Hazus: Earthquake Global Risk Report

Region Name: HiltonCreek

Earthquake Scenario: hiltoncreek2011cfmel_m6p92_se

Print Date: June 04, 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 12 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 36,765.41 square miles and contains 617 census tracts. There are over 874 thousand households in the region which has a total population of 2,776,050 peopleF. The distribution of population by Total Region and County is provided in Appendix B.

There are an estimated 898 thousand buildings in the region with a total building replacement value (excluding contents) of 476,041 (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 49,248 and 64,521 (millions of dollars) , respectively.

Building and Lifeline Inventory

Building Inventory

Hazus estimates that there are 898 thousand buildings in the region which have an aggregate total replacement value of 476,041 (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 55 hospitals in the region with a total bed capacity of 8,454 beds. There are 1,243 schools, 365 fire stations, 100 police stations and 22 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 113,769.00 (millions of dollars). This inventory includes over 4,024.00 miles of highways, 3,301 bridges, 89,298.47 miles of pipes.

Table 1: Transportation System Lifeline Inventory

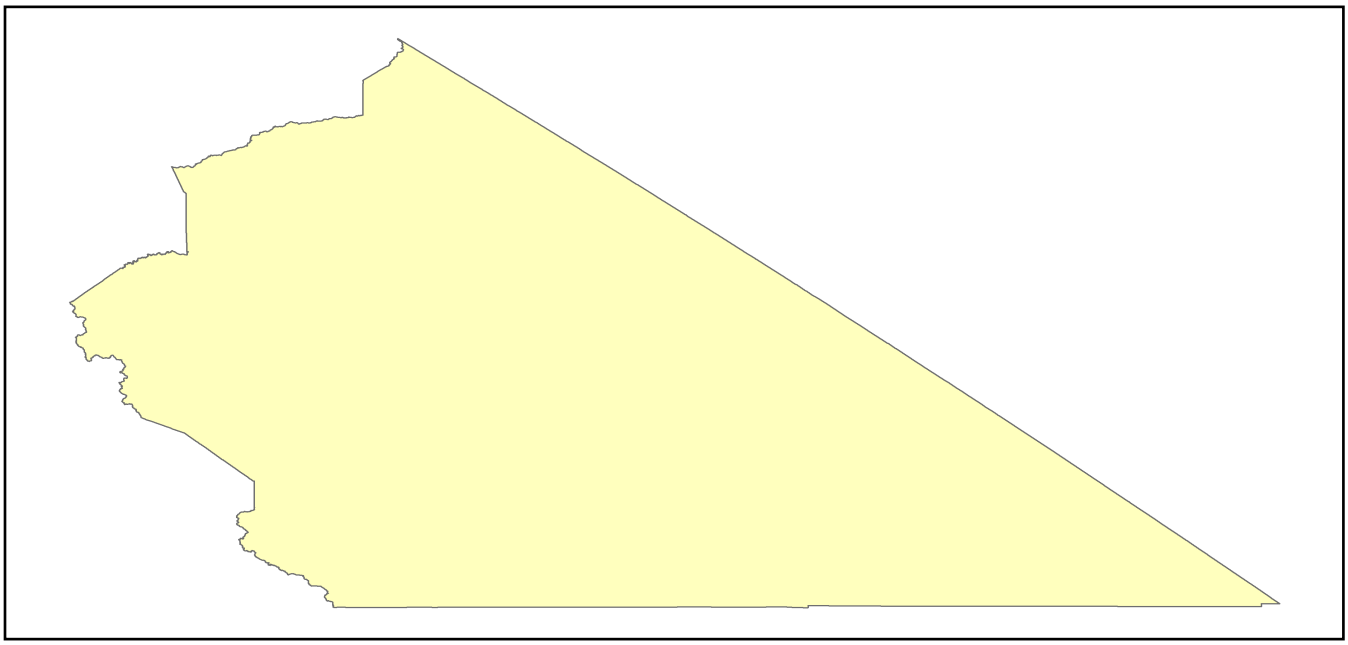
System	Component	# Locations/ # Segments	Replacement value (millions of dollars)
Highway	Bridges	3,301	7274.1661
	Segments	1,292	30188.3317
	Tunnels	5	104.0146
		Subtotal	**37566.5124**
Railways	Bridges	416	2367.0400
	Facilities	23	61.2490
	Segments	529	8461.2634
	Tunnels	0	0.0000
		Subtotal	**10889.5524**
Light Rail	Bridges	0	0.0000
	Facilities	0	0.0000
	Segments	0	0.0000
	Tunnels	0	0.0000
		Subtotal	**0.0000**
Bus	Facilities	17	37.0524
		Subtotal	**37.0524**
Ferry	Facilities	0	0.0000
		Subtotal	**0.0000**
Port	Facilities	0	0.0000
		Subtotal	**0.0000**
Airport	Facilities	47	365.3467
	Runways	54	390.0004
		Subtotal	**755.3471**
		Total	**49,248.50**

Table 2: Utility System Lifeline Inventory

System	Component	# Locations / Segments	Replacement value (millions of dollars)
Potable Water	Distribution Lines	NA	1785.1652
	Facilities	2	78.5880
	Pipelines	0	0.0000
		Subtotal	**1863.7532**
Waste Water	Distribution Lines	NA	1071.0991
	Facilities	26	4470.7468
	Pipelines	0	0.0000
		Subtotal	**5541.8459**
Natural Gas	Distribution Lines	NA	714.0661
	Facilities	3	142.4899
	Pipelines	159	3166.6111
		Subtotal	**4023.1671**
Oil Systems	Facilities	2	0.2360
	Pipelines	0	0.0000
		Subtotal	**0.2360**
Electrical Power	Facilities	181	53075.6741
		Subtotal	**53075.6741**
Communication	Facilities	144	16.9920
		Subtotal	**16.9920**
		Total	**64,521.70**

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	hiltoncreek2011cfmel_m6p92_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	6.92
Depth (km)	NA
Rupture Length (Km)	NA
Rupture Orientation (degrees)	NA
Attenuation Function	NA

Direct Earthquake Damage

Building Damage

Hazus estimates that about 338 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

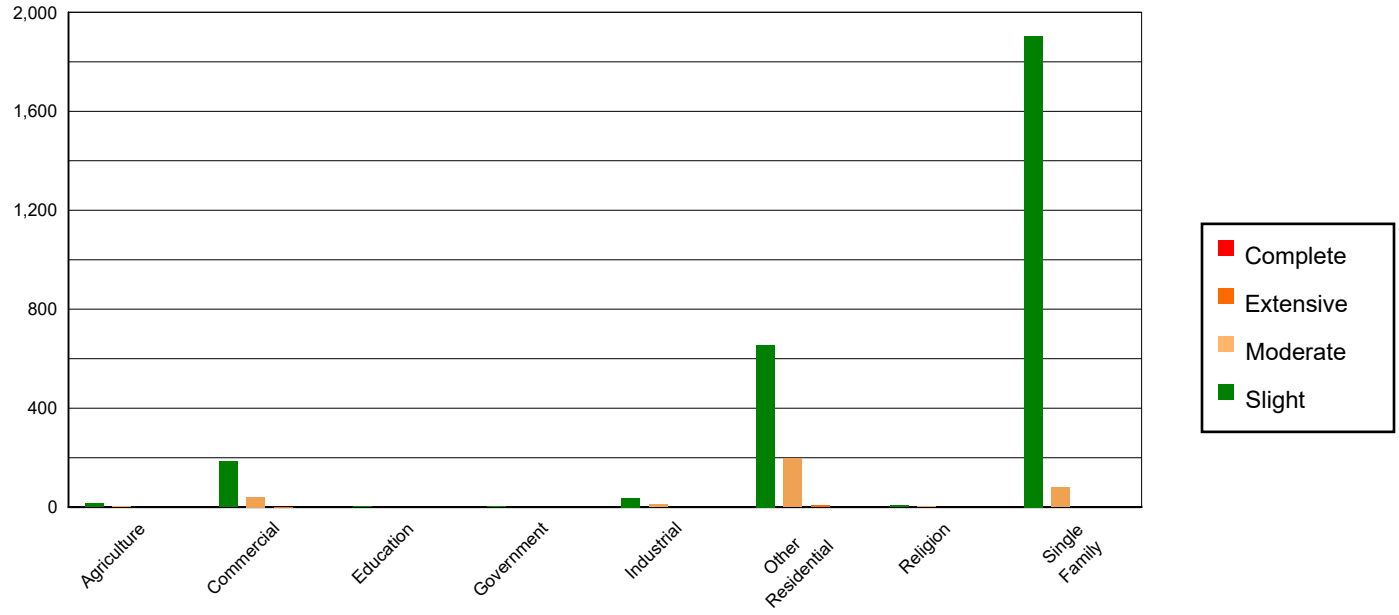


Table 3: Expected Building Damage by Occupancy

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Agriculture	19287.26	2.16	13.80	0.49	1.89	0.57	0.05	0.67	0.00	6.70
Commercial	55146.05	6.16	185.32	6.60	41.47	12.53	1.16	15.36	0.00	17.30
Education	1742.71	0.19	1.99	0.07	0.30	0.09	0.00	0.03	0.00	0.00
Government	2164.95	0.24	3.59	0.13	0.46	0.14	0.00	0.06	0.00	0.00
Industrial	14726.06	1.65	37.30	1.33	9.29	2.81	0.35	4.61	0.00	13.94
Other Residential	115205.49	12.87	655.46	23.33	195.11	58.96	5.94	78.50	0.00	62.06
Religion	3831.25	0.43	8.17	0.29	1.55	0.47	0.03	0.40	0.00	0.00
Single Family	682822.19	76.30	1903.94	67.77	80.84	24.43	0.03	0.36	0.00	0.00
Total	**894,926**		**2,810**		**331**		**8**		**0**	

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

	None		Slight		Moderate		Extensive		Complete	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Wood	780793.06	87.25	2115.68	75.30	87.75	26.52	0.00	0.02	0.00	0.00
Steel	22431.20	2.51	63.81	2.27	24.26	7.33	1.25	16.53	0.00	47.38
Concrete	21374.34	2.39	61.12	2.18	11.63	3.51	0.29	3.84	0.00	8.67
Precast	14513.79	1.62	57.57	2.05	17.45	5.27	0.38	5.06	0.00	0.00
RM	26195.02	2.93	61.30	2.18	14.48	4.38	0.22	2.87	0.00	0.00
URM	2473.28	0.28	18.96	0.67	3.84	1.16	0.20	2.62	0.00	43.95
MH	27145.27	3.03	431.14	15.35	171.50	51.83	5.22	69.07	0.00	0.00
Total	**894,926**		**2,810**		**331**		**8**		**0**	

*Note:
RM Reinforced Masonry
URM Unreinforced Masonry
MH Manufactured Housing

Essential Facility Damage

Before the earthquake, the region had 8,454 hospital beds available for use. On the day of the earthquake, the model estimates that only 8,379 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	55	0	0	55
Schools	1,243	0	0	1,243
EOCs	22	0	0	22
PoliceStations	100	0	0	100
FireStations	365	0	0	363

Transportation Lifeline Damage

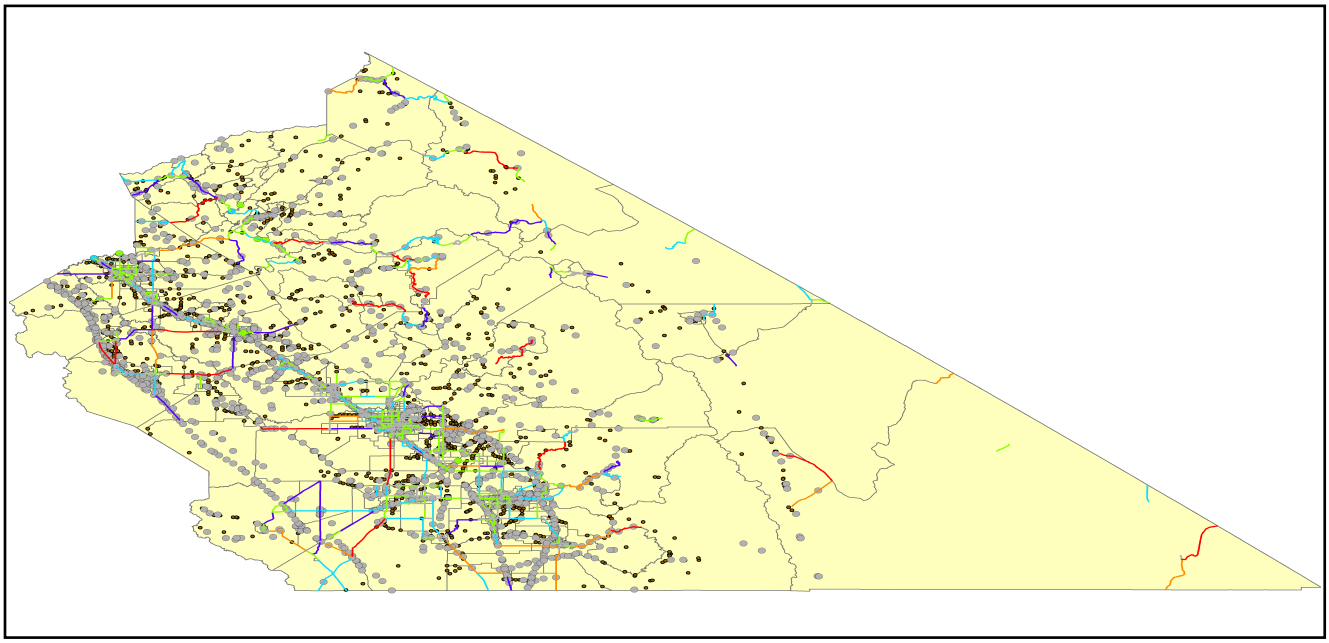


Table 6: Expected Damage to the Transportation Systems

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	1,292	0	0	1,292	1,292
	Bridges	3,301	0	0	3,301	3,301
	Tunnels	5	0	0	5	5
Railways	Segments	529	0	0	529	529
	Bridges	416	0	0	416	416
	Tunnels	0	0	0	0	0
	Facilities	23	0	0	23	23
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	17	0	0	17	17
Ferry	Facilities	0	0	0	0	0
Port	Facilities	0	0	0	0	0
Airport	Facilities	47	1	0	47	47
	Runways	54	0	0	54	54

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	2	0	0	2	2
Waste Water	26	0	0	26	26
Natural Gas	3	0	0	3	3
Oil Systems	2	0	0	2	2
Electrical Power	181	5	0	176	181
Communication	144	0	0	144	144

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

System	Total Pipelines Length (miles)	Number of Leaks	Number of Breaks
Potable Water	55,462	297	74
Waste Water	33,277	149	37
Natural Gas	559	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	874,083	1	0	0	0	0
Electric Power		0	0	0	0	0

Induced Earthquake Damage

Fire Following Earthquake

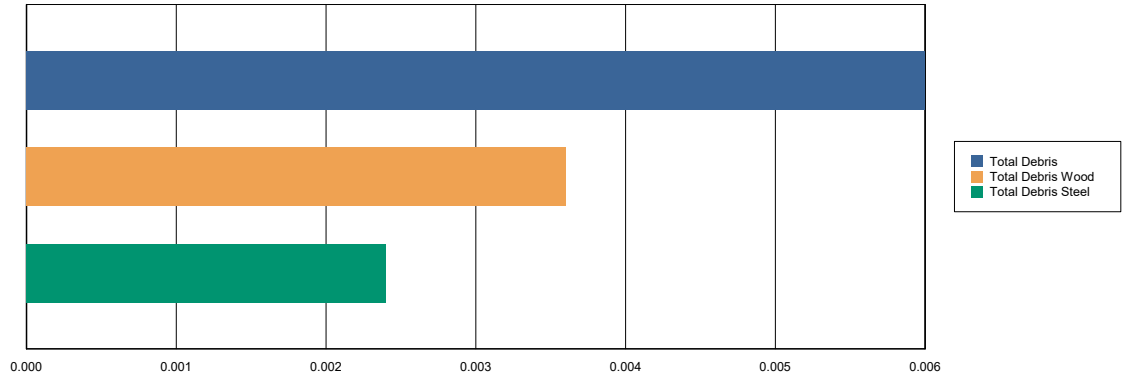
Fires often occur after an earthquake. Because of the number of fires and the lack of water to fight the fires, they can often burn out of control. Hazus uses a Monte Carlo simulation model to estimate the number of ignitions and the amount of burnt area. For this scenario, the model estimates that there 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 6,000 tons of debris will be generated. Of the total amount, Brick/Wood comprises 60.00% 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 240 truckloads (@25 tons/truck) to remove the debris generated by the earthquake.

Earthquake Debris (millions of tons)



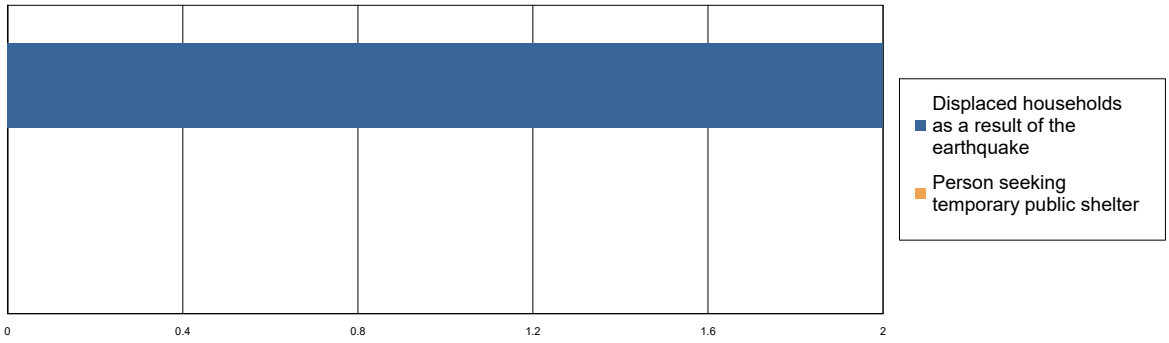
Brick/ Wood	Reinforced Concrete/Steel	Total Debris	Truck Load
0.00	0.00	0.01	240 (@25 tons/truck)

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 2 households to be displaced due to the earthquake. Of these, 0 people (out of a total population of 2,776,050) will seek temporary shelter in public shelters.

Displaced Households/ Persons Seeking Short Term Public Shelter



Displaced households as a result of the earthquake	Persons seeking temporary public shelter
2	0

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	0.03	0.00	0.00	0.00
	Commuting	0.00	0.00	0.00	0.00
	Educational	0.00	0.00	0.00	0.00
	Hotels	0.01	0.00	0.00	0.00
	Industrial	0.03	0.00	0.00	0.00
	Other-Residential	1.67	0.11	0.00	0.00
	Single Family	1.50	0.03	0.00	0.00
	Total	**3**	**0**	**0**	**0**
2 PM	Commercial	2.08	0.13	0.00	0.00
	Commuting	0.01	0.01	0.01	0.00
	Educational	0.32	0.02	0.00	0.00
	Hotels	0.00	0.00	0.00	0.00
	Industrial	0.21	0.01	0.00	0.00
	Other-Residential	0.52	0.03	0.00	0.00
	Single Family	0.50	0.01	0.00	0.00
	Total	**4**	**0**	**0**	**0**
5 PM	Commercial	1.29	0.08	0.00	0.00
	Commuting	0.13	0.18	0.30	0.06
	Educational	0.00	0.00	0.00	0.00
	Hotels	0.00	0.00	0.00	0.00
	Industrial	0.13	0.01	0.00	0.00
	Other-Residential	0.60	0.04	0.00	0.00
	Single Family	0.54	0.01	0.00	0.00
	Total	**3**	**0**	**0**	**0**

Economic Loss

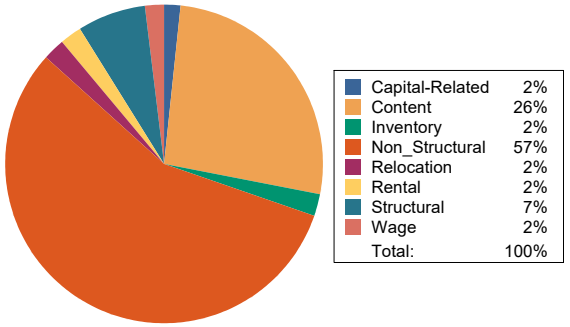
The total economic loss estimated for the earthquake is 734.83 (millions of dollars), which includes building and lifeline related losses based on the region's available inventory. The following three sections provide more detailed information about these losses.

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 105.03 (millions of dollars); 8 % 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 61 % 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)

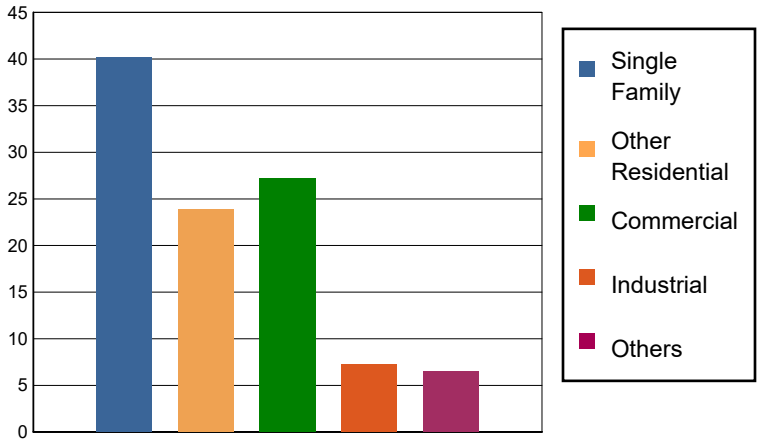


Table 11: Building-Related Economic Loss Estimates

(Millions of dollars)

Category	Area	Single Family	Other Residential	Commercial	Industrial	Others	Total
Income Losses							
	Wage	0.0000	0.3958	1.4676	0.0454	0.0929	2.0017
	Capital-Related	0.0000	0.1680	1.6348	0.0273	0.0221	1.8522
	Rental	0.2563	1.1129	0.7974	0.0208	0.0256	2.2130
	Relocation	0.5430	0.6063	0.8011	0.1058	0.1836	2.2398
	Subtotal	**0.7993**	**2.2830**	**4.7009**	**0.1993**	**0.3242**	**8.3067**
Capital Stock Losses							
	Structural	3.4435	1.7380	1.4886	0.3899	0.3548	7.4148
	Non_Structural	25.2945	15.2285	11.9512	3.7002	3.3178	59.4922
	Content	10.6640	4.5982	7.7153	2.5353	2.2369	27.7497
	Inventory	0.0000	0.0000	1.3559	0.4179	0.2951	2.0689
	Subtotal	**39.4020**	**21.5647**	**22.5110**	**7.0433**	**6.2046**	**96.7256**
	Total	**40.20**	**23.85**	**27.21**	**7.24**	**6.53**	**105.03**

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	30188.3317	0.0000	0.00
	Bridges	7274.1661	0.5155	0.01
	Tunnels	104.0146	0.0285	0.03
	Subtotal	**37566.5124**	**0.5440**	
Railways	Segments	8461.2634	0.0000	0.00
	Bridges	2367.0400	0.0000	0.00
	Tunnels	0.0000	0.0000	0.00
	Facilities	61.2490	0.2735	0.45
	Subtotal	**10889.5524**	**0.2735**	
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	37.0524	0.7165	1.93
	Subtotal	**37.0524**	**0.7165**	
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	365.3467	4.8866	1.34
	Runways	390.0004	0.0000	0.00
	Subtotal	**755.3471**	**4.8866**	
	Total	**49,248.46**	**6.42**	

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	78.5880	0.0281	0.04
	Distribution Lines	1785.1652	1.3355	0.07
	Subtotal	**1863.7532**	**1.3636**	
Waste Water	Pipelines	0.0000	0.0000	0.00
	Facilities	4470.7468	1.2475	0.03
	Distribution Lines	1071.0991	0.6708	0.06
	Subtotal	**5541.8459**	**1.9183**	
Natural Gas	Pipelines	3166.6111	0.0000	0.00
	Facilities	142.4899	0.0003	0.00
	Distribution Lines	714.0661	0.2298	0.03
	Subtotal	**4023.1671**	**0.2301**	
Oil Systems	Pipelines	0.0000	0.0000	0.00
	Facilities	0.2360	0.0001	0.04
	Subtotal	**0.2360**	**0.0001**	
Electrical Power	Facilities	53075.6741	619.8232	1.17
	Subtotal	**53075.6741**	**619.8232**	
Communication	Facilities	16.9920	0.0407	0.24
	Subtotal	**16.9920**	**0.0407**	
	Total	**64,521.67**	**623.38**	

Appendix A: County Listing for the Region

Alpine,CA

Calaveras,CA

Fresno,CA

Inyo,CA

Kings,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
	Calaveras	45,292	8,305	4,893	13,199
	Fresno	1,008,654	98,532	61,772	160,304
	Inyo	19,016	2,951	1,970	4,921
	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
	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		**2,776,050**	**289,202**	**186,826**	**476,035**

Hilton Creek

Building Inspection Tagging (Counts)

Inspected		Restricted		Unsafe	
Residential	276	Residential	5.96	Residential	0.00275
Commercial	41.5	Commercial	1.16	Commercial	0.000766
Industrial	9.29	Industrial	0.349	Industrial	0.000617
Agricultural	1.89	Agricultural	0.051	Agricultural	0.000297
Educational	0.298	Educational	0.0024	Educational	0
Government	0.457	Government	0.00491	Government	0
Religious	1.55	Religious	0.0301	Religious	0

Total Economic Loss

Total: $105M

Top Counties	State	Total
Mono	CA	$81.4M
Inyo	CA	$14.8M
Fresno	CA	$6.6M
Madera	CA	$1.5M
Tulare	CA	$501K
Mariposa	CA	$66.9K
Merced	CA	$63.7K

Injuries & Fatalities

Total Day: 3.87
Total Night: 3.38

Top Counties	State	Injuries (day/night)	Fatalities (day/night)
Mono	CA	2.95/2.67	0.00293/0.000446
Inyo	CA	0.811/0.652	0.000261/0.000079
Fresno	CA	0.0839/0.0339	0.000028/0.000006
Madera	CA	0.0142/0.0181	0.000004/0.000006
Tulare	CA	0.00579/0.0035	0.000001/0
Merced	CA	0.00146/0.000114	0/0
Mariposa	CA	0.000458/0.00016	0/0

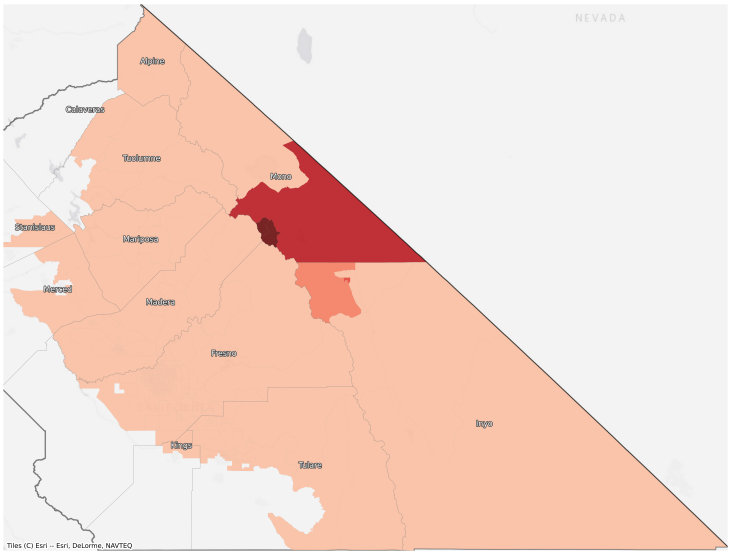
Displaced Households & Short-Term Shelter Needs

Total Displaced: 2.14
Total Needing Shelter: 0.853

Top Counties	State	Displaced	Needing Shelter
Mono	CA	1.81	0.7
Inyo	CA	0.33	0.153
Alpine	CA	0	0
Calaveras	CA	0	0
Fresno	CA	0	0
Kings	CA	0	0
Madera	CA	0	0

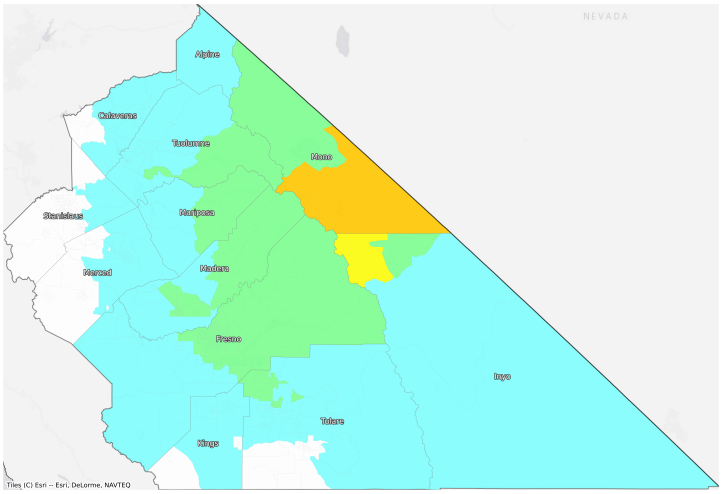
Economic Impacts by Census Tract (315 Tracts with Losses)

$0-604K | $604K-2.26M | $2.26M-13.3M | $13.3M-35.2M



Ground Shaking

Not Felt | Weak | Light | Moderate | Strong | Very Strong | Severe | Violent | Extreme



Debris

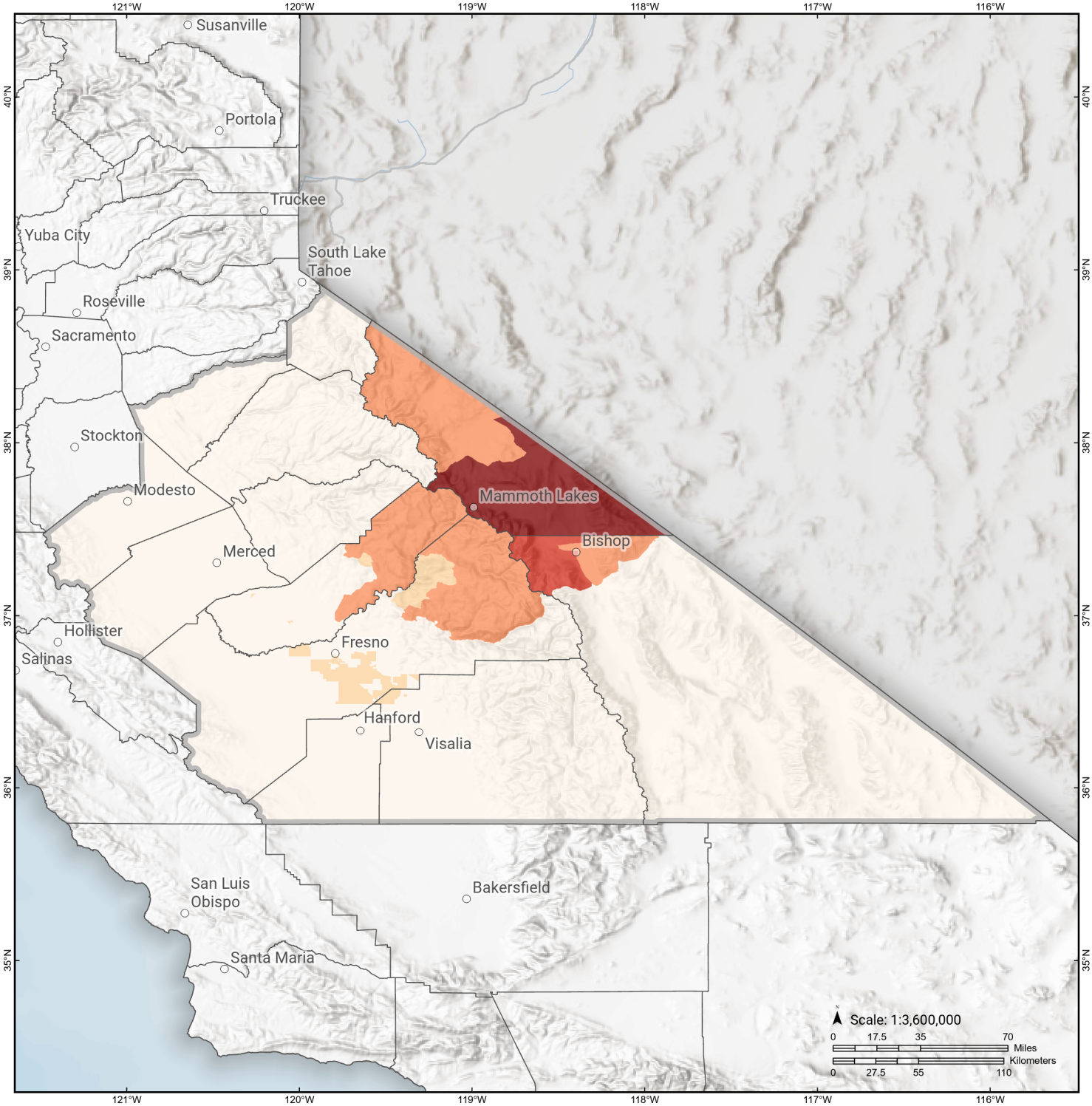
Total Tons: 6.85K
Total Truckloads: 274

Type	Tons
Brick, Wood, and Other	4.13K
Concrete & Steel	2.72K

Hilton Creek

Debris Generated by Census Tract

California Department of Conservation
California Geological Survey



Study Region: Hilton Creek
Scenario: hiltoncreek2011cfmel_m6p92_se

Debris Generated *(in tons)*

- 0 - 1
- >1 - 10
- >10 - 100
- >100 - 1,000
- >1,000 - 2,200

Hilton Creek

Displaced Households by Census Tract

Study Region: Hilton Creek
Scenario: hiltoncreek2011cfmel_m6p92_se

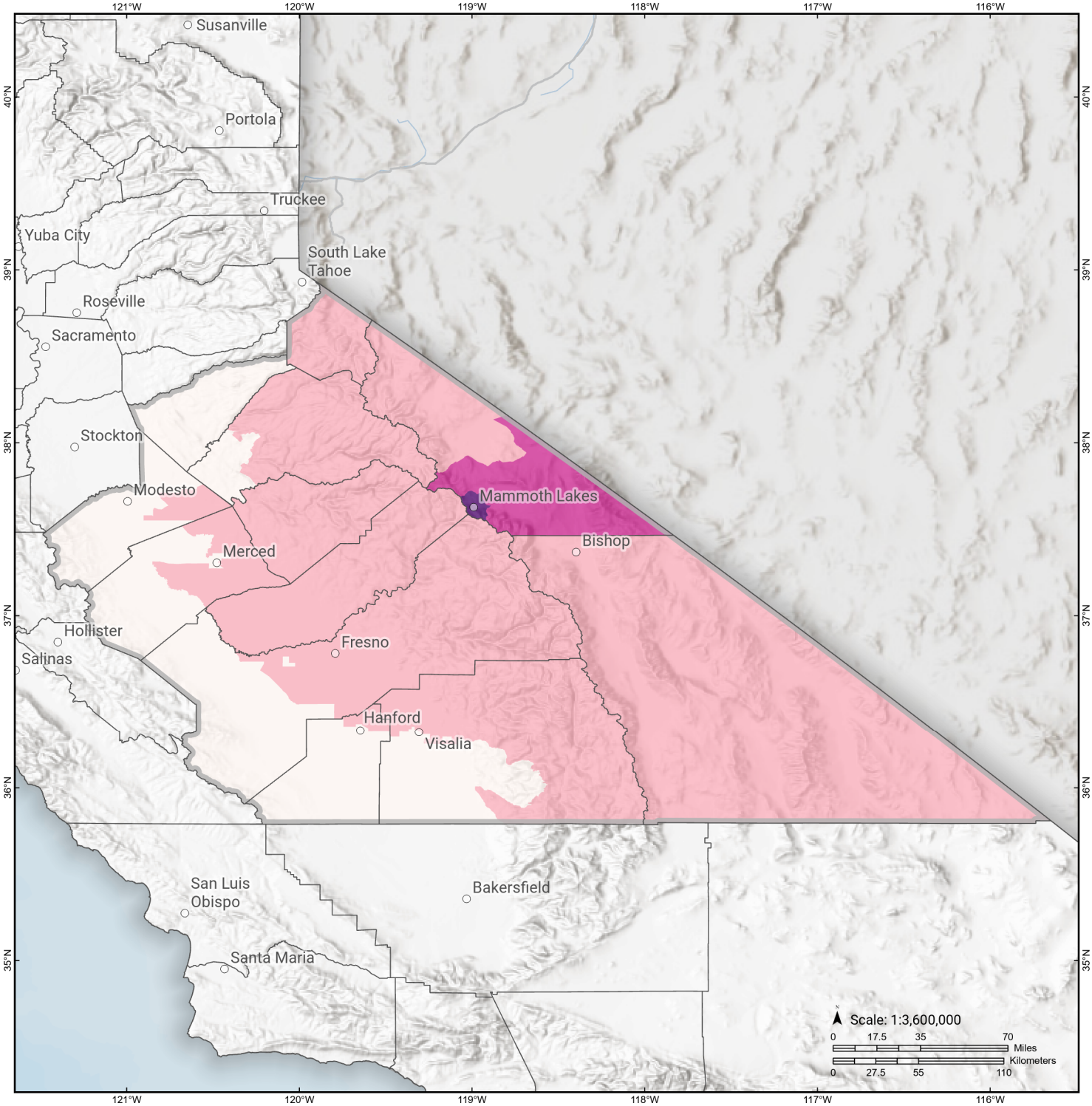
Displaced Households

- 0
- 1

Hilton Creek

Loss Ratio by Census Tract

California Department of Conservation
California Geological Survey



Study Region: Hilton Creek
Scenario: hiltoncreek2011cfmel_m6p92_se

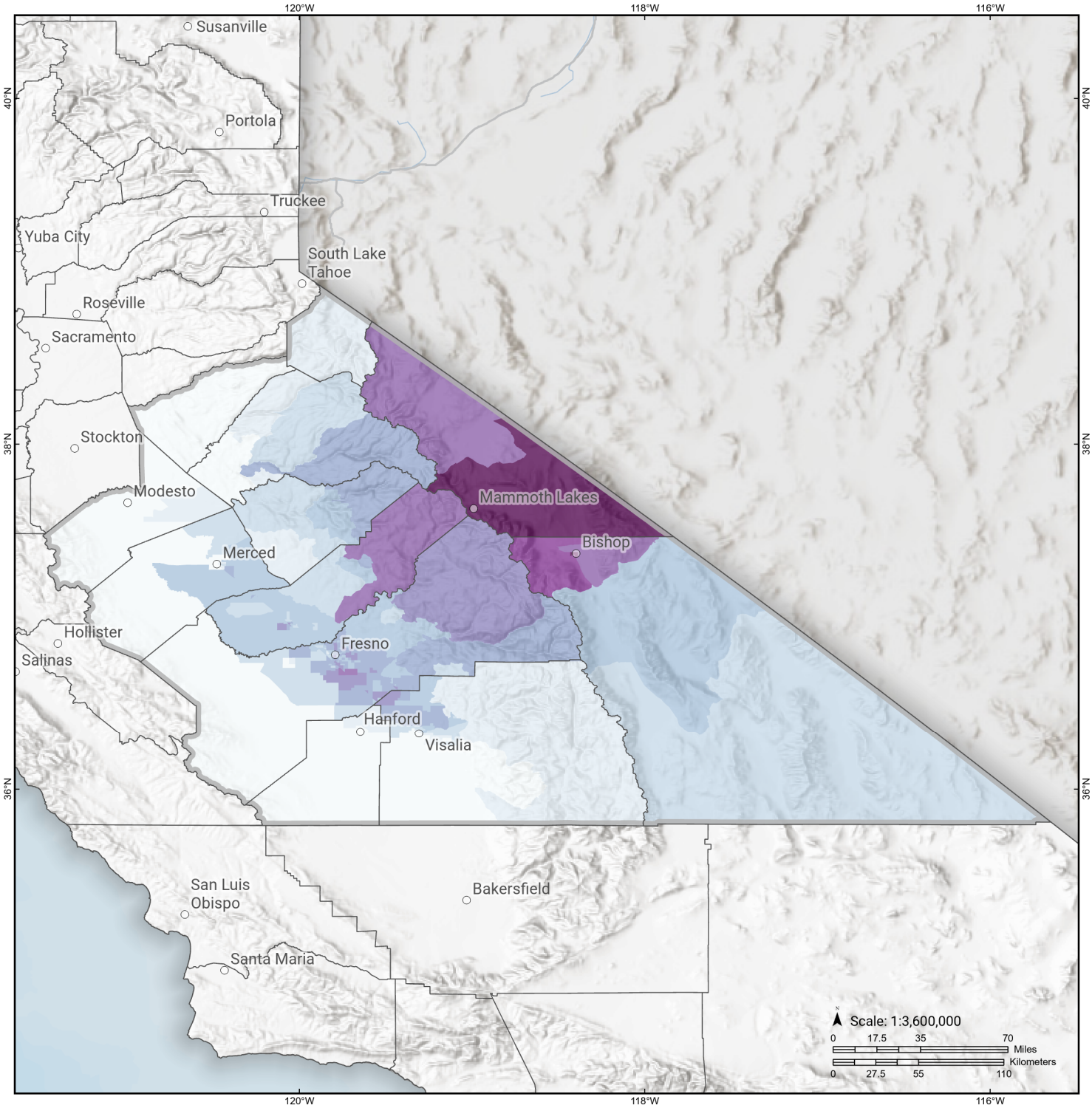
Loss Ratio *(ratio of building related economic loss to exposed value of buildings)*

- 0
- >0 - 1%
- >1 - 2%
- >2 - 3%

Hilton Creek

Total Building Related Economic Loss by Census Tract

California Department of Conservation
California Geological Survey



Study Region: Hilton Creek
Scenario: hiltoncreek2011cfmel_m6p92_se

Economic Loss *(in thousands of USD $)*

0	>60 - 200
>0 - 1	>200 - 750
>1 - 5	>750 - 2,500
>5 - 20	>2,500 - 10,000
>20 - 60	>10,000 - 35,200

Building Damage by Count by General Occupancy

RiskMAP
Increasing Resilience Together

June 04, 2024

	# of Buildings					
	None	Slight	Moderate	Extensive	Complete	Total
California						
Alpine						
Agriculture	0	0	0	0	0	0
Commercial	48	0	0	0	0	48
Education	5	0	0	0	0	5
Government	4	0	0	0	0	4
Industrial	14	0	0	0	0	14
Religion	1	0	0	0	0	1
Other Residential	97	0	0	0	0	97
Single Family	842	0	0	0	0	842
Calaveras						
Agriculture	2,207	0	0	0	0	2,207
Commercial	1,413	0	0	0	0	1,413
Education	35	0	0	0	0	35
Government	84	0	0	0	0	84
Industrial	466	0	0	0	0	466
Religion	130	0	0	0	0	130
Other Residential	2,559	0	0	0	0	2,559
Single Family	22,148	0	0	0	0	22,148
Fresno						

		# of Buildings					
		None	Slight	Moderate	Extensive	Complete	Total
	Agriculture	*3,420*	*1*	*0*	*0*	*0*	*3,421*
	Commercial	*21,047*	*7*	*0*	*0*	*0*	*21,054*
	Education	*602*	*0*	*0*	*0*	*0*	*602*
	Government	*291*	*0*	*0*	*0*	*0*	*291*
	Industrial	*5,346*	*2*	*0*	*0*	*0*	*5,348*
	Religion	*1,506*	*1*	*0*	*0*	*0*	*1,507*
	Other Residential	*40,956*	*16*	*1*	*0*	*0*	*40,973*
	Single Family	*226,424*	*1*	*0*	*0*	*0*	*226,425*
Inyo							
	Agriculture	*31*	*1*	*0*	*0*	*0*	*32*
	Commercial	*676*	*38*	*7*	*0*	*0*	*721*
	Education	*40*	*1*	*0*	*0*	*0*	*41*
	Government	*99*	*2*	*0*	*0*	*0*	*101*
	Industrial	*244*	*11*	*2*	*0*	*0*	*257*
	Religion	*54*	*3*	*1*	*0*	*0*	*57*
	Other Residential	*3,817*	*203*	*30*	*0*	*0*	*4,050*
	Single Family	*4,326*	*119*	*1*	*0*	*0*	*4,446*
Kings							
	Agriculture	*306*	*0*	*0*	*0*	*0*	*306*
	Commercial	*2,318*	*0*	*0*	*0*	*0*	*2,318*
	Education	*103*	*0*	*0*	*0*	*0*	*103*
	Government	*72*	*0*	*0*	*0*	*0*	*72*
	Industrial	*555*	*0*	*0*	*0*	*0*	*555*
	Religion	*210*	*0*	*0*	*0*	*0*	*210*
	Other Residential	*4,342*	*0*	*0*	*0*	*0*	*4,342*

	# of Buildings					
	None	Slight	Moderate	Extensive	Complete	Total
Single Family	*36,245*	*0*	*0*	*0*	*0*	*36,245*
Madera						
Agriculture	*634*	*0*	*0*	*0*	*0*	*634*
Commercial	*2,904*	*1*	*0*	*0*	*0*	*2,905*
Education	*115*	*0*	*0*	*0*	*0*	*115*
Government	*111*	*0*	*0*	*0*	*0*	*111*
Industrial	*903*	*0*	*0*	*0*	*0*	*903*
Religion	*119*	*0*	*0*	*0*	*0*	*119*
Other Residential	*6,626*	*9*	*0*	*0*	*0*	*6,635*
Single Family	*38,910*	*2*	*0*	*0*	*0*	*38,912*
Mariposa						
Agriculture	*29*	*0*	*0*	*0*	*0*	*29*
Commercial	*689*	*0*	*0*	*0*	*0*	*689*
Education	*27*	*0*	*0*	*0*	*0*	*27*
Government	*33*	*0*	*0*	*0*	*0*	*33*
Industrial	*94*	*0*	*0*	*0*	*0*	*94*
Religion	*36*	*0*	*0*	*0*	*0*	*36*
Other Residential	*307*	*0*	*0*	*0*	*0*	*307*
Single Family	*8,084*	*0*	*0*	*0*	*0*	*8,084*
Merced						
Agriculture	*7,653*	*0*	*0*	*0*	*0*	*7,653*
Commercial	*4,754*	*0*	*0*	*0*	*0*	*4,754*
Education	*163*	*0*	*0*	*0*	*0*	*163*
Government	*171*	*0*	*0*	*0*	*0*	*171*
Industrial	*1,022*	*0*	*0*	*0*	*0*	*1,022*

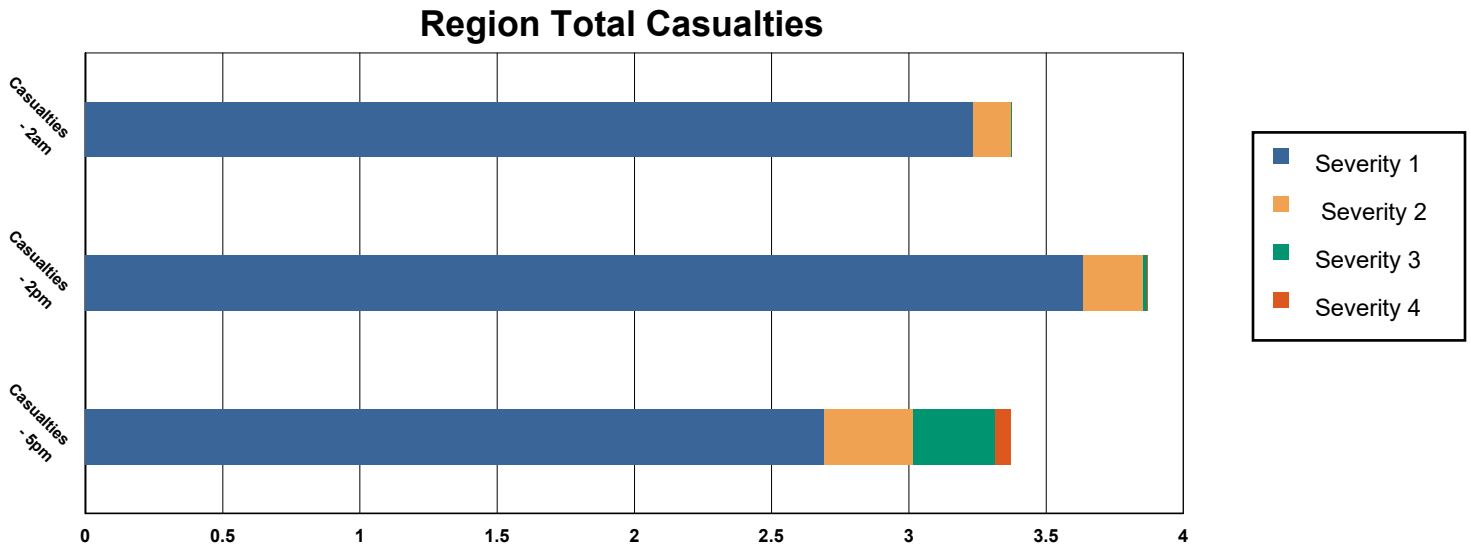
		# of Buildings					
		None	Slight	Moderate	Extensive	Complete	Total
	Religion	*345*	*0*	*0*	*0*	*0*	*345*
	Other Residential	*10,787*	*0*	*0*	*0*	*0*	*10,787*
	Single Family	*63,598*	*0*	*0*	*0*	*0*	*63,598*
Mono							
	Agriculture	*131*	*12*	*2*	*0*	*0*	*145*
	Commercial	*479*	*140*	*34*	*1*	*0*	*654*
	Education	*19*	*1*	*0*	*0*	*0*	*21*
	Government	*16*	*2*	*0*	*0*	*0*	*18*
	Industrial	*76*	*24*	*7*	*0*	*0*	*108*
	Religion	*26*	*5*	*1*	*0*	*0*	*32*
	Other Residential	*1,164*	*426*	*164*	*6*	*0*	*1,759*
	Single Family	*5,842*	*1,782*	*80*	*0*	*0*	*7,704*
Stanislaus							
	Agriculture	*1,239*	*0*	*0*	*0*	*0*	*1,239*
	Commercial	*10,369*	*0*	*0*	*0*	*0*	*10,369*
	Education	*307*	*0*	*0*	*0*	*0*	*307*
	Government	*680*	*0*	*0*	*0*	*0*	*680*
	Industrial	*3,475*	*0*	*0*	*0*	*0*	*3,475*
	Religion	*456*	*0*	*0*	*0*	*0*	*456*
	Other Residential	*19,569*	*0*	*0*	*0*	*0*	*19,569*
	Single Family	*142,724*	*0*	*0*	*0*	*0*	*142,724*
Tulare							
	Agriculture	*3,555*	*0*	*0*	*0*	*0*	*3,555*
	Commercial	*8,873*	*0*	*0*	*0*	*0*	*8,873*
	Education	*269*	*0*	*0*	*0*	*0*	*269*

	# of Buildings					
	None	Slight	Moderate	Extensive	Complete	Total
Government	*461*	*0*	*0*	*0*	*0*	*461*
Industrial	*2,148*	*0*	*0*	*0*	*0*	*2,148*
Religion	*827*	*0*	*0*	*0*	*0*	*827*
Other Residential	*20,020*	*2*	*0*	*0*	*0*	*20,022*
Single Family	*112,034*	*0*	*0*	*0*	*0*	*112,034*
Tuolumne						
Agriculture	*82*	*0*	*0*	*0*	*0*	*82*
Commercial	*1,576*	*0*	*0*	*0*	*0*	*1,576*
Education	*57*	*0*	*0*	*0*	*0*	*57*
Government	*143*	*0*	*0*	*0*	*0*	*143*
Industrial	*383*	*0*	*0*	*0*	*0*	*383*
Religion	*121*	*0*	*0*	*0*	*0*	*121*
Other Residential	*4,962*	*0*	*0*	*0*	*0*	*4,962*
Single Family	*21,645*	*0*	*0*	*0*	*0*	*21,645*
Total	**894,926**	**2,810**	**331**	**8**	**0**	**898,074**
Region Total	**894,926**	**2,810**	**331**	**8**	**0**	**898,074**

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

June 04, 2024



	Injury Severity Level				
	Severity 1	Severity 2	Severity 3	Severity 4	Total
California					
Alpine					
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

	Injury Severity Level				
	Severity 1	Severity 2	Severity 3	Severity 4	Total
California					
Alpine					
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**
Calaveras					
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**
Fresno					
Casualties - 2am					
Commuting	0	0	0	0	0

	Injury Severity Level				
	Severity 1	Severity 2	Severity 3	Severity 4	Total
California					
Fresno					
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**
Inyo					
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	**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

	Injury Severity Level				
	Severity 1	Severity 2	Severity 3	Severity 4	Total
California					
Inyo					
Casualties - 2pm					
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	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	**1**	**0**	**0**	**0**	**1**
Kings					
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				
	Severity 1	Severity 2	Severity 3	Severity 4	Total
California					
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
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

	Injury Severity Level				
	Severity 1	Severity 2	Severity 3	Severity 4	Total
California					
Mariposa					
Casualties - 2pm					
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
Other-Residential	0	0	0	0	0
Single Family	0	0	0	0	0

	Injury Severity Level				
	Severity 1	Severity 2	Severity 3	Severity 4	Total
California					
Merced					
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	1	0	0	0	1
Total Casualties - 2am	**3**	**0**	**0**	**0**	**3**
Casualties - 2pm					
Commuting	0	0	0	0	0
Commercial	2	0	0	0	2
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	**3**	**0**	**0**	**0**	**3**
Casualties - 5pm					
Commuting	0	0	0	0	1
Commercial	1	0	0	0	1
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	1
Total Casualties - 5pm	**2**	**0**	**0**	**0**	**3**
Stanislaus					
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

	Injury Severity Level				
	Severity 1	Severity 2	Severity 3	Severity 4	Total
California					
Stanislaus					
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**
Tulare					
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				
	Severity 1	Severity 2	Severity 3	Severity 4	Total
California					
Tulare					
Casualties - 5pm					
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**
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**
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

June 04, 2024

All values are in thousands of tons.

	Brick, Wood & Others	Concrete & Steel	Total
California			
Alpine	0	0	0
Calaveras	0	0	0
Fresno	0	0	0
Inyo	1	1	1
Kings	0	0	0
Madera	0	0	0
Mariposa	0	0	0
Merced	0	0	0
Mono	3	2	5
Stanislaus	0	0	0
Tulare	0	0	0
Tuolumne	0	0	0
Total	**4**	**3**	**7**
Region Total	**4**	**3**	**7**

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

June 4, 2024

All values are in thousands of dollars

	Capital Stock Losses					Income Losses				
	Cost Structural Damage	Cost Non-struct. Damage	Cost Contents Damage	Inventory Loss	Loss Ratio %	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	Total Loss
California										
Inyo	994	8,120	3,998	447	0.19	314	299	329	313	14,814
Fresno	89	3,628	2,489	321	0.00	10	18	19	26	6,600
Kings	0	0	0	0	0.00	0	0	0	0	1
Tuolumne	0	30	19	1	0.00	0	0	0	0	50
Tulare	5	265	182	46	0.00	0	1	1	1	501
Madera	32	875	523	58	0.00	2	3	2	7	1,502
Calaveras	0	0	0	0	0.00	0	0	0	0	0
Alpine	0	0	0	0	0.00	0	0	0	0	0
Merced	2	29	24	9	0.00	0	0	0	0	64

Study Region : HiltonCreek

Scenario : hiltoncreek2011cfmel_m6p92_se

	Capital Stock Losses					Income Losses				
	Cost Structural Damage	Cost Non-struct. Damage	Cost Contents Damage	Inventory Loss	Loss Ratio %	Relocation Loss	Capital Related Loss	Wages Losses	Rental Income Loss	Total Loss
Stanislaus	0	1	0	0	0.00	0	0	0	0	1
Mono	6,292	46,501	20,492	1,187	1.21	1,914	1,531	1,650	1,866	81,434
Mariposa	1	43	22	1	0.00	0	0	0	0	67
Total	**7,415**	**59,492**	**27,750**	**2,069**	**0.12**	**2,240**	**1,852**	**2,002**	**2,213**	**105,034**
Region Total	**7,415**	**59,492**	**27,750**	**2,069**	**0.12**	**2,240**	**1,852**	**2,002**	**2,213**	**105,034**

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

June 04, 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**
Calaveras								
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**
Fresno								
Segments	0	0	0					0
Bridges	1	0	0					1
Tunnels	0	0	0					0
Facilities		208	0	21	0	0	1,004	1,233

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	**1**	**208**	**0**	**21**	**0**	**0**	**1,004**	**1,234**
Inyo								
Segments	0	0	0					0
Bridges	32	0	0					32
Tunnels	0	0	0					0
Facilities		0	0	0	0	0	908	908
Total	**32**	**0**	**0**	**0**	**0**	**0**	**908**	**940**
Kings								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		11	0	5	0	0	40	56
Total	**0**	**11**	**0**	**5**	**0**	**0**	**40**	**56**
Madera								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		26	0	21	0	0	57	103
Total	**0**	**26**	**0**	**21**	**0**	**0**	**57**	**104**
Mariposa								
Segments	0	0	0					0
Bridges	2	0	0					2
Tunnels	0	0	0					0
Facilities		0	0	86	0	0	51	137

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	**2**	**0**	**0**	**86**	**0**	**0**	**51**	**138**
Merced								
Segments	0	0	0					0
Bridges	0	0	0					0
Tunnels	0	0	0					0
Facilities		28	0	2	0	0	29	59
Total	**0**	**28**	**0**	**2**	**0**	**0**	**29**	**60**
Mono								
Segments	0	0	0					0
Bridges	478	0	0					478
Tunnels	28	0	0					28
Facilities		0	0	557	0	0	2,572	3,129
Total	**507**	**0**	**0**	**557**	**0**	**0**	**2,572**	**3,636**
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	1	0	0					1
Tunnels	0	0	0					0
Facilities		0	0	25	0	0	113	139

	Highway	Railway	Light Rail	Bus Facility	Ports	Ferries	Airport	Total
Total	**1**	**0**	**0**	**25**	**0**	**0**	**113**	**139**
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**	**108**
Total	**544**	**274**	**0**	**717**	**0**	**0**	**4,887**	**6,421**
Region Total	**544**	**274**	**0**	**717**	**0**	**0**	**4,887**	**6,421**

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Direct Economic Loss For Utilities

June 04, 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
Calaveras							
Facilities	0	5	0	0	1,358	0	1,363
Pipelines	10	5	0	0			15
Total	10	10	0	0	1,358	0	1,378
Fresno							
Facilities	0	492	0	0	104,692	6	105,190
Pipelines	191	96	0	0			286
Total	191	588	0	0	104,692	6	105,477
Inyo							
Facilities	0	0	0	0	96,381	8	96,389

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
Pipelines	111	56	0	0			167
Total	111	56	0	0	96,381	8	96,556
Kings							
Facilities	0	0	0	0	185	0	186
Pipelines	40	20	0	0			60
Total	40	20	0	0	185	0	246
Madera							
Facilities	0	0	0	0	14,173	1	14,173
Pipelines	87	44	0	0			130
Total	87	44	0	0	14,173	1	14,304
Mariposa							
Facilities	0	492	0	0	42	2	536
Pipelines	20	10	0	0			30
Total	20	502	0	0	42	2	566
Merced							
Facilities	0	126	0	0	4	0	130
Pipelines	39	19	0	0			58
Total	39	145	0	0	4	0	188
Mono							
Facilities	0	0	0	0	389,673	22	389,694
Pipelines	745	374	0	0			1,120

	Potable Water	Waste Water	Oil Systems	Natural Gas	Electric Power	Communication	Total
Total	745	374	0	0	389,673	22	390,814
Stanislaus							
Facilities	0	0	0	0	5	0	5
Pipelines	2	1	0	0			3
Total	2	1	0	0	5	0	8
Tulare							
Facilities	28	128	0	0	271	2	430
Pipelines	66	33	0	0			99
Total	94	161	0	0	271	2	529
Tuolumne							
Facilities	0	3	0	0	13,039	0	13,042
Pipelines	23	11	0	0			34
Total	23	14	0	0	13,039	0	13,076
Total	**1,364**	**1,918**	**0**	**0**	**619,823**	**41**	**623,146**
Region Total	**1,364**	**1,918**	**0**	**0**	**619,823**	**41**	**623,146**

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™

FEMA

RiskMAP
Increasing Resilience Together

Shelter Summary Report

June 04, 2024

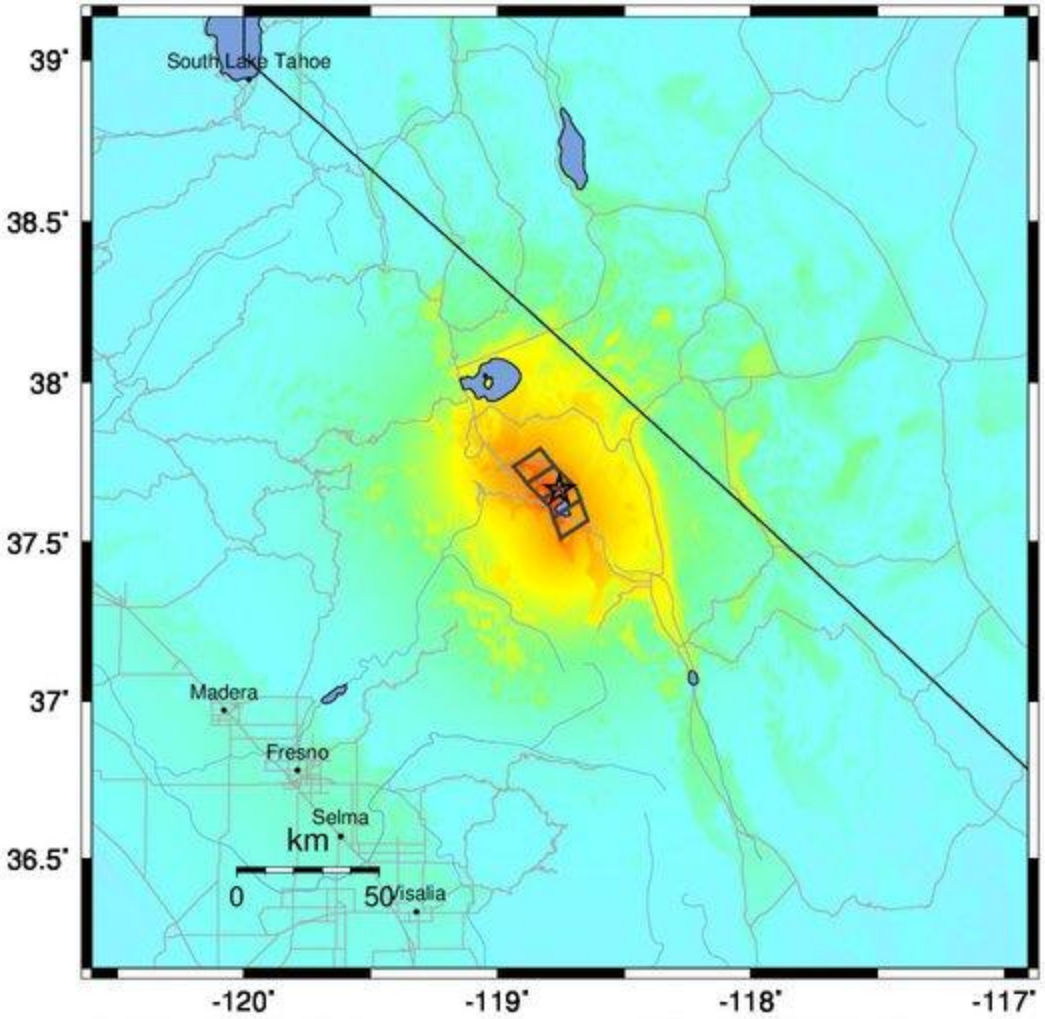
	# of Displaced Households	# of People Needing Short Term Shelter
California		
Alpine	0	0
Calaveras	0	0
Fresno	0	0
Inyo	0	0
Kings	0	0
Madera	0	0
Mariposa	0	0
Merced	0	0
Mono	2	1
Stanislaus	0	0
Tulare	0	0
Tuolumne	0	0
Total	**2**	**1**
Region Total	**2**	**1**

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 Hilton Creek - Median ground motions Scenario

Scenario Date: May 16, 2017 08:32:08 AM MDT M 6.9 N37.66 W118.76 Depth: 9.5km



PLANNING SCENARIO ONLY -- Map Version 14 Processed 2017-05-16 07:27:39 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)