Fire Following Earthquake

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 4 ignitions that will burn about 0.06 sq. mi (0.00 % of the region's total area.) The model also estimates that the fires will displace about 564 people and burn about 67 (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.

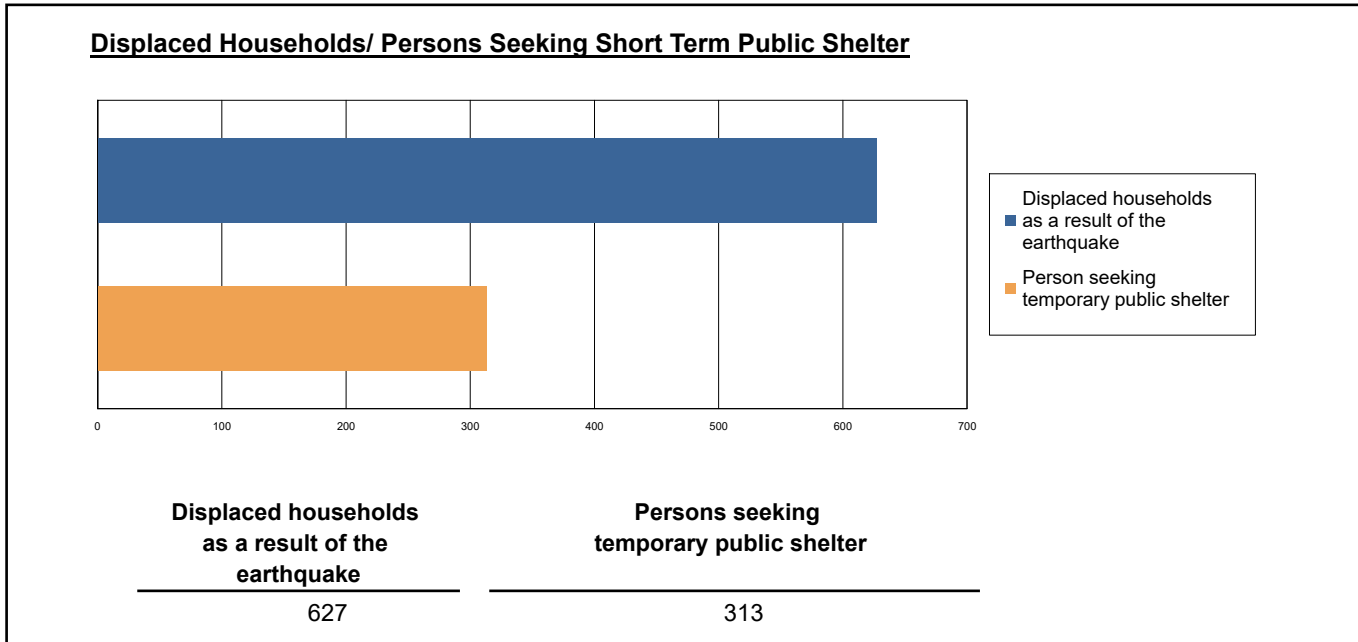
The model estimates that a total of 406,000 tons of debris will be generated. Of the total amount, Brick/Wood comprises 42.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 16,240 truckloads (@25 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 627 households to be displaced due to the earthquake. Of these, 313 people (out of a total population of 19,939,675) 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	2.84	0.41	0.04	0.07
	Commuting	0.02	0.04	0.05	0.01
	Educational	0.00	0.00	0.00	0.00
	Hotels	0.32	0.04	0.00	0.01
	Industrial	3.35	0.50	0.04	0.09
	Other-Residential	115.94	13.77	0.90	1.71
	Single Family	85.51	4.38	0.05	0.09
	Total	208	19	1	2
2 PM	Commercial	192.66	28.57	2.67	5.16
	Commuting	0.18	0.32	0.44	0.09
	Educational	63.04	8.93	0.88	1.70
	Hotels	0.06	0.01	0.00	0.00
	Industrial	24.55	3.68	0.33	0.64
	Other-Residential	36.56	4.42	0.31	0.56
	Single Family	27.39	1.49	0.02	0.03
	Total	344	47	5	8
5 PM	Commercial	128.82	19.48	1.88	3.59
	Commuting	3.49	6.13	8.56	1.75
	Educational	15.09	1.79	0.13	0.24
	Hotels	0.10	0.01	0.00	0.00
	Industrial	15.34	2.30	0.21	0.40
	Other-Residential	42.56	5.18	0.36	0.67
	Single Family	31.39	1.68	0.02	0.04
	Total	237	37	11	7

Economic Loss

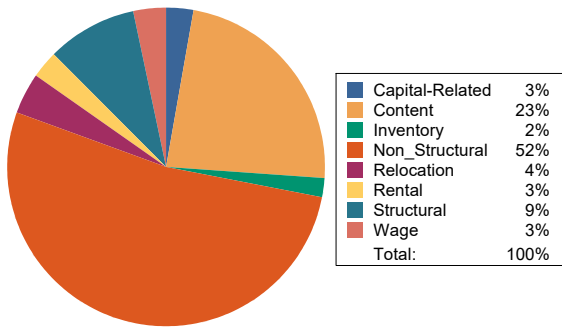
The total economic loss estimated for the earthquake is 5,072.90 (millions of dollars), which includes building and lifeline related losses based on the region's available inventory. The following three sections provide more detailed information about these losses.

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 4,017.28 (millions of dollars); 13 % 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 50 % 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)

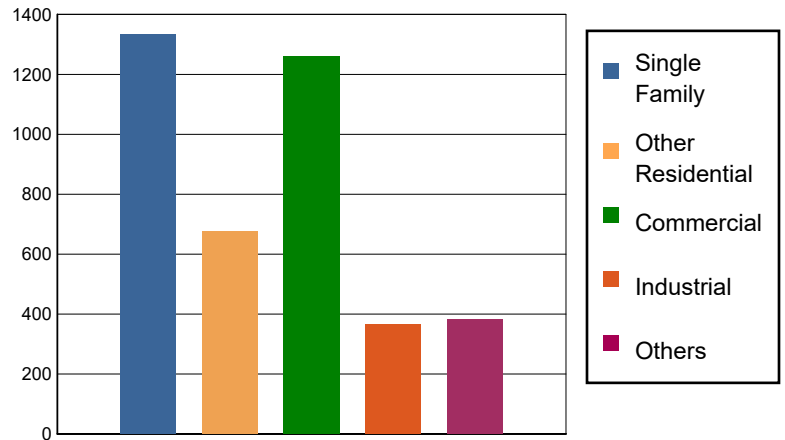


Table 11: Building-Related Economic Loss Estimates
(Millions of dollars)

Category	Area	Single Family	Other Residential	Commercial	Industrial	Others	Total
Income Losses							
	Wage	0.0000	23.9850	99.4625	3.6516	8.0145	135.1136
	Capital-Related	0.0000	10.1946	93.2259	2.3404	2.5680	108.3289
	Rental	13.1274	36.6921	49.7361	2.2985	3.5422	105.3963
	Relocation	43.2017	23.8902	68.9625	11.3822	27.6203	175.0569
	Subtotal	56.3291	94.7619	311.3870	19.6727	41.7450	523.8957
Capital Stock Losses							
	Structural	133.6966	59.1443	110.0791	34.6328	32.9318	370.4846
	Non_Structural	827.2691	410.1306	494.6690	171.1256	196.1820	2,099.3763
	Content	315.8296	110.9332	290.2355	119.9526	104.8310	941.7819
	Inventory	0.0000	0.0000	54.9351	18.8190	7.9861	81.7402
	Subtotal	1276.7953	580.2081	949.9187	344.5300	341.9309	3493.3830
	Total	1333.12	674.97	1261.31	364.20	383.68	4017.28

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	107997.3631	0.0000	0.00
	Bridges	54971.0204	32.2001	0.06
	Tunnels	547.6912	0.6142	0.11
	Subtotal	163516.0747	32.8143	
Railways	Segments	59421.2729	0.0000	0.00
	Bridges	9502.3000	21.7268	0.23
	Tunnels	0.0000	0.0000	0.00
	Facilities	292.9300	4.4455	1.52
	Subtotal	69216.5029	26.1723	
Light Rail	Segments	2829.7483	0.0000	0.00
	Bridges	6.1737	0.0000	0.00
	Tunnels	0.0000	0.0000	0.00
	Facilities	2293.5200	21.8422	0.95
	Subtotal	5129.4420	21.8422	
Bus	Facilities	98.0407	1.9494	1.99
	Subtotal	98.0407	1.9494	
Ferry	Facilities	25.2890	0.4185	1.65
	Subtotal	25.2890	0.4185	
Port	Facilities	979.6441	17.3779	1.77
	Subtotal	979.6441	17.3779	
Airport	Facilities	3872.6014	42.7764	1.10
	Runways	1615.2633	0.0000	0.00
	Subtotal	5487.8647	42.7764	
Total		244,452.86	143.35	

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	1414.5840	3.5439	0.25
	Distribution Lines	4585.7735	7.8553	0.17
	Subtotal	6000.3575	11.3992	
Waste Water	Pipelines	0.0000	0.0000	0.00
	Facilities	15819.5656	200.0152	1.26
	Distribution Lines	2751.4641	3.9459	0.14
	Subtotal	18571.0297	203.9611	
Natural Gas	Pipelines	18442.1811	0.0000	0.00
	Facilities	1493.7967	32.4769	2.17
	Distribution Lines	1834.3094	1.3518	0.07
	Subtotal	21770.2872	33.8287	
Oil Systems	Pipelines	0.0000	0.0000	0.00
	Facilities	8.0240	0.0432	0.54
	Subtotal	8.0240	0.0432	
Electrical Power	Facilities	125942.2670	661.3340	0.53
	Subtotal	125942.2670	661.3340	
Communication	Facilities	52.7460	1.7029	3.23
	Subtotal	52.7460	1.7029	
	Total	172,344.71	912.27	

Appendix A: County Listing for the Region

Fresno,CA

Kern,CA

Kings,CA

Los Angeles,CA

Monterey,CA

Orange,CA

San Bernardino,CA

San Luis Obispo,CA

Santa Barbara,CA

Tulare,CA

Ventura,CA

Appendix B: Regional Population and Building Value Data

State	County Name	Population	Building Value (millions of dollars)		
			Residential	Non-Residential	Total
California	Fresno	1,008,654	98,532	61,772	160,304
	Kern	909,235	87,567	59,168	146,736
	Kings	152,486	13,719	7,861	21,581
	Los Angeles	10,014,009	950,697	566,995	1,517,692
	Monterey	439,035	47,655	28,750	76,405
	Orange	3,186,989	363,381	176,806	540,188
	San Bernardino	2,181,654	225,045	152,557	377,602
	San Luis Obispo	282,424	41,720	20,896	62,616
	Santa Barbara	448,229	49,971	28,481	78,452
	Tulare	473,117	43,262	31,210	74,472
	Ventura	843,843	99,299	52,072	151,371
Total Region		19,939,675	2,020,848	1,186,568	3,207,419

Building Damage by Count by General Occupancy

May 01, 2024

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
California						
Fresno						
<i>Agriculture</i>	3,421	0	0	0	0	3,421
<i>Commercial</i>	21,054	0	0	0	0	21,054
<i>Education</i>	602	0	0	0	0	602
<i>Government</i>	291	0	0	0	0	291
<i>Industrial</i>	5,348	0	0	0	0	5,348
<i>Religion</i>	1,507	0	0	0	0	1,507
<i>Other Residential</i>	40,973	0	0	0	0	40,973
<i>Single Family</i>	226,425	0	0	0	0	226,425
Kern						
<i>Agriculture</i>	4,637	8	0	0	0	4,645
<i>Commercial</i>	15,537	28	2	0	0	15,567
<i>Education</i>	462	0	0	0	0	462
<i>Government</i>	442	1	0	0	0	443
<i>Industrial</i>	6,036	11	0	0	0	6,047
<i>Religion</i>	1,521	3	0	0	0	1,524
<i>Other Residential</i>	54,400	114	6	0	0	54,520
<i>Single Family</i>	205,079	60	0	0	0	205,139
Kings						

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Agriculture</i>	306	0	0	0	0	306
<i>Commercial</i>	2,318	0	0	0	0	2,318
<i>Education</i>	103	0	0	0	0	103
<i>Government</i>	72	0	0	0	0	72
<i>Industrial</i>	555	0	0	0	0	555
<i>Religion</i>	210	0	0	0	0	210
<i>Other Residential</i>	4,342	0	0	0	0	4,342
<i>Single Family</i>	36,245	0	0	0	0	36,245
Los Angeles						
<i>Agriculture</i>	2,031	1	0	0	0	2,032
<i>Commercial</i>	190,685	170	6	0	0	190,861
<i>Education</i>	5,484	2	0	0	0	5,486
<i>Government</i>	3,029	2	0	0	0	3,031
<i>Industrial</i>	53,088	36	1	0	0	53,126
<i>Religion</i>	10,644	7	0	0	0	10,651
<i>Other Residential</i>	481,531	136	4	0	0	481,671
<i>Single Family</i>	1,803,020	118	2	0	0	1,803,140
Monterey						
<i>Agriculture</i>	1,815	0	0	0	0	1,815
<i>Commercial</i>	9,246	0	0	0	0	9,246
<i>Education</i>	239	0	0	0	0	239
<i>Government</i>	185	0	0	0	0	185
<i>Industrial</i>	1,850	0	0	0	0	1,850
<i>Religion</i>	580	0	0	0	0	580
<i>Other Residential</i>	19,809	0	0	0	0	19,809

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
Orange						
<i>Single Family</i>	90,876	0	0	0	0	90,876
<i>Agriculture</i>	1,135	0	0	0	0	1,135
<i>Commercial</i>	68,336	4	0	0	0	68,340
<i>Education</i>	1,890	0	0	0	0	1,890
<i>Government</i>	650	0	0	0	0	650
<i>Industrial</i>	18,794	1	0	0	0	18,795
<i>Religion</i>	2,057	0	0	0	0	2,057
<i>Other Residential</i>	85,702	16	0	0	0	85,718
<i>Single Family</i>	706,211	1	0	0	0	706,212
San Bernardino						
<i>Agriculture</i>	1,815	0	0	0	0	1,815
<i>Commercial</i>	40,041	0	0	0	0	40,041
<i>Education</i>	985	0	0	0	0	985
<i>Government</i>	1,238	0	0	0	0	1,238
<i>Industrial</i>	9,474	0	0	0	0	9,474
<i>Religion</i>	2,320	0	0	0	0	2,320
<i>Other Residential</i>	98,821	0	0	0	0	98,821
<i>Single Family</i>	525,367	0	0	0	0	525,367
San Luis Obispo						
<i>Agriculture</i>	419	2	0	0	0	421
<i>Commercial</i>	9,340	33	2	0	0	9,375
<i>Education</i>	182	0	0	0	0	182
<i>Government</i>	185	0	0	0	0	185
<i>Industrial</i>	2,545	11	1	0	0	2,556

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Religion</i>	359	1	0	0	0	360
<i>Other Residential</i>	19,999	199	18	0	0	20,216
<i>Single Family</i>	85,480	159	0	0	0	85,639
Santa Barbara						
<i>Agriculture</i>	251	124	69	17	3	464
<i>Commercial</i>	4,914	2,954	1,658	264	29	9,820
<i>Education</i>	208	69	19	2	1	299
<i>Government</i>	124	73	37	5	0	239
<i>Industrial</i>	1,447	770	512	99	11	2,840
<i>Religion</i>	330	170	101	18	2	621
<i>Other Residential</i>	11,779	7,294	3,951	1,034	54	24,111
<i>Single Family</i>	60,972	33,043	4,858	101	7	98,982
Tulare						
<i>Agriculture</i>	3,555	0	0	0	0	3,555
<i>Commercial</i>	8,873	0	0	0	0	8,873
<i>Education</i>	269	0	0	0	0	269
<i>Government</i>	461	0	0	0	0	461
<i>Industrial</i>	2,148	0	0	0	0	2,148
<i>Religion</i>	827	0	0	0	0	827
<i>Other Residential</i>	20,021	1	0	0	0	20,022
<i>Single Family</i>	112,034	0	0	0	0	112,034
Ventura						
<i>Agriculture</i>	578	17	3	0	0	598
<i>Commercial</i>	14,463	438	51	1	0	14,953
<i>Education</i>	492	5	0	0	0	497

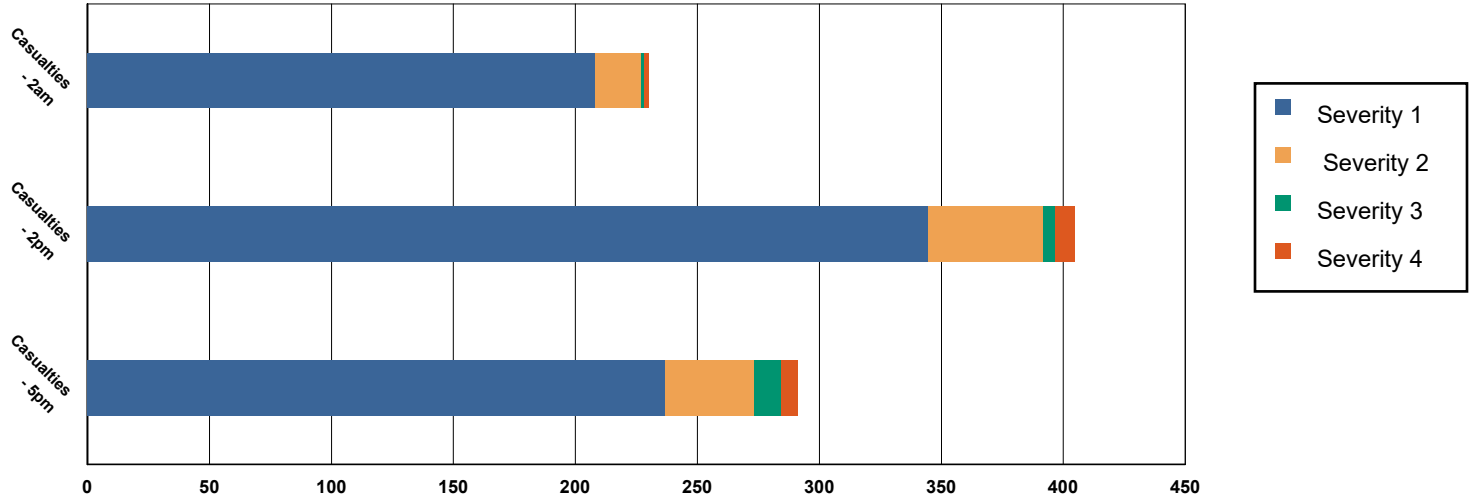
	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Government</i>	972	27	2	0	0	1,001
<i>Industrial</i>	5,859	211	26	1	0	6,097
<i>Religion</i>	1,154	29	4	0	0	1,187
<i>Other Residential</i>	24,616	1,381	164	2	0	26,163
<i>Single Family</i>	200,738	3,215	16	0	0	203,968
Total	5,466,426	50,945	11,515	1,545	108	5,530,538
Region Total	5,466,426	50,945	11,515	1,545	108	5,530,538

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

Fresno

Casualties - 2am

	Severity 1	Severity 2	Severity 3	Severity 4	Total
<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

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

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

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Los Angeles					
Casualties - 2pm					
Single Family	0	0	0	0	0
Hotels	0	0	0	0	0
Total Casualties - 2pm	3	0	0	0	3
Casualties - 5pm					
Other-Residential	0	0	0	0	0
Industrial	0	0	0	0	0
Commuting	0	0	0	0	0
Single Family	0	0	0	0	0
Commercial	1	0	0	0	1
Hotels	0	0	0	0	0
Educational	0	0	0	0	0
Total Casualties - 5pm	2	0	0	0	2
Monterey					
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					
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
Other-Residential	0	0	0	0	0
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
Commercial	0	0	0	0	0
Other-Residential	0	0	0	0	0
Industrial	0	0	0	0	0
Hotels	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 - 5pm	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Orange					
Casualties - 2am					
<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
<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
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>Single Family</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>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>Other-Residential</i>	0	0	0	0	0
<i>Industrial</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
San Bernardino					
Casualties - 2am					
<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>Commuting</i>	0	0	0	0	0
<i>Educational</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 - 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>Commuting</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
San Bernardino					
Casualties - 2pm					
<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 - 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>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
Total Casualties - 5pm	0	0	0	0	0
San Luis Obispo					
Casualties - 2am					
<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>Commuting</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 2am	1	0	0	0	1
Casualties - 2pm					
<i>Single Family</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</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>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>Commercial</i>	0	0	0	0	0
<i>Hotels</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					
San Luis Obispo					
Total Casualties - 5pm	0	0	0	0	0
Santa Barbara					
Casualties - 2am					
<i>Industrial</i>	3	0	0	0	4
<i>Commercial</i>	3	0	0	0	3
<i>Other-Residential</i>	109	14	1	2	125
<i>Commuting</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Single Family</i>	80	4	0	0	84
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 2am	195	19	1	2	217
Casualties - 2pm					
<i>Commercial</i>	184	28	3	5	220
<i>Single Family</i>	26	1	0	0	27
<i>Other-Residential</i>	35	4	0	1	40
<i>Commuting</i>	0	0	0	0	1
<i>Educational</i>	61	9	1	2	72
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	23	4	0	1	28
Total Casualties - 2pm	329	47	5	8	389
Casualties - 5pm					
<i>Other-Residential</i>	40	5	0	1	46
<i>Single Family</i>	29	2	0	0	31
<i>Commercial</i>	123	19	2	4	148
<i>Commuting</i>	3	6	9	2	20
<i>Educational</i>	15	2	0	0	17
<i>Industrial</i>	15	2	0	0	17
<i>Hotels</i>	0	0	0	0	0
Total Casualties - 5pm	225	36	11	7	279
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

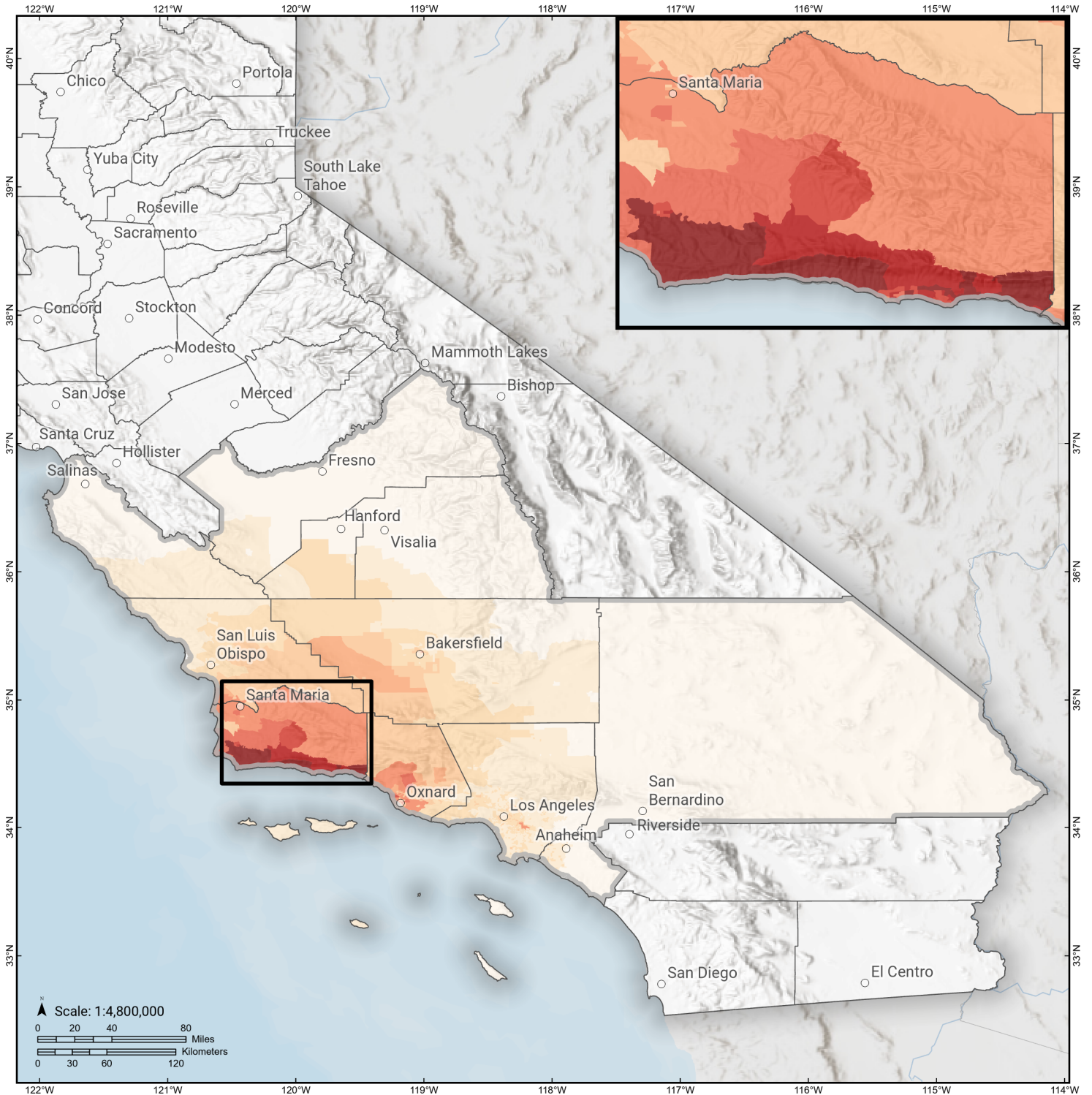
	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Tulare					
Casualties - 2pm					
<i>Hotels</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
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
Ventura					
Casualties - 2am					
<i>Educational</i>	0	0	0	0	0
<i>Commuting</i>	0	0	0	0	0
<i>Single Family</i>	5	0	0	0	5
<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>	5	0	0	0	5
Total Casualties - 2am	10	0	0	0	10
Casualties - 2pm					
<i>Industrial</i>	1	0	0	0	1
<i>Educational</i>	2	0	0	0	2
<i>Commuting</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Other-Residential</i>	1	0	0	0	1
<i>Commercial</i>	6	0	0	0	6
<i>Single Family</i>	1	0	0	0	1
Total Casualties - 2pm	12	0	0	0	12
Casualties - 5pm					
<i>Commuting</i>	0	0	0	0	0
<i>Other-Residential</i>	2	0	0	0	2
<i>Commercial</i>	4	0	0	0	5
<i>Hotels</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					
Ventura					
Casualties - 5pm					
<i>Single Family</i>	2	0	0	0	2
<i>Industrial</i>	1	0	0	0	1
Total Casualties - 5pm	9	0	0	0	9
Region Total	NA	NA	NA	NA	NA

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.

Santa Ynez (West)

Debris Generated by Census Tract



Study Region: Santa Ynez (West)
Scenario: bssc2014santaynezwestshaw09m_m7p11_se



Debris Generated (in tons)



Debris Summary Report

May 01, 2024

All values are in thousands of tons.

	Brick, Wood & Others	Concrete & Steel	Total
California			
Fresno	0	0	0
Kings	0	0	0
San Luis Obispo	1	0	1
Tulare	0	0	0
San Bernardino	0	0	0
Ventura	9	7	16
Kern	1	0	1
Orange	0	0	0
Monterey	0	0	0
Los Angeles	4	0	4
Santa Barbara	155	228	384
Total	170	236	406
Region Total	170	236	406

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										
San Bernardino	0	0	0	0	0.00	0	0	0	0	0
Fresno	0	0	0	0	0.00	0	0	0	0	0
Kings	1	14	10	2	0.00	0	0	0	0	27
San Luis Obispo	930	10,642	5,304	690	0.02	148	107	116	169	18,105
Tulare	1	62	44	16	0.00	0	0	0	0	124
Santa Barbara	350,128	1,885,751	829,341	67,942	2.85	171,418	104,831	130,914	100,839	3,641,164
Kern	681	9,123	5,154	957	0.01	90	124	139	142	16,410
Ventura	16,112	155,549	78,165	9,613	0.11	3,123	2,828	3,474	3,380	272,243
Monterey	0	1	1	1	0.00	0	0	0	0	3

	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	
Orange	46	2,941	1,931	223	0.00	4	7	8	13	5,173
Los Angeles	2,586	35,292	21,832	2,297	0.00	274	432	464	854	64,031
Total	370,485	2,099,377	941,782	81,740	0.27	175,057	108,329	135,114	105,397	4,017,280
Region Total	370,485	2,099,377	941,782	81,740	0.27	175,057	108,329	135,114	105,397	4,017,280

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								
Fresno								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Kern								
Segments	0	0	0					0
Bridges	59	0	0					59
Tunnels	0	0	0					0
Facilities		180	0	62	0	0	811	1,053
Total	59	180	0	62	0	0	811	1,112
Kings								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		3	0	0	0	0	0	3

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	0	3	0	0	0	0	0	3
Los Angeles								
<i>Segments</i>	0	0	0					0
<i>Bridges</i>	98	0	0					98
<i>Tunnels</i>	0	0	0					0
<i>Facilities</i>		1,091	21,842	297	6,599	94	24,465	54,388
Total	98	1,091	21,842	297	6,599	94	24,465	54,487
Monterey								
<i>Segments</i>	0	0	0					0
<i>Bridges</i>	0	0	0					0
<i>Tunnels</i>	0	0	0					0
<i>Facilities</i>		0	0	2	0	0	57	59
Total	0	0	0	2	0	0	57	59
Orange								
<i>Segments</i>	0	0	0					0
<i>Bridges</i>	1	0	0					1
<i>Tunnels</i>	0	0	0					0
<i>Facilities</i>		40	0	0	98	6	697	841
Total	1	40	0	0	98	6	697	842
San Bernardino								
<i>Segments</i>	0	0	0					0
<i>Bridges</i>	0	0	0					0
<i>Tunnels</i>	0	0	0					0
<i>Facilities</i>		0	0	0	0	0	0	0

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	0	0	0	0	0	0	0	0
San Luis Obispo								
Segments	0	0	0					0
Bridges	47	1	0					48
Tunnels	0	0	0					0
Facilities		161	0	41	294	0	871	1,366
Total	47	161	0	41	294	0	871	1,414
Santa Barbara								
Segments	0	0	0					0
Bridges	31,071	21,688	0					52,760
Tunnels	611	0	0					611
Facilities		2,417	0	1,456	6,351	164	14,047	24,435
Total	31,683	24,106	0	1,456	6,351	164	14,047	77,806
Tulare								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		0	0	2	0	0	6	8
Total	0	0	0	2	0	0	6	8
Ventura								
Segments	0	0	0					0
Bridges	922	38	0					960
Tunnels	3	0	0					3
Facilities		554	0	89	4,036	155	1,823	6,657

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	925	592	0	89	4,036	155	1,823	7,620
Total	32,814	26,172	21,842	1,949	17,378	419	42,776	143,351
Region Total	32,814	26,172	21,842	1,949	17,378	419	42,776	143,351

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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							
Fresno							
<i>Facilities</i>	0	0	0	0	0	0	0
<i>Pipelines</i>	23	12	0	0			35
Total	23	12	0	0	0	0	35
Kern							
<i>Facilities</i>	112	369	1	291	110,938	8	111,719
<i>Pipelines</i>	365	183	0	0			548
Total	477	552	1	291	110,938	8	112,267
Kings							
<i>Facilities</i>	0	0	0	4	807	0	811
<i>Pipelines</i>	51	26	0	0			76
Total	51	26	0	4	807	0	888
Los Angeles							
<i>Facilities</i>	339	2,218	4	427	185,241	7	188,236

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
<i>Pipelines</i>	548	275	0	0			824
Total	887	2,494	4	427	185,241	7	189,060
Monterey							
<i>Facilities</i>	0	0	0	0	126	0	126
<i>Pipelines</i>	38	19	0	0			58
Total	38	19	0	0	126	0	183
Orange							
<i>Facilities</i>	2	382	0	59	4,348	0	4,791
<i>Pipelines</i>	134	68	0	0			202
Total	136	449	0	59	4,348	0	4,993
San Bernardino							
<i>Facilities</i>	0	3	0	0	0	0	3
<i>Pipelines</i>	13	6	0	0			19
Total	13	9	0	0	0	0	22
San Luis Obispo							
<i>Facilities</i>	28	3,786	2	0	25,490	8	29,315
<i>Pipelines</i>	190	95	0	0			285
Total	218	3,882	2	0	25,490	8	29,600
Santa Barbara							
<i>Facilities</i>	0	171,741	28	29,924	131,273	1,571	334,536
<i>Pipelines</i>	6,036	3,032	0	0			9,068

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
Total	6,036	174,773	28	29,924	131,273	1,571	343,604
Tulare							
<i>Facilities</i>	0	0	0	0	1,392	0	1,392
<i>Pipelines</i>	51	25	0	0			76
Total	51	25	0	0	1,392	0	1,468
Ventura							
<i>Facilities</i>	3,063	21,516	9	1,772	201,719	109	228,188
<i>Pipelines</i>	406	204	0	0			610
Total	3,469	21,720	9	1,772	201,719	109	228,798
Total	11,399	203,961	43	32,477	661,334	1,703	910,917
Region Total	11,399	203,961	43	32,477	661,334	1,703	910,917

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.

Santa Ynez (West)

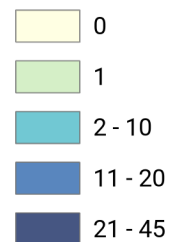
Displaced Households by Census Tract



Study Region: Santa Ynez (West)
Scenario: bssc2014santaynezwestshaw09m_m7p11_se

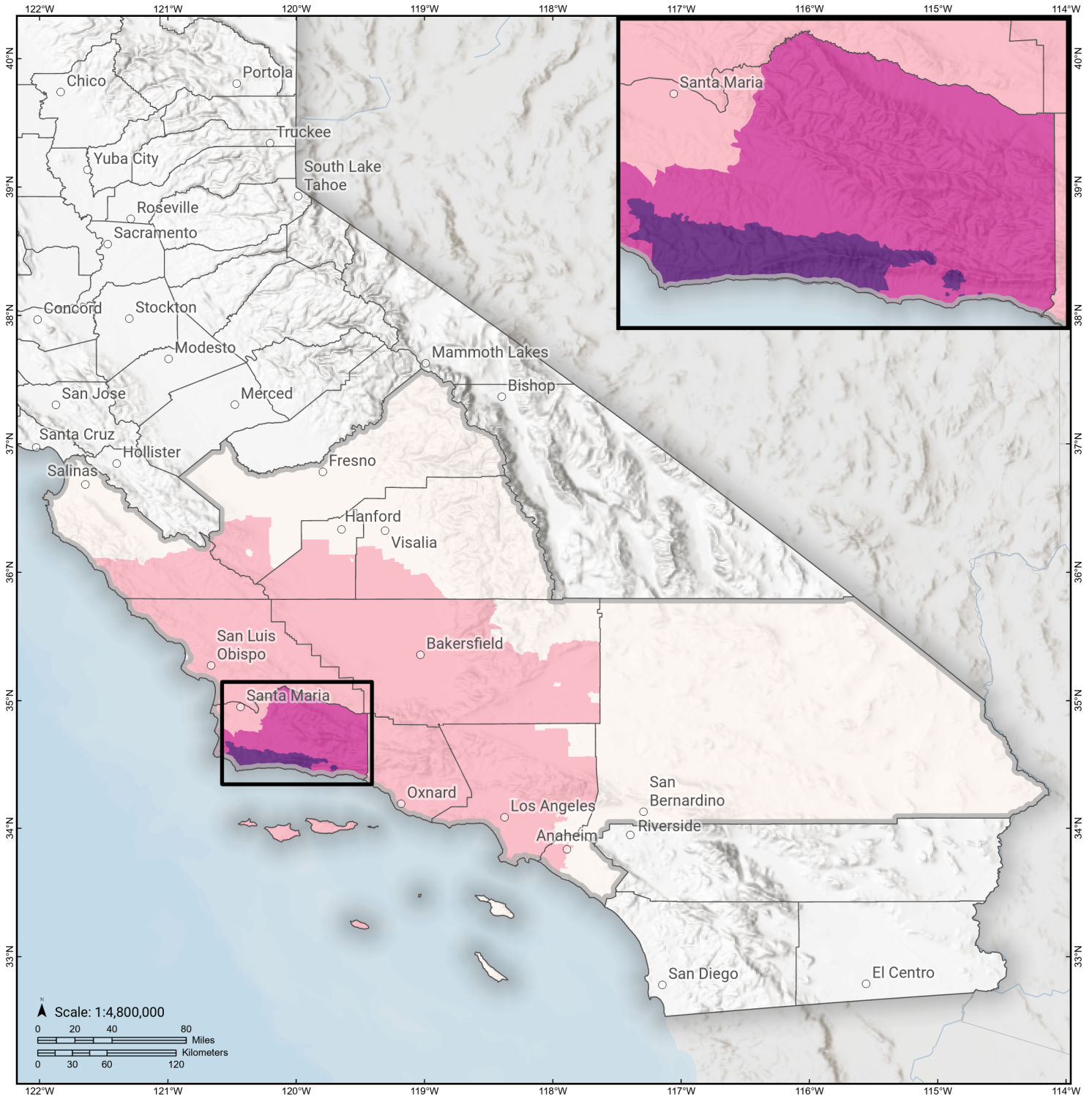


Displaced Households



Santa Ynez (West)

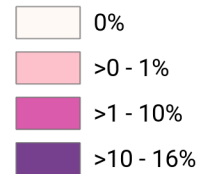
Loss Ratio by Census Tract



Study Region: Santa Ynez (West)
Scenario: bssc2014santaynezwestshaw09m_m7p11_se



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



Hazus Quick Assessment Report

Estimated Economic Loss (\$ Billions)

Category	Description	Range
General Building Stock	Building Damage	1.20 - 4.90
	Building Contents	0.10 - 0.60
	Business Interruption	0.30 - 1.00
Infrastructure	Lifelines Damage	
Total		2.00 - 8.00

Preliminary Damage Assessment (PDA) Estimates

Description	Residential	Commercial	Other	Total
Affected	45,700	3,600	1,500	50,800
Minor	9,000	1,700	740	11,440
Major	1,100	270	140	1,510
Destroyed	60	30	20	110
Total	55,860	5,600	2,400	63,860

Estimated Casualties : Night Time

Severity Level	Description	# Persons
Level 1	Medical Aid	100 - 400
Level 2	Hospital Care	10 - 40
Level 3	Life-threatening	< 10
Level 4	Fatalities	< 10

Estimated Shelter Needs

Type	Households	People
Displaced Households	300 - 1,300	750 - 3,250
Public Shelter	130	310

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 : 7.11

Epicenter Latitude/Longitude :
/

Depth & Type : /U

Name :
NA

Ground Motion /Attenuation :

Maximum PGA: 1.00

Information Sources:

Comments :

Population and Building Exposure

Population: 19,939,675

Building Exposure : (\$ Millions)

Residential	2,020,852
Commercial	680,833
Other	505,739
Total	3,207,424

Counties : See Appendix

Major Metro Area :

Hazus Quick Assessment Report

Estimated Economic Loss (\$ Billions)

Category	Description	Range
General Building Stock	Building Damage	1.20 - 4.90
	Building Contents	0.10 - 0.60
	Business Interruption	0.30 - 1.00
Infrastructure	Lifelines Damage	
Total		2.00 - 8.00

Preliminary Damage Assessment (PDA) Estimates

Description	Residential	Commercial	Other	Total
Affected	45,700	3,600	1,500	50,800
Minor	9,000	1,700	740	11,440
Major	1,100	270	140	1,510
Destroyed	60	30	20	110
Total	55,860	5,600	2,400	63,860

Estimated Casualties : Day Time

Severity Level	Description	# Persons
Level 1	Medical Aid	170 - 700
Level 2	Hospital Care	20 - 90
Level 3	Life-threatening	< 10
Level 4	Fatalities	0 - 20

Estimated Shelter Needs

Type	Households	People
Displaced Households	300 - 1,300	750 - 3,250
Public Shelter	130	310

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.

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Earthquake Information

Location :

Origin Time:

Magnitude : 7.11

Epicenter Latitude/Longitude :
/

Depth & Type : /U

Name :
NA

Ground Motion /Attenuation :

Maximum PGA: 1.00

Information Sources:

Comments :

Population and Building Exposure

Population: 19,939,675

Building Exposure : (\$ Millions)

Residential	2,020,852
Commercial	680,833
Other	505,739
Total	3,207,424

Counties : See Appendix

Major Metro Area :

Hazus Quick Assessment Report

Estimated Economic Loss (\$ Billions)

Category	Description	Range
General Building Stock	Building Damage	1.20 - 4.90
	Building Contents	0.10 - 0.60
	Business Interruption	0.30 - 1.00
Infrastructure	Lifelines Damage	
Total		2.00 - 8.00

Preliminary Damage Assessment (PDA) Estimates

Description	Residential	Commercial	Other	Total
Affected	45,700	3,600	1,500	50,800
Minor	9,000	1,700	740	11,440
Major	1,100	270	140	1,510
Destroyed	60	30	20	110
Total	55,860	5,600	2,400	63,860

Estimated Casualties : Commute Time

Severity Level	Description	# Persons
Level 1	Medical Aid	120 - 500
Level 2	Hospital Care	20 - 70
Level 3	Life-threatening	10 - 20
Level 4	Fatalities	< 10

Estimated Shelter Needs

Type	Households	People
Displaced Households	300 - 1,300	750 - 3,250
Public Shelter	130	310

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.

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Earthquake Information

Location :

Origin Time:

Magnitude : 7.11

Epicenter Latitude/Longitude :
/

Depth & Type : /U

Name :
NA

Ground Motion /Attenuation :

Maximum PGA: 1.00

Information Sources:

Comments :

Population and Building Exposure

Population: 19,939,675

Building Exposure : (\$ Millions)

Residential	2,020,852
Commercial	680,833
Other	505,739
Total	3,207,424

Counties : See Appendix

Major Metro Area :

Shelter Summary Report

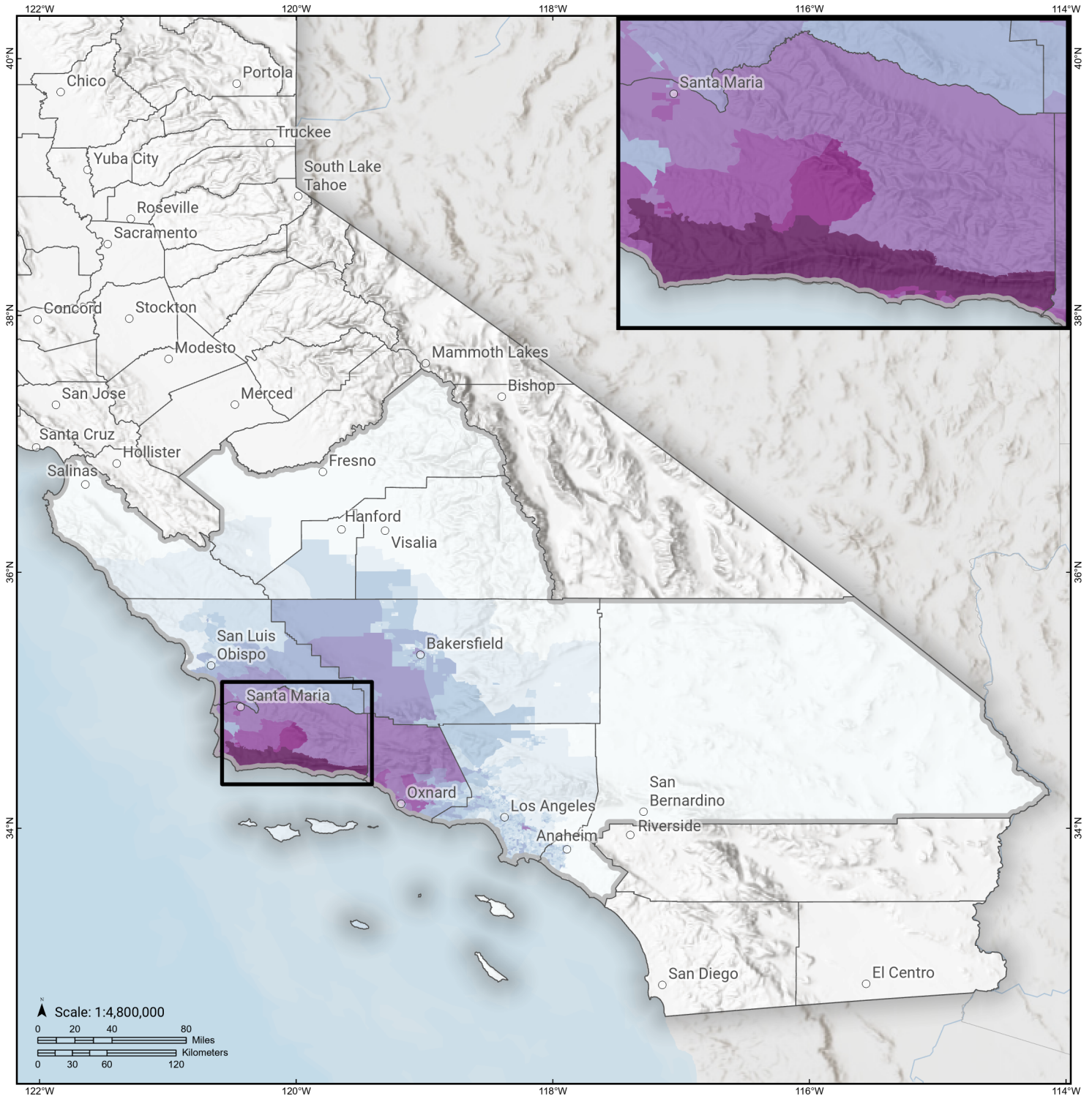
May 01, 2024

	# of Displaced Households	# of People Needing Short Term Shelter
California		
Fresno	0	0
Kings	0	0
San Luis Obispo	0	0
Tulare	0	0
San Bernardino	0	0
Ventura	4	2
Kern	0	0
Orange	0	0
Monterey	0	0
Los Angeles	0	0
Santa Barbara	623	312
Total	627	314
Region Total	627	314

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.

Santa Ynez (West)

Total Building Related Economic Loss by Census Tract



Study Region: Santa Ynez (West)

Scenario: bssc2014santaynezwestshaw09m_m7p11_se



Economic Loss (in thousands of USD \$)

