
Hazus: Earthquake Global Risk Report

Region Name: HartleySprings

Earthquake Scenario: hartleysprings2011cf_m6p77_se

Print Date: May 06, 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.

Table of Contents

Section	Page #
General Description of the Region	3
Building and Lifeline Inventory	4
Building Inventory	
Critical Facility Inventory	
Transportation and Utility Lifeline Inventory	
Earthquake Scenario Parameters	7
Direct Earthquake Damage	8
Buildings Damage	
Essential Facilities Damage	
Transportation and Utility Lifeline Damage	
Induced Earthquake Damage	14
Fire Following Earthquake	
Debris Generation	
Social Impact	15
Shelter Requirements	
Casualties	
Economic Loss	17
Building Related Losses	
Transportation and Utility Lifeline Losses	
Appendix A: County Listing for the Region	
Appendix B: Regional Population and Building Value Data	

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 10 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 34,334.17 square miles and contains 572 census tracts. There are over 811 thousand households in the region which has a total population of 2,578,272 people. The distribution of population by Total Region and County is provided in Appendix B.

There are an estimated 824 thousand buildings in the region with a total building replacement value (excluding contents) of 441,261 (millions of dollars). Approximately 89.00 % of the buildings (and 61.00% of the building value) are associated with residential housing.

The replacement value of the transportation and utility lifeline systems is estimated to be 44,522 and 56,314 (millions of dollars) , respectively.

Building and Lifeline Inventory

Building Inventory

Hazus estimates that there are 824 thousand buildings in the region which have an aggregate total replacement value of 441,261 (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 52 hospitals in the region with a total bed capacity of 8,264 beds. There are 1,148 schools, 310 fire stations, 87 police stations and 20 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 100,836.00 (millions of dollars). This inventory includes over 3,572.26 miles of highways, 3,030 bridges, 78,197.68 miles of pipes.

Table 1: Transportation System Lifeline Inventory

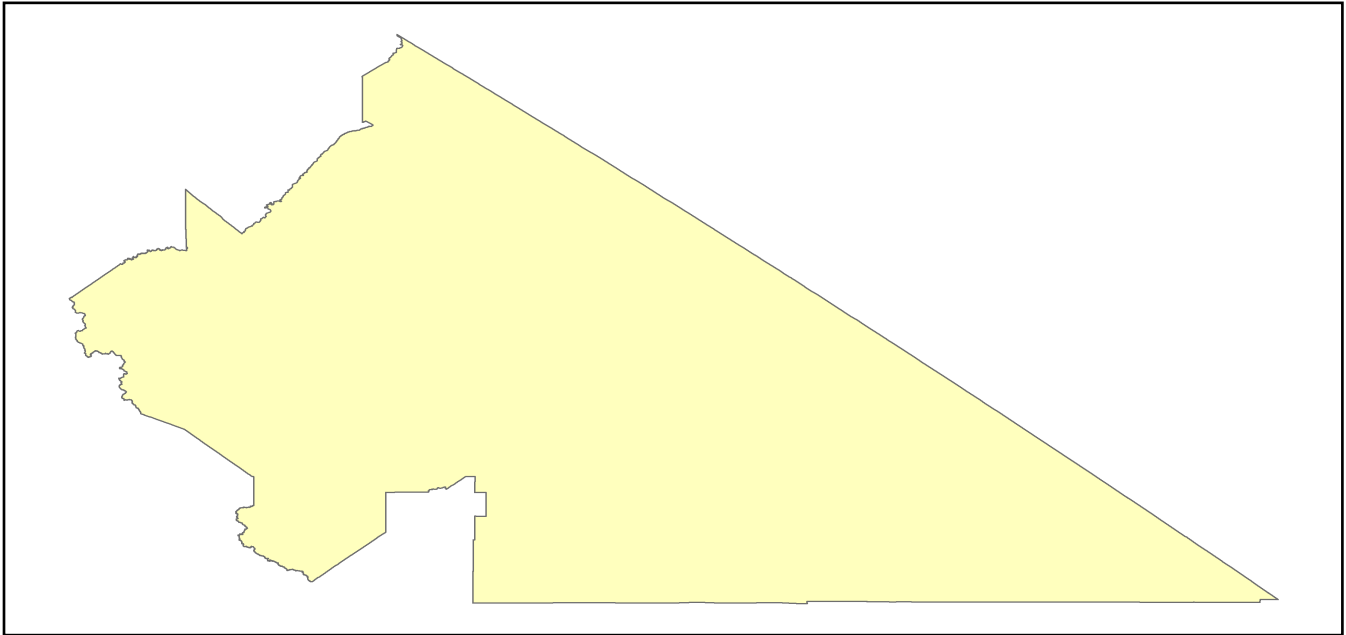
System	Component	# Locations/ # Segments	Replacement value (millions of dollars)
Highway	Bridges	3,030	6837.3164
	Segments	1,165	27215.4217
	Tunnels	5	104.0146
	Subtotal		34156.7527
Railways	Bridges	384	2184.9600
	Facilities	18	47.9340
	Segments	518	7493.9693
	Tunnels	0	0.0000
	Subtotal		9726.8633
Light Rail	Bridges	0	0.0000
	Facilities	0	0.0000
	Segments	0	0.0000
	Tunnels	0	0.0000
	Subtotal		0.0000
Bus	Facilities	15	32.7545
	Subtotal		32.7545
Ferry	Facilities	0	0.0000
	Subtotal		0.0000
Port	Facilities	0	0.0000
	Subtotal		0.0000
Airport	Facilities	41	317.4347
	Runways	48	288.9412
	Subtotal		606.3759
		Total	44,522.70

Table 2: Utility System Lifeline Inventory

System	Component	# Locations / Segments	Replacement value (millions of dollars)
Potable Water	Distribution Lines	NA	1563.6638
	Facilities	1	39.2940
	Pipelines	0	0.0000
		Subtotal	1602.9578
Waste Water	Distribution Lines	NA	938.1983
	Facilities	22	3782.9396
	Pipelines	0	0.0000
		Subtotal	4721.1379
Natural Gas	Distribution Lines	NA	625.4655
	Facilities	1	18.2016
	Pipelines	128	2655.7461
		Subtotal	3299.4132
Oil Systems	Facilities	1	0.1180
	Pipelines	0	0.0000
		Subtotal	0.1180
Electrical Power	Facilities	154	46675.0366
		Subtotal	46675.0366
Communication	Facilities	136	16.0480
		Subtotal	16.0480
	Total		56,314.70

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	hartleysprings2011cf_m6p77_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	6.80
Depth (km)	NA
Rupture Length (Km)	NA
Rupture Orientation (degrees)	NA
Attenuation Function	NA

Direct Earthquake Damage

Building Damage

Hazus estimates that about 814 buildings will be at least moderately damaged. This is over 0.00 % of the buildings in the region. There are an estimated 0 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

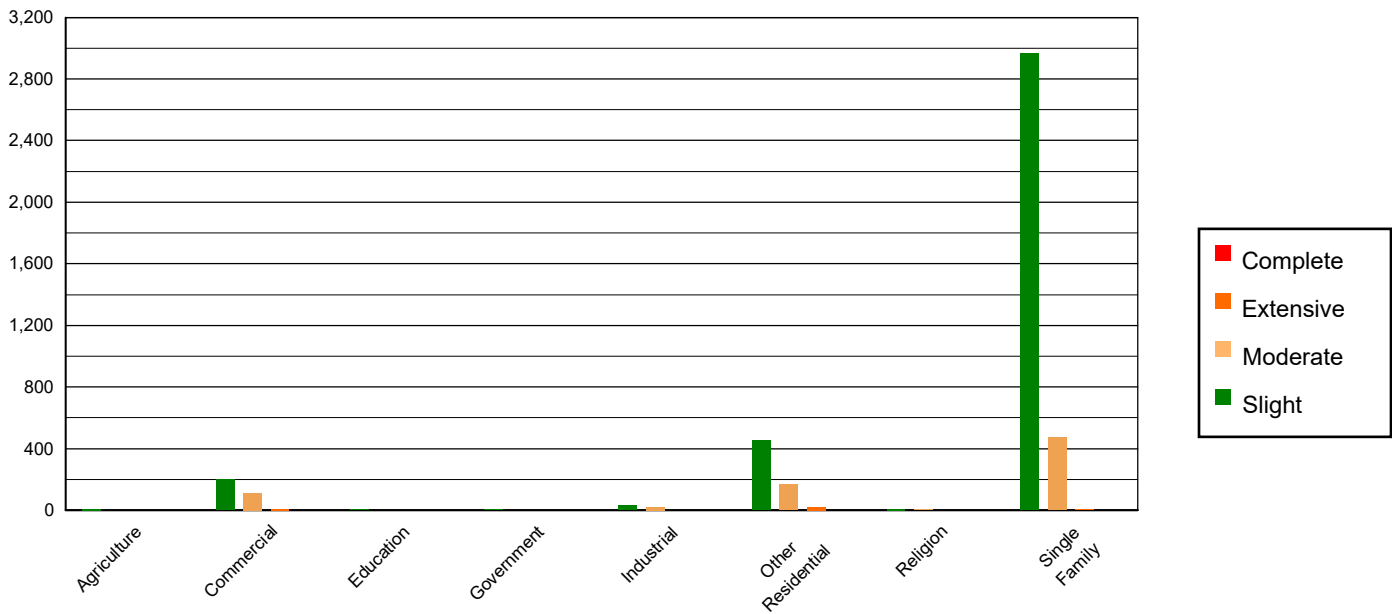


Table 3: Expected Building Damage by Occupancy

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	16779.98	2.05	8.36	0.23	1.54	0.20	0.11	0.31	0.00	0.55
Commercial	51325.44	6.26	197.87	5.39	110.51	14.20	9.12	25.12	0.06	20.68
Education	1602.63	0.20	3.12	0.08	1.21	0.16	0.04	0.11	0.00	0.00
Government	2008.70	0.24	2.92	0.08	1.30	0.17	0.08	0.23	0.00	0.00
Industrial	13699.77	1.67	31.28	0.85	19.09	2.45	1.84	5.07	0.02	5.23
Other Residential	108518.75	13.23	453.26	12.35	167.46	21.53	21.30	58.68	0.23	73.22
Religion	3490.35	0.43	6.87	0.19	3.52	0.45	0.26	0.72	0.00	0.32
Single Family	622969.31	75.94	2967.83	80.83	473.32	60.84	3.55	9.77	0.00	0.00
Total	820,395		3,672		778		36		0	

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

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Wood	714747.20	87.12	3214.45	87.55	504.80	64.89	2.69	7.41	0.00	0.00
Steel	20613.03	2.51	46.24	1.26	36.66	4.71	5.47	15.08	0.06	20.92
Concrete	19857.02	2.42	60.52	1.65	33.68	4.33	2.33	6.42	0.00	0.48
Precast	13404.01	1.63	50.32	1.37	40.84	5.25	3.91	10.78	0.05	15.53
RM	24378.33	2.97	86.07	2.34	63.99	8.23	4.94	13.61	0.00	0.91
URM	2179.22	0.27	10.23	0.28	1.06	0.14	0.02	0.06	0.00	0.00
MH	25216.12	3.07	203.68	5.55	96.92	12.46	16.93	46.65	0.19	62.16
Total	820,395		3,672		778		36		0	

*Note:

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

Essential Facility Damage

Before the earthquake, the region had 8,264 hospital beds available for use. On the day of the earthquake, the model estimates that only 8,138 hospital beds (98.00%) are available for use by patients already in the hospital and those injured by the earthquake. After one week, 100.00% 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	52	0	0	51
Schools	1,148	0	0	1,141
EOCs	20	0	0	20
PoliceStations	87	0	0	86
FireStations	310	0	0	307

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	1,165	0	0	1,165	1,165
	Bridges	3,030	0	0	3,030	3,030
	Tunnels	5	0	0	5	5
Railways	Segments	518	0	0	518	518
	Bridges	384	0	0	384	384
	Tunnels	0	0	0	0	0
	Facilities	18	0	0	18	18
Light Rail	Segments	0	0	0	0	0
	Bridges	0	0	0	0	0
	Tunnels	0	0	0	0	0
	Facilities	0	0	0	0	0
Bus	Facilities	15	1	0	15	15
Ferry	Facilities	0	0	0	0	0
Port	Facilities	0	0	0	0	0
Airport	Facilities	41	0	0	41	41
	Runways	48	0	0	48	48

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	1	0	0	1	1
Waste Water	22	0	0	22	22
Natural Gas	1	0	0	1	1
Oil Systems	1	0	0	1	1
Electrical Power	154	4	0	150	154
Communication	136	1	0	136	136

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

System	Total Pipelines Length (miles)	Number of Leaks	Number of Breaks
Potable Water	48,581	223	56
Waste Water	29,148	112	28
Natural Gas	469	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	811,225	0	0	0	0	0
Electric Power		2,198	1,359	521	38	3

Induced Earthquake Damage

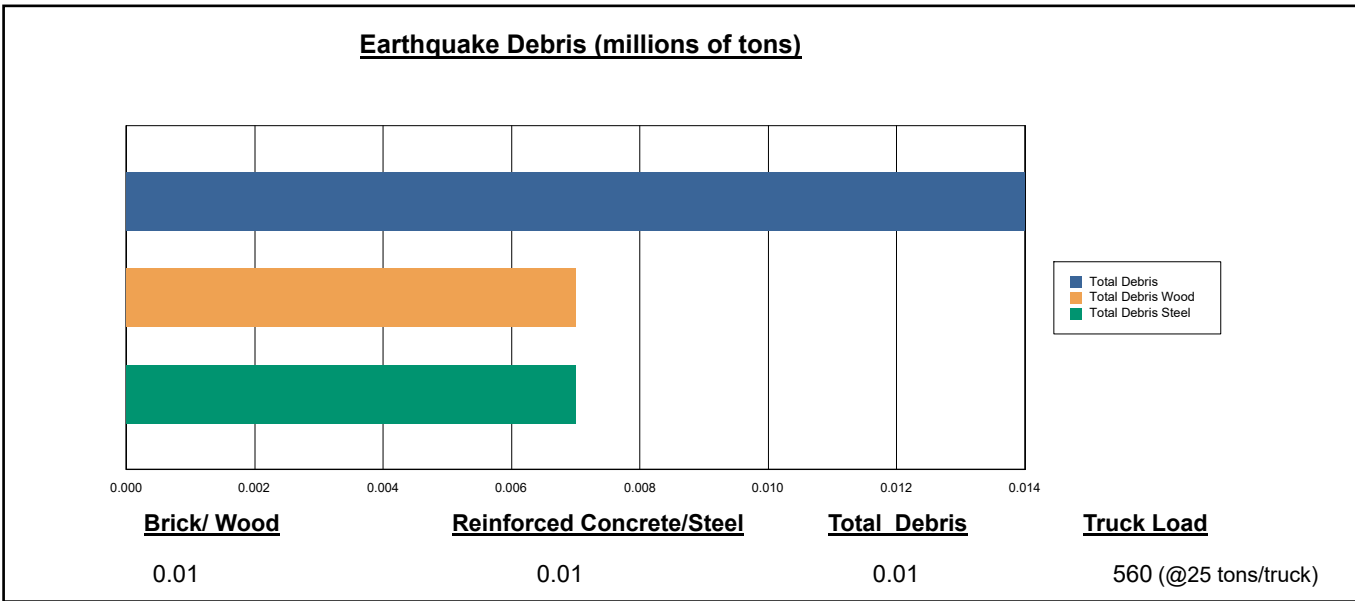
Fire Following Earthquake

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 0 ignitions that will burn about 0.00 sq. mi (0.00 % of the region's total area.) The model also estimates that the fires will displace about 0 people and burn about 0 (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.

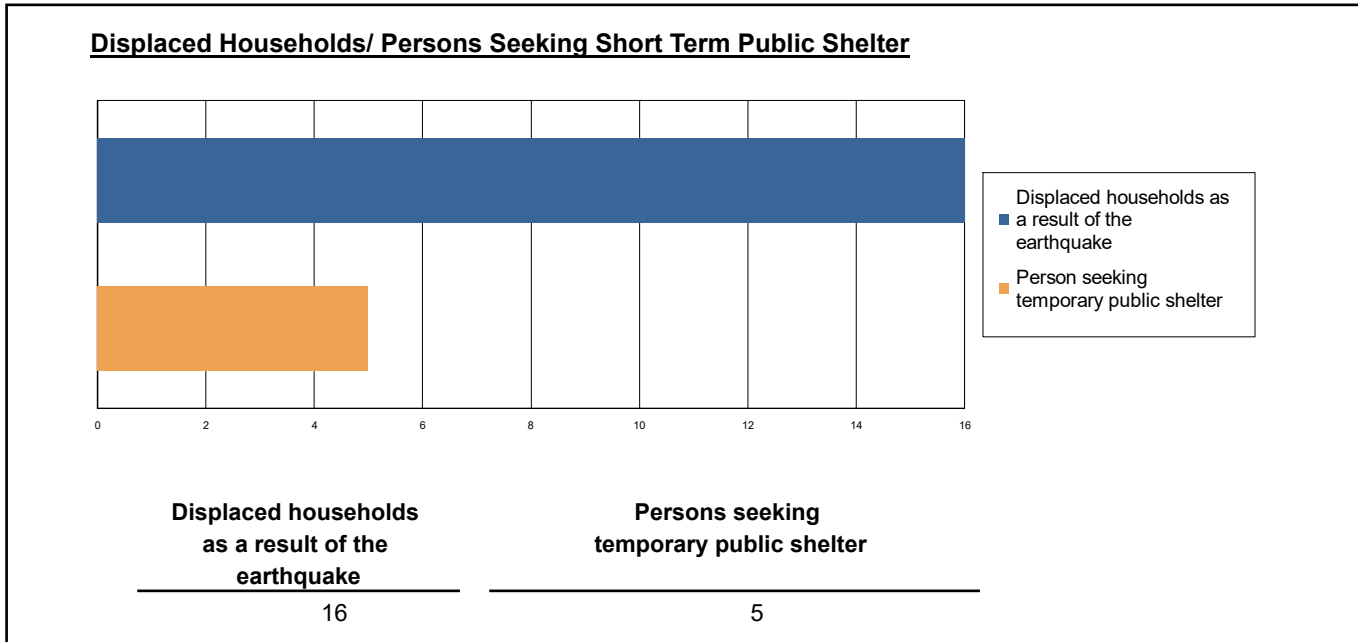
The model estimates that a total of 14,000 tons of debris will be generated. Of the total amount, Brick/Wood comprises 50.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 560 truckloads (@25 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 16 households to be displaced due to the earthquake. Of these, 5 people (out of a total population of 2,578,272) 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	0.07	0.01	0.00	0.00
	Commuting	0.00	0.00	0.00	0.00
	Educational	0.00	0.00	0.00	0.00
	Hotels	0.02	0.00	0.00	0.00
	Industrial	0.05	0.01	0.00	0.00
	Other-Residential	1.82	0.14	0.00	0.00
	Single Family	3.19	0.17	0.00	0.00
	Total	5	0	0	0
2 PM	Commercial	4.60	0.43	0.00	0.01
	Commuting	0.00	0.00	0.00	0.00
	Educational	0.67	0.06	0.00	0.00
	Hotels	0.00	0.00	0.00	0.00
	Industrial	0.40	0.04	0.00	0.00
	Other-Residential	0.63	0.05	0.00	0.00
	Single Family	1.13	0.06	0.00	0.00
	Total	7	1	0	0
5 PM	Commercial	2.89	0.27	0.00	0.01
	Commuting	0.04	0.08	0.10	0.02
	Educational	0.00	0.00	0.00	0.00
	Hotels	0.00	0.00	0.00	0.00
	Industrial	0.25	0.02	0.00	0.00
	Other-Residential	0.66	0.05	0.00	0.00
	Single Family	1.17	0.06	0.00	0.00
	Total	5	0	0	0

Economic Loss

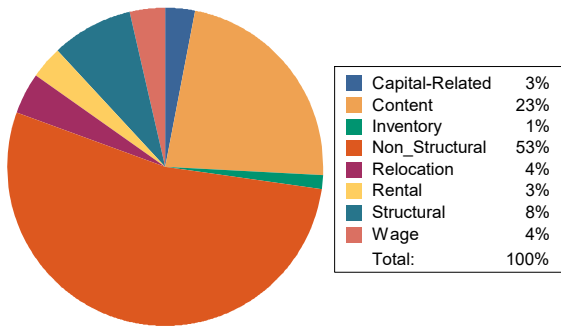
The total economic loss estimated for the earthquake is 575.29 (millions of dollars), which includes building and lifeline related losses based on the region's available inventory. The following three sections provide more detailed information about these losses.

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 186.27 (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 66 % 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)

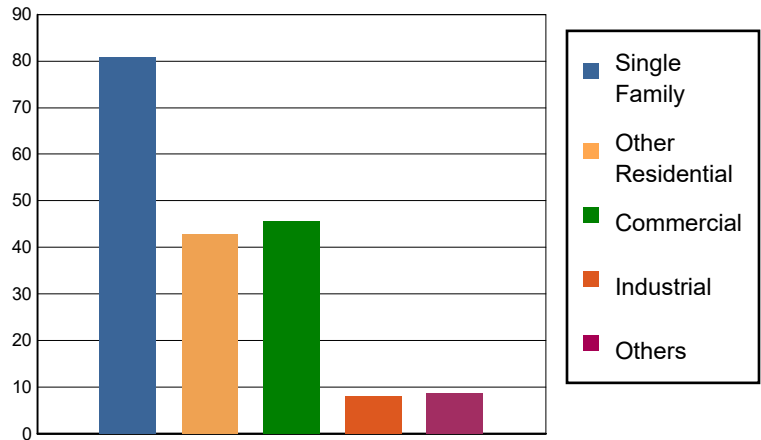


Table 11: Building-Related Economic Loss Estimates
(Millions of dollars)

Category	Area	Single Family	Other Residential	Commercial	Industrial	Others	Total
Income Losses							
	Wage	0.0000	1.9421	4.4456	0.0845	0.1784	6.6506
	Capital-Related	0.0000	0.8243	4.9497	0.0488	0.0507	5.8735
	Rental	0.9623	3.4597	1.8088	0.0293	0.0655	6.3256
	Relocation	3.2210	1.1526	2.4197	0.2385	0.6494	7.6812
	Subtotal	4.1833	7.3787	13.6238	0.4011	0.9440	26.5309
Capital Stock Losses							
	Structural	7.6763	3.3311	3.3717	0.6489	0.6474	15.6754
	Non_Structural	48.9759	25.0909	17.0455	3.8752	4.4521	99.4396
	Content	20.0855	7.1047	9.9917	2.5801	2.5491	42.3111
	Inventory	0.0000	0.0000	1.6988	0.4357	0.1787	2.3132
	Subtotal	76.7377	35.5267	32.1077	7.5399	7.8273	159.7393
	Total	80.92	42.91	45.73	7.94	8.77	186.27

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	27215.4217	0.0000	0.00
	Bridges	6837.3164	0.3013	0.00
	Tunnels	104.0146	0.1303	0.13
	Subtotal	34156.7527	0.4316	
Railways	Segments	7493.9693	0.0000	0.00
	Bridges	2184.9600	0.0000	0.00
	Tunnels	0.0000	0.0000	0.00
	Facilities	47.9340	0.2394	0.50
	Subtotal	9726.8633	0.2394	
Light Rail	Segments	0.0000	0.0000	0.00
	Bridges	0.0000	0.0000	0.00
	Tunnels	0.0000	0.0000	0.00
	Facilities	0.0000	0.0000	0.00
	Subtotal	0.0000	0.0000	
Bus	Facilities	32.7545	1.3235	4.04
	Subtotal	32.7545	1.3235	
Ferry	Facilities	0.0000	0.0000	0.00
	Subtotal	0.0000	0.0000	
Port	Facilities	0.0000	0.0000	0.00
	Subtotal	0.0000	0.0000	
Airport	Facilities	317.4347	3.8159	1.20
	Runways	288.9412	0.0000	0.00
	Subtotal	606.3759	3.8159	
Total		44,522.75	5.81	

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	39.2940	0.0006	0.00
	Distribution Lines	1563.6638	1.0015	0.06
	Subtotal	1602.9578	1.0021	
Waste Water	Pipelines	0.0000	0.0000	0.00
	Facilities	3782.9396	0.9965	0.03
	Distribution Lines	938.1983	0.5031	0.05
	Subtotal	4721.1379	1.4996	
Natural Gas	Pipelines	2655.7461	0.0000	0.00
	Facilities	18.2016	0.0003	0.00
	Distribution Lines	625.4655	0.1724	0.03
	Subtotal	3299.4132	0.1727	
Oil Systems	Pipelines	0.0000	0.0000	0.00
	Facilities	0.1180	0.0000	0.00
	Subtotal	0.1180	0.0000	
Electrical Power	Facilities	46675.0366	380.4776	0.82
	Subtotal	46675.0366	380.4776	
Communication	Facilities	16.0480	0.0514	0.32
	Subtotal	16.0480	0.0514	
	Total	56,314.71	383.20	

Appendix A: County Listing for the Region

Alpine,CA

Fresno,CA

Inyo,CA

Madera,CA

Mariposa,CA

Merced,CA

Mono,CA

Stanislaus,CA

Tulare,CA

Tuolumne,CA

Appendix B: Regional Population and Building Value Data

State	County Name	Population	Building Value (millions of dollars)		
			Residential	Non-Residential	Total
California	Alpine	1,204	721	139	861
	Fresno	1,008,654	98,532	61,772	160,304
	Inyo	19,016	2,951	1,970	4,921
	Madera	156,255	18,025	9,641	27,667
	Mariposa	17,131	3,299	1,141	4,441
	Merced	281,202	25,194	26,098	51,292
	Mono	13,195	3,293	1,083	4,377
	Stanislaus	552,878	62,937	37,511	100,449
	Tulare	473,117	43,262	31,210	74,472
	Tuolumne	55,620	8,964	3,507	12,471
Total Region		2,578,272	267,178	174,072	441,255

Building Inspection Tagging (Counts)

Total Economic Loss
Total:

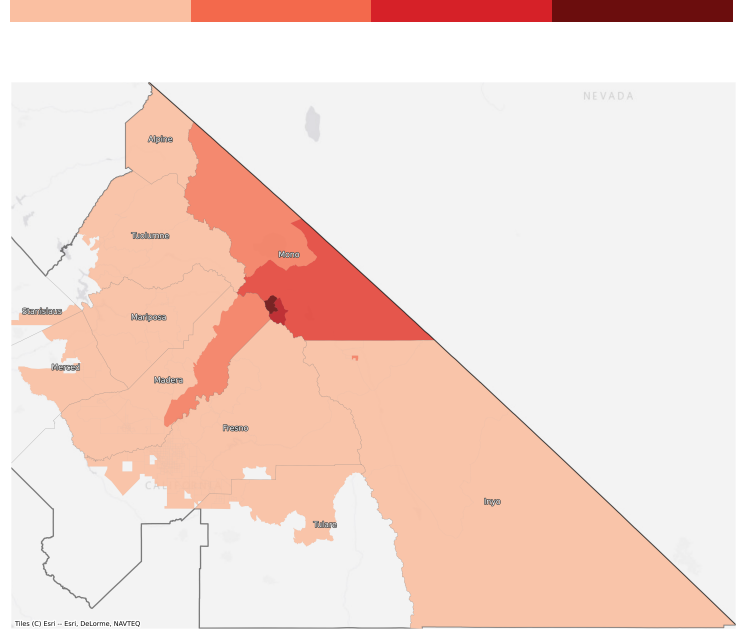
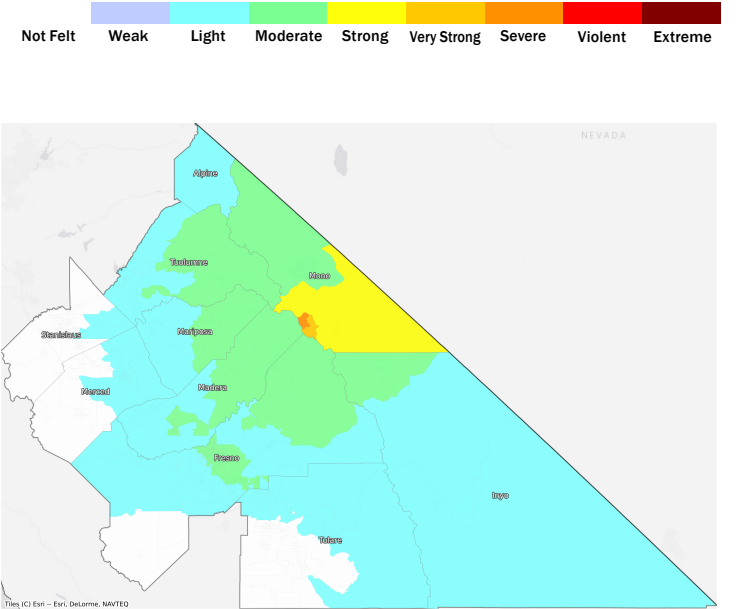
Top Counties	State	Total

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

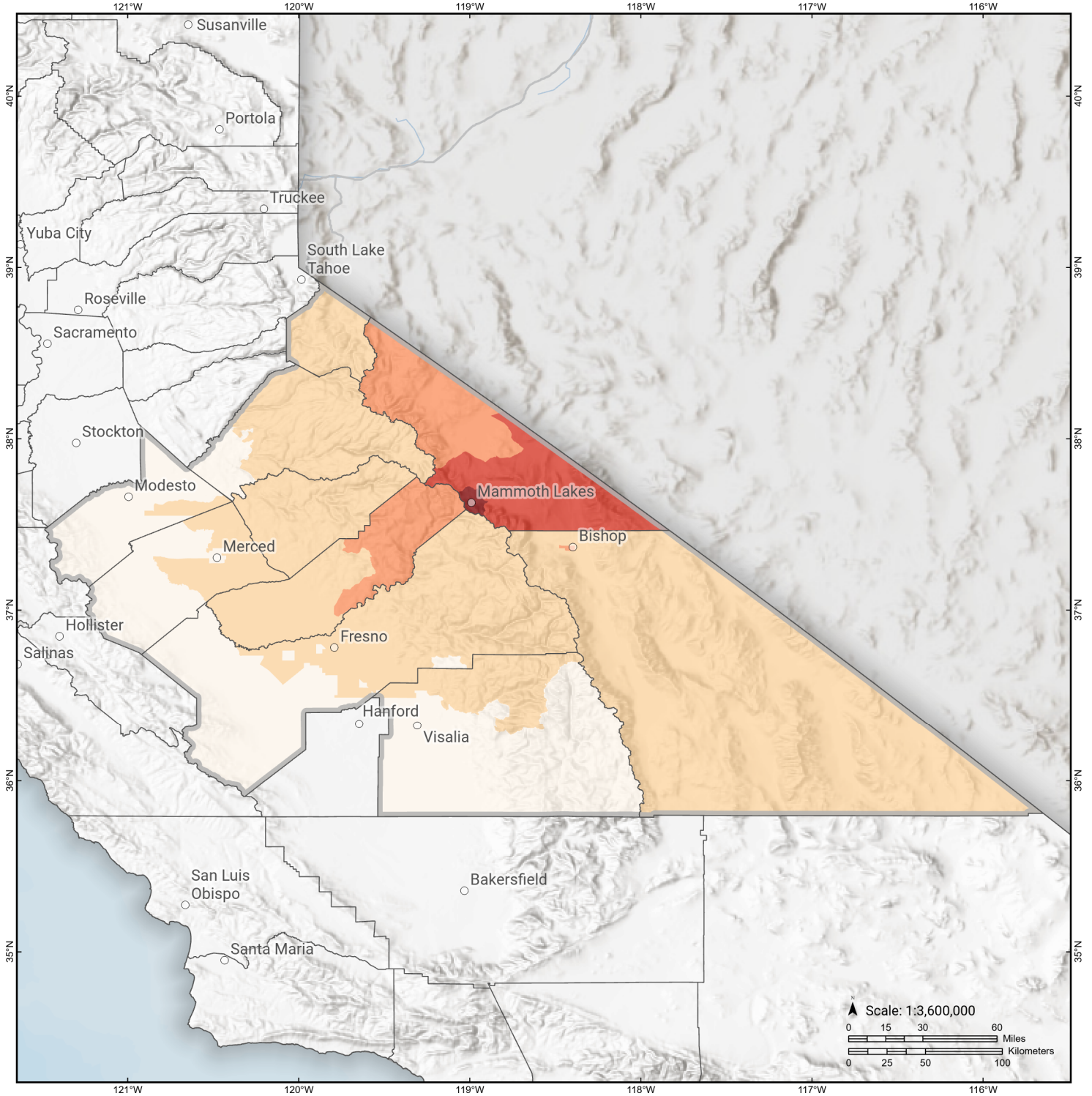
Economic Impacts by Census Tract

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.

Hartley Springs

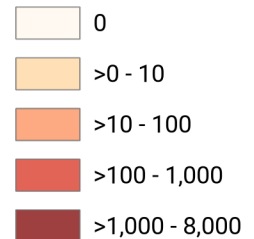
Debris Generated by Census Tract



Study Region: Hartley Springs
Scenario: hartleysprings2011cf_m6p77_se

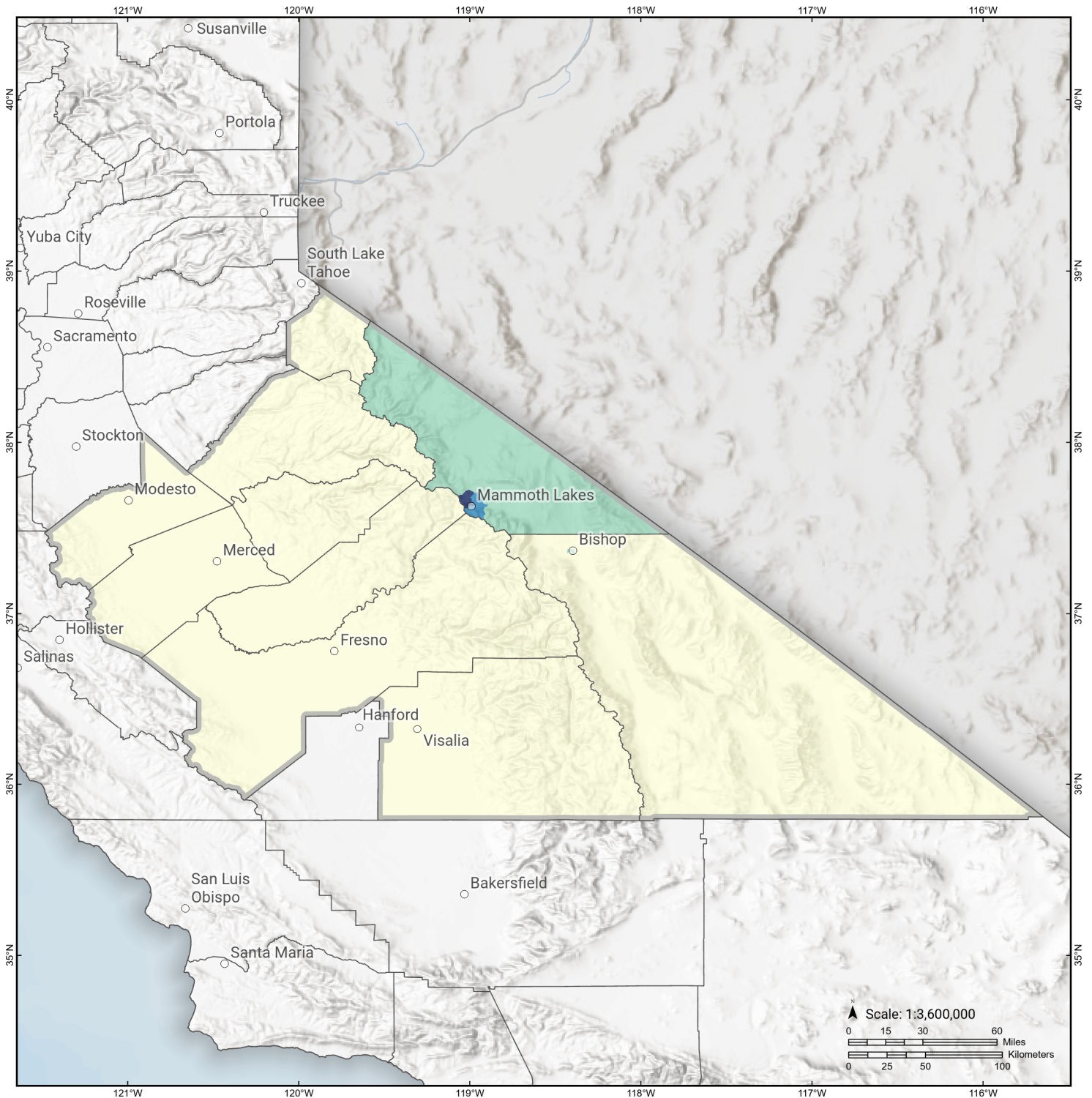


Debris Generated (in tons)



Hartley Springs

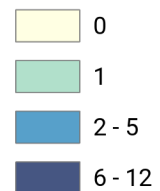
Displaced Households by Census Tract



Study Region: Hartley Springs
Scenario: hartleysprings2011cf_m6p77_se

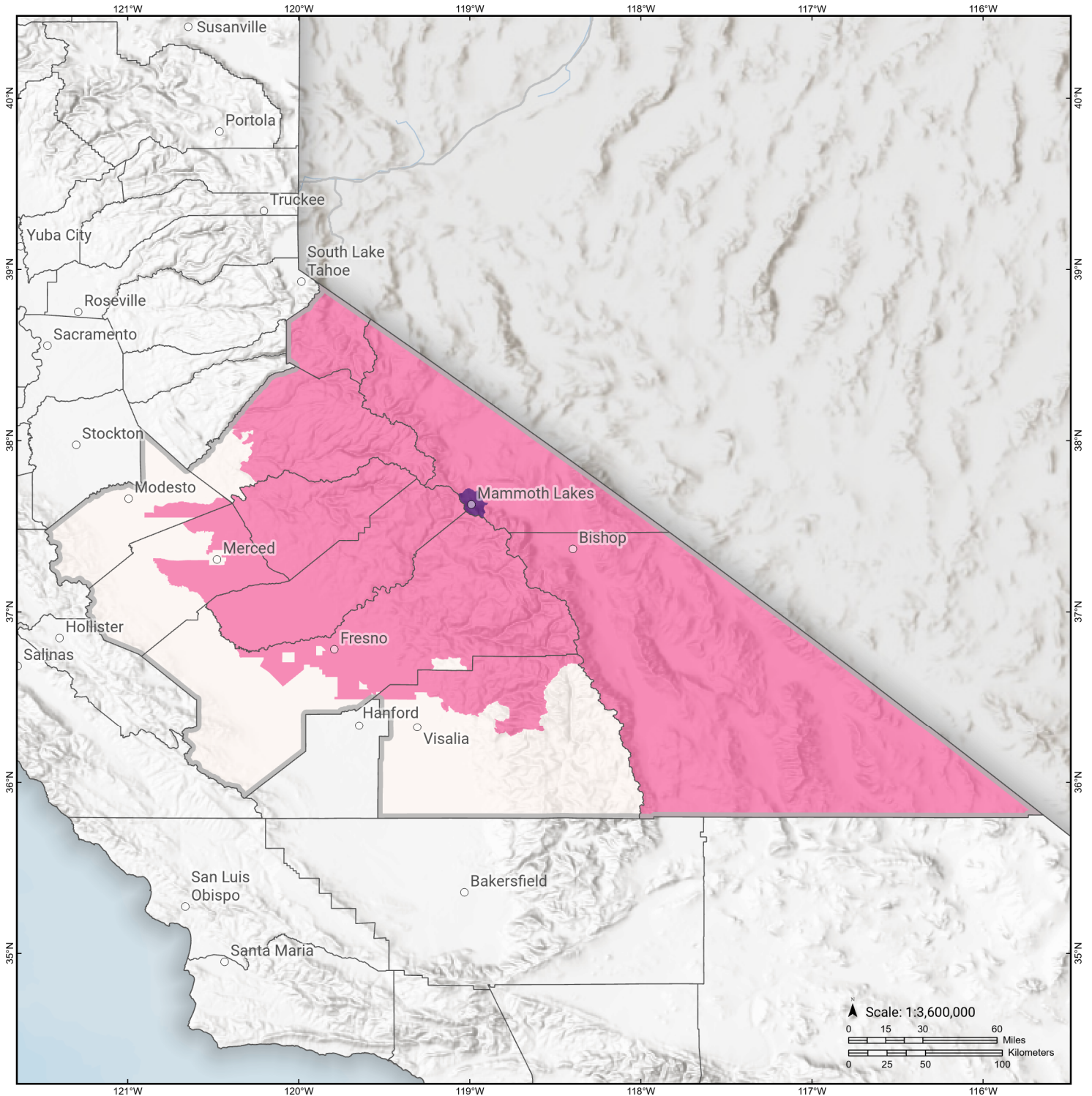


Displaced Households



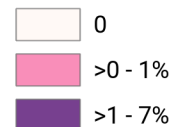
Hartley Springs

Loss Ratio by Census Tract



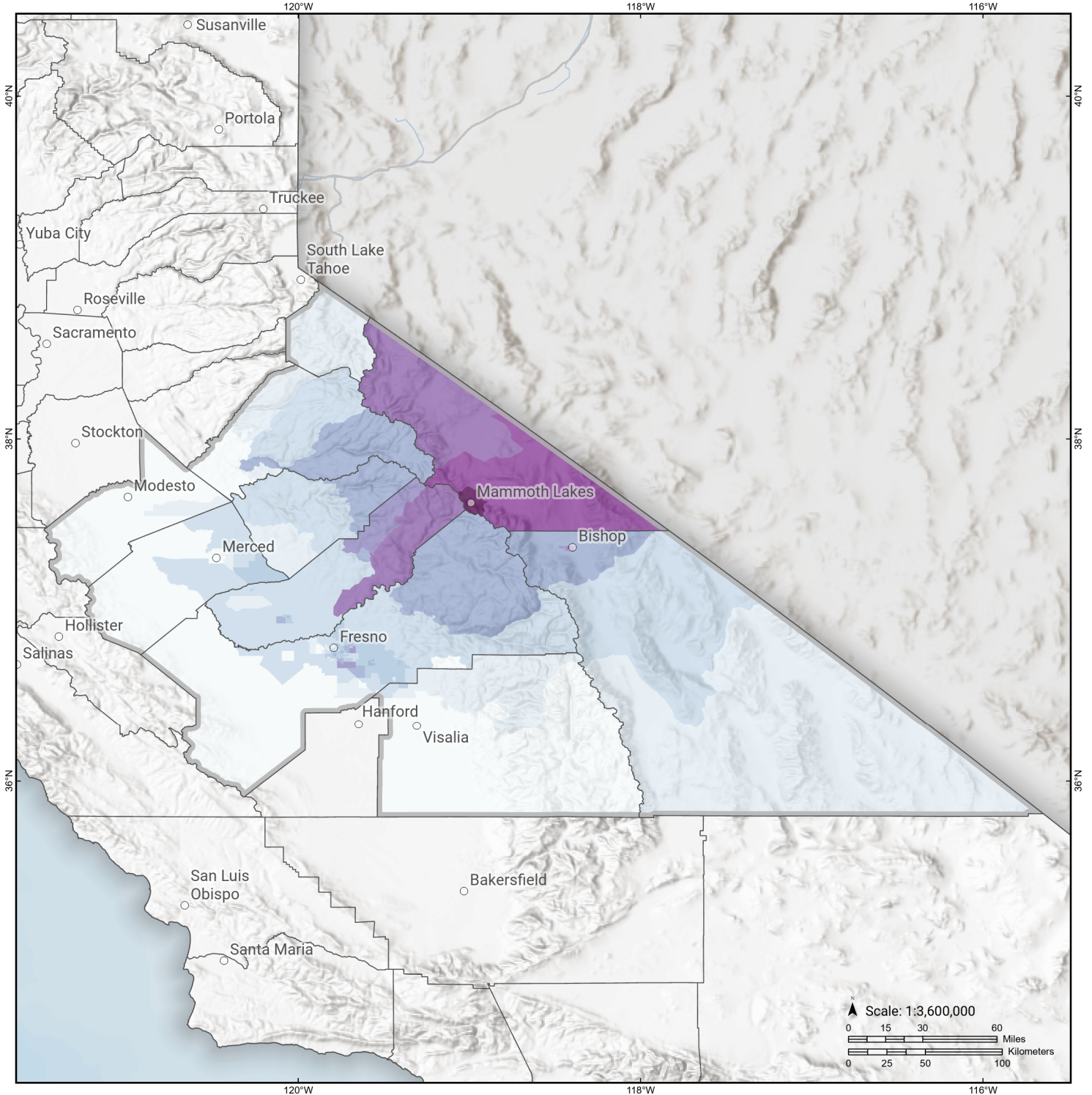
Study Region: Hartley Springs
Scenario: hartleysprings2011cf_m6p77_se

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



Hartley Springs

Total Building Related Economic Loss by Census Tract



Study Region: Hartley Springs
Scenario: hartleysprings2011cf_m6p77_se



Economic Loss (in thousands of USD \$)



Building Damage by Count by General Occupancy

May 06, 2024

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
California						
Alpine						
<i>Agriculture</i>	0	0	0	0	0	0
<i>Commercial</i>	48	0	0	0	0	48
<i>Education</i>	5	0	0	0	0	5
<i>Government</i>	4	0	0	0	0	4
<i>Industrial</i>	14	0	0	0	0	14
<i>Religion</i>	1	0	0	0	0	1
<i>Other Residential</i>	97	0	0	0	0	97
<i>Single Family</i>	842	0	0	0	0	842
Fresno						
<i>Agriculture</i>	3,421	0	0	0	0	3,421
<i>Commercial</i>	21,049	4	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>	5,347	1	0	0	0	5,348
<i>Religion</i>	1,507	0	0	0	0	1,507
<i>Other Residential</i>	40,965	7	0	0	0	40,973
<i>Single Family</i>	226,425	0	0	0	0	226,425
Inyo						

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Agriculture</i>	32	0	0	0	0	32
<i>Commercial</i>	716	4	0	0	0	721
<i>Education</i>	41	0	0	0	0	41
<i>Government</i>	101	0	0	0	0	101
<i>Industrial</i>	256	1	0	0	0	257
<i>Religion</i>	57	0	0	0	0	57
<i>Other Residential</i>	4,022	27	2	0	0	4,050
<i>Single Family</i>	4,441	5	0	0	0	4,446
Madera						
<i>Agriculture</i>	634	0	0	0	0	634
<i>Commercial</i>	2,904	1	0	0	0	2,905
<i>Education</i>	115	0	0	0	0	115
<i>Government</i>	111	0	0	0	0	111
<i>Industrial</i>	902	1	0	0	0	903
<i>Religion</i>	119	0	0	0	0	119
<i>Other Residential</i>	6,617	17	1	0	0	6,635
<i>Single Family</i>	38,906	6	0	0	0	38,912
Mariposa						
<i>Agriculture</i>	29	0	0	0	0	29
<i>Commercial</i>	689	0	0	0	0	689
<i>Education</i>	27	0	0	0	0	27
<i>Government</i>	33	0	0	0	0	33
<i>Industrial</i>	94	0	0	0	0	94
<i>Religion</i>	36	0	0	0	0	36
<i>Other Residential</i>	307	0	0	0	0	307

		# of Buildings					
		None	Slight	Moderate	Extensive	Complete	Total
Merced	<i>Single Family</i>	8,084	0	0	0	0	8,084
	<i>Agriculture</i>	7,653	0	0	0	0	7,653
	<i>Commercial</i>	4,754	0	0	0	0	4,754
	<i>Education</i>	163	0	0	0	0	163
	<i>Government</i>	171	0	0	0	0	171
	<i>Industrial</i>	1,022	0	0	0	0	1,022
	<i>Religion</i>	345	0	0	0	0	345
	<i>Other Residential</i>	10,787	0	0	0	0	10,787
Mono	<i>Single Family</i>	63,598	0	0	0	0	63,598
	<i>Agriculture</i>	136	8	2	0	0	145
	<i>Commercial</i>	347	188	110	9	0	654
	<i>Education</i>	17	3	1	0	0	21
	<i>Government</i>	14	3	1	0	0	18
	<i>Industrial</i>	59	29	19	2	0	108
	<i>Religion</i>	22	6	3	0	0	32
	<i>Other Residential</i>	1,171	402	165	21	0	1,759
Stanislaus	<i>Single Family</i>	4,272	2,955	473	4	0	7,704
	<i>Agriculture</i>	1,239	0	0	0	0	1,239
	<i>Commercial</i>	10,369	0	0	0	0	10,369
	<i>Education</i>	307	0	0	0	0	307
	<i>Government</i>	680	0	0	0	0	680
	<i>Industrial</i>	3,475	0	0	0	0	3,475

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Religion</i>	456	0	0	0	0	456
<i>Other Residential</i>	19,569	0	0	0	0	19,569
<i>Single Family</i>	142,724	0	0	0	0	142,724
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>	20,022	0	0	0	0	20,022
<i>Single Family</i>	112,034	0	0	0	0	112,034
Tuolumne						
<i>Agriculture</i>	82	0	0	0	0	82
<i>Commercial</i>	1,576	0	0	0	0	1,576
<i>Education</i>	57	0	0	0	0	57
<i>Government</i>	143	0	0	0	0	143
<i>Industrial</i>	383	0	0	0	0	383
<i>Religion</i>	121	0	0	0	0	121
<i>Other Residential</i>	4,962	0	0	0	0	4,962
<i>Single Family</i>	21,645	0	0	0	0	21,645
Total	820,395	3,672	778	36	0	824,881
Region Total	820,395	3,672	778	36	0	824,881

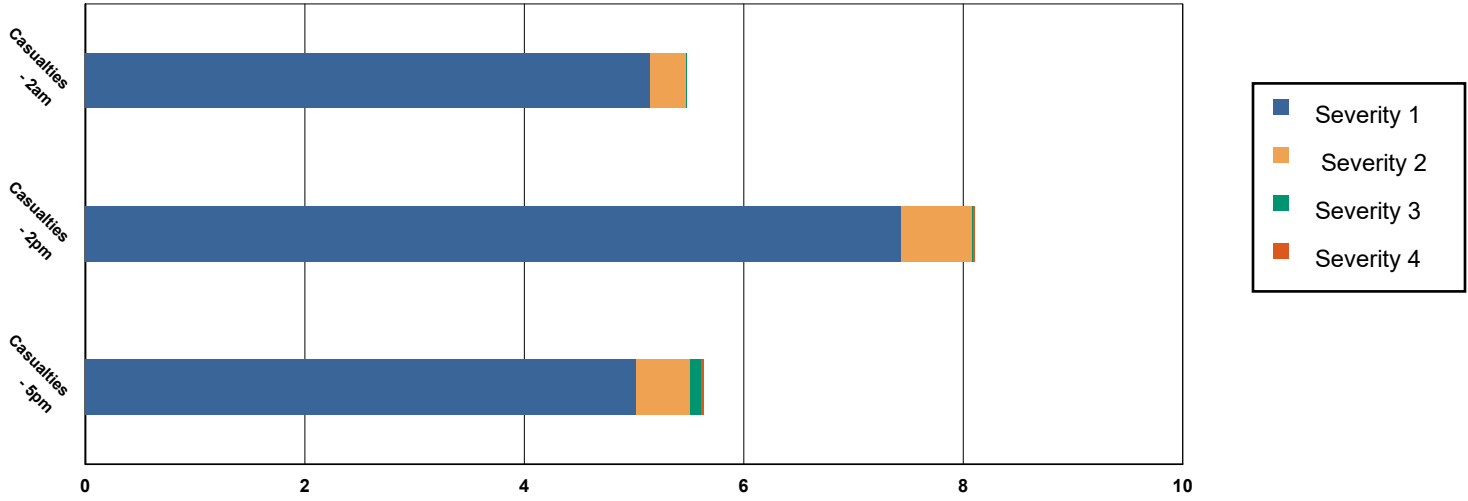
# of Buildings					
None	Slight	Moderate	Extensive	Complete	Total

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.

Casualties Summary Report

May 06, 2024

Region Total Casualties



Injury Severity Level

Severity 1	Severity 2	Severity 3	Severity 4	Total
------------	------------	------------	------------	-------

California

Alpine

Casualties - 2am

	Severity 1	Severity 2	Severity 3	Severity 4	Total
Commuting	0	0	0	0	0
Commercial	0	0	0	0	0
Educational	0	0	0	0	0
Hotels	0	0	0	0	0
Industrial	0	0	0	0	0
Other-Residential	0	0	0	0	0
Single Family	0	0	0	0	0

Total Casualties - 2am

0	0	0	0	0
---	---	---	---	---

Casualties - 2pm

	Severity 1	Severity 2	Severity 3	Severity 4	Total
Commuting	0	0	0	0	0
Commercial	0	0	0	0	0
Educational	0	0	0	0	0
Hotels	0	0	0	0	0
Industrial	0	0	0	0	0
Other-Residential	0	0	0	0	0
Single Family	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Alpine					
Total Casualties - 2pm	0	0	0	0	0
Casualties - 5pm					
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</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
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Fresno					
Casualties - 2am					
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</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
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</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
<i>Single Family</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>Commercial</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
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Inyo					
Casualties - 2am					
<i>Commuting</i>	0	0	0	0	0

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

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

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Mono					
Casualties - 2pm					
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	1	0	0	0	1
<i>Single Family</i>	1	0	0	0	1
Total Casualties - 2pm	7	1	0	0	8
Casualties - 5pm					
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	3	0	0	0	3
<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>	1	0	0	0	1
<i>Single Family</i>	1	0	0	0	1
Total Casualties - 5pm	5	0	0	0	6
Stanislaus					
Casualties - 2am					
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</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
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</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
<i>Single Family</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>Commercial</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
<i>Single Family</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Stanislaus					
Total Casualties - 5pm	0	0	0	0	0
Tulare					
Casualties - 2am					
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</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
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</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
<i>Single Family</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>Commercial</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
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
Tuolumne					
Casualties - 2am					
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</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
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 2am	0	0	0	0	0
Casualties - 2pm					
<i>Commuting</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Tuolumne					
Casualties - 2pm					
<i>Commercial</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
<i>Single Family</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>Commercial</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
<i>Single Family</i>	0	0	0	0	0
Total Casualties - 5pm	0	0	0	0	0
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.

Debris Summary Report

May 06, 2024

All values are in thousands of tons.

	Brick, Wood & Others	Concrete & Steel	Total
California			
Alpine	0	0	0
Fresno	0	0	0
Inyo	0	0	0
Madera	0	0	0
Mariposa	0	0	0
Merced	0	0	0
Mono	7	7	15
Stanislaus	0	0	0
Tulare	0	0	0
Tuolumne	0	0	0
Total	8	7	15
Region Total	8	7	15

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 6, 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										
Inyo	68	910	467	59	0.02	15	20	20	21	1,579
Fresno	48	2,288	1,602	184	0.00	5	13	13	17	4,169
Tuolumne	2	85	52	3	0.00	0	0	0	0	142
Tulare	0	22	14	2	0.00	0	0	0	0	38
Madera	57	1,377	807	86	0.01	5	5	5	11	2,353
Alpine	0	0	0	0	0.00	0	0	0	0	1
Merced	1	10	9	4	0.00	0	0	0	0	23
Stanislaus	0	0	0	0	0.00	0	0	0	0	1
Mono	15,498	94,677	39,325	1,976	2.52	7,657	5,836	6,612	6,275	177,856

	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	
Mariposa	1	71	36	1	0.00	0	0	0	0	110
Total	15,676	99,440	42,311	2,313	0.25	7,681	5,874	6,651	6,326	186,272
Region Total	15,676	99,440	42,311	2,313	0.25	7,681	5,874	6,651	6,326	186,272

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 06, 2024

All values are in thousands of dollars

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
California								
Alpine								
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
Fresno								
Segments	0	0	0					0
Bridges	1	0	0					1
Tunnels	0	0	0					0
Facilities		185	0	21	0	0	998	1,204
Total	1	185	0	21	0	0	998	1,205
Inyo								
Segments	0	0	0					0
Bridges	1	0	0					1
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	159	159

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	1	0	0	0	0	0	159	160
Madera								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		26	0	21	0	0	11	58
Total	0	26	0	21	0	0	11	58
Mariposa								
Segments	0	0	0					0
Bridges	2	0	0					2
Tunnels	0	0	0					0
Facilities		0	0	155	0	0	51	207
Total	2	0	0	155	0	0	51	208
Merced								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		28	0	2	0	0	14	45
Total	0	28	0	2	0	0	14	45
Mono								
Segments	0	0	0					0
Bridges	292	0	0					292
Tunnels	130	0	0					130
Facilities		0	0	1,124	0	0	2,469	3,593

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	423	0	0	1,124	0	0	2,469	4,016
Stanislaus								
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
Tulare								
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
Tuolumne								
Segments	0	0	0					0
Bridges	4	0	0					4
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	108	108
Total	4	0	0	0	0	0	108	112
Total	432	239	0	1,323	0	0	3,816	5,810
Region Total	432	239	0	1,323	0	0	3,816	5,810

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 06, 2024

All values are in thousands of dollars

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
California							
Alpine							
Facilities	0	3	0	0	0	0	3
Pipelines	1	1	0	0			2
Total	1	3	0	0	0	0	5
Fresno							
Facilities	0	492	0	0	104,202	5	104,699
Pipelines	139	70	0	0			208
Total	139	561	0	0	104,202	5	104,907
Inyo							
Facilities	0	0	0	0	16,577	1	16,578
Pipelines	46	23	0	0			69
Total	46	23	0	0	16,577	1	16,647
Madera							
Facilities	0	0	0	0	13,579	1	13,580

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
<i>Pipelines</i>	90	45	0	0			136
Total	90	45	0	0	13,579	1	13,715
Mariposa							
<i>Facilities</i>	0	492	0	0	42	2	536
<i>Pipelines</i>	18	9	0	0			27
Total	18	501	0	0	42	2	563
Merced							
<i>Facilities</i>	0	5	0	0	4	0	9
<i>Pipelines</i>	26	13	0	0			39
Total	26	18	0	0	4	0	48
Mono							
<i>Facilities</i>	0	0	0	0	230,944	44	230,988
<i>Pipelines</i>	635	319	0	0			955
Total	635	319	0	0	230,944	44	231,943
Stanislaus							
<i>Facilities</i>	0	0	0	0	4	0	4
<i>Pipelines</i>	1	1	0	0			2
Total	1	1	0	0	4	0	6
Tulare							
<i>Facilities</i>	1	3	0	0	163	0	166
<i>Pipelines</i>	19	10	0	0			28

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
Total	20	12	0	0	163	0	194
Tuolumne							
<i>Facilities</i>	0	3	0	0	14,963	0	14,965
<i>Pipelines</i>	26	13	0	0			39
Total	26	15	0	0	14,963	0	15,004
Total	1,002	1,500	0	0	380,478	51	383,031
Region Total	1,002	1,500	0	0	380,478	51	383,031

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.

Fire Station Facilities Functionality

March 01, 2024

	Count	Functionality(%) At Day 1
California		
Alpine	4	99.90
Fresno	77	99.90
Inyo	15	99.80
Madera	25	99.90
Mariposa	22	99.80
Merced	31	100.00
Mono	16	78.60
Stanislaus	49	100.00
Tulare	44	100.00
Tuolumne	27	99.90
Total	310	97.80
Region Total	310	97.80

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	0.10 - 0.20
	Building Contents	< 0.1
	Business Interruption	0.00 - 0.10
Infrastructure	Lifelines Damage	
Total		0.10 - 0.40

Preliminary Damage Assessment (PDA) Estimates

Description	Residential	Commercial	Other	Total
Affected	3,400	200	50	3,650
Minor	640	110	30	780
Major	20	< 10	< 10	20
Destroyed	0	0	0	0
Total	4,060	310	80	4,450

Estimated Casualties : Night Time

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

Estimated Shelter Needs

Type	Households	People
Displaced Households	10 - 30	25 - 75
Public Shelter	0	10

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 : 6.80

Epicenter Latitude/Longitude :
/

Depth & Type : /U

Name :
NA

Ground Motion /Attenuation :

Maximum PGA: 0.00

Information Sources:

Comments :

Population and Building Exposure

Population: 2,578,272

Building Exposure : (\$ Millions)

Residential	267,183
Commercial	81,803
Other	92,274
Total	441,260

Counties :

Major Metro Area :

Hazus Quick Assessment Report

Estimated Economic Loss (\$ Billions)

Category	Description	Range
General Building Stock	Building Damage	0.10 - 0.20
	Building Contents	< 0.1
	Business Interruption	0.00 - 0.10
Infrastructure	Lifelines Damage	
Total		0.10 - 0.40

Preliminary Damage Assessment (PDA) Estimates

Description	Residential	Commercial	Other	Total
Affected	3,400	200	50	3,650
Minor	640	110	30	780
Major	20	< 10	< 10	20
Destroyed	0	0	0	0
Total	4,060	310	80	4,450

Estimated Casualties : Day Time

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

Estimated Shelter Needs

Type	Households	People
Displaced Households	10 - 30	25 - 75
Public Shelter	0	10

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 : 6.80

Epicenter Latitude/Longitude :
/

Depth & Type : /U

Name :
NA

Ground Motion /Attenuation :

Maximum PGA: 0.00

Information Sources:

Comments :

Population and Building Exposure

Population: 2,578,272

Building Exposure : (\$ Millions)

Residential	267,183
Commercial	81,803
Other	92,274
Total	441,260

Counties :

Major Metro Area :

Hazus Quick Assessment Report

Estimated Economic Loss (\$ Billions)

Category	Description	Range
General Building Stock	Building Damage	0.10 - 0.20
	Building Contents	< 0.1
	Business Interruption	0.00 - 0.10
Infrastructure	Lifelines Damage	
Total		0.10 - 0.40

Preliminary Damage Assessment (PDA) Estimates

Description	Residential	Commercial	Other	Total
Affected	3,400	200	50	3,650
Minor	640	110	30	780
Major	20	< 10	< 10	20
Destroyed	0	0	0	0
Total	4,060	310	80	4,450

Estimated Casualties : Commute Time

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

Estimated Shelter Needs

Type	Households	People
Displaced Households	10 - 30	25 - 75
Public Shelter	0	10

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 : 6.80

Epicenter Latitude/Longitude :
/

Depth & Type : /U

Name :
NA

Ground Motion /Attenuation :

Maximum PGA: 0.00

Information Sources:

Comments :

Population and Building Exposure

Population: 2,578,272

Building Exposure : (\$ Millions)

Residential	267,183
Commercial	81,803
Other	92,274
Total	441,260

Counties :

Major Metro Area :

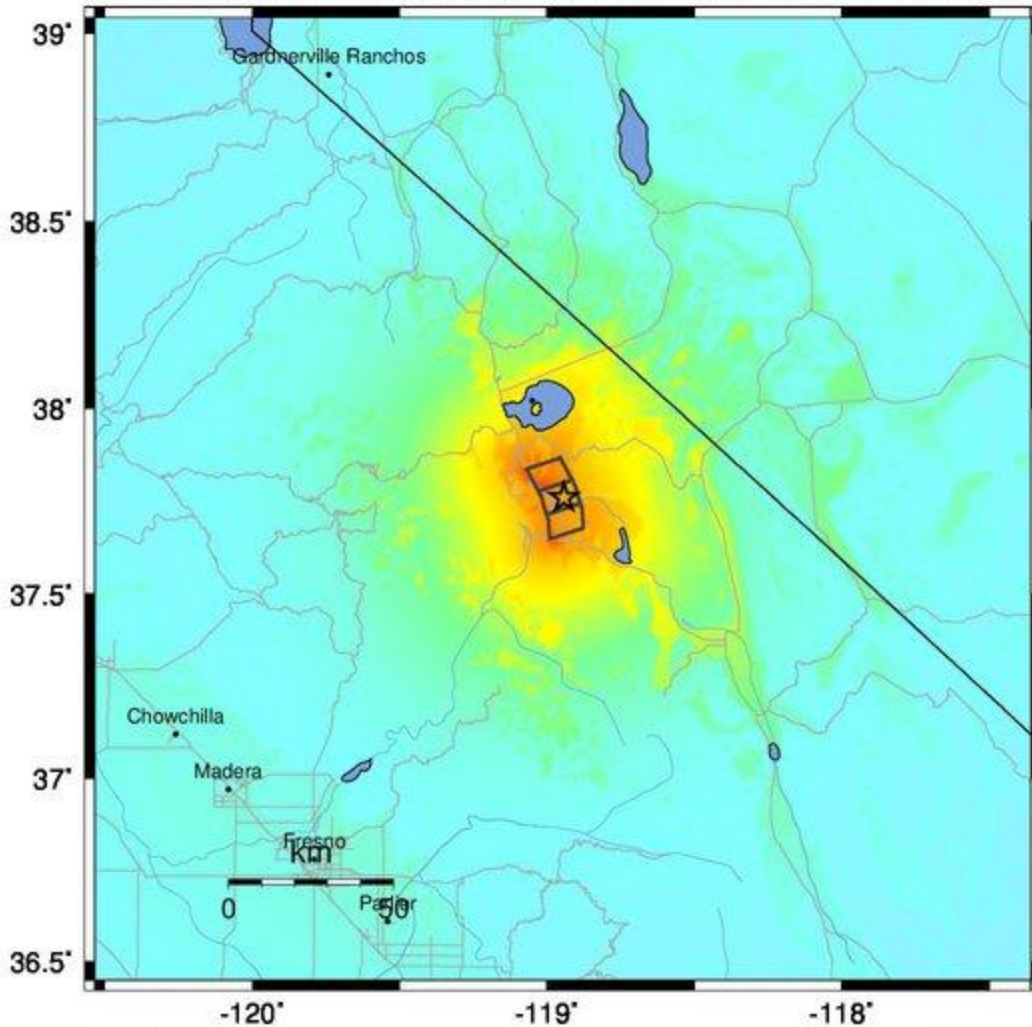
Shelter Summary Report

May 06, 2024

	# of Displaced Households	# of People Needing Short Term Shelter
California		
Alpine	0	0
Fresno	0	0
Inyo	0	0
Madera	0	0
Mariposa	0	0
Merced	0	0
Mono	16	6
Stanislaus	0	0
Tulare	0	0
Tuolumne	0	0
Total	16	6
Region Total	16	6

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 Hartley Springs - Median ground motions Scenario
 Scenario Date: May 16, 2017 08:32:08 AM MDT M 6.8 N37.76 W118.94 Depth: 9.0km



PLANNING SCENARIO ONLY -- Map Version 14 Processed 2017-05-16 06:38:27 PM 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)