
Hazus: Earthquake Global Risk Report

Region Name: WhiteMountains

Earthquake Scenario: White Mountains

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.

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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 17 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 68,788.32 square miles and contains 1,474 census tracts. There are over 2,066 thousand households in the region which has a total population of 6,503,337 people. The distribution of population by Total Region and County is provided in Appendix B.

There are an estimated 2,134 thousand buildings in the region with a total building replacement value (excluding contents) of 1,147,297 (millions of dollars). Approximately 91.00 % of the buildings (and 62.00% of the building value) are associated with residential housing.

The replacement value of the transportation and utility lifeline systems is estimated to be 113,755 and 145,107 (millions of dollars) , respectively.

Building and Lifeline Inventory

Building Inventory

Hazus estimates that there are 2,134 thousand buildings in the region which have an aggregate total replacement value of 1,147,297 (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 116 hospitals in the region with a total bed capacity of 17,546 beds. There are 2,472 schools, 756 fire stations, 210 police stations and 34 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 258,862.00 (millions of dollars). This inventory includes over 8,176.62 miles of highways, 5,973 bridges, 190,624.20 miles of pipes.

Table 1: Transportation System Lifeline Inventory

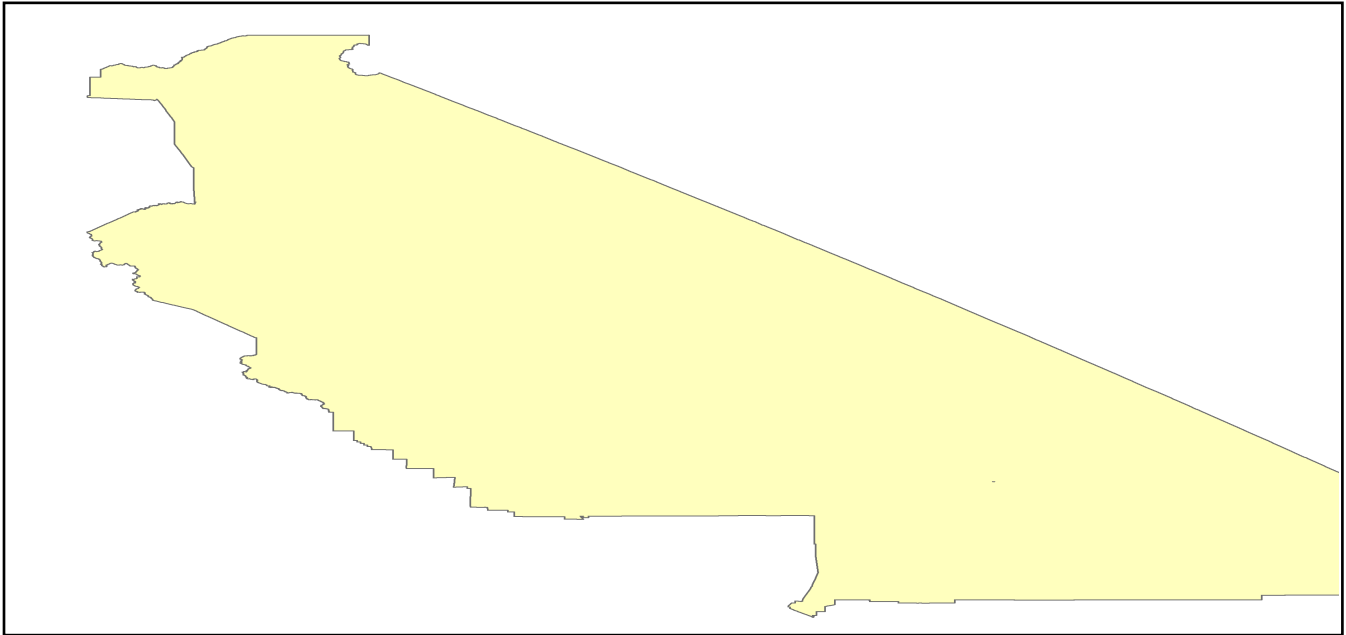
System	Component	# Locations/ # Segments	Replacement value (millions of dollars)
Highway	Bridges	5,973	17915.4353
	Segments	3,169	65569.8609
	Tunnels	13	148.1514
	Subtotal		83633.4476
Railways	Bridges	1,289	7334.4100
	Facilities	54	143.8020
	Segments	1,367	20634.5776
	Tunnels	0	0.0000
	Subtotal		28112.7896
Light Rail	Bridges	0	0.0000
	Facilities	0	0.0000
	Segments	0	0.0000
	Tunnels	0	0.0000
	Subtotal		0.0000
Bus	Facilities	28	60.8700
	Subtotal		60.8700
Ferry	Facilities	0	0.0000
	Subtotal		0.0000
Port	Facilities	0	0.0000
	Subtotal		0.0000
Airport	Facilities	95	870.4931
	Runways	118	1078.0593
	Subtotal		1948.5524
		Total	113,755.70

Table 2: Utility System Lifeline Inventory

System	Component	# Locations / Segments	Replacement value (millions of dollars)
Potable Water	Distribution Lines	NA	3781.6145
	Facilities	14	550.1160
	Pipelines	0	0.0000
		Subtotal	4331.7305
Waste Water	Distribution Lines	NA	2268.9687
	Facilities	59	10145.1562
	Pipelines	0	0.0000
		Subtotal	12414.1249
Natural Gas	Distribution Lines	NA	1512.6458
	Facilities	21	848.4600
	Pipelines	354	14974.3274
		Subtotal	17335.4332
Oil Systems	Facilities	15	1.7700
	Pipelines	0	0.0000
		Subtotal	1.7700
Electrical Power	Facilities	443	110991.3541
		Subtotal	110991.3541
Communication	Facilities	277	32.6860
		Subtotal	32.6860
	Total		145,107.10

Earthquake Scenario

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



Scenario Name	White Mountains
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	7.40
Depth (km)	NA
Rupture Length (Km)	NA
Rupture Orientation (degrees)	NA
Attenuation Function	NA

Direct Earthquake Damage

Building Damage

Hazus estimates that about 1,724 buildings will be at least moderately damaged. This is over 0.00 % of the buildings in the region. There are an estimated 48 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

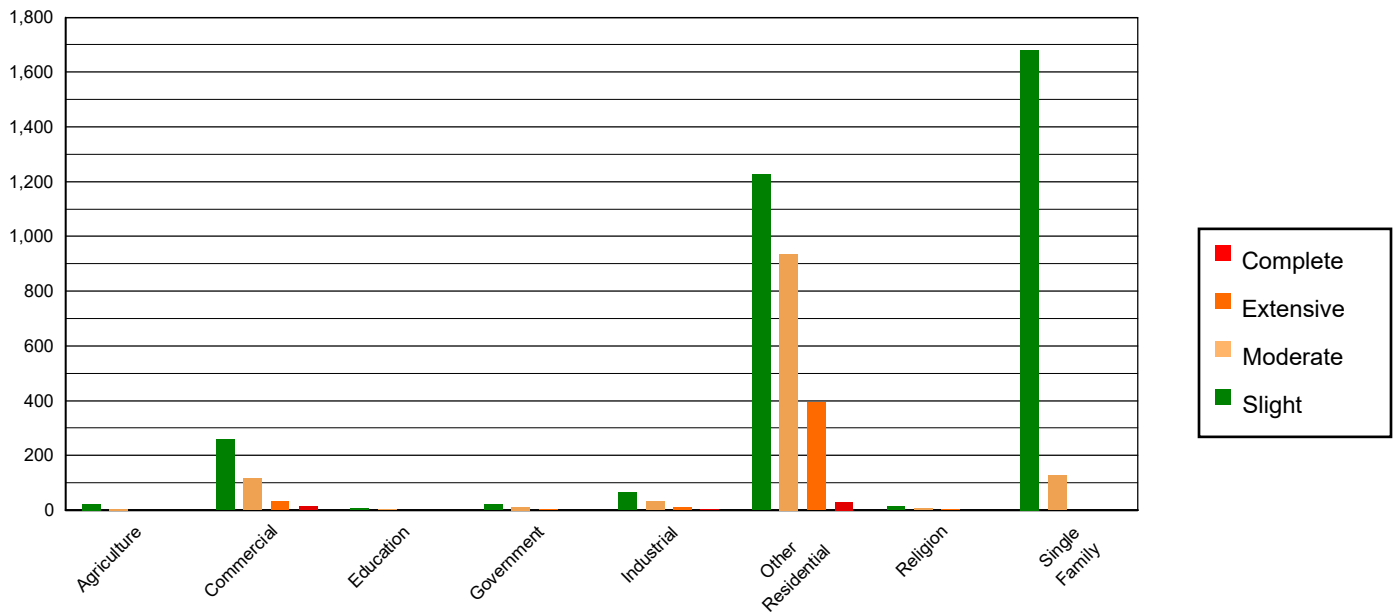


Table 3: Expected Building Damage by Occupancy

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	26198.15	1.23	23.74	0.72	3.94	0.32	0.16	0.04	0.00	0.00
Commercial	125233.63	5.88	259.92	7.89	116.79	9.45	31.96	7.25	13.70	28.32
Education	3565.86	0.17	6.12	0.19	1.92	0.16	0.10	0.02	0.00	0.00
Government	4323.75	0.20	21.99	0.67	11.40	0.92	1.80	0.41	0.05	0.11
Industrial	34320.76	1.61	64.47	1.96	32.25	2.61	10.27	2.33	3.25	6.73
Other Residential	293117.97	13.76	1224.20	37.16	936.38	75.80	393.82	89.29	30.64	63.36
Religion	8267.02	0.39	14.89	0.45	6.79	0.55	2.59	0.59	0.71	1.47
Single Family	1634612.52	76.76	1679.25	50.97	125.85	10.19	0.38	0.09	0.00	0.00
Total	2,129,640		3,295		1,235		441		48	

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

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Wood	1870115.56	87.81	2371.05	71.97	229.52	18.58	2.95	0.67	0.23	0.47
Steel	42151.94	1.98	86.25	2.62	68.20	5.52	29.82	6.76	9.18	18.99
Concrete	36782.26	1.73	109.81	3.33	60.45	4.89	17.89	4.06	7.69	15.90
Precast	23991.53	1.13	61.89	1.88	39.84	3.23	5.39	1.22	1.44	2.98
RM	67084.06	3.15	98.82	3.00	51.45	4.16	3.24	0.73	0.00	0.00
URM	5776.08	0.27	31.77	0.96	11.25	0.91	13.53	3.07	9.95	20.57
MH	83738.24	3.93	534.99	16.24	774.61	62.71	368.27	83.49	19.87	41.09
Total	2,129,640		3,295		1,235		441		48	

*Note:

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

Essential Facility Damage

Before the earthquake, the region had 17,546 hospital beds available for use. On the day of the earthquake, the model estimates that only 17,401 hospital beds (99.00%) 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	116	0	0	115
Schools	2,472	5	0	2,455
EOCs	34	0	0	33
PoliceStations	210	0	0	208
FireStations	756	0	0	750

Transportation Lifeline Damage

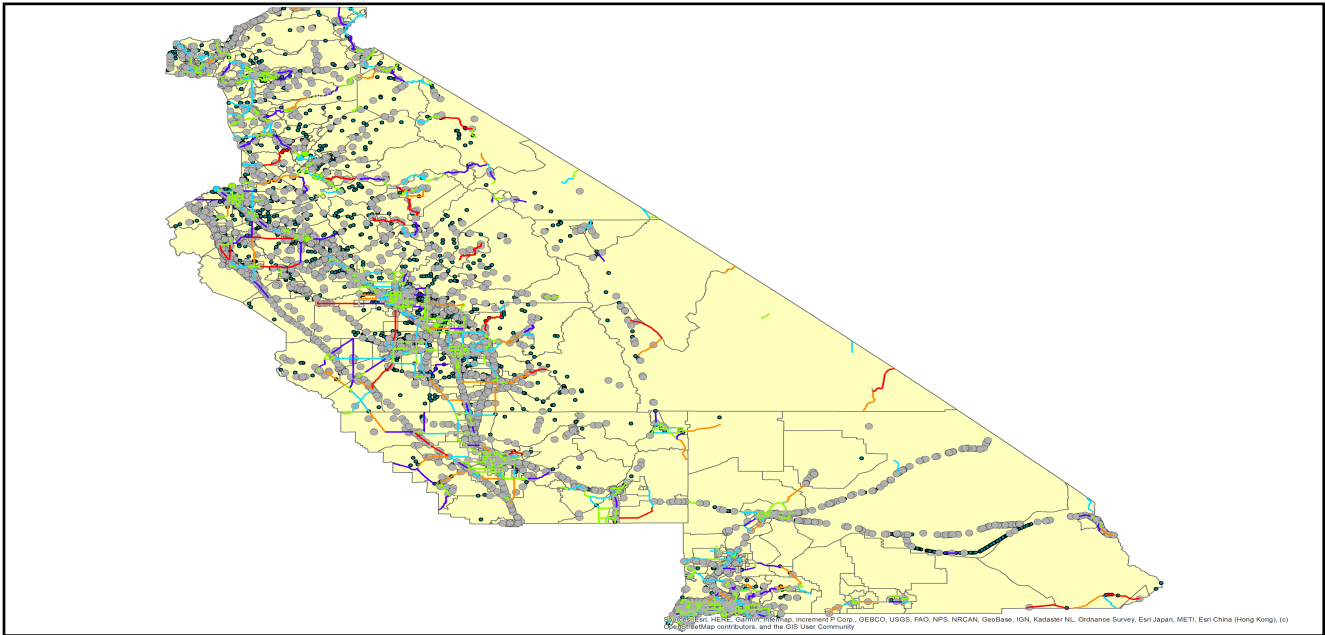


Table 6: Expected Damage to the Transportation Systems

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	3,169	0	0	3,169	3,169
	Bridges	5,973	2	0	5,972	5,972
	Tunnels	13	0	0	13	13
Railways	Segments	1,367	0	0	1,367	1,367
	Bridges	1,289	0	0	1,289	1,289
	Tunnels	0	0	0	0	0
	Facilities	54	0	0	54	54
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	28	0	0	28	28
Ferry	Facilities	0	0	0	0	0
Port	Facilities	0	0	0	0	0
Airport	Facilities	95	0	0	95	95
	Runways	118	0	0	118	118

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	14	0	0	14	14
Waste Water	59	0	0	59	59
Natural Gas	21	0	0	21	21
Oil Systems	15	0	0	15	15
Electrical Power	443	9	0	440	443
Communication	277	5	0	277	277

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

System	Total Pipelines Length (miles)	Number of Leaks	Number of Breaks
Potable Water	117,489	952	238
Waste Water	70,494	478	120
Natural Gas	2,642	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	2,066,516	29	1	0	0	0
Electric Power		3,337	1,903	645	36	5

Induced Earthquake Damage

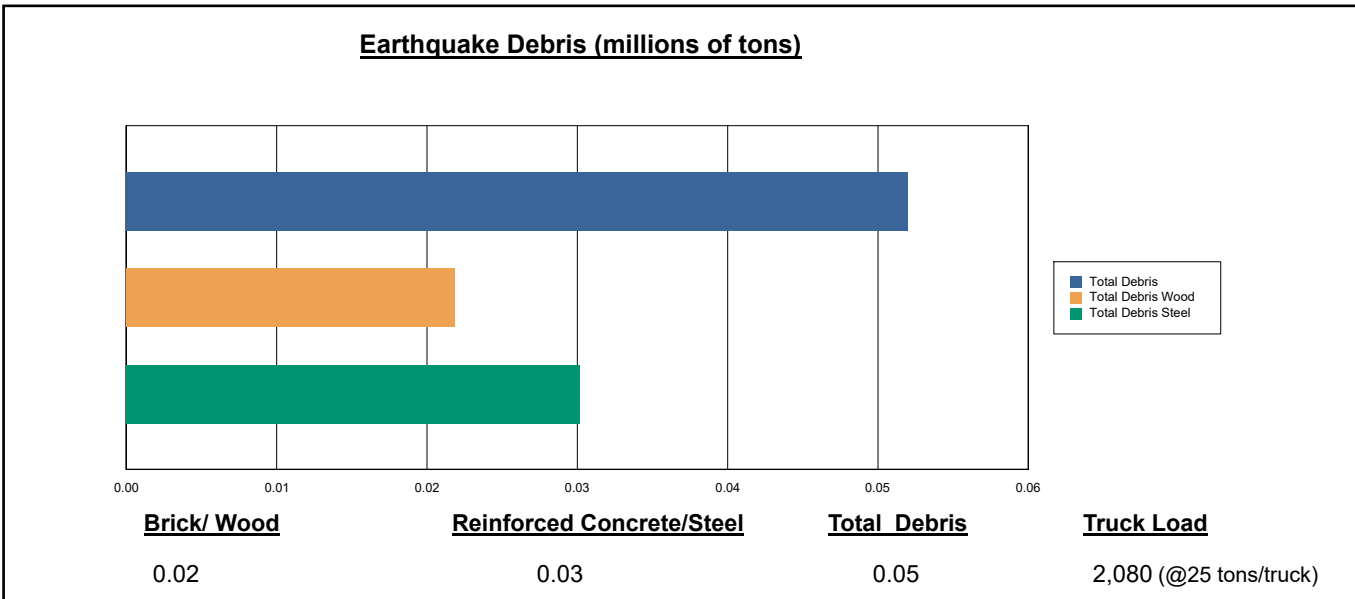
Fire Following Earthquake

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.

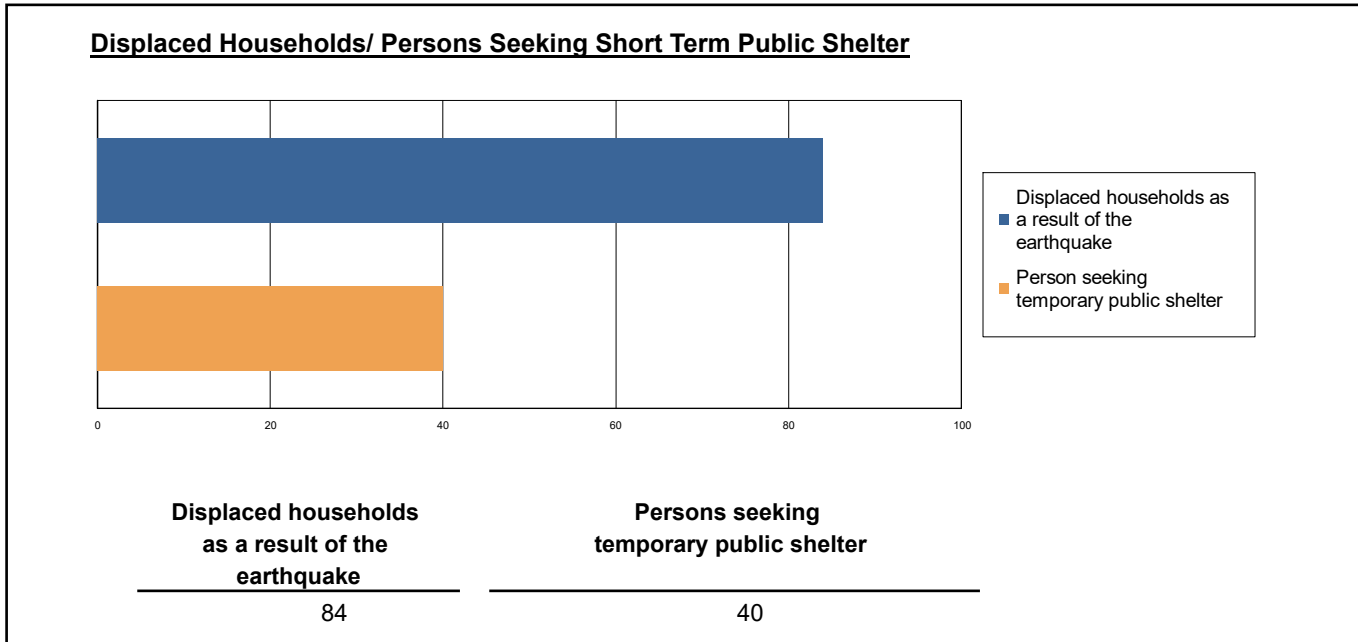
The model estimates that a total of 52,000 tons of debris will be generated. Of the total amount, Brick/Wood comprises 42.00% of the total, with the remainder being Reinforced Concrete/Steel. If the debris tonnage is converted to an estimated number of truckloads, it will require 2,080 truckloads (@25 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 84 households to be displaced due to the earthquake. Of these, 40 people (out of a total population of 6,503,337) 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	0.43	0.10	0.02	0.03
	Commuting	0.00	0.01	0.01	0.00
	Educational	0.00	0.00	0.00	0.00
	Hotels	0.02	0.00	0.00	0.00
	Industrial	0.36	0.08	0.01	0.02
	Other-Residential	21.99	3.73	0.34	0.65
	Single Family	2.33	0.09	0.00	0.00
	Total	25	4	0	1
2 PM	Commercial	25.40	6.03	0.87	1.71
	Commuting	0.04	0.07	0.10	0.02
	Educational	4.24	0.90	0.12	0.23
	Hotels	0.00	0.00	0.00	0.00
	Industrial	2.69	0.60	0.08	0.16
	Other-Residential	6.43	1.13	0.11	0.21
	Single Family	0.67	0.03	0.00	0.00
	Total	39	9	1	2
5 PM	Commercial	15.81	3.74	0.54	1.05
	Commuting	0.74	1.18	1.77	0.35
	Educational	0.00	0.00	0.00	0.00
	Hotels	0.00	0.00	0.00	0.00
	Industrial	1.68	0.37	0.05	0.10
	Other-Residential	8.10	1.42	0.14	0.26
	Single Family	0.85	0.03	0.00	0.00
	Total	27	7	2	2

Economic Loss

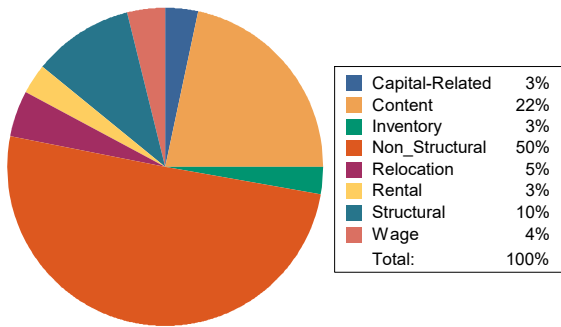
The total economic loss estimated for the earthquake is 1,149.52 (millions of dollars), which includes building and lifeline related losses based on the region's available inventory. The following three sections provide more detailed information about these losses.

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 299.67 (millions of dollars); 15 % 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 43 % 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)

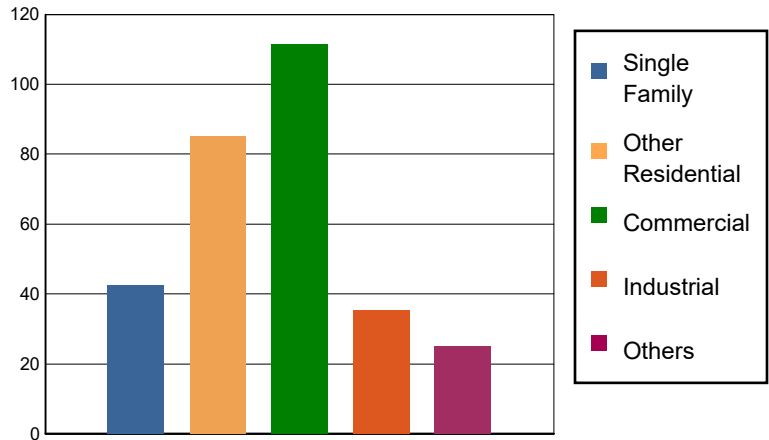


Table 11: Building-Related Economic Loss Estimates
(Millions of dollars)

Category	Area	Single Family	Other Residential	Commercial	Industrial	Others	Total
Income Losses							
	Wage	0.0000	1.2634	9.2573	0.5667	0.8163	11.9037
	Capital-Related	0.0000	0.5366	9.1288	0.3455	0.0971	10.1080
	Rental	0.3185	4.0825	3.9755	0.1998	0.4105	8.9868
	Relocation	0.8585	5.2476	5.5512	0.8320	1.9289	14.4182
	Subtotal	1.1770	11.1301	27.9128	1.9440	3.2528	45.4167
Capital Stock Losses							
	Structural	3.6529	9.6701	10.7288	3.9163	2.4360	30.4041
	Non_Structural	26.8323	52.0839	43.4174	16.3714	12.1914	150.8964
	Content	10.9564	12.1682	23.9970	11.2384	6.4258	64.7858
	Inventory	0.0000	0.0000	5.4865	1.8349	0.8444	8.1658
	Subtotal	41.4416	73.9222	83.6297	33.3610	21.8976	254.2521
	Total	42.62	85.05	111.54	35.31	25.15	299.67

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	65569.8609	0.0000	0.00
	Bridges	17915.4353	2.8652	0.02
	Tunnels	148.1514	0.0001	0.00
	Subtotal	83633.4476	2.8653	
Railways	Segments	20634.5776	0.0000	0.00
	Bridges	7334.4100	0.0000	0.00
	Tunnels	0.0000	0.0000	0.00
	Facilities	143.8020	0.5271	0.37
	Subtotal	28112.7896	0.5271	
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	60.8700	0.5146	0.85
	Subtotal	60.8700	0.5146	
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	870.4931	8.6817	1.00
	Runways	1078.0593	0.0000	0.00
	Subtotal	1948.5524	8.6817	
Total		113,755.66	12.59	

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	550.1160	0.0305	0.01
	Distribution Lines	3781.6145	4.2831	0.11
	Subtotal	4331.7305	4.3136	
Waste Water	Pipelines	0.0000	0.0000	0.00
	Facilities	10145.1562	1.6292	0.02
	Distribution Lines	2268.9687	2.1515	0.09
	Subtotal	12414.1249	3.7807	
Natural Gas	Pipelines	14974.3274	0.0000	0.00
	Facilities	848.4600	0.0230	0.00
	Distribution Lines	1512.6458	0.7371	0.05
	Subtotal	17335.4332	0.7601	
Oil Systems	Pipelines	0.0000	0.0000	0.00
	Facilities	1.7700	0.0002	0.01
	Subtotal	1.7700	0.0002	
Electrical Power	Facilities	110991.3541	828.1628	0.75
	Subtotal	110991.3541	828.1628	
Communication	Facilities	32.6860	0.2456	0.75
	Subtotal	32.6860	0.2456	
	Total	145,107.10	837.26	

Appendix A: County Listing for the Region

Alpine,CA

Amador,CA

Calaveras,CA

El Dorado,CA

Fresno,CA

Inyo,CA

Kern,CA

Kings,CA

Madera,CA

Mariposa,CA

Merced,CA

Mono,CA

Placer,CA

San Bernardino,CA

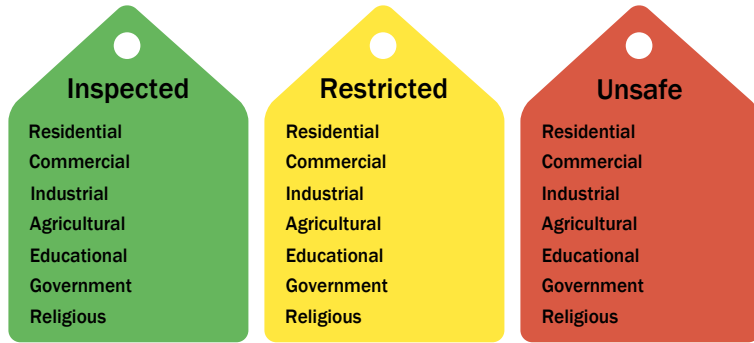
Stanislaus,CA

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
	Amador	40,474	5,608	2,517	8,125
	Calaveras	45,292	8,305	4,893	13,199
	El Dorado	191,185	34,907	9,704	44,611
	Fresno	1,008,654	98,532	61,772	160,304
	Inyo	19,016	2,951	1,970	4,921
	Kern	909,235	87,567	59,168	146,736
	Kings	152,486	13,719	7,861	21,581
	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
	Placer	404,739	69,985	24,193	94,179
	San Bernardino	2,181,654	225,045	152,557	377,602
	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		6,503,337	712,314	434,965	1,147,288

Building Inspection Tagging (Counts)

Total Economic Loss
Total:

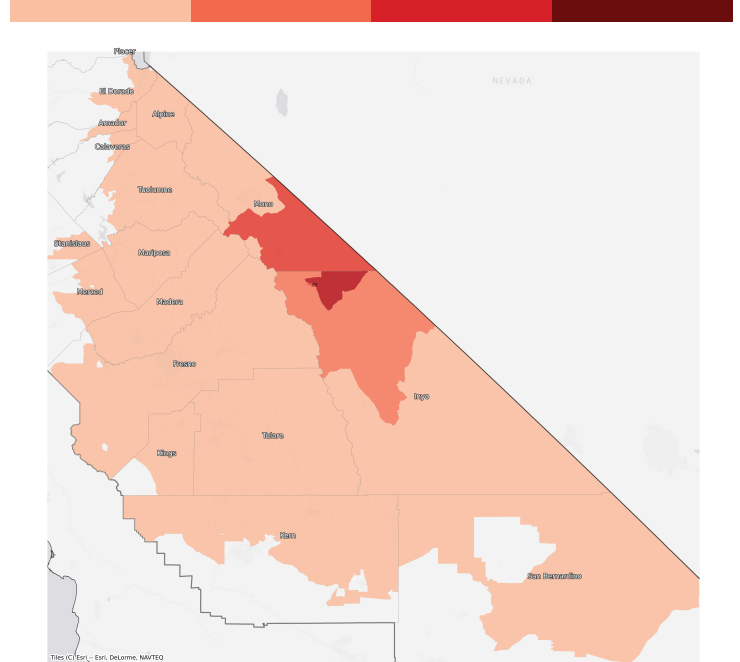
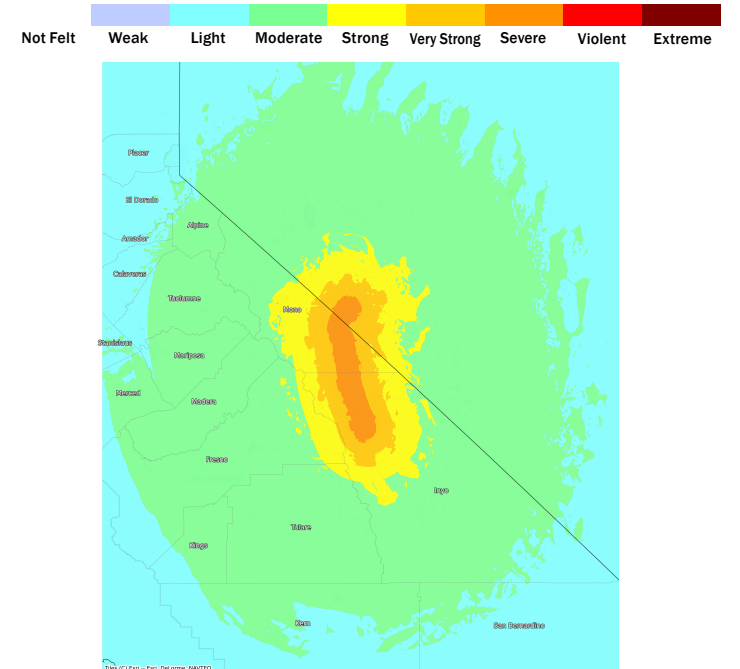
Top Counties	State	Total

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

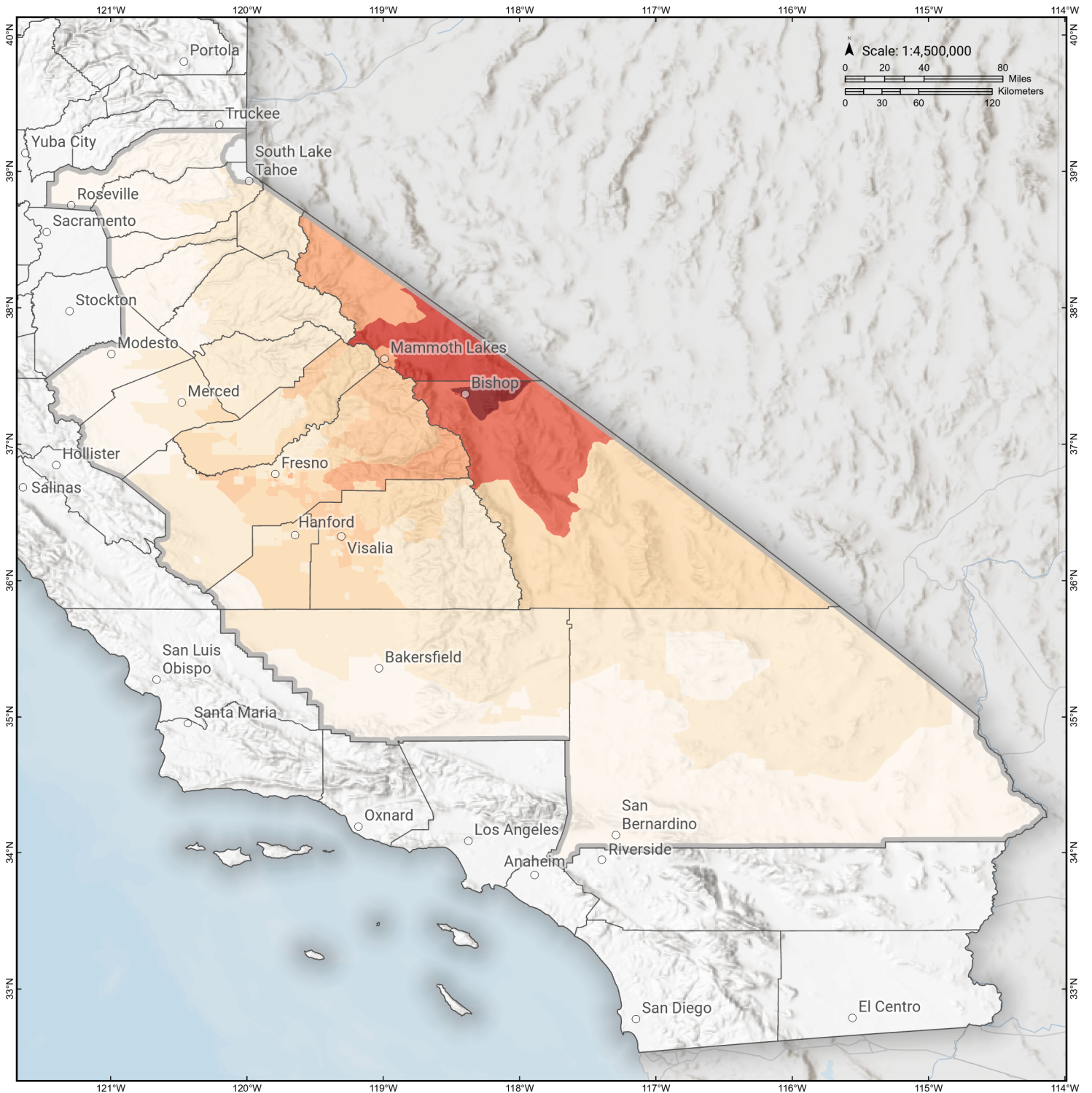
Economic Impacts by Census Tract

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.

White Mountains

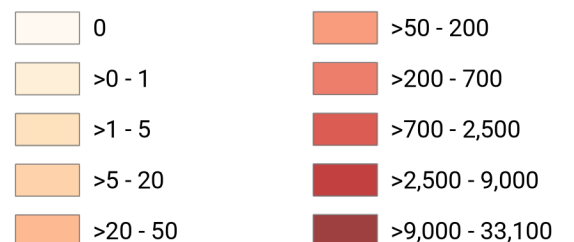
Debris Generated by Census Tract



Study Region: White Mountains
Scenario: whitemountainsshaw09_m7p38_se



Debris Generated (in tons)



White Mountains

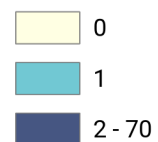
Displaced Households by Census Tract



Study Region: White Mountains
Scenario: whitemountainsshaw09_m7p38_se

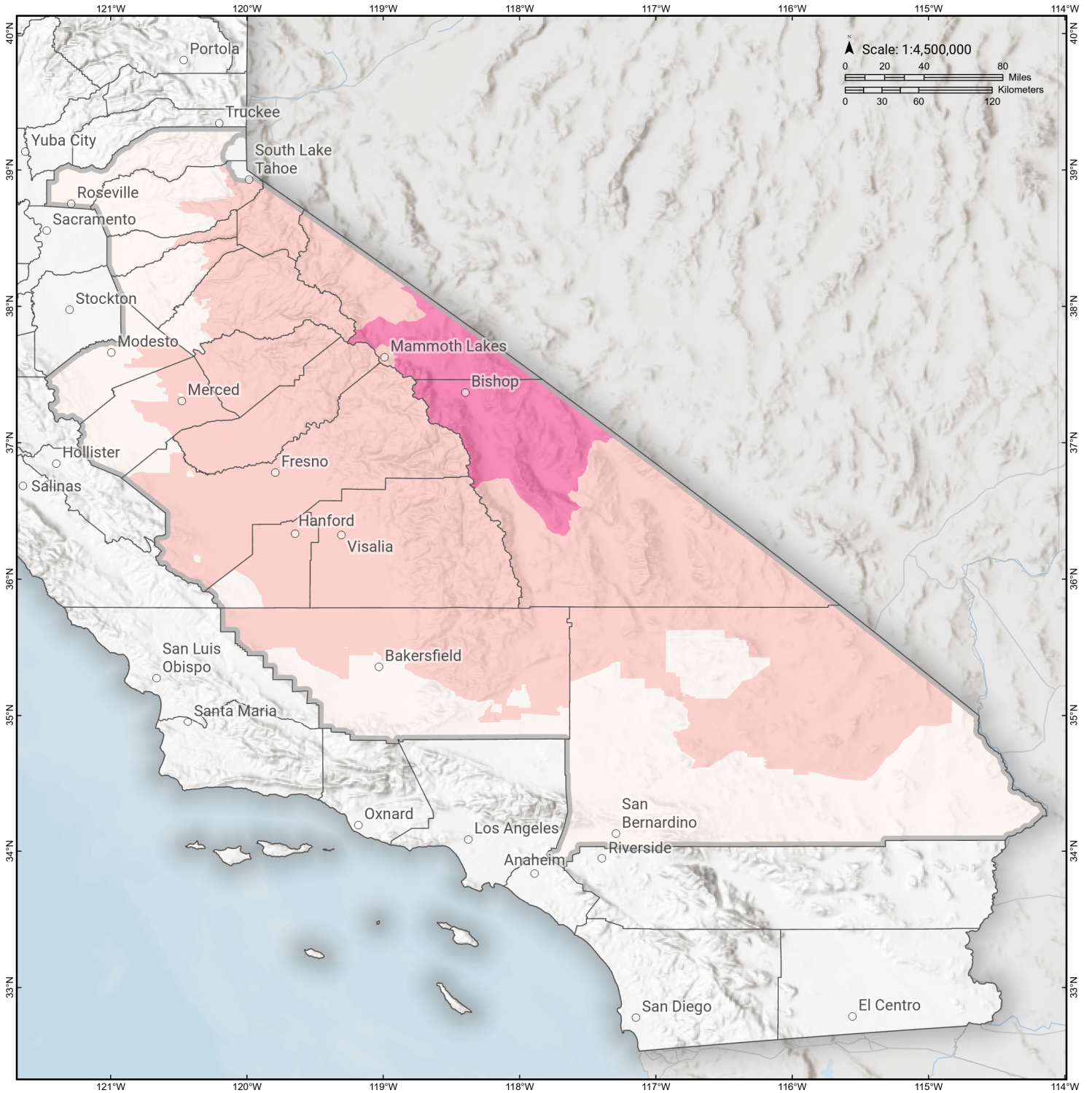


Displaced Households



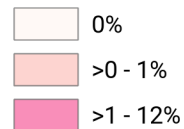
White Mountains

Loss Ratio by Census Tract



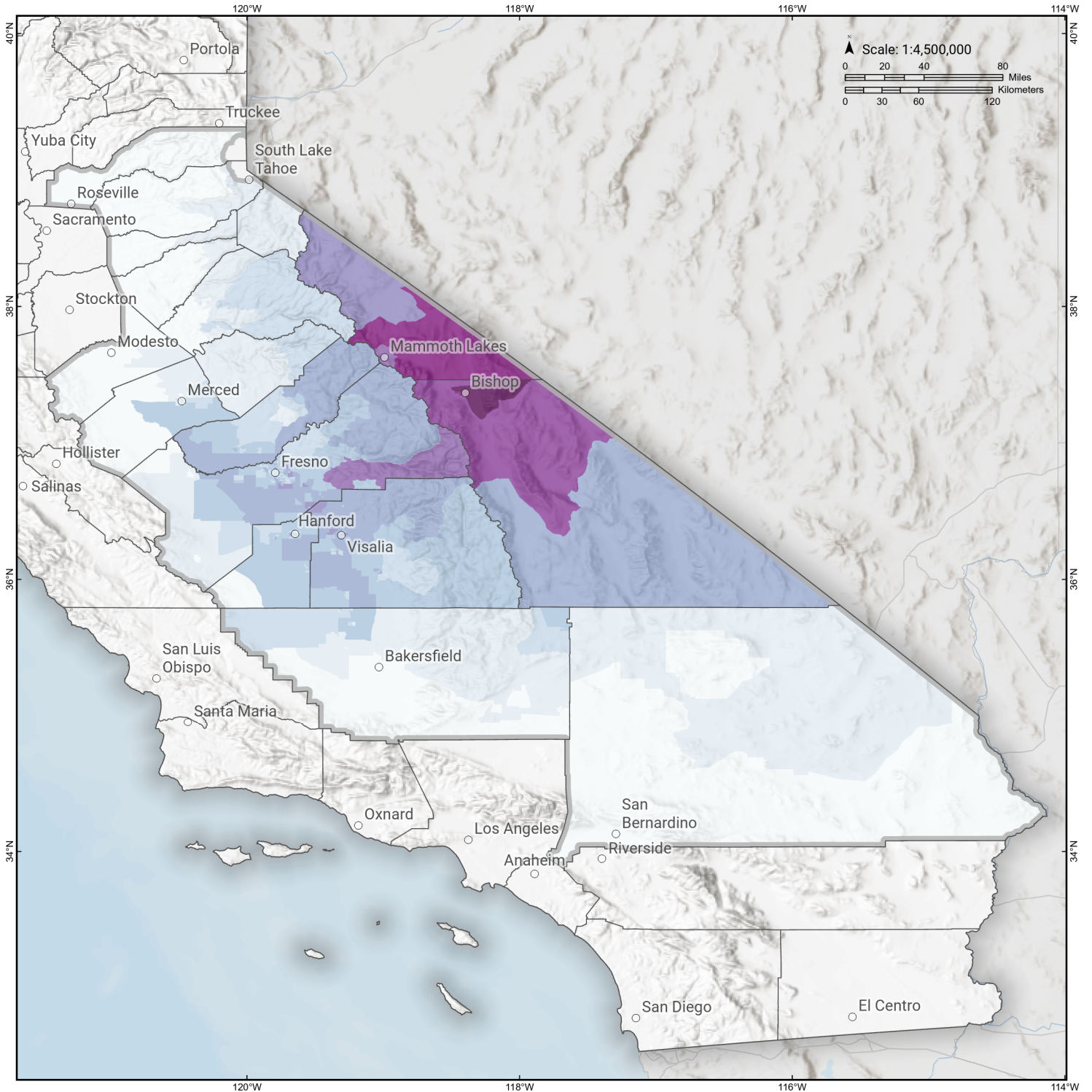
Study Region: White Mountains
Scenario: whitemountainsshaw09_m7p38_se

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



White Mountains

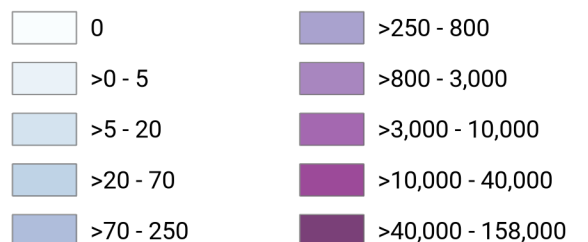
Total Building Related Economic Loss by Census Tract



Study Region: White Mountains
Scenario: whitemountainsshaw09_m7p38_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
Amador						
<i>Agriculture</i>	44	0	0	0	0	44
<i>Commercial</i>	1,368	0	0	0	0	1,368
<i>Education</i>	23	0	0	0	0	23
<i>Government</i>	32	0	0	0	0	32
<i>Industrial</i>	235	0	0	0	0	235
<i>Religion</i>	45	0	0	0	0	45
<i>Other Residential</i>	1,037	0	0	0	0	1,037
<i>Single Family</i>	14,962	0	0	0	0	14,962
Calaveras						

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Agriculture</i>	2,207	0	0	0	0	2,207
<i>Commercial</i>	1,413	0	0	0	0	1,413
<i>Education</i>	35	0	0	0	0	35
<i>Government</i>	84	0	0	0	0	84
<i>Industrial</i>	466	0	0	0	0	466
<i>Religion</i>	130	0	0	0	0	130
<i>Other Residential</i>	2,559	0	0	0	0	2,559
<i>Single Family</i>	22,148	0	0	0	0	22,148
El Dorado						
<i>Agriculture</i>	161	0	0	0	0	161
<i>Commercial</i>	4,768	0	0	0	0	4,768
<i>Education</i>	128	0	0	0	0	128
<i>Government</i>	100	0	0	0	0	100
<i>Industrial</i>	1,199	0	0	0	0	1,199
<i>Religion</i>	180	0	0	0	0	180
<i>Other Residential</i>	10,420	0	0	0	0	10,420
<i>Single Family</i>	71,424	0	0	0	0	71,424
Fresno						
<i>Agriculture</i>	3,419	2	0	0	0	3,421
<i>Commercial</i>	21,033	20	1	0	0	21,054
<i>Education</i>	602	0	0	0	0	602
<i>Government</i>	290	1	0	0	0	291
<i>Industrial</i>	5,343	5	0	0	0	5,348
<i>Religion</i>	1,505	2	0	0	0	1,507
<i>Other Residential</i>	40,914	57	3	0	0	40,973

		# of Buildings					
		None	Slight	Moderate	Extensive	Complete	Total
Inyo	<i>Single Family</i>	226,402	23	0	0	0	226,425
	<i>Agriculture</i>	27	4	1	0	0	32
	<i>Commercial</i>	368	197	111	32	14	721
	<i>Education</i>	33	6	2	0	0	41
	<i>Government</i>	67	20	11	2	0	101
	<i>Industrial</i>	165	48	31	10	3	257
	<i>Religion</i>	37	10	6	3	1	57
	<i>Other Residential</i>	2,010	843	779	387	31	4,050
Kern	<i>Single Family</i>	3,063	1,263	120	0	0	4,446
	<i>Agriculture</i>	4,645	0	0	0	0	4,645
	<i>Commercial</i>	15,567	0	0	0	0	15,567
	<i>Education</i>	462	0	0	0	0	462
	<i>Government</i>	443	0	0	0	0	443
	<i>Industrial</i>	6,047	0	0	0	0	6,047
	<i>Religion</i>	1,524	0	0	0	0	1,524
	<i>Other Residential</i>	54,517	3	0	0	0	54,520
Kings	<i>Single Family</i>	205,139	0	0	0	0	205,139
	<i>Agriculture</i>	306	0	0	0	0	306
	<i>Commercial</i>	2,317	1	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

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Religion</i>	210	0	0	0	0	210
<i>Other Residential</i>	4,340	2	0	0	0	4,342
<i>Single Family</i>	36,245	0	0	0	0	36,245
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>	903	0	0	0	0	903
<i>Religion</i>	119	0	0	0	0	119
<i>Other Residential</i>	6,631	3	0	0	0	6,635
<i>Single Family</i>	38,912	0	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
<i>Single Family</i>	8,084	0	0	0	0	8,084
Merced						
<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

		# of Buildings					
		None	Slight	Moderate	Extensive	Complete	Total
Mono	<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>	10,786	1	0	0	0	10,787
	<i>Single Family</i>	63,598	0	0	0	0	63,598
	<i>Agriculture</i>	129	14	2	0	0	145
	<i>Commercial</i>	622	28	4	0	0	654
	<i>Education</i>	21	0	0	0	0	21
	<i>Government</i>	18	0	0	0	0	18
	<i>Industrial</i>	99	8	1	0	0	108
Placer	<i>Religion</i>	30	1	0	0	0	32
	<i>Other Residential</i>	1,328	272	153	7	0	1,759
	<i>Single Family</i>	7,341	357	6	0	0	7,704
	<i>Agriculture</i>	258	0	0	0	0	258
	<i>Commercial</i>	8,538	0	0	0	0	8,538
	<i>Education</i>	231	0	0	0	0	231
	<i>Government</i>	377	0	0	0	0	377
	<i>Industrial</i>	2,703	0	0	0	0	2,703
	<i>Religion</i>	382	0	0	0	0	382
	<i>Other Residential</i>	14,843	0	0	0	0	14,843
San Bernardino	<i>Single Family</i>	134,719	0	0	0	0	134,719
	<i>Agriculture</i>	1,815	0	0	0	0	1,815

	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<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
Stanislaus						
<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
<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>	3,551	3	0	0	0	3,555
<i>Commercial</i>	8,859	13	1	0	0	8,873
<i>Education</i>	269	0	0	0	0	269
<i>Government</i>	460	1	0	0	0	461
<i>Industrial</i>	2,145	3	0	0	0	2,148
<i>Religion</i>	826	1	0	0	0	827
<i>Other Residential</i>	19,976	44	2	0	0	20,022

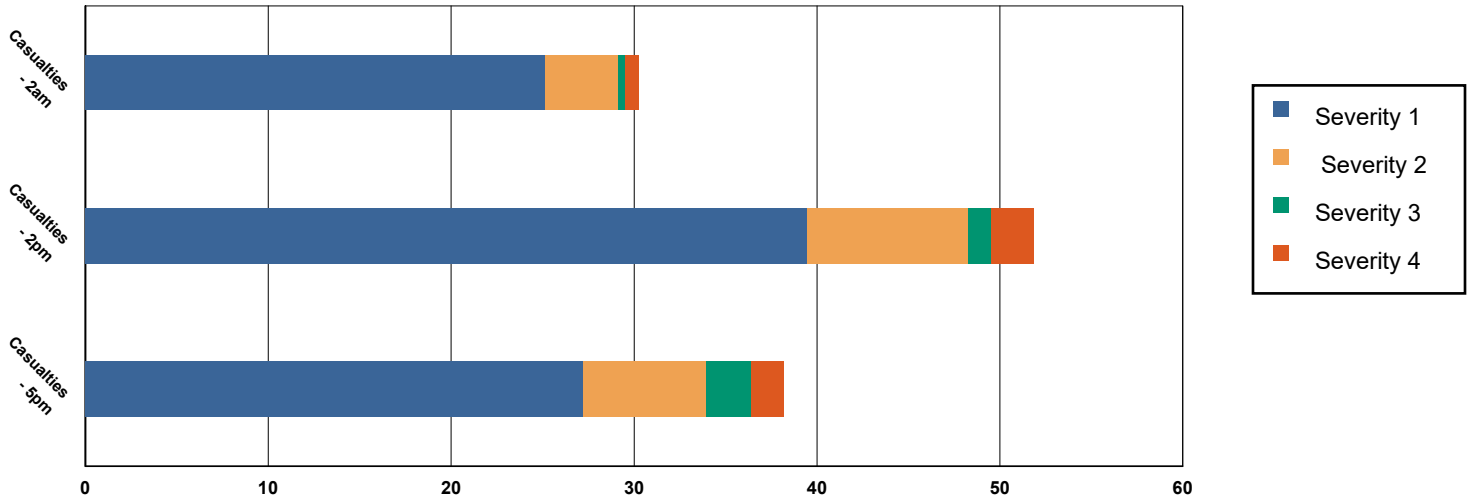
	# of Buildings					Total
	None	Slight	Moderate	Extensive	Complete	
<i>Single Family</i>	111,998	36	0	0	0	112,034
Tuolumne						
<i>Agriculture</i>	82	0	0	0	0	82
<i>Commercial</i>	1,576	0	0	0	0	1,576
<i>Education</i>	57	0	0	0	0	57
<i>Government</i>	143	0	0	0	0	143
<i>Industrial</i>	383	0	0	0	0	383
<i>Religion</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	2,129,640	3,295	1,235	441	48	2,134,659
Region Total	2,129,640	3,295	1,235	441	48	2,134,659

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
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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
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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
Amador					
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
Calaveras					
Casualties - 2am					
<i>Commuting</i>	0	0	0	0	0

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Calaveras					
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
El Dorado					
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					
El Dorado					
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
Fresno					
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					
Inyo					
Casualties - 2am					
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	0	0	0	0	1
<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>	21	4	0	1	26
<i>Single Family</i>	2	0	0	0	2
Total Casualties - 2am	24	4	0	1	29
Casualties - 2pm					
<i>Commuting</i>	0	0	0	0	0
<i>Commercial</i>	25	6	1	2	33
<i>Educational</i>	4	1	0	0	5
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	3	1	0	0	3
<i>Other-Residential</i>	6	1	0	0	8
<i>Single Family</i>	1	0	0	0	1
Total Casualties - 2pm	38	9	1	2	50
Casualties - 5pm					
<i>Commuting</i>	1	1	1	0	3
<i>Commercial</i>	15	4	1	1	21
<i>Educational</i>	0	0	0	0	0
<i>Hotels</i>	0	0	0	0	0
<i>Industrial</i>	2	0	0	0	2
<i>Other-Residential</i>	8	1	0	0	9
<i>Single Family</i>	1	0	0	0	1
Total Casualties - 5pm	26	7	2	2	36
Kern					
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

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Kern					
Casualties - 2pm					
<i>Industrial</i>	0	0	0	0	0
<i>Other-Residential</i>	0	0	0	0	0
<i>Single Family</i>	0	0	0	0	0
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
Kings					
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					
Kings					
Total Casualties - 5pm	0	0	0	0	0
Madera					
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
Mariposa					
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					
Mariposa					
Casualties - 2pm					
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
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

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Merced					
Casualties - 5pm					
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	1	0	0	0	1
Single Family	0	0	0	0	0
Total Casualties - 2am	1	0	0	0	1
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	1	0	0	0	1
Casualties - 5pm					
Commuting	0	0	0	0	1
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	1	0	0	0	1
Placer					
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

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Placer					
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
San Bernardino					
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

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
San Bernardino					
Casualties - 5pm					
<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
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
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

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Tulare					
Casualties - 2am					
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
Tuolumne					
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

	Injury Severity Level				Total
	Severity 1	Severity 2	Severity 3	Severity 4	
California					
Tuolumne					
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
Amador	0	0	0
Calaveras	0	0	0
El Dorado	0	0	0
Fresno	0	0	1
Inyo	20	30	50
Kern	0	0	0
Kings	0	0	0
Madera	0	0	0
Mariposa	0	0	0
Merced	0	0	0
Mono	1	1	2
Placer	0	0	0
San Bernardino	0	0	0
Stanislaus	0	0	0
Tulare	0	0	0
Tuolumne	0	0	0
Total	22	30	52

	Brick, Wood & Others	Concrete & Steel	Total
Region Total	22	30	52

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	27,903	124,018	50,576	6,278	3.09	13,777	9,794	11,533	8,435	252,314
San Bernardino	0	2	2	0	0.00	0	0	0	0	5
Fresno	369	7,162	4,501	688	0.00	58	90	100	108	13,077
Kings	13	555	375	52	0.00	2	3	4	4	1,009
Tuolumne	0	18	12	1	0.00	0	0	0	0	30
Tulare	278	5,578	3,235	596	0.01	31	46	53	58	9,875
Madera	22	727	455	72	0.00	1	1	1	4	1,285
Calaveras	0	0	0	0	0.00	0	0	0	0	0
Alpine	0	2	1	0	0.00	0	0	0	0	2

	Capital Stock Losses				Loss Ratio %	Income Losses				Total Loss
	Cost Structural Damage	Cost Non-struct. Damage	Cost Contents Damage	Inventory Loss		Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	
Merced	7	188	135	29	0.00	0	0	1	1	363
Stanislaus	0	1	0	0	0.00	0	0	0	0	1
Mono	1,806	12,345	5,313	424	0.32	550	172	211	376	21,197
Placer	0	0	0	0	0.00	0	0	0	0	0
Kern	5	271	163	24	0.00	1	0	1	1	466
El Dorado	0	10	7	0	0.00	0	0	0	0	17
Amador	0	0	0	0	0.00	0	0	0	0	0
Mariposa	0	19	11	0	0.00	0	0	0	0	31
Total	30,404	150,897	64,786	8,166	0.20	14,418	10,108	11,904	8,987	299,671
Region Total	30,404	150,897	64,786	8,166	0.20	14,418	10,108	11,904	8,987	299,671

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	51	51
Total	0	0	0	0	0	0	51	51
Amador								
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
Calaveras								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	11	11

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	0	0	0	0	0	0	11	11
El Dorado								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		0	0	24	0	0	57	80
Total	0	0	0	24	0	0	57	80
Fresno								
Segments	0	0	0					0
Bridges	54	0	0					54
Tunnels	0	0	0					0
Facilities		231	0	21	0	0	1,049	1,301
Total	54	231	0	21	0	0	1,049	1,354
Inyo								
Segments	0	0	0					0
Bridges	2,464	0	0					2,464
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	4,988	4,988
Total	2,464	0	0	0	0	0	4,988	7,452
Kern								
Segments	0	0	0					0
Bridges	1	0	0					1
Tunnels	0	0	0					0
Facilities		66	0	44	0	0	376	485

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	1	66	0	44	0	0	376	486
Kings								
Segments	0	0	0					0
Bridges	1	0	0					1
Tunnels	0	0	0					0
Facilities		128	0	41	0	0	359	529
Total	1	128	0	41	0	0	359	530
Madera								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		26	0	21	0	0	102	149
Total	0	26	0	21	0	0	102	149
Mariposa								
Segments	0	0	0					0
Bridges	2	0	0					2
Tunnels	0	0	0					0
Facilities		0	0	86	0	0	51	137
Total	2	0	0	86	0	0	51	139
Merced								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		51	0	21	0	0	149	221

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	0	51	0	21	0	0	149	221
Mono								
Segments	0	0	0					0
Bridges	307	0	0					307
Tunnels	0	0	0					0
Facilities		0	0	174	0	0	1,103	1,278
Total	307	0	0	174	0	0	1,103	1,584
Placer								
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
San Bernardino								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		26	0	0	0	0	17	43
Total	0	26	0	0	0	0	17	43
Stanislaus								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		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
Tulare								
Segments	0	0	0					0
Bridges	34	0	0					34
Tunnels	0	0	0					0
Facilities		0	0	83	0	0	255	338
Total	34	0	0	83	0	0	255	372
Tuolumne								
Segments	0	0	0					0
Bridges	1	0	0					1
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	108	108
Total	1	0	0	0	0	0	108	109
Total	2,865	527	0	515	0	0	8,682	12,589
Region Total	2,865	527	0	515	0	0	8,682	12,589

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	123	0	0	0	0	123
Pipelines	6	3	0	0			8
Total	6	126	0	0	0	0	131
Amador							
Facilities	0	3	0	0	295	0	298
Pipelines	6	3	0	0			8
Total	6	5	0	0	295	0	306
Calaveras							
Facilities	0	10	0	0	1,358	0	1,368
Pipelines	17	9	0	0			26
Total	17	19	0	0	1,358	0	1,394
El Dorado							
Facilities	0	0	0	0	852	0	852

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
<i>Pipelines</i>	17	9	0	0			26
Total	17	9	0	0	852	0	879
Fresno							
<i>Facilities</i>	0	492	0	13	393,476	7	393,988
<i>Pipelines</i>	253	127	0	0			381
Total	253	619	0	13	393,476	7	394,369
Inyo							
<i>Facilities</i>	0	0	0	0	187,377	226	187,603
<i>Pipelines</i>	2,028	1,019	0	0			3,046
Total	2,028	1,019	0	0	187,377	226	190,649
Kern							
<i>Facilities</i>	2	8	0	6	5,480	1	5,497
<i>Pipelines</i>	279	140	0	0			420
Total	282	148	0	6	5,480	1	5,917
Kings							
<i>Facilities</i>	0	0	0	4	5,844	1	5,849
<i>Pipelines</i>	75	37	0	0			112
Total	75	37	0	4	5,844	1	5,961
Madera							
<i>Facilities</i>	0	0	0	0	14,173	1	14,173
<i>Pipelines</i>	90	45	0	0			135

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
Total	90	45	0	0	14,173	1	14,308
Mariposa							
<i>Facilities</i>	0	492	0	0	42	2	536
<i>Pipelines</i>	36	18	0	0			55
Total	36	510	0	0	42	2	590
Merced							
<i>Facilities</i>	0	131	0	0	175	0	306
<i>Pipelines</i>	80	40	0	0			120
Total	80	171	0	0	175	0	426
Mono							
<i>Facilities</i>	0	0	0	0	193,789	2	193,791
<i>Pipelines</i>	1,104	555	0	0			1,658
Total	1,104	555	0	0	193,789	2	195,449
Placer							
<i>Facilities</i>	0	0	0	0	384	0	384
<i>Pipelines</i>	9	4	0	0			13
Total	9	4	0	0	384	0	398
San Bernardino							
<i>Facilities</i>	0	0	0	0	5,180	0	5,180
<i>Pipelines</i>	77	38	0	0			115
Total	77	38	0	0	5,180	0	5,295

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
Stanislaus							
<i>Facilities</i>	0	0	0	0	123	0	123
<i>Pipelines</i>	11	5	0	0			16
Total	11	5	0	0	123	0	139
Tulare							
<i>Facilities</i>	28	369	0	0	4,057	5	4,459
<i>Pipelines</i>	151	76	0	0			227
Total	179	445	0	0	4,057	5	4,686
Tuolumne							
<i>Facilities</i>	0	3	0	0	15,558	0	15,560
<i>Pipelines</i>	44	22	0	0			67
Total	44	25	0	0	15,558	0	15,627
Total	4,314	3,781	0	23	828,163	246	836,526
Region Total	4,314	3,781	0	23	828,163	246	836,526

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 - 0.40
	Building Contents	0.00 - 0.10
	Business Interruption	0.00 - 0.10
Infrastructure	Lifelines Damage	
Total		0.10 - 0.60

Preliminary Damage Assessment (PDA) Estimates

Description	Residential	Commercial	Other	Total
Affected	2,900	260	130	3,290
Minor	1,100	120	50	1,270
Major	390	30	10	430
Destroyed	30	10	< 10	40
Total	4,420	420	190	5,030

Estimated Casualties : Night Time

Severity Level	Description	# Persons
Level 1	Medical Aid	10 - 50
Level 2	Hospital Care	< 10
Level 3	Life-threatening	< 10
Level 4	Fatalities	< 10

Estimated Shelter Needs

Type	Households	People
Displaced Households	40 - 170	100 - 425
Public Shelter	20	40

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 : 7.40

Epicenter Latitude/Longitude :
/

Depth & Type : /U

Name :
NA

Ground Motion /Attenuation :

Maximum PGA: 0.00

Information Sources:

Comments :

Population and Building Exposure

Population: 6,503,337

Building Exposure : (\$ Millions)

Residential	712,322
Commercial	232,431
Other	202,543
Total	1,147,296

Counties : See Appendix

Major Metro Area :

Hazus Quick Assessment Report

Estimated Economic Loss (\$ Billions)

Category	Description	Range
General Building Stock	Building Damage	0.10 - 0.40
	Building Contents	0.00 - 0.10
	Business Interruption	0.00 - 0.10
Infrastructure	Lifelines Damage	
Total		0.10 - 0.60

Preliminary Damage Assessment (PDA) Estimates

Description	Residential	Commercial	Other	Total
Affected	2,900	260	130	3,290
Minor	1,100	120	50	1,270
Major	390	30	10	430
Destroyed	30	10	< 10	40
Total	4,420	420	190	5,030

Estimated Casualties : Day Time

Severity Level	Description	# Persons
Level 1	Medical Aid	20 - 80
Level 2	Hospital Care	0 - 20
Level 3	Life-threatening	< 10
Level 4	Fatalities	< 10

Estimated Shelter Needs

Type	Households	People
Displaced Households	40 - 170	100 - 425
Public Shelter	20	40

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:

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Earthquake Information

Location :

Origin Time:

Magnitude : 7.40

Epicenter Latitude/Longitude :
/

Depth & Type : /U

Name :
NA

Ground Motion /Attenuation :

Maximum PGA: 0.00

Information Sources:

Comments :

Population and Building Exposure

Population: 6,503,337

Building Exposure : (\$ Millions)

Residential	712,322
Commercial	232,431
Other	202,543
Total	1,147,296

Counties : See Appendix

Major Metro Area :

Hazus Quick Assessment Report

Estimated Economic Loss (\$ Billions)

Category	Description	Range
General Building Stock	Building Damage	0.10 - 0.40
	Building Contents	0.00 - 0.10
	Business Interruption	0.00 - 0.10
Infrastructure	Lifelines Damage	
Total		0.10 - 0.60

Preliminary Damage Assessment (PDA) Estimates

Description	Residential	Commercial	Other	Total
Affected	2,900	260	130	3,290
Minor	1,100	120	50	1,270
Major	390	30	10	430
Destroyed	30	10	< 10	40
Total	4,420	420	190	5,030

Estimated Casualties : Commute Time

Severity Level	Description	# Persons
Level 1	Medical Aid	10 - 50
Level 2	Hospital Care	< 10
Level 3	Life-threatening	< 10
Level 4	Fatalities	< 10

Estimated Shelter Needs

Type	Households	People
Displaced Households	40 - 170	100 - 425
Public Shelter	20	40

Earthquake Information

Location :

Origin Time:

Magnitude : 7.40

Epicenter Latitude/Longitude :
/

Depth & Type : /U

Name :
NA

Ground Motion /Attenuation :

Maximum PGA: 0.00

Information Sources:

Comments :

Population and Building Exposure

Population: 6,503,337

Building Exposure : (\$ Millions)

Residential	712,322
Commercial	232,431
Other	202,543
Total	1,147,296

Counties : See Appendix

Major Metro Area :

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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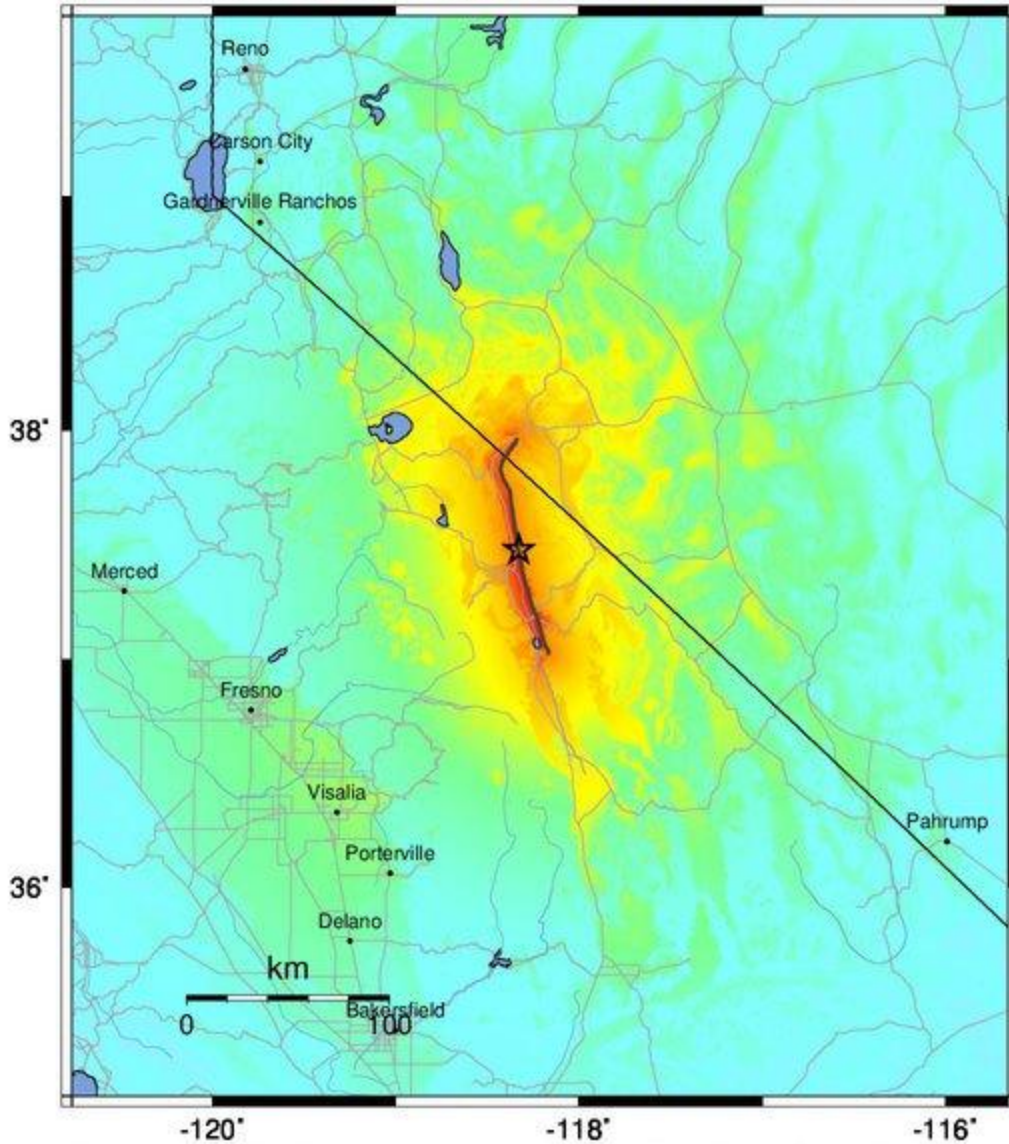
Shelter Summary Report

May 06, 2024

	# of Displaced Households	# of People Needing Short Term Shelter
California		
Alpine	0	0
Amador	0	0
Calaveras	0	0
El Dorado	0	0
Fresno	0	0
Inyo	84	40
Kern	0	0
Kings	0	0
Madera	0	0
Mariposa	0	0
Merced	0	0
Mono	1	0
Placer	0	0
San Bernardino	0	0
Stanislaus	0	0
Tulare	0	0
Tuolumne	0	0
Total	85	40
Region Total	85	40

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 White Mountains - Median ground motions Scenario
 Scenario Date: May 16, 2017 08:31:49 AM MDT M 7.4 N37.48 W118.33 Depth: 8.3km



PLANNING SCENARIO ONLY -- Map Version 15 Processed 2017-05-17 12:22:55 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)