

Regional Catastrophic Earthquake Interim Housing Plan

Annex to the San Francisco Bay Area Regional Emergency Coordination Plan

August 2011

Prepared by: California Emergency Management Agency



Cities of Oakland, San Francisco, and San Jose Counties of Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma





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Prepared for:



Bay Area Urban Area Security Initiative

With support from:



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This Plan has been prepared for the Bay Area Urban Area Security Initiative Approval Authority (Approval Authority) on behalf of the counties and cities within the 12-county Bay Area region. The Plan describes the general strategy for emergency response to an incident with regional impact. The Plan has been prepared in accordance with the standards of the National Incident Management System, the California Standardized Emergency Management System, and other Federal and State requirements and standards for emergency response plans applicable as of the date of the Plan's preparation.

The Plan provides guidance only; it is intended for use in further development of response capabilities, implementation of training and exercises, and defining the general approach to incident response. The actual response to an incident, whether at the regional, county, or city level, is dependent on:

- The specific conditions of the incident, including the incident type, geographic extent, severity, timing, and duration
- The availability of resources for response at the time of the incident
- Decisions of Incident Commanders and political leadership
- Actions taken by neighboring jurisdictions, the State, and the Federal Government

These and other factors may result in unforeseen circumstances, prevent the implementation of Plan components, or require actions that are significantly different from those described in the Plan. The Approval Authority and its contractors; the counties, cities, and other organizations that have participated in Plan development; the State; and the Federal Government are not responsible for circumstances related to the implementation of the Plan during an incident.

The Plan is not applicable outside the 12-county region that comprises the planning area.

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Foreword

The vulnerability of the San Francisco Bay Area to earthquakes is well known. According to the 2008 Uniform California Earthquake Rupture Forecast,¹ the probability of an **M** 6.7 or greater earthquake in the Bay Area in the next 30 years is 63 percent. An earthquake of this magnitude will result in widespread and catastrophic damage.

A catastrophic earthquake in the Bay Area will immediately overwhelm local, regional, and State emergency response capabilities. The region will need massive, rapid support from the Federal Government, other local governments in California, other states, and nonprofit and private-sector organizations. The effectiveness of the region's response will affect the long-term recovery of the region's communities and economy. An effective response will be possible only if comprehensive planning has taken place.

The Federal Government is providing funding under the Regional Catastrophic Preparedness Grant Program (RCPGP) to selected metropolitan areas throughout the United States to plan for catastrophic events. The San Francisco Bay Area is one of the metropolitan areas. The Federal Emergency Management Agency (FEMA) is administering the program. The Bay Area Urban Area Security Initiative (UASI) Program is implementing the RCPGP for 12 counties and 2 cities² in the Bay Area. For fiscal year 2007/2008, the UASI Program used RCPGP funding to prepare plans in six functional areas: Debris Removal, Mass Care and Sheltering, Mass Fatality, Mass Transportation/Evacuation, Interim Housing, and Volunteer Management.

This document, the Regional Catastrophic Earthquake Interim Housing Plan, has been prepared under the RCPGP. The document is based on a "scenario event," a set of assumptions about a catastrophic earthquake in the Bay Area. Two of the assumptions are that the earthquake occurs on the San Andreas Fault and the magnitude is 7.9. The scenario earthquake is projected to result in 160,000 households in the 12-county Bay Area region that will still need interim housing 1 year after the event.

¹ Edward H. Field et al., *The Uniform California Earthquake Rupture Forecast*, Version 2.0 (UCERF 2), USGS Open File Report 2007-1437, 2008. Available at http://pubs.usgs.gov/ of/2007/1437/.

² Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma counties the cities of Oakland and San Jose.

- California State Emergency Plan
- The San Francisco Bay Area Regional Emergency Coordination Plan
- The San Francisco Bay Area Earthquake Readiness Response: Concept of Operations Plan, prepared by FEMA

The Regional Catastrophic Earthquake Interim Housing Plan was developed with the participation of the following:

- Alameda County Sheriff's Office
- American Red Cross Bay Area
- American Red Cross—FEMA Region IX
- American Red Cross Sonoma and Mendocino
- California Emergency Management Agency
- California Department of Social Services
- Collaborating Agencies Responding to Disaster
- Contra Costa County Emergency Medical Services Agency
- Contra Costa County Office of Emergency Services
- FEMA Region IX, Operational Planning
- Marin County Office of Emergency Services
- Monterey County Office of Emergency Services
- City of Oakland Office of Emergency Services
- San Francisco Department of Emergency Management
- San Francisco Human Services Agency
- City of San Jose
- San Jose State University
- City of Santa Clara Fire Department
- Santa Clara County Office of Emergency Services
- Santa Clara County Social Services Agency
- Solano County Animal Care
- Stanford Hospital Office of Service Continuity and Disaster Planning

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Executive Summary

The Regional Catastrophic Earthquake Interim Housing Plan (Plan)³ is a scenariodriven, function-specific operations plan for interim housing and related aspects of long-term recovery in the aftermath of a catastrophic earthquake in the Bay Area. A separate document, the Regional Catastrophic Earthquake Mass Care and Sheltering Plan, describes the mass care and sheltering operations in the immediate aftermath of the earthquake.

The Plan is an annex to the San Francisco Bay Area Regional Emergency Coordination Plan and is consistent with the San Francisco Bay Area Earthquake Readiness Response, Concept of Operations Plan, prepared by the Federal Emergency Management Agency (FEMA) and California Emergency Management Agency (Cal EMA).

ES-1 Scope

The scope of the Plan includes the following:

- The transition from the short-term response to the longer-term response and recovery after an **M** 7.9 earthquake on the San Andreas Fault.
- The response related to interim housing in the first year after the earthquake. Interim housing is defined as the housing between sheltering and the return of disaster victims to permanent housing. This period may span from shortly after the disaster to up to 18 months or longer after the disaster.
- Twelve counties in the Bay Area region: Alameda, Contra Costa, Marin, Monterey, Napa, San Benito, San Francisco, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma.
- Interim housing roles and responsibilities, communications, and response operations that are applicable at the regional level.
- Services for people who will need assistance with interim housing, including those with access and functional needs. According to recent State and Federal guidance, emergency shelters and interim housing alternatives are intended to be available and accessible to everyone in affected communities to the extent possible. This requires planning for people with a variety of access and functional needs, including those involving Communication, Medical Care, (Maintaining) Independence, Supervision, and Transportation. The five categories, often referred to as the CMIST needs, include unattended children, people with a wide range of disabilities and medical conditions, some elderly people, people in the criminal justice system, and people stranded without transportation far from a place where they would normally seek shelter or residence.

³ For simplicity, the abbreviation of the title of this document is "Plan."

The scope does not include planning for people with medically unstable conditions. The Medical Health Branch of the Cal EMA Regional Emergency Operations Center (REOC) and the State Operations Center (SOC) are responsible for coordinating support for Operational Areas in their efforts to care for people who are medically unstable. The scope also does not include housing support for animals, which is not a responsibility of the REOC/SOC Care and Shelter Branches.

ES-2 Catastrophic Nature of the Earthquake

Threats and hazards resulting from the earthquake include structural and nonstructural damage to buildings and infrastructure, fires, subsidence and loss of soil-bearing capacity, landslides, hazardous materials spills and incidents, dam/levee failure resulting in flooding, and civil disorder. Many residential, commercial, and industrial buildings would be rendered uninhabitable. The earthquake would affect all regional utilities and transportation networks significantly; large portions of the transportation infrastructure would be damaged or destroyed. Utility and water supply damage, even in areas with less extreme structural impacts, would compound the problem of housing people.

The earthquake would result in:

- More than 400,000 displaced residents
- More than 300,000 people seeking shelter
- More than 1 million people who need transportation assistance
- 1.8 million households without potable water
- 7,000 fatalities
- 50 million tons of debris

ES-3 Roles and Responsibilities in Interim Housing and Long-Term Recovery

Once the region has addressed immediate life and safety issues, the mass care and sheltering response begins to transition into interim housing. Supporting the provision of interim housing is the role of several levels of government, nongovernmental, and private-sector entities. Many displaced residents will need interim housing for many months, and shelters are closed as interim housing opportunities develop. The transition from shelter to interim housing is likely to occur as part of a larger process for planning housing and economic recovery and will include task forces and extensive public-private cooperation.

ES-3.1 Local Governments and Operational Areas

Local governments have housing authorities, planning and zoning departments, health and human service agencies, building inspectors, departments of community and/or economic development, and public works departments that have roles and responsibilities in one or more of the following tasks:

- Inspecting damaged housing and prioritizing repair or reconstruction
- Modifying local ordinances about zoning for interim housing and/or installation of temporary housing units or permitting for construction or repairs
- · Making and implementing long-term recovery plans
- Helping local residents apply for Federal assistance through a variety of programs
- Applying for Community Development Block Grants and other forms of Federal or State assistance
- Establishing Local Assistance Centers (LACs)

In addition, Operational Areas will play a role in coordinating resource requests, per SEMS, and participating in a State-Coordinated Housing Task Force (SCHTF). Each affected Operational Area will provide a representative on the Task Force.

ES-3.2 Regional Agencies/Organizations

The Cal EMA Coastal Region coordinates resource requests and information sharing to support emergency operations and mutual aid for Operational Areas in the region. With regard to interim housing, the coordination includes supporting Operational Areas by assisting with communications, transportation, and transitioning people out of shelters and into interim housing.

The Association of Bay Area Governments may play a role on the SCHTF and on the Regional Recovery Task Force.

ES-3.3 State Agencies/Organizations

The State works with local governments to identify interim housing opportunities, requests Federal assistance provides technical assistance, and promotes redevelopment through supporting public and private partnerships.

The State will also serve on the SCHTF, which will be led by the Governor's Authorized Representative or State Coordinating Officer.

In addition to Cal EMA, the lead State agencies for housing and recovery include the Business, Transportation, and Housing Agency, State Consumer Services Agency, California Department of Health and Human Services, State Office of the Attorney General, California Department of Insurance, CaliforniaVolunteers, and the Department of Parks and Recreation.

ES-3.4 Federal Agency Responsibilities

FEMA leads the Federal Government's response in interim housing and assists state and local governments with long-term recovery planning. FEMA administers the Individual Assistance Program, which provides financial assistance for rental housing and repair or replacement of primary residences and offers direct assistance by providing temporary housing units or by constructing permanent housing units. It also establishes Disaster Recovery Centers, which are co-located with Local Assistance Centers, to provide information on FEMA and other disaster assistance programs, including Small Business Administration loan programs. FEMA provides technical assistance in community and State planning, recovery, and mitigation grant and insurance programs; it also performs a number of other coordination and support tasks.

A variety of Federal agencies support interim housing operations, including the Department of Agriculture, the Department of Defense, the Department of Housing and Urban Development, the Small Business Administration, the Department of Veterans Affairs, the Federal Home Loan Mortgage Corporation, the Federal National Mortgage Association, the Department of Health and Human Services, and the General Services Administration.

ES-3.5 Private-Sector and Nongovernmental Organizations

Private-sector entities, particularly in real estate, construction, insurance, and redevelopment, are important in providing interim housing and facilitating long-term recovery. Key roles include constructing or repairing housing, identifying development opportunities, providing interim housing directly, and forming partnerships with government and nonprofit organizations to provide a smooth and efficient interim housing process.

Nongovernmental organizations (NGOs), including faith-based organizations, community-based organizations, and other nonprofits and entities, have roles in supporting or providing interim housing. These include managing donations, supporting reconstruction efforts, providing community support, and addressing a wide range of other needs for various stakeholders, including people with access and functional needs.

ES-4 Communications and Coordination

The primary issues in this Plan are interim housing and the aspects of long-term recovery that are associated with it. **Section 4** describes the coordination and communications plan, and systems for a wide range of programs and possibilities regarding interim housing. It explains how governmental organizations, NGOs, and the private sector will initiate the numerous interim housing programs, their associated funding mechanisms, and how they will coordinate the flow of resources into and among them. In this section, the SCHTF and its relationship to other regional, State, and Federal organizations is addressed. A second issue—creating, integrating, and dispensing public information—is also discussed.

ES-5 Priorities for Response in Interim Housing

Three levels of operational goals were developed as part of the planning process:

- Operational priorities
- Objectives

Tasks

The operational priorities are the most overarching goals. Objectives were developed to organize the tasks undertaken to reach those goals. Tasks are the steps that must be taken by one of the entities with roles and responsibilities in interim housing.

Through an iterative process with a number of stakeholders throughout the region, the three levels of response and recovery priorities were developed. The tasks, in particular, are a critical addition to this operational plan. The tasks provide a link between local field-level operations guides and the higher level and mostly conceptual housing plans that are currently in place.

Operational priorities, objectives, and tasks are developed for three phases of response and recovery:

- E+72 hours to E+14 days
- E+14 days to E+60 days
- E+60 days to E+1 year

These operational priorities, objectives, and tasks are presented in **Section 5**. The first phase of response, E to E+72 hours, is omitted because the focus at this time is not on interim housing.

Section 5 also includes information on resources and operations in interim housing. The Plan provides information on the expected magnitude of the shortfalls of these resources and how the gaps might be closed.

The topics in the operations sections draw on the rest of the Plan. They synthesize the resources with the communications and coordination systems within it, and they tie each entity's general mission and roles and responsibilities to its specific actions and duties in the catastrophic earthquake. They spell out how the roles, resources, and communications systems will be used to perform the necessary response tasks, and in doing so, how they will obtain the objectives and meet the highest level operational priorities.

Not intended to be field-level response plans, the operations sections provide important details about the mechanisms through which the tasks will be performed by the major and minor players in providing or supporting interim housing. When options are available, they are described; when conflicts or resource shortfalls are likely, they are illuminated; and when critical interactions between one level of government and another, or between the public and private sectors, will exist, they are prepared for.

ES-6 Long-Term Recovery

Section 6 addresses the transition from immediate recovery to long-term recovery, and describes the organizations that may be involved in addressing long-term recovery planning and implementation. This section also discusses long-term

recovery issues and considerations and provides a platform for future planning efforts. While housing is central to long-term recovery, a range of long-term recovery issues are addressed here.

ES-7 Response/Recovery Timeline

In Section 7, a table containing the tasks for interim housing operations is presented in chronological order so that the approximate sequence of operational steps can be seen and used in achieving an effective response and recovery. The objective that each task supports is also included in the table so that the links between the objectives and the priorities above them can be made. The table also lists the entities with primary and secondary responsibilities for performing the various tasks.

The table thus forms a true response timeline for interim housing and the transition to long-term recovery. Together with the resources and the operational details provided below, the response timeline is the key product of this Plan.

Appendices

The appendices that are included in the Plan are as follows:

- · A glossary of acronyms, abbreviations, and key terms
- Maps
- Summaries of relevant State and Federal plans, guidance documents, and regulations
- Methods used to generate the earthquake-specific assumptions and planning figures
- Interim housing issues
- · Resources provided by Voluntary Organizations Active in Disaster
- An example of a State-Coordinated Housing Task Force Plan
- A response timeline for interim housing operations

1 Introduction

The Regional Catastrophic Earthquake Interim Housing Plan (Plan)⁴ is a scenariodriven, function-specific operations plan for the San Francisco Bay Area region (see **Section 1.3.2**) that describes interim housing programs and responses in the aftermath of a catastrophic earthquake on the San Andreas Fault. The Plan is an annex to the Regional Emergency Coordination Plan (RECP). It includes standard elements of the State of California Emergency Plan (SEP) but focuses on addressing the specific response needs that would be generated by the earthquake.

1.1 Purpose

The purpose of the Plan is to provide a guide for operations associated with providing interim housing for displaced residents in the region. The Plan provides primarily operational details for interim housing but also includes information about support through Federal and State disaster assistance programs.

1.2 Objectives

The objectives of the Plan are to:

- · Project the catastrophic impacts of the earthquake on interim housing
- Define the planning assumptions
- Identify agencies with roles in providing or supporting interim housing alternatives and define those roles
- Describe resources required for interim housing operations and the systems and process for transitioning people into interim housing solutions
- Identify recommended priorities
- Identify recommended time-based objectives to guide response operations
- Establish a response/recovery timeline of tasks for interim housing

1.3 Scope

The Plan describes the transition of displaced people from shelters to interim housing and the provision of housing assistance programs in response to the earthquake.

The National Disaster Housing Strategy defines "interim housing" as housing assistance between sheltering and the return of disaster victims to permanent housing. Although in most cases an individual or household first finds shelter and then obtains interim housing, an individual or family may find an apartment or hotel immediately after the earthquake, which is also defined as interim housing. Activities associated with interim housing may begin a few days after the event and may last for years.

⁴ For simplicity, the abbreviation of the title of this document is "Plan."

Appendix A contains a glossary of acronyms, abbreviations, and key terms.

1.3.1 Nature and Duration of the Earthquake

The scenario used in the development of this Plan is a moment magnitude (M) 7.9 earthquake on the northern segment of the San Andreas Fault. The impacts from the earthquake are described in **Section 2**.

1.3.2 Geographic Scope

The Plan includes the following 12 counties (see Appendix B, Map B-1):

- Alameda County
- Contra Costa County
- Marin County
- Monterey County
- Napa County
- San Benito County
- San Francisco County
- San Mateo County
- Santa Clara County
- Santa Cruz County
- Solano County
- Sonoma County

These counties and the cities within them will be affected directly by damage from the earthquake, regional disruption of critical infrastructure systems, and short- and long-term impacts to the economy. Adjacent counties, such as Mendocino, Sacramento, San Joaquin, and Stanislaus, may be affected directly by damage or indirectly by evacuations and other response actions. An **M** 7.9 earthquake will also have significant effects on the rest of California and the Nation as a whole.

1.3.3 Time Frame

The time frame for the Plan begins with the occurrence of the earthquake and ends 1 year after the earthquake. The planning periods (phases) are given in hours and days after the event (E). The Plan does not address preparedness activities that may occur before the earthquake or the housing or other long-term recovery activities that may occur after 1 year.

1.4 Applicability

The Plan is consistent with the regional plans described below.

1.4.1 RECP

As stated above, the Regional Catastrophic Earthquake Interim Housing Plan is an incident-specific annex to the RECP, prepared by the Bay Area Urban Area Security Initiative (UASI) Program in 2008 and the California Emergency Management Agency (Cal EMA). The Plan is also consistent with the RECP Care and Shelter Subsidiary Plan. This Plan will be adopted and maintained by Cal EMA to support the RECP Base and Subsidiary Plans.

The RECP provides an all-hazards framework for collaboration among responsible entities and coordination during disasters that affect the San Francisco Bay Area counties as a region. The RECP defines procedures for regional coordination, collaboration, decision-making, and resource sharing among emergency response agencies in the Bay Area within the framework of the Standardized Emergency Management System (SEMS).

The RECP Base Plan and the Care and Shelter Subsidiary Plan describe the coordinating role of the Regional Emergency Operations Center (REOC) in regional care and shelter operations. As described in **Section 2** of this Plan, the catastrophic nature of the earthquake may disrupt REOC operations. However, Cal EMA will implement alternative measures to maintain the regional function of SEMS to support Operational Area response activities.

1.4.2 CONPLAN

The Plan is also consistent with the San Francisco Bay Area Earthquake Readiness Response: Concept of Operations Plan (CONPLAN), prepared by the Federal Emergency Management Agency (FEMA) and Cal EMA. The CONPLAN describes the joint State-Federal response to an **M** 7.9 earthquake on the San Andreas Fault in the Bay Area and includes annexes describing care and sheltering and temporary housing operations. The CONPLAN describes the establishment of a Joint Field Office (JFO) with a Unified Coordination Group⁵ that will coordinate joint State-Federal operations in support of the response in the Bay Area.

1.5 Authorities, Regulations, Requirements

As an annex to the RECP, the Plan reflects the following:

- California Emergency Services Act
- SEP
- SEMS

Additional authorities, requirements, plans, and guidance documents applicable to this Plan are summarized in **Appendix C**.

⁵ As described in the CONPLAN, the JFO will be located in or adjacent to one of the affected Bay Area counties. The Unified Coordination Group will include the Federal Coordinating Officer, State Coordinating Officer, and other State and Federal senior leaders representing agencies with significant response and recovery roles. These descriptions are consistent with the California Catastrophic Incident Base Plan as well.

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2 Situation and Assumptions

This section contains a description of the scenario earthquake and its projected impacts, and the general planning and interim housing assumptions that were used in the development of this Plan.

2.1 Scenario Earthquake

The scenario earthquake is an **M** 7.9 earthquake on the northern segment of the San Andreas Fault. The basis for the scenario is a Hazards U.S. (HAZUS)⁶ analysis performed by the Earthquake Engineering Research Institute, with support from the U.S. Geological Survey and Cal EMA, beginning in 2005 and modified in 2009 by URS Corporation for the Regional Catastrophic Preparedness Grant Program (RCPGP). Technical details of the HAZUS model and its specification for this project are presented in **Appendix D**.

The characteristics of the scenario earthquake and its impacts on the region are:

- 1. The earthquake occurs in January on a weekday at 1400 hours Pacific Standard Time.
- 2. A foreshock precedes the main shock by 20 to 25 seconds. There is no other warning.
- 3. The main shock lasts 45 to 60 seconds.
- 4. The epicenter is just outside the entrance to the San Francisco Bay, west of the Golden Gate Bridge.
- 5. The earthquake ruptures approximately 300 miles of the northern segment of the San Andreas Fault, from the San Juan Bautista area in the south to Cape Mendocino in the north.
- 6. Shaking is felt in Oregon to the north, Los Angeles to the south, and Nevada to the east.
- 7. The estimated magnitude is M 7.9 with a Modified Mercalli (MM) intensity of VIII (severe shaking/moderate to heavy damage) to IX (violent shaking/heavy damage) in widespread areas of the most severely affected counties. Pockets in the affected counties experience instrument intensity of MM X (extreme shaking/very heavy damage), particularly areas immediately adjacent to the fault and areas where liquefaction is likely to occur. The shaking intensity and areas where liquefaction is likely to occur are shown in Appendix B, Maps B-2 and B-3, respectively.

⁶ HAZUS is a loss-estimation software program developed by the National Institute of Building Sciences (NIBS) for FEMA. The version used for this analysis (HAZUS-MH MR3) was developed by NIBS in 2003. See Appendix D for more detail.

- 8. Ground shaking and damage occurs in 19 California counties, from Monterey County in the south to Humboldt County in the north and into the San Joaquin Valley.
- 9. Damage is catastrophic in the areas that experience shaking intensities of MM IX and X and high or very high levels of susceptibility for liquefaction, which are the areas adjacent to the fault in Marin, San Francisco, San Mateo, Santa Clara, Santa Cruz, and Sonoma counties. Appendix B, Map B-4, illustrates one aspect of these effects by showing the locations of completely or extensively damaged buildings.
- 10. Counties along the fault outside the Bay Area, such as Mendocino, may sustain damage and require response.
- 11. Central Valley counties such as Sacramento and San Joaquin may be affected immediately by evacuations and other response actions.
- 12. The rest of California and the Nation are affected significantly by the need to respond; the deaths, injuries, and relocations of the Bay Area residents; economic disruption; and media attention.
- 13. Threats and hazards resulting from shaking, surface fault rupture, and liquefaction include:
 - Structural and nonstructural damage to buildings and infrastructure, including widespread collapse of buildings
 - Widespread fires
 - Subsidence and loss of soil-bearing capacity, particularly in areas of liquefaction
 - Displacement along the San Andreas fault
 - Widespread landslides
 - Hazardous materials spills and incidents
 - Dam/levee failure resulting in flooding
 - Civil disorder
- 14. Threats and hazards resulting from the main shock are aggravated or recur during aftershocks, which continue for months after the main shock.
- 15. The earthquake does not generate a tsunami or seiche, despite its magnitude.
- 16. Potable water supply systems suffer major damage because of the following:
 - Extensive damage to pipelines from ground deformation
 - Interruption of pumps and treatment due to power outages
 - Damage to treatment facilities, storage facilities, and distribution infrastructure
 - Contamination of potable water systems because of damaged lines

The number of households without potable water is provided in **Table 2-1**,⁷ based on the estimated damage to potable water pipelines and facilities, and derived using HAZUS.

17. The earthquake results in massive power outages, and auxiliary power systems and generators are not sufficient to meet critical needs. The number of households without electricity is provided in **Table 2-2**, based on the estimated damage to electrical facilities, substations, and distribution circuits.

2.2 General Planning Assumptions

The general planning assumptions that will drive the response are:

- 1. Within 24 hours:
 - Local governments proclaim a Local Emergency. The Governor of California proclaims a State of Emergency and requests that the President declare a Major Disaster.
 - The President declares a Major Disaster, making Federal assistance available under the Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988.

	Total	Households without Potable Water Post-Earthquake			
County	Households	E+24 Hours	E+72 Hours	E+7 Days	E+30 Days
Alameda	564,200	465,000	459,800	448,200	341,800
Contra Costa	384,600	105,700	85,700	45,600	N/A
Marin	105,300	56,300	48,600	29,300	N/A
Monterey	130,300	N/A	N/A	N/A	N/A
Napa	50,300	3,900	<100	0	0
San Benito	17,300	N/A	N/A	N/A	N/A
San Francisco	358,900	340,100	336,400	326,100	N/A
San Mateo	268,000	236,900	234,300	228,100	149,700
Santa Clara	624,700	516,800	512,300	502,700	423,100
Santa Cruz	95,800	16,100	6,500	<100	<100
Solano	140,900	12,500	3,700	<100	<100
Sonoma	182,900	87,800	81,900	69,100	<100
Total	2,923,200	1,841,100	1,769,200	1,649,400	914,900

Table 2-1. Number of households without potable water after the scenario earthquake.

Source: HAZUS analysis conducted by URS in 2009. The estimates were adjusted, by county, for population increases since 2000.

E = scenario event

N/A = Not available (HAZUS results are unreliable)

⁷ Numbers are rounded to the nearest hundred in all tables in this Plan.

Total		Households without Electricity Post-Earthquake			
County	Households	E+24 Hours	E+72 Hours	E+7 Days	E+30 Days
Alameda	564,200	23,600	13,700	5,400	1,200
Contra Costa	384,600	15,400	9,300	3,700	800
Marin	105,300	3,700	2,400	1,100	200
Monterey	130,300	N/A	N/A	N/A	N/A
Napa	50,300	2,000	1,200	500	100
San Benito	17,300	N/A	N/A	N/A	N/A
San Francisco	358,900	253,900	161,300	73,100	18,300
San Mateo	268,000	100,100	62,800	27,900	6,800
Santa Clara	624,700	57,100	34,300	14,400	3,400
Santa Cruz	95,800	15,500	9,600	3,900	800
Solano	140,900	5,600	3,200	1,400	300
Sonoma	182,900	60,000	40,400	19,700	5,000
Total	2,923,200	492,200	308,400	139,000	34,300

Table 2-2. Number of households without electricity after the scenario earthquake.

Source: HAZUS analysis conducted by URS in 2009. The estimates are adjusted, by county, for population increase since the year 2000. For Contra Costa, Napa, and Solano counties, the power loss is not accurately represented in HAZUS and is an average of losses for Alameda and Marin counties. HAZUS does not provide reliable results for Monterey and San Benito counties, but it can be assumed that there will be some power loss in these counties.

E = scenario event

N/A = Not available (HAZUS results are unreliable)

- The U.S. Department of Homeland Security and FEMA respond in accordance with the National Response Framework and begin mobilizing Federal resources.
- 2. Because of extensive damage to building and transportation infrastructure in Oakland, the REOC in Oakland may not be functional. The REOC function within SEMS will persist but may operate at an alternate location, such as:
 - A REOC outside the region
 - The State Operations Center (SOC)
 - The JFO once it is established ⁸

Cal EMA will notify the Operational Areas of the appropriate channels for communication with the regional function, once it has been established.

- 3. On a statewide basis, all elements of the SEMS are functional, including communications and mutual aid systems.
- 4. The response capabilities and resources of the local governments and the State in the region are quickly overwhelmed or exhausted.

⁸ According to the California Catastrophic Incident Plan, this joint Federal-State function is a critical part of responding to a disaster of this scale.

- A detailed and credible common operating picture cannot be achieved for 24 to 48 hours (or longer) after the disaster. As a result, response activities begin without the benefit of detailed and complete situational or critical needs assessments (except as available from scenario-based pre-disaster impact modeling).
- 6. First responders, providers of recovery services, and other critical response personnel are personally affected by the disaster and may be unable to report to their posts for days because of the damaged transportation infrastructure. First responders who are on duty may be held over for additional shift coverage.
- 7. Once the President declares a Major Disaster and commits Federal resources, the State and Federal governments establish joint operations to provide assistance to local jurisdictions.
- 8. Massive assistance in the form of response teams, equipment, materials, and unsolicited volunteers begins to flow toward the region, providing urgently needed resources but creating coordination and logistical support challenges.
- 9. Because of damage to the transportation infrastructure, out-of-region mutual aid, State and Federal resources, and resources from other states cannot begin to arrive inside the worst impacted area for up to 72 hours.
- Depending on location, some Operational Area Emergency Operations Centers (EOCs) experience significant damage, but others are partly or wholly operational.

2.3 Interim Housing Assumptions

This Plan covers the provision of interim housing during the first 12 months after the earthquake. **Appendix E** provides background information on interim housing issues. The assumptions regarding interim housing are described below.

2.3.1 Demand for Interim Housing

Projected interim housing needs for the region, based on the HAZUS analysis,⁹ are provided in **Table 2-3**. The table is a list of the estimated number of households that will need some form of interim housing until their housing units are repaired or restored or until they find alternative permanent housing. This does not mean that every household will seek government assistance for interim housing. Data for San Jose and Oakland are not listed separately but are represented in Santa Clara and Alameda counties, respectively.

⁹ The total demand is equal to the "displaced households" produced by HAZUS using weighting factors developed by Charles Kircher et al. ("When the Big One Strikes Again—Estimated Losses Due to a Repeat of the 1906 San Francisco Earthquake." EERI, 2006). It includes all households in completely damaged buildings, plus most households in extensively damaged units, and a small proportion of households in moderately damaged buildings.

Number of Households in the Region Needing Interim H	
County	E+1 Month
Alameda	95,400
Contra Costa	17,500
Marin	8,000
Monterey	2,300
Napa	3,500
San Benito	300
San Francisco	116,800
San Mateo	41,700
Santa Clara	97,300
Santa Cruz	3,600
Solano	3,400
Sonoma	14,600
Total	404,200

Table 2-3. Estimated number of households in the region that will need interim housing 1 month after the earthquake.

Source: URS analysis of HAZUS damage estimates E = scenario event

The assumptions for determining the demand for interim housing are:

- 1. The number of households requiring interim housing may be underestimated if the recovery period for critical sewer, water, and energy services takes longer than a few months.
- 2. Interim housing needs will be driven by the timeline to restore damaged housing or construct new housing.
- Housing restoration timelines are highly dependent on the availability of financing; local, State, and Federal assistance; the availability of contractors and construction materials and equipment; and local planning and permitting decisions.
- 4. It is likely that the restoration of some structures will take more than 5 years, and resources will not be available to restore all damaged units. Seven years after the Loma Prieta earthquake, only 50 percent of the damaged or destroyed multifamily housing stock had been restored.¹⁰
- 5. Approximately 15 percent of households in the Bay Area have earthquake insurance. It is likely that housing restoration resources (insurance, private financing, and Federal grants and loans) will be insufficient to restore all

¹⁰ Comerio, Mary, Disaster Hits Home: New Policy for Urban Housing Recovery, University of California Press, 1998.

damaged or destroyed housing. Further, high deductibles for earthquake insurance may leave gaps in coverage for those with relatively minor damage, and damage caused by secondary disasters—including flood and fire—may complicate the claims process for homeowners.

2.3.2 Interim Housing Planning Assumptions and Considerations

The following assumptions and considerations pertain to interim housing:

- 1. Local governments want to relocate as few residents as possible while providing interim housing as quickly as possible. However, previous disasters have shown that placing people into suitable interim housing too rapidly may require them to relocate multiple times.
- 2. Access to schools, health care, grocery stores, social support networks, accessibility, and other amenities affect decisions about interim housing.
- 3. County and city governments in the region must find a balance between speeding recovery and rebuilding more safely.
- 4. The extensive damage to residential structures from the earthquake occurs in a region that already has a competitive housing market. Therefore, the demand for interim housing will far outstrip the supply of units available for rent in the Bay Area region. The assumed restoration timelines, vacancy rates, and numbers of displaced households indicate that only a small percentage of the peak housing need could be met by available units in the 12-county area. Locally, in heavily affected areas, the percentage of housing needs being met could be lower. This proportion gradually increases as housing units are repaired.
- 5. The shortage of housing in the Bay Area is exacerbated by the location of available units relative to the demand for units.
- 6. Because the available housing stock is reduced, rental prices are likely to increase, perhaps dramatically. This increase in rental prices adds to the housing challenges that displaced households face, particularly those with relatively low incomes.
- 7. Interim housing solutions, including hotels/motels, in or near affected communities may initially be provided to first responders and recovery contractors, which may further exacerbate the housing shortage for displaced households.
- 8. A variety of interim housing strategies may be employed to house displaced families, including short-term solutions (e.g., hotels/motels, dormitories) and longer-term solutions (e.g., rental housing and temporary housing units, such as mobile homes).
- 9. Housing solutions will be made more challenging by the presence of large existing homeless populations and the likely destruction of homeless shelters.

- 10. All of these impacts on general housing supply and demand are expected to be more severe with regard to accessible housing for people with certain types of access and functional needs.
- 11. Because of the lack of available rental housing in the Bay Area region, tens of thousands of households may require rental housing outside of the Bay Area, and temporary housing units (e.g., trailers, mobile homes, alternative units) may need to be brought into or constructed in the region.
- 11. Adjoining counties offer potential rental resources to displaced Bay Area households. For example, Sacramento County had an estimated 21,200 vacant rental units at the time of the research for this Plan. However, relocation to Sacramento or other locations offers significant challenges to Bay Area residents because of the distance from their current residences and places of work.
- 12. Housing assistance may be in the form of local, State, Federal, or communitybased organization (CBO)/faith-based organization (FBO) rental assistance; hotels/motels; new temporary units; or converted commercial space.
- 13. At its peak capacity, FEMA has been able to provide direct housing support for more than 10,000 households per month using temporary housing units such as travel trailers and mobile homes, but this rate of production and installation may take several weeks to achieve and is dependent on the availability of suitable space for units, the availability of hook-ups to utilities, and the various challenges of installing units in an urban environment.
- 14. Significant numbers of people may permanently relocate from the Bay Area. Factors affecting individuals' decisions to permanently relocate include the speed and strength of economic recovery in the Bay Area, including the availability of jobs; the speed with which social and other services, including schools, are restored; the distance from their original housing to which individuals temporarily relocate; and the measures that governments put in place to reduce the impact of future disasters.
- 15. Following an event of this magnitude, elected officials are likely to become involved in decisions regarding response and recovery, including housing, though the manner and extent to which they will be involved is uncertain.

3 Roles and Responsibilities

This section addresses the roles and responsibilities of local governments, Operational Areas, regional organizations, the State government, the Federal Government, private-sector entities, and nongovernmental organizations (NGOs) related to interim housing and long-term recovery.

3.1 Local Governments and Operational Areas

Local governments work with others across the community, in nearby areas, and with the State to identify and address disaster housing needs, including sheltering, interim housing, and permanent housing. Local government responsibilities relating to interim housing and long-term recovery include:

- Activating Local Assistance Centers (LACs) and connecting individuals and families with recovery services, which may include interim housing
- Determining the safety and habitability of houses, apartments, and other buildings and, with the State and Federal governments, assessing damage
- Developing an interim housing strategy and plans
- Issuing and enforcing permits for repairs and demolition, modifying local zoning, codes, and permitting regulations to enable housing reconstruction and the installation of temporary housing
- Working with State and Federal governments to identify disaster victims in need of housing assistance and to identify interim housing options, including rental housing, and the locations of community temporary housing sites
- Leading the long-term community recovery effort, including development and implementation of long-term recovery plans

Local agencies that may have a role in post-disaster housing may include:

- Community development agencies
- Housing authorities or agencies
- Health and human service agencies
- Public works agencies
- Building inspectors
- Economic development agencies
- Emergency services agencies

To address interim housing issues following a disaster, Operational Areas may establish housing task forces to plan for and implement interim housing. A task force consists of county agencies with responsibility for housing and human services, and nonprofit and private-sector organizations with skills and resources that can contribute to interim housing planning and operations. An Operational Area task force also includes representatives of cities and other incorporated areas. Operational Areas will also participate in the State-Coordinated Housing Task Force, providing information on housing need and supply in their Operational Area, expressing housing solution preferences, and conveying information back to the Operational Area EOC.

In addition, the Operational Area will play a coordinating role, per SEMS, in requesting resources and coordinating with the State in the initial months after the disaster.

3.2 Regional Organizations

Cal EMA Coastal Region

- Acts as the State's primary point of contact for Operational Areas in the region
- Coordinates the regional response to disasters, including collection, verification and evaluation of situation information and, for all resources dispatched through the Emergency Services Mutual Aid System, coordinates the allocation of available resources
- Coordinates mutual aid requests for emergency services between Operational Areas in the region. (This includes the direct coordination of all mutual aid requests other than that provided through established discipline-specific systems such as the Disaster Medical/Health, Law Enforcement, and Fire and Rescue Mutual Aid Systems).
- Maintains liaison and coordination with Cal EMA Headquarters, and with State and Federal agencies in the region as required.

Association of Bay Area Governments

• The Association of Bay Area Governments (ABAG) is a supporting agency for information dissemination and for long-term recovery planning.

3.3 State of California

The State has the primary responsibility for assisting local governments in responding to and recovering from disasters that are beyond the capabilities of local government. The State has the following roles and responsibilities pertaining to interim housing:

- To assist local governments to identify and expand safe, affordable housing opportunities
- To request and coordinate the implementation of Federal assistance
- To provide technical assistance to local and tribal officials
- To promote the redevelopment of communities by catalyzing public/private community partnerships
- To coordinate the development of a post-disaster housing plan that identifies interim housing needs and preferences

In accordance with the SEP:

- The California Health and Human Services Agency (CHHS) is the lead agency for the California Emergency Function #6—Mass Care and Shelter.
- The State Consumer Services Agency (SCSA) and the Business, Transportation, and Housing Agency (BTHA) are co-leads for California Emergency Function #14—Long-Term Recovery.

Cal EMA plays a leading role in coordinating the State-Coordinated Housing Task Force (SCHTF). In addition to Cal EMA, the Business, Transportation, and Housing Agency, State Consumer Services Agency, California Department of Health and Human Services, State Office of the Attorney General, California Department of Insurance, CaliforniaVolunteers, and the Department of Parks and Recreation may participate in the SCHTF, along with other departments and agencies, as needed. Additionally, the Governor's office may request participation from other State agencies on the SCHTF. As requested, agencies should designate, by title, a representative to the Task Force.

The agencies, departments, divisions, and offices listed below have responsibility for some aspect of interim housing following a disaster; additional roles, responsibilities, and authorities may be added as necessary.

Table 3-1 summarizes the roles and responsibilities of State agencies as they apply to interim housing and long-term recovery.

Department/ Agency	Day to Day Responsibilities	Interim Housing Responsibilities (Coordinated/Tasked by Cal EMA)
Cal EMA	 Responsible for the coordination of overall State agency response to major disasters in support of local government. Responsible for assuring the State's readiness to respond to and recover from all hazards and for assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts. 	 Coordinates the Safety Assessment Program Coordinates the State- Coordinated Housing Task Force Coordinates the provision of mutual aid and tasking State agencies to provide resources Manages disaster recovery programs that provide public assistance to State/ local government Activates State-level SEMS function from REOC, SOC, and/or JFO Coordinates response/immediate recovery activities as part of Unified Coordination Group
Department of Real Estate	 Safeguards and promotes the public interest in real estate matters through licensure, regulation, education and enforcement Monitors and regulates industry practices 	 Provides support for land use and acquisition for local, State, and Federa housing assistance programs Issues and implements State policies and guidelines for rent and real estate price stabilization May participate in SCHTF

Table 3-1. Summary of agency roles and responsibilities for interim housing.

Department/ Agency	Day to Day Responsibilities	Interim Housing Responsibilities (Coordinated/Tasked by Cal EMA)
The California Department of Consumer Affairs	 Issues licenses to doctors, dentists, contractors, cosmetologists and automotive repair facilities. Includes 40 regulatory entities which establish minimum qualifications and levels of competency for licensure. Licenses, registers, or certifies practitioners; investigates complaints and discipline violators 	Provides staff to Local Assistance Centers and takes part in the hazard mitigation planning process
California Department of General Services	• Provides variety of services to State agencies through procurement and acquisition solutions, real estate management and design, transportation, professional printing, design and web services, and funding for the creation and construction of schools	 Classifies State property for possible temporary emergency housing sites. Coordinates with professional engineering organizations and Cal EMA in recruiting, orienting, and training volunteer structural engineers for the Safety Assessment Program.
California Department of Social Services	Oversees and administers programs serving children, immigrants, the elderly, and low-income residents. Administers CalWorks and licensing for child care and elderly facilities, and determines eligibility for Social Security Supplemental Insurance	 Administers the State Supplemental Grant Program. Serves as lead for Mass Care and Sheltering activities; facilities transitio of families out of shelter into longer- term housing May serve on SCHTF
State Office of the Attorney General	 Represents the people of California in civil and criminal matters before trial courts, appellate courts and the supreme courts of California and the United States. Establishes and operates projects and programs to protect Californians from fraudulent, unfair, and illegal activities that victimize consumers or threaten public safety 	• Investigates consumer fraud cases and helps protect consumers against price gouging and other fraudulent activities by private companies in a post-disaster environment, including those activities related to housing repair and construction
CaliforniaVolunt eers	 The State office that manages programs and initiatives aimed at increasing the number of Californians engaged in service and volunteering. California/Volunteers also administers California's Citizen Corps programs including: Community Emergency Response Teams (CERT), Medical Reserve Corps, and Volunteers in Police Service, Fire Corps and Neighborhood Watch 	Manages the Disaster Corps that will unify affiliated volunteer programs and provide a common standard for training, certification and classification of disaster volunteers. These volunteers may assist in housing- related activities, including helping provide needed services to displaced residents.
The California Department of Parks and Recreation	 Manages the California State parks system, which includes 278 parks and 1.4 million acres 	 Facilitates the use of parks for temporary housing, if appropriate May serve on SCHTF

 Table 3-1.
 Summary of agency roles and responsibilities for interim housing.

3.3.1 Governor of California

The Governor of California:

- Requests Federal disaster assistance under the FEMA Individual Assistance Program, when requesting a disaster declaration from the President of the United States
- Redirects civil service State agency employees to support disaster response efforts
- May make, temporarily suspend, or modify, for up to 60 days, any public health, safety, zoning, or intrastate transportation law, ordinance, or regulation essential to provide temporary housing for disaster victims
- Delegates authority to the State Coordinating Officer or the Governor's Authorized Representative for convening the SCHTF and signing off on housing plans

3.3.2 Cal EMA

Cal EMA is the lead agency for coordinating overall State agency response to disasters and for assisting local governments in their emergency preparedness, response, recovery, and hazard mitigation efforts. As such, it is responsible for:

- Coordinating the delivery of services under the California Disaster Assistance Act
- Coordinating the State Safety Assessment Program (SAP)
- Providing oversight and guidance for recovery programs that are implemented for individuals, businesses, farmers, and ranchers
- Managing disaster recovery programs that provide public assistance to local government, State Agencies, and private nonprofits
- Facilitating coordination between local, State, and Federal agencies, particularly FEMA, to ensure the smooth delivery, receipt, and processing of assistance resources
- Activating the State-level function, whether it occurs at the SOC or JFO
- Coordinating the provision of mutual aid and tasking State agencies to provide resources to support response and relief operations
- Providing guidance to local governments that wish to open LACs where a variety of local, State, Federal, and private nonprofit agencies can co-locate to provide recovery information and resources to those affected by the disaster
- Serving on the SCHTF

3.3.3 Business, Transportation, and Housing Agency

Component agencies of the BTHA have roles and responsibilities related to interim housing and long-term recovery. The assigned roles and responsibilities are summarized below. The Department of Housing and Community Development:

- Provides lists of State-owned Office of Migrant Services facilities available for emergency short-term housing, and local or community-based organizations that can provide additional housing facilities and outreach
- Provides policy and program guidance on housing issues and financing options
- Coordinates with local housing authorities and community housing organizations
- · Helps find sites and facilities for temporary emergency housing
- Oversees and employs expedited procedures for the discharge of program funds to meet emergency conditions in low-income communities through mandated programs
- Allocates and expedites emergency funding made available through Federal housing and community development programs
- Assigns staff to provide inspections of housing facilities for safety
- · Assists with the reconstruction of manufactured housing facilities
- Assists individuals with completing housing applications
- Identifies necessary changes in building codes to mitigate the effects of disasters
- May participate in SCHTF

The California Department of Real Estate:

- Provides support for land use and acquisition for local, State, and Federal housing assistance programs
- Issues and implements State policies and guidelines for rent and real estate price stabilization
- Works with other agencies on temporary housing issues

The California Department of Transportation classifies State property for possible temporary emergency housing sites.

3.3.4 State and Consumer Services Agency

- SCSA's component agencies may perform disaster-related functions: The California Department of Consumer Affairs may provide staff to Local Assistance Centers to assist consumers in verifying contractor's licenses, investigates complaints, and provides information on hiring contractors.
- The California Department of General Services may classify State property for possible temporary emergency housing sites. The department may work with Cal EMA to create and facilitate plans, including mobilization centers and disaster support areas. The Department may also coordinate with professional engineering organizations and Cal EMA in recruiting, orienting, and training volunteer structural engineers for the Safety Assessment Program.
3.3.5 California Department of Social Services

In addition to its lead role in mass care and sheltering, the CDSS administers the State Supplemental Grant Program, which provides financial support to disaster victims who have already received the maximum level of FEMA Individuals and Households Program (IHP) assistance and have additional unmet needs. If a disaster assistance applicant has reached the maximum IHP assistance and has additional unmet needs, FEMA automatically transmits the application to the State Supplemental Grant Program. CDSS also may take part in the SCHTF.

3.3.6 State Office of the Attorney General

The Office of the Attorney General investigates consumer fraud cases and helps protect consumers against price gouging and other fraudulent activities by private companies in a post-disaster environment, including those activities related to housing repair and construction. The Office's Public Inquiry Unit receives and responds to calls directly from individuals who may be the victim of fraud or abuse at the hands of a contractor.

3.3.7 California Department of Insurance

The California Department of Insurance addresses a variety of insurance issues in a post-disaster environment, including providing information to the public on insurance issues, providing technical expertise on insurance issues, and providing post-disaster statistical insurance information.

3.3.8 CaliforniaVolunteers

CaliforniaVolunteers is the lead state agency for coordinating volunteers in times of disaster. CaliforniaVolunteers also administers California's Citizen Corps programs including Community Emergency Response Teams (CERT). CaliforniaVolunteers is developing a statewide Disaster Corps that will unify affiliated volunteer programs and provide a common standard for training, certification and classification of disaster volunteers. These volunteers may assist in housing related activities, including helping provide needed services to displaced residents.

3.3.9 The California Department of Parks and Recreation

Also known as California State Parks, the California Department of Parks and Recreation manages the California State parks system. The system administers 278 parks and 1.4 million acres. The California Department of Parks will work with other agencies to facilitate the use of parks for temporary housing, if appropriate.

3.4 Federal Agencies

Interim housing operations, including programs that provide assistance to individuals and households, are coordinated mainly by the Federal Government. Two key programs provide assistance to individuals and households: the Individuals and Households Program and the Disaster Loan Program. FEMA manages the Individual and Households Program, which includes temporary housing for displaced households. The United States Small Business Administration administers the Disaster Loan Program, which provides low-interest loans to homeowners, and in some cases renters, to facilitate the repair and replacement of their homes and personal property.

The Robert T. Stafford Disaster Relief and Emergency Assistance Act is the law that establishes the assistance programs that may be implemented under an emergency. Other agencies, including the U.S. Department of Housing and Urban Development and the U.S. Department of Agriculture, are also responsible for administering housing-related disaster programs.

Federal assistance is primarily coordinated through Emergency Support Function (ESF) #6, Mass Care, Emergency Assistance, Housing, and Human Services; ESF #14, Long-Term Community Recovery; and through the National Disaster Housing Task Force.

3.4.1 FEMA

Under ESF #6, Mass Care, Emergency Assistance, Housing, and Human Services, FEMA provides leadership to coordinate and integrate Federal efforts associated with housing services. Housing support may include rental assistance, repairs, loan assistance, factory-built housing, permanent construction, and accessible housing. FEMA:

- Administers the Individuals and Household Program (IHP), which provides financial assistance for rental housing and repair or replacement of primary residences not covered by a homeowner's insurance
- Provides direct assistance in the form of temporary housing units when rental units are not available
- Constructs permanent housing in limited cases of insular or remote locations where no other type of housing assistance is possible
- Establishes Disaster Recovery Centers (DRCs) or participates in LACs to provide information and improve assistance for FEMA and other disaster assistance programs

Under ESF #14, Long-Term Community Recovery, FEMA is a coordinator and a primary agency. ESF #14 provides Federal support to local, regional, State, and tribal governments, NGOs, and the private sector to enable community recovery. As part of ESF #14, FEMA:

- Coordinates drafting and publication of operational plans and procedures specific to ESF #14
- Represents ESF #14 at interagency planning meetings and at the JFO
- Provides technical assistance in community and State planning, recovery, and mitigation grant and insurance programs; outreach and public education; and natural hazard vulnerability or risk assessments

3.4.2 National Disaster Housing Task Force

Additional support may come from the National Disaster Housing Task Force, a Federal-level task force that provides focus to Federal, and specifically FEMA's, housing efforts. The task force fulfills the following roles in deliberative planning and incident response and recovery:

- Leads disaster housing contingency planning and preparedness efforts for the Federal Government
- Oversees implementation of the National Disaster Housing Strategy
- Advises and provides technical and subject-matter expertise to the JFO and the SCHTF on matters such as high-level political and interagency issues, communications, educational materials, and training aids

3.4.3 USDA

The U.S. Department of Agriculture (USDA) is a primary agency for ESF #14. The USDA provides two different types of loans. One type of loan is emergency farm loans or farm ownership loans. The second type of loan is natural disaster loans to low- and very-low-income individuals and households, and housing repair loans and grants to low- and very-low-income individuals and households.

The USDA Office of Rural Development provides disaster housing assistance through programs that normally increase economic opportunity for rural Americans. The roles and responsibilities after a disaster are to:

- Provide information on USDA-financed, currently available and habitable housing units
- Provide letters of priority entitlement for placement in USDA-financed housing
- Assist eligible recipients to meet emergency housing assistance needs resulting from Presidential emergency or major disaster declarations
- Provide technical support and access for damage assessments and restoration efforts for electric power generation, transmission, and distribution

3.4.4 U.S. Department of Defense

In addition to its lead role in ESF #3, Public Works and Engineering, the U.S. Army Corps of Engineers (USACE) provides mass care and human services support at FEMA's request. These roles and responsibilities may include:

- Inspecting, constructing, or installing shelters and housing options or other forms of support
- Conducting or providing technical assistance on the expedited repair of damaged homes, to include temporary roofing or other repairs that facilitate reoccupation of minimally damaged structures

3.4.5 HUD

Under ESF #6, the U.S. Department of Housing and Urban Development (HUD):

- Provides access to and information on availability and accessibility of nearby habitable housing units owned or possessed by HUD
- Ensures that disaster victims who were receiving Section 8¹¹ rental assistance vouchers before the earthquake are reintegrated into the program
- Provides staff to assist mass care and housing operations
- Provides financial support to communities thorough the Community Development Block Grant (CDBG) Program for Disaster Recovery Assistance, which is allocated to local and State governments for community development activities
- Maintains the National Housing Locator, a web-based clearinghouse of available rental housing that can assist individuals and families, working with HUD, other Federal agencies, and public housing authorities, in finding rental housing after a declared disaster
- Implements the Federal Government's Disaster Housing Assistance Program, when requested and funded by FEMA, by working with its network of public housing authorities to provide rental assistance and case management services
- Offers insured mortgages through lenders approved by the Federal Housing Administration to disaster victims to rebuild substantially damaged or destroyed homes or to rehabilitate less damaged homes
- Provides, also through the Federal Housing Administration, homeownership opportunities through discounted home sales programs

3.4.6 U.S. Department of Veterans Affairs

The U.S. Department of Veterans Affairs:

- Makes Veterans Affairs property available to provide shelter space and provides FEMA with a list of all habitable Department-owned housing units that are available for interim housing
- Assigns representatives to FEMA Disaster Assistance Centers to counsel eligible disaster victims on Veterans Affairs housing
- Assigns to FEMA any habitable Veterans Affairs single-family and multiplefamily housing units for use as interim housing options

3.4.7 Federal Home Loan Mortgage Corporation

The Federal Home Loan Mortgage Corporation (Freddie Mac):

• Provides temporary housing assistance, including direct housing assistance (e.g., making some real estate–owned units available for lease)

¹¹ Section 8 of the U.S. Housing Act of 1937

- Provides grants to nonprofits and other housing organizations that give assistance for rental and purchase, donation, or lease of single-family homes, multifamily units, and manufactured homes
- Provides mortgage relief and assistance to borrowers, including issuing a temporary moratorium on foreclosures, extending mortgage relief to members of the National Guard who are on State duty involved in disaster operations, and providing mortgage payment forbearance

3.4.8 Federal National Mortgage Association

The Federal National Mortgage Association (Fannie Mae) may also offer mortgage relief and assistance, including a temporary moratorium on foreclosures, mortgage payment forbearance, loan modifications, and credit protections.

3.4.9 U.S. Small Business Administration

Through its Office of Disaster Assistance, the U.S. Small Business Administration (SBA) may provide low-interest loans to eligible homeowners, renters, businesses, and private nonprofit organizations following a disaster. Disaster loans are made available to homeowners to repair or replace damaged or destroyed real estate; to both homeowners and renters to repair or replace damaged or destroyed personal property; and to businesses and private nonprofit organizations to repair or replace damaged or destroyed personal property; and to businesses and private nonprofit organizations to repair or replace damaged or destroyed real estate, machinery and equipment, inventory and other business assets.

3.4.10 U.S. Department of Health and Human Services

The U.S. Department of Health and Human Services (HHS) is the primary agency for ESF #8, Public Health and Medical Services, and is a supporting agency to FEMA under ESF #6. Under ESF #6, HHS:

- Provides health and human services other than housing and veterinary medical services
- Works with FEMA to provide case management services, including financial assistance, through government agencies or qualified nonprofits, to streamline assistance and prevent duplication of benefits
- Provides subject-matter expertise, consultation, and technical assistance on disaster-related human services issues such as child care and the requirements of people with access and functional needs
- Assists medically evacuated patients in family reunification through the National Emergency Family Registry Locator System and the National Emergency Child Locator Center

3.4.11 General Services Administration

Under ESF #6, the General Services Administration provides resource support, which may include food, shelter, cleaning supplies, comfort kits, first aid, clothing,

personal items, emergency transportation, and more. At FEMA's request, the General Services Administration can also obtain land leases for housing sites, logistical staging areas, or other required facilities.

3.5 Private-Sector Entities

Private-sector entities including companies and associations, particularly those in construction, engineering, insurance, and real estate, function as partners in disaster housing efforts and have roles that include the following:

- Working with local, tribal, and State officials to provide essential services, such as water, power, communications, transportation, and medical care
- Designing, producing, delivering, installing, and maintaining temporary or permanent housing and related critical infrastructure
- Identifying ways to quickly repair or replace damaged or destroyed housing
- · Identifying rental resources and other temporary housing solutions

Insurance companies are generally the first source of recovery assistance for individuals and households. Insurance companies are responsible for providing timely assessments of damage for households who file claims and for providing distributions to those households.

3.6 NGOs, CBOs, and FBOs

NGOs, CBOs, and FBOs include national, local, or international organizations with a mission to provide disaster relief; churches; neighborhood social service and health clinics; and food-distribution agencies. These organizations may expand their normal services to meet increased needs after a disaster, either independently or in coordination with local, State, and Federal efforts. The larger roles may include:

- Providing support for community recovery and displaced individuals and families
- Assisting the transition from care and shelter operations to interim housing arrangements
- Managing donations
- Supporting housing reconstruction
- Addressing housing needs that are unmet by government programs and private insurance

Associations such as the California Apartment Association, the California Building Industry Association, and the Building Industry of the Bay Area may provide information and data on housing that is critical to housing recovery and the provision of interim housing.

3.6.1 VOAD

The National Voluntary Organizations Active in Disaster (VOAD) coordinates planning efforts by many NGOs, which increases their effectiveness and reduces duplication of services. Following a disaster, the National VOAD:

- Encourages members and voluntary agencies to convene in or around the affected area and begin response services and coordination efforts
- Provides information to member organizations about the severity of the disaster, the needs of disaster victims, and the actions being taken by organizations to support response and recovery operations
- Provides guidance on management of unaffiliated volunteers and unsolicited donated goods
- Supports formation of long-term recovery committees

VOADs are notably active in Solano County, San Mateo County (called Thrive or the Thrive Alliance), and in Santa Clara County (called Collaborative Agencies Disaster Relief Effort). A list of the VOAD member agencies and the services they provide is given in **Appendix F**.

3.6.2 Other CBOs and FBOs

Other CBOs and FBOs provide a range of services to address needs that are wholly or partly unmet by local, State, and Federal governments. These services may include providing casework, financial assistance, transportation assistance, counseling, and long-term community planning.

Several counties in the Bay Area have coalitions of CBOs that coordinate voluntary agencies in their respective counties, including:

- Alameda County (Collaborating Agencies Responding to Disaster)
- Contra Costa County (Volunteer Center for the East Bay)
- Marin County (Marin Interagency Disaster Coalition)
- San Francisco (San Francisco Community Agencies Responding to Disaster)

In order to identify unmet needs and to ensure efficient delivery of services, the member agencies (CBOs and FBOs) of The Bay Area Coordinated Assistance Network (CAN) track the assistance they provide to individuals. CAN is described in the Regional Catastrophic Earthquake Mass Care and Sheltering Plan, **Section 3.1.6.3**.

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4 Coordination and Information Sharing

This section presents the coordination and communication plan and systems for a wide range of programs and possibilities regarding interim housing. It explains how governmental organizations, NGOs, and the private sector will initiate the numerous interim housing programs and their associated funding mechanisms, and how they will coordinate the flow of resources into and among them.

4.1 Activation and Response Coordination

4.1.1 REOC

During the immediate aftermath of the earthquake, the emphasis is on providing lifesustaining emergency mass care and sheltering. The REOC plays a critical role in the collection, coordination, and distribution of information and resource requests, per SEMS. As shelters close and people move into the interim housing options described in **Section 5**, the systems described in the remainder of **Section 4.1** become fully operational, and the care and sheltering operations are phased out.

4.1.2 SCHTF

To identify and coordinate the provision of interim housing for displaced populations, the California Governor's Office initiates and establishes a State Coordinated Housing Task Force (SCHTF). The task force is convened by the Governor's representative—the Governor's Authorized Representative (GAR) or the State Coordinating Officer (SCO). Task force participants include representatives from the affected Operational Areas, tribal governments, State agencies, Federal agencies, NGOs, and private-sector associations with expertise and resources to support interim and longer-term housing. For more information about the SCHTF, the composition of the task force, and the housing plan, please see **Appendix G**.

Although the state will have a strong leadership and coordination role in a catastrophic event, local operational areas will be heavily involved to ensure their needs and concerns are put forward and priorities can be established. The Housing Task Force will be a unified effort of local, state, and federal concerns and resources.

The primary responsibility of the SCHTF is to develop a housing plan and coordinate the provision of temporary housing following the disaster. The actual housing plan developed may include the following elements:

- **Purpose**. The Purpose section explains the purpose of the plan, and is specific to the disaster.
- **Goals**. The goals section provides the goals of the plan that are specific to the disaster.

- **Participating Agencies**. The SCHTF includes representatives from Federal, State, and local governments, and the private sector.
- **Assumptions**. The assumptions summarize the assumptions necessary to implement the plan, and are specific to the disaster.
- **Damage Assessment**. The damage assessment consolidates information from all Operational Areas, the State, and the Federal Government on the extent of damage.
- Needs Assessment. The needs assessment consolidates information from all Operational Areas, the State, and the Federal Government on needs related to the disaster. This includes information about the number of families requiring assistance, what types of assistance are required, and access and functional needs populations.
- Concept of Operations. The Concept of Operations describes how housing resources are to be provided, including responsible parties, resources, and locations, and is specific to the disaster.
- **Recommendations**. The Recommendations include the recommendations for meeting the specific housing need, and incorporate specific recommendations from the Operational Areas and local governments. This section includes recommended housing solutions from the suite of available housing options.
- Additional Proposed Solutions/Additional Approval Required. This section addresses additional solutions, or activities related to recommended solutions, that may require additional actions from Federal, State, County, or local governments. For example, this section includes solutions that require additional funding or legislation.
- Long-Term Actions. This section addresses activities that are specifically targeted to the restoration of housing, or development of new housing, and are specific to the disaster.

As necessary, the SCHTF may form sub-groups to address specific issues, such as insurance, accessibility, and social services for displaced families. The housing plan, once approved by the GAR or the SCO, provides a framework for the delivery of disaster housing.

The SCO or GAR are likely to be the lead for the Task Force, and are responsible for signing off on the Task Force Housing Plan. State agencies that may participate in the task force include: Cal EMA, the Department of Housing and Community Development, the California Department of Social Services, the California Parks Department, the California Department of Insurance, and others, as needed.

A representative from each of the affected Operational Areas will participate in the SCHTF, as well. They will communicate the housing needs and preferences of their Operational Area, and will coordinate the flow of information from the SCHTF to their Operational Areas. FEMA will also provide representation to the Task Force. Finally, private and nongovernmental organizations may also be involved in the work of the

Task Force, to include the Association of Bay Area Governments, private associations, and nonprofits.

In addition to developing the plan, the SCHTF works with the JFO, the Operational Areas (through the Regional Coordination Group), and local governments to coordinate the provision of interim housing programs in accordance with the housing plan. **Figure 4-1** illustrates the process of developing, implementing, and approving the SCHTF plan.



Housing Plan Development Housing Plan Execution
Figure 4-1. SCHTF plan development and execution.

Operational Areas may form their own Operational Area Housing Task Forces, which would gather information, develop Operational Area plans, provide input to the SCHTF through the Operational Area representative on the SCHTF, and coordinate the provision of temporary housing in their Operational Area. If an Operational Area Housing Task Force is not formed, these functions will be performed by the Care and Shelter Branch, Recovery Unit, or other element in the Operational Area response/recovery organization.

The National Disaster Housing Task Force provides technical assistance and expertise, as needed, to support the SCHTF.

Figure 4-2 illustrates the organization and coordination of these various entities.



Figure 4-2. State-Coordinated Housing Task Force coordination.

4.1.3 CDSS Department Operations Centers

The CDSS DOC manages the implementation of the department's programs in the affected areas. Programs may include the State Supplemental Grant Program (SSGP) for individuals and households, which may provide up to \$10,000 for additional unmet needs. CDSS leads the Care and Shelter Branch of the REOC and the SOC to coordinate support for care and shelter operations. Other agencies activate their own DOCs to manage their agencies' interim housing programs and activities.

4.2 Information, Coordination, and Resource Requests

As summarized in **Table 4-1**, various entities are responsible for collecting information that will provide a picture of housing demand and the location of housing supply or locations for temporary housing units. This information is used to develop the needs assessment section of the SCHTF housing plan.

Critical information necessary to initiate the interim housing mission may include damage assessments, geographic information system (GIS) modeling, and information from local utilities authorities regarding service limitations and estimates of restoration time frames.

Preliminary data during the initial response during the first 72 hours will be derived from local damage assessments. Immediately following the incident, jurisdictions will begin conducting damage surveys to facilitate resource requests for response needs, referred to as an initial damage estimate. This estimate will be provided both to the State and Federal government to help provide a preliminary scope. During this time period, FEMA will also run a HAZUS model simulating the earthquake to estimate the damage to all infrastructure and assist with response.

After response operations (i.e., 72 hours to 14 days), a formal assessment will be conducted to determine whether or not Federal Individual Assistance and Public Assistance programs will be activated. It is important to note that this Plan assumes these disaster declarations will not be contingent on a formal damage assessment. During this time period, damage data will be collected at the JFO from utility companies and current operational costs to help estimate overall damage. While FEMA will not provide individual household-identifying information, housing damage estimates collected from IHP registrations will be provided based on zip codes, which can also supplement overall damage data.

Initially, the information is collected regularly throughout the operational phases by local government agencies, EOCs, the REOC and the SOC. The information specific to interim housing needs and resources is aggregated into the SCHTF housing plan. For interim housing, critical information on housing demand and resources is captured and consolidated first in the Operational Area housing plans and then in the State housing plan. Sources of information include safety inspections, damage assessments, GIS and other software systems, and surveys of families in shelters.

Critical information includes:

- How many homes have been damaged and to what extent?
- How many people need shelter, including estimations of those with access and functional needs?
- What housing resources are available, including rental housing, open space for community sites, commercial parks, and facilities that could be converted to interim housing?
- What housing strategies are recommended, what impediments exist to implementing these strategies, and what are the resource gaps?

The information pertinent to interim housing operations and the collection plan for this information are summarized in **Table 4-1**.

4.3 Public Information

The government will provide reliable and comprehensive information to the public on interim housing and related issues. The information will help save lives, restore confidence, and help individuals and households recover. Communications regarding interim housing include:

- · How individuals and households can register for FEMA assistance
- Location of LACs and DRCs
- How individuals and families can access additional information on available housing
- Plans and timelines for service restoration
- Community recovery plans and timelines
- · Zoning, permitting, and other relevant regulations

In addition, information will be provided to the public on how to avoid being the victim of fraud, and how to report potential cases of fraud, waste, and abuse. For example, for improper use of State funds, the public would be encouraged to contact the State Auditor; for improper use of Federal funds, the FEMA Office of the Inspector General; and for improper activity by a private business, the State Office of the Attorney General.

Initially, mass public notification systems used for emergency purposes, such as the Emergency Alert System and Emergency Digital Information System, in addition to broadcast media are used to distribute information. As response operations transition to recovery operations and displaced households transition from shelters to interim housing, more targeted communications, as well as broadcast communications, are used to distribute information. The Joint Information Center (JIC) is responsible for coordinating the provision of information to the public.

All public information actions apply to individuals with access and functional needs as well as to the general public. However, to reach the widest possible audience and provide the added assistance to reach those with access and functional needs, communications will consider both the public information content and the media used for delivery of messages.

Critical Information	Specific Information Provided	Methodology/Source	Responsible Entity	Product	Timeline
Population/community support impacts	 Estimated population affected or displaced Number, type, and location of homes affected (destroyed, damaged) Percentage and location of banks, grocery stores, pharmacies, and other community services open and able to meet needs of public Status of transportation system and utilities (e.g., water, electric, sewer) 	 Predictive modeling GIS Assessment teams Reports from State-level or regional-level Operations Centers, other EOCs News media and other open sources Voluntary agency reports ESF #6 reports Operational Area Initial Damage Estimates PDA Mission Planning Team 	 SCHTF Operations Local, State, and Federal government 	 National Emergency Management Information System Individual Assistance (NEMIS IA) module Situation briefing Situation reports SCHTF housing plan—Damage Assessment and Needs Assessment sections 	 Initial estimate within 12 hours; updates every operational period SCHTF housing plan convened within 2 weeks of the earthquake
Demographics of displaced households	 Population displaced Demographic breakdown of displaced population, including income levels and number of foreign languages spoken by greater than 1% of the displaced population Characteristics of displaced households, including number of elderly, children, and special-needs residents Homeowner insurance data for displaced households 	 GIS Predictive modeling Commercial products Census data FEMA Assistance Registrations Private-sector insurance data (aggregate level) Preliminary damage assessments Northern California VOAD and local NGO assistance data 	• SCHTF/Planning	 Jurisdiction profiles GIS analysis Regional analysis and summary SCHTF housing plan: damage assessment and needs assessment Joint Housing reports—Preliminary housing projections through the housing scoping tool 	 Limited initial information no later than 12 hours after the earthquake SCHTF convened within 2 weeks of the earthquake Joint Housing reports within 8 weeks of the earthquake
Interim housing operations	 Priority housing populations (e.g., police officers, fire suppression personnel, key local industries) Location and supply of existing rental housing (available, habitable rental housing) Location of private sites Location, condition, and availability of commercial sites Locations and estimated space capacity of community sites Relocation requirements and resources Anticipated requirements for Federal resources 	 EOC/Coordination Center reports Rapid needs assessment team reports Community relations field reports ESF reports Elected officials SCHTF Projected housing requirements (FEMA) Temporary housing units available (FEMA) Contractor personnel install capabilities (FEMA) Commercial site locations and space capacity data (State of California) Community site locations (Operational Areas) 	• SCHTF/Operations	 Situation briefings Situation reports GIS products SCHTF housing plan: available resources, concept of operations, and recommendations 	 Initial assessment within 2 weeks of the earthquake; updated every 7 days
Potential housing issues and housing resource shortfalls	 Actual or potential resource shortfalls in the affected counties, including: Housing resource shortfalls Shortfalls in contracting or construction support sources Limitations in the restoration of utilities or other wrap-around resources Permitting and land use restrictions 	 Cal EMA Operations Centers or Coordination Center reports Rapid needs assessment team reports Community relations field reports ESF reports SCHTF 	SCHTF/Planning	 Situation briefings Situation reports GIS models SCHTF housing plan: needs assessment and special considerations/concerns 	 Initial assessment within 8 weeks of the earthquake; updated every 7 days SCHTF convened within 2 weeks of the earthquake
Source: URS analysis (2009) Cal EMA = California Emergency EOC = Emergency Operations C ESF = Emergency Support Funct FEMA = Federal Emergency Mar	Management Agency enter tion	GIS = geographic information system NGO = nongovernmental organization PDA = Preliminary Damage Assessment SCHTF = State-Coordinated Housing Task Force VOAD = Voluntary Organizations Active in Disaster			

 Table 4-1. Critical Information, methodologies and sources, responsible entities, products, and timeline for interim housing operations.

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5 Operations

The purpose of this section is to provide an operational plan for interim housing after the earthquake. Accordingly, this section presents:

- Operational priorities and objectives for the response
- · Resources that can be used to achieve those goals
- Operational details of how interim housing is provided and how a transition to long-term recovery begins
- A response timeline that specifies the individual tasks to be taken as part of the response

5.1 Priorities and Objectives

This section provides an outline of the:

- Operational priorities and interim housing operations
- Objectives that support those priorities

The objectives are described according to the general response/recovery phases. The phases are:

- E+72 hours to E+14 days
- E+14 days to E+60 days
- E+60 days to E+1 year

The following subsections present the operational priorities and objectives by time frame. **Section 7** contains a comprehensive response/recovery timeline for interim housing operations. The timeline shows the individual tasks used to meet the objectives and the agencies responsible for performing them. The timeline also reflects other events or actions that may be occurring during the response period that can affect the response of local governments throughout the region.

5.1.1 E+72 Hours to E+14 Days

This section presents the priorities and objectives for the period from 72 hours to 14 days after the earthquake. The first 72 hours following the disaster will be focused on life/safety issues.

5.1.1.1 Operational Priorities

The operational priority for this period is to begin to develop an interim housing strategy.

5.1.1.2 Objectives

The objectives that support the operational priorities are described below. Each objective is elaborated upon in **Section 7**, which presents the tasks that will be carried out to meet that objective.

- Initiate registration for individual housing assistance
- · Collect data from damage assessments and building inspections of housing
- Establish Local Assistance Centers (LACs)/DRCs
- Convene a SCHTF to develop a housing plan and coordinate interim housing strategy
- Assess interim housing requirements, including accessibility for various access and functional needs populations
- Initiate development of an interim housing strategy that describes housing options

5.1.2 E+14 Days to E+60 Days

This section presents the priority and objectives for the period from 14 days to 60 days after the earthquake.

5.1.2.1 Operational Priorities

The operational priority for this period is to initiate the transition from shelters to interim housing.

5.1.2.2 Objectives

The objectives that support the operational priorities are described below. Each objective is elaborated upon in **Section 7**, which presents the tasks that are carried out to meet that objective.

- Continue to integrate private sector resources
- Maintain ongoing situational awareness of shelter activities
- Identify opportunities to close shelters and return residents to homes or available housing
- Implement interim housing programs and strategies
- · Evaluate safety assessments and building inspections of homes
- Facilitate restoration of moderately damaged dwellings
- Educate and support occupants of nontraditional shelters to encourage them to return to their habitable homes or move to interim housing
- Transition families from short-term solutions (e.g., hotels) to longer-term solutions
- · Convene long-term recovery task force to coordinate regional recovery
- Identify restricted use housing for populations necessary to remain in the region

5.1.3 E+60 Days to E+1 Year

This section presents the priorities and objectives for the period from 60 days to 1 year after the earthquake.

5.1.3.1 Operational Priorities

The operational priorities for this period are:

- · Complete the transition of displaced families from shelters to interim housing
- Develop and implement a long-term housing strategy
- Transition families to permanent housing

5.1.3.2 Objectives

The objectives that support the operational priorities are described below. **Section 7** lists tasks that are associated with carrying out these objectives.

- · Continue to implement interim housing programs
- · Provide wraparound services to support those in interim housing
- Develop and implement long-term recovery plans
- Identify and access sources of funding for long-term recovery
- Restore damaged housing and develop replacement housing
- · Facilitate the return of displaced families to local communities

5.2 Resources for Interim Housing Operations

This section discusses the resources available for use as interim housing from a variety of private- and public-sector sources.

5.2.1 Private-Sector Resources and Support for Interim Housing Operations

Certain private-sector entities can provide evaluators and coordinators as volunteers in the California SAP. These evaluators and coordinators include certified building inspectors, licensed engineers, and architects. Volunteers are individuals from the private sector who are registered with the State of California as Disaster Service Worker Volunteers.

Additionally, private-sector contractors from the region, State, and other areas of the Nation provide the resources necessary to repair homes, in addition to facilitating the provision of materials necessary to rebuild homes. The requirement and number of resources provided for both the SAP as well as general construction and contracting will not be known until after the earthquake.

The first source of funding for the repair and reconstruction of housing is private insurance. In order to receive funding from FEMA, the SBA, or the State of California, homeowners must first file a claim with their insurance companies. This

money can be applied to the repair or replacement of their homes, or in some cases to the provision of interim housing.

The majority of rental units, hotels, and commercial parks that will provide interim housing for displaced households are privately-owned resources. Based on the San Andreas Fault scenario produced by HAZUS, the estimated habitable rental housing resources available, by county, are summarized in **Table 5-1**. These estimates were developed based on State of California housing data; specifically, these numbers were derived by applying the vacancy rate data to total undamaged, habitable units generated by the model.

Number of Units
13,800
10,700
3,800
8,700
2,700
600
13,100
4,200
10,900
6,400
4,900
8,800
88,600

Table 5-1. County resources for interim

 housing: Estimates of habitable vacant rental

 units.

Source: Analysis of HAZUS damage estimates and U.S. Census American Community Survey vacancy rates.

Hotel and motel rooms located in the region and in surrounding counties are another resource that can be provided to displaced households for up to 6 months following a catastrophic incident (see **Table 5-2**). While some hotel and motel structures will remain habitable following the earthquake, such resources may be occupied by travelers or personnel supporting the response, or may take time to be made available to displaced households. In order to determine the potential resource availability of hotels and motels, a site assessment is conducted.

Commercial park sites may be evaluated to assess their function and space capacity, as damage to electric, water, and sewer systems could render them unable to sustain temporary units. Additionally, pre-disaster occupancy is considered because existing residents or leaseholders may restrict the availability of sites at these parks as potential sites for temporary units set aside for displaced households.

Table 5-2. Number of pre-disaster hotel/motel properties and rooms in 2008, in markets that are relevant to the region.

Market	Number of Hotel/ Motel Properties	Number of Rooms
California North Market	670	36,600
Oakland Market	240	24,080
San Francisco-San Mateo Market	400	51,800
San Jose-Santa Cruz Market	310	29,400
California North Central Coast Market	270	17,380
Total	1,890	159,260

Source: Data based on "California Monthly Lodging Report, June 2011," from the California Tourism Industry: California Statistics and Trends website. Census data are used for both the number of properties and the number of rooms.

NGOs may provide services, including casework, to match displaced individuals with available assistance, fund home repair, provide for rental housing, and meet the needs that have been unmet by government assistance. Many NGOs provide their services to specific communities, such as low-income populations, or access and functional needs populations.

5.2.2 State and Local Government Resources for Interim Housing

Local governments provide building inspectors and safety inspection resources, including SAP Evaluators, to provide for safety inspections of local housing stock. SAP Evaluators must be professionally registered engineers, professionally licensed architects, or certified building inspectors. While many local government building inspectors are already trained as SAP Evaluators, the post-earthquake demand is likely to exceed the resources of these evaluators, which can be augmented by requests for additional resources through the State.

Local government may also decide to establish a LAC. City and/or county government officials are responsible for assessing the need for a LAC, and are also responsible for coordinating the participation of local government agencies, volunteers, CBOs, and nonprofit organizations. Local governments ensure that appropriate representation from relevant government entities is present at the LAC, which may include local planning and zoning, the housing authority, and the office of community development, among other organizations.

In addition to private-sector rental resources, local public housing authorities can provide rental resources to displaced households if habitable units are available. Through LACs, local governments may provide assistance in locating rental resources. Local governments can also provide transportation support, through municipal resources, to help families relocate from congregate shelters to interim housing options, and are responsible for repairs to infrastructure.

As defined by the National Disaster Housing Strategy, community sites or group sites are those sites provided by state or local government that accommodate two or more units and are complete with utilities. Typically, these sites are located on government-owned open space, including parks and fairgrounds, where a site is identified as suitable for use. Group sites can vary in size from two units to hundreds of units, depending on the need of the disaster and availability of alternate housing options. Because of the resources required to establish, maintain and deactivate group sites, they are considered an option of last resort.

The FEMA CONPLAN identifies open spaces throughout the region that could be used to stage resources in the first phases of a response operation. Because the potential sites are owned by a variety of entities, priorities for their use must be coordinated. The sites are owned by local, State, and Federal governments; some sites are privately owned. As initial response operations on the sites demobilize, the SCHTF and local governments can assess the capacity of the sites to accommodate interim housing operations. Privately-owned land needs to be leased by the Government (U.S. General Services Agency in coordination with FEMA) before a community or group site can be developed. The estimated time to establish a community site is 60 to 90 days.

State and local governments are likely to use pre-identified sites for debris management, evacuation areas, and transportation staging. As the response and recovery progresses, FEMA uses forward staging sites to facilitate the deployment of goods to the affected area, including temporary housing units. Units are deployed either to a forward staging area from FEMA's long-term storage sites or directly to the site from the manufacturer. Ideally, a temporary housing unit storage site is flat, paved, and free of obstacles. While these storage sites should be close enough to the disaster location to provide timely support to the affected area, consideration is given to avoiding congestion and interference with response and recovery operations. In some cases, these sites may not be needed for several days to several weeks following the earthquake, given the time it takes to deploy and transport a temporary housing unit. FEMA works with State and local governments to identify forward staging areas, which are leased by the General Services Agency.

Community temporary housing sites require significantly more work to prepare them for use. Utilities, access roads, and security structures may have to be installed. The typical time to establish a community site is 60 to 90 days.

5.2.3 Federal Resources for Interim Housing

The level of Federal resources used to provide for interim housing depends largely on the need caused by the earthquake. In less damaged areas, existing housing resources in the affected community may provide sufficient interim housing to displaced households. The Federal resources required are determined based on the housing need of individuals, the availability of housing in the region, and the decisions made by the SCHTF and local governments.

FEMA maintains a supply of temporary housing units that may be brought to a disaster location in the event that direct housing will be provided. These units are deployed to forward staging areas as close to the disaster area as possible before being deployed to private, commercial, or community sites, traveling an average of 500 miles in the first 72 hours following a request, and 500 miles each additional day until they reach the affected area. Additionally, FEMA maintains competitive contracts with temporary unit vendors that provide for the acquisition of additional units as necessary. FEMA employs temporary contractors that are generally responsible for the transportation and installation of units.

FEMA may mission assign the USACE to provide technical assistance to locate and assess land for temporary housing park sites, locate vacancies in existing commercial sites, asses the property of a potential private site, and review new designs for parks. The USACE may also be tasked to execute a mission to design and construct new community sites, including housing unit placement and setup, and hauling and installing housing units to private sites or commercial sites.

FEMA provides financial assistance and temporary housing units to individuals through the Individual Assistance Program. This program provides, up to certain limits, financial assistance to rent a habitable unit, and/or repair damage to homeowner properties. The program also provides direct housing, in the form of temporary housing units, when existing housing resources are unable to meet housing demand. Under the Public Assistance program, FEMA provides funding to local governments and the State for infrastructure recovery and emergency response.

Financial assistance provided by the SBA to individuals and households following a disaster is intended for the repair or replacement of primary residences or to repair or replace personal property (car, clothing, furniture, etc.). Assistance may be provided to homeowners for repair and replacement of their primary pre-disaster residence, or to homeowners and renters for the repair or replacement of personal property.

In addition to these resources, FEMA, through an Interagency Agreement with the HHS, may provide case management services to individuals and households affected by the disaster, if requested by the State. Case managers help survivors to develop a disaster recovery plan, reflecting both short- and long-term goals, and help connect survivors with resources to meet needs such as housing, medical, and employment needs. Over the course of recovery operations, case management services may transition to a State-managed program funded through a direct grant from FEMA. If the State does not request Federal assistance with case management, such services may be provided by local nonprofit organizations or local governments.

FEMA also provides technical assistance to recovery operations through ESF #14. ESF #14 coordinates and facilitates appropriate Federal programs for long-term recovery planning and implementation, including working with community leaders to identify metrics, capital funding programs, incentives, and waivers for their recovery plans.

5.2.4 Anticipated Interim Housing Resource Shortages

As summarized in **Table 5-3**, the estimated interim housing shortage is based on habitable, vacant rental housing in the region. Using State of California housing data, vacancy rates were applied to the number of habitable units to produce an estimate of the number of potentially vacant and habitable units following the earthquake.

The anticipated resource shortages at various times are summarized in the column "Estimated Housing Shortfall" in **Table 5-3**. This estimated resource shortfall provides the basis of need for additional State and Federal resources. This estimate of interim housing need does not account for first responders, contractors, or other surge resources who arrive in the Bay Area to provide support to response and recovery operations and who will need housing in the area.

Months Post- Earthquake	Total Displaced Households, Initial Estimate	Total Available Housing Supply	Estimated Housing Shortfall
E+1 month	404,200	88,600	315,700
E+3 months	N/A	168,900	235,300
E+6 months	N/A	223,600	180,600
E+9 months	N/A	278,300	125,900
E+12 months	N/A	333,000	71,200

Table 5-3. Estimated	housing shortfall.
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Total Displaced Households, Initial Estimate, is based on the scenario event. It reports the total number of households displaced by the earthquake. Total Available Housing Supply at 1 month to 12 months is based on HAZUS recovery times, as well as estimated predisaster vacant rental housing (see **Table 5-4** for estimates of available rental housing throughout the region). Estimated Housing Shortfall is the difference between the Total Displaced Households, Initial Estimate and the Total Available Housing Supply at each time period. Any discrepancies in the number of total displaced households presented in this Plan are attributable to rounding error. Source: URS analysis (2009) E = scenario event N/A = Not applicable

This resource shortage decreases over time as damaged units are repaired and occupied. These estimates assume that as housing units are returned to habitability, they are first made available to those who previously occupied the unit, so that households whose pre-disaster units take the longest to repair or replace will remain

displaced the longest. While research from recent disasters show that between 75 percent and 90 percent of damaged single family housing stock is generally recovered within two years, multifamily housing often takes longer to restore. For example, 7 years after the Loma Prieta earthquake, only 50 percent of the multifamily housing stock was recovered.

5.2.5 Integration of Interim Housing Resources

The SCHTF convenes at the JFO or the SOC. The task force provides for collaboration between local, State, and Federal government, and nonprofit entities in the development of a comprehensive housing plan.

FEMA will transport temporary housing units to staging areas near the affected area. FEMA, in coordination with local and State agencies, is responsible for leasing the required property for the development of sites. FEMA determines the eligibility of the applicants for temporary housing and provides the required location information to the USACE. Following site identification and preparation, FEMA contractors transport and install temporary units from the staging area.

5.3 Interim Housing Operations

5.3.1 Strategies for Assisting Displaced People

Following the displacement of over 400,000 households in the Bay Area, virtually all housing options need to be used. However, the SCHTF and other stakeholders need to make strategic decisions about how these options are implemented. Strategic actions that the Bay Area could undertake to address housing needs of displaced Bay Area residents are discussed below.

Strategies to keep displaced families near their home communities may include:

- Maximize the use of transitional sheltering opportunities in the Bay Area until longer-term interim housing can be provided. Transitional shelters include hotels, motels, and other facilities that could be converted to non-congregate shelters (see **Table 5-2**). This reduces opportunities for housing critical recovery workers and first responders in these transitional shelters. To mitigate potential impact on recovery, additional solutions can be provided to house first responders and critical recovery workers, including base camps, cruise ships, and temporary housing units.
- Maximize the use of temporary housing units where feasible. In less densely populated parts of the Bay Area, including Napa, Sonoma, Monterey, and Solano counties, residents in single family homes may be able to stay in temporary housing units on their private lots, which enables them to oversee reconstruction while freeing up rental housing for other displaced residents. Similarly, use of commercial parks located throughout the region is maximized, and alternative types of temporary housing units that are more suitable for urban environments are explored. Finally, community sites are established where feasible. In particular, the feasibility of community sites in counties with

intact infrastructure, such as Monterey, is examined. This requires modification of existing permitting and land use provisions, and requires the agreement of each individual county or city.

Encourage residents who must leave the region to find housing in adjoining counties. The solutions described above do not provide enough housing, nor do these options provide housing quickly enough, to house all displaced residents within the Bay Area. To keep as many residents as close to their home communities as possible, applicants are assisted in finding housing in adjoining counties by providing transportation to these areas, working with these counties to establish reception centers, and distributing information about available housing in these areas. For residents displaced from Alameda, Santa Clara, and San Francisco counties, Sacramento, Fresno, Stanislaus, Merced, and San Joaquin counties could potentially offer 113,167 rental housing units (Table 5-4). Some displaced residents will choose to relocate, temporarily or permanently, to other parts of the state or country.

,, ,	
County	Vacant Rental Units
Sacramento	45,800
San Joaquin	18,700
Stanislaus	13,800
Merced	9,800
Fresno	25,100
Total	113,200

vacant rental units in counties adjacent to the Bay Area in 2008.

Table 5-4. Estimated number of

Source: Data based on U.S. Census Bureau American Community Survey estimates of number of vacant housing units. Assumes no damage to units in these counties.

Strategies that focus on promoting recovery of infrastructure and communities, recognizing that most displaced residents have to leave the region temporarily, may include:

Designate transitional shelters and temporary housing units for critical recovery workers and other designated populations. The majority of hotels, motels, and other transitional shelter (short-term) housing are designated for those directly involved in response, recovery, or continuity of government. This includes contractors restoring infrastructure; State and FEMA personnel involved with response and recovery; and government workers involved in providing services to the general population. If certain industries are determined to be critical to short- and/or long-term recovery, work with those companies to ensure that temporary housing units are provided for their workers.

- Limit the use of temporary housing units. Where appropriate, provide temporary housing units for selected populations, as discussed above. At the discretion of the County or other governing jurisdiction, provide temporary housing units on owners' private sites. Establishing large group or community sites may work against the goal of rapid recovery of infrastructure and communities.
- Assist families to relocate temporarily outside of the region. Work with FEMA and adjoining counties and states to identify rental housing outside of the Bay Area and communicate this to displaced families. Work with FEMA to establish host states that will offer services to Bay Area residents who leave the community. Work with FEMA to provide transportation to areas with sufficient housing and services.
- Initiate efforts to facilitate rebuilding of housing. To the extent possible, expedite the permitting of out-of-state contractors to facilitate the restoration and reconstruction of housing. Use FEMA programs, including FEMA Public Assistance Program and Individual Assistance, to fund reconstruction. Use CDBG funds, either through existing appropriations or through additional Congressional appropriations, to fund restoration of housing.
- Educate families about price gouging and assist them in the use of licensed contractors to rebuild homes.
- Implement a phased recovery and repopulation plan. Prioritize the restoration
 of services and repair/rebuilding of homes in certain communities with the goal
 of returning as many people to their homes as quickly as possible. In
 coordination with FEMA and Federal/nonprofit caseworkers, maintain contact
 with displaced residents, providing information on recovery timelines and
 providing assistance, when possible and appropriate, for them to return when
 services have been reestablished and homes have been repaired or alternative
 housing has been rebuilt.

Additional information regarding the different forms of interim housing, including information regarding program delivery and processes, is provided in **Appendix E**.

5.3.2 Interim Housing Options and Alternatives

In order to develop the concept of operations section of the SCHTF housing plan, the task force identifies which housing options should be used to provide interim housing to displaced households. In determining an interim housing strategy, the task force needs to balance competing priorities. Quickly transitioning households out of congregate shelter, keeping households near their home communities, and reducing the number of times a family must move during their displacement period are typical objectives.

According to the National Disaster Housing Strategy and the Federal Disaster Housing Plan, the first resources that should be considered for displaced households are available housing resources, such as rental apartments, followed by direct housing, such as mobile homes or park models, or alternative forms of interim housing, with final consideration given to other innovative housing solutions. The types of housing and programs that fall under those categories, and their anticipated duration, are summarized in **Table 5-5**.

In addition to traditional and alternative forms of housing assistance provided by FEMA, the Rental Repair Pilot Program has been implemented in several postdisaster locations. The program, authorized by the Post-Katrina Emergency Management Act of 2006, provides funding directly to owners of apartment complexes for repairs to rental units, provided that eligible IHP applicants would be housed in those units in exchange for the cost of repairs. Local and State government officials help prioritize which apartment complexes are selected for the program. Some of the advantages and disadvantages of each program are listed in **Table 5-6**.

In addition to prioritizing the types of housing resources that are provided to displaced households, the Housing Task Force may prioritize populations to be placed in specific housing types or housing locations. This housing can be designated as "restricted use" housing to be provided for individuals or households who need to stay in the area for recovery- or security-related purposes (contractors, police or fire personnel, community planning officials, utility company personnel). The Housing Task Force may consider whether to prioritize employees of specific employers that are critical to regional recovery. This may include employers whose workforce is a large portion of the local population, or employers whose revenues are critical to continued government operations or recovery. Priority populations may also include individuals or households with access or functional needs who require a specific type or location of housing in order to access a facility or a specific service.

The combination and quantity of housing programs selected is largely contingent on the amount of damage and the characteristics of households affected or displaced by the earthquake. The FEMA Joint Housing Solutions Group Mission Scoping Tool provides one method for developing an initial scope of the housing mission, as well as for developing a more detailed picture of housing requirements as additional information is gathered about household characteristics. While this tool can be accessed through ESF #6, local governments still lead the effort to collect information about specific housing needs and provide that information to the SCHTF.

Туре	Sub-Type	Description	Authorization/Funding	Duration
Existing housing resources	Transitional shelters	 Hotels and motels to provide an individual unit to a displaced household 	 TSA funded under Public Assistance Program, Category B, Emergency Protective Measures 	Initially 1 month; up to 6 months, if approved
	Financial assistance (rent)	Financial assistance to rent a habitable rental property	 Individual Assistance, Individuals and Households Program, up to program limits 	Up to 18 months
	Financial assistance (repair and replacement)	 Financial assistance to repair or replace a damaged or condemned home 	 Individual Assistance, Individuals and Households Program, up to program limits 	N/A
	Host-State Housing Protocol	 Implemented if significant numbers are displaced to another state, or to a different jurisdiction within the state Provides for direct payments to property owners via FEMA, Federal partners, or contract agents 	FEMA assistance, requested by State	Up to 18 months
Traditional interim housing	Temporary housing units	 Provided when no rentable properties are available; may include manufactured homes, park models, or alternative housing units Provided on private sites, commercial sites, or new community sites 	 Individual Assistance, Individuals and Households Program 	Up to 18 months
Innovative forms of interim housing	Alternative forms of temporary housing units	New and innovative forms of temporary housing	 Individual Assistance, Individuals and Households Program, up to program limits 	Up to 18 months

Table 5-5. Interim housing priorities and housing types, listed in order of priority.

Source: analysis URS (2009)

FEMA = Federal Emergency Management Agency

N/A = Not applicable

TSA = Transitional Shelter Assistance

Туре	Sub-Type	Advantages	Disadvantages
Existing housing resources	Transitional shelters	Provides for displaced households to remain in the regionProvides for resources close to household origin	 Limited hotel/motel resources in the region Not likely to accommodate some households (large families) Only suitable for a short duration
	Financial assistance (rent)	 Provides for displaced households to remain in the region Provides for rental resources that can lead to permanent housing for some households 	 Limited rental resources in the region Contingent on resources being made available at fair market rate
	Financial assistance (repair and replacement)	Enables homeowners to direct their recoveryReduces need for interim housing	 Time frame for availability contingent on the amount of damage caused to homes Provided only for homeowners; may not address damage to rental properties (although SBA loan programs may address this)
	Host-State Housing Protocol	 Draws on capabilities/resources of unaffected states/ municipalities 	 Residents are not housed in the region; may be far from their work, school, or other services Possible increased likelihood that displaced residents will not return
Traditional interim housing	Temporary housing units	 May provide for increased capacity to meet demand Units on private sites enable households to monitor repairs and stay close to work and community 	 Private sites: Limited by property size, not likely feasible in urban areas Commercial sites: Limited by capacity Community sites: Additional time required to establish infrastructure May alter city/county land use May remain in place for a long time after the disaster
Innovative forms of interim housing	Alternative forms of direct housing	 May provide for units that accommodate larger families, are more comfortable spaces, or are more suitable for urban areas 	Additional time to establish unitsPotentially limited capacity

Table 5-6. Types and sub-types of interim housing and their advanta	ages and disadvantages.
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Source: analysis URS (2009)

5.3.3 Individual Housing Assistance

In order for households to access State and Federal housing assistance, the household must first register for assistance with FEMA, via either the FEMA teleregistration number or the online portal. This registration begins the application process for homeowners, renters, and businesses. When registering, applicants are asked to provide the following information:

- Social Security number
- Description of losses caused by the disaster
- Insurance information
- Income information
- Directions to damaged property
- Telephone number for contact

Following application, households can access additional information via the FEMA tele-registration phone number, the FEMA website, or at the Federal DRCs or State LACs.

Households are then contacted for an inspection, generally within 10 days of application. Inspectors, who are FEMA contractors, assess disaster-related damage to property and personal property. Homeowners need to provide proof of ownership, whereas renters only need to provide proof of residency. These damage assessments are done to determine eligibility, whereas the California SAP inspections determine habitability.

Following inspection, the FEMA IHP makes a decision regarding the application and issues a letter to the applicant. If the applicant is eligible for assistance, this letter explains what the assistance can be used to pay for. If the applicant is not eligible for assistance, the letter includes reasons for the decision and information about the appeal process. If the applicant is eligible for help, the decision letter is followed by a check or direct transfer to the bank account. Funds are required to be used as directed, and recipients must keep a record of funding use for three years afterward.

FEMA will refer cases in which a homeowner is seeking home repair/replacement and personal property repair/replacement to the Small Business Administration for consideration first. If the applicant is eligible for a loan, he or she must accept the loan assistance first before seeking other assistance. SBA low-interest loans can be used for real estate damage and personal property, and are made up to verified damage amounts, up to \$200,000.

Eligibility criteria for IHP assistance are summarized as follows:

- Household has filed for insurance benefits, and damage to property is not covered by insurance.
- Household members are citizens of the United States, noncitizen nationals, or qualified aliens.
- Home is in an area that has been declared a disaster area by the President.

- Home is in the disaster area where the household lives the majority of the year (i.e., a primary residence).
- Home is uninhabitable due to disaster, or requires repairs because of damage from the disaster.

Once approved for assistance under IHP, households receive assistance for rent, housing repair or replacement, a temporary housing unit, or permanent or semipermanent construction of a home. All IHP assistance is limited to annual caps (currently at \$30,200). If a household receives a temporary housing unit, the household is still eligible for repair or reconstruction assistance for eligible damage to the home.

Some applicants are directly referred to the Other Needs Assistance program if they cannot demonstrate loan repayment ability. Other households may also be eligible for other needs assistance under the IHP for housing-related expenses such as transportation and moving costs. Following receipt of assistance from these Federal sources, if the household has additional rental, housing, or transportation-related costs (among others), household members' information is transferred from the FEMA to the CDSS State Supplemental Grant Program, which may also provide assistance.

FEMA and SBA will not duplicate assistance. Neither the FEMA IHP nor the SBA Loan Programs will duplicate assistance from insurance. If the individual or household receives the FEMA IHP maximum grant, and has additional eligible needs under that program, they will be referred to the State Supplemental Grant Program for consideration. The State also does not duplicate assistance from insurance and other programs.

In order to connect individuals and households to housing assistance and numerous other programs, the State of California and local governments will establish LACs. These centers provide access to local and State resources, including NGOs that may provide additional housing-related assistance. In addition, the State and FEMA coordinate to provide Federal resources at the LAC, or at a Federal DRC co-located with the LAC.

In order to establish a LAC, local governments first assess the need for one, and then determine an appropriate location for it. In collaboration with Cal EMA, local governments determine which agencies and NGOs should be represented at the LAC. In Federally-declared disasters, FEMA, SBA, and other Federal agencies will provide representatives at the LAC. This will allow individuals and families to seek Federal assistance and learn about Federal, State, and local programs and services in one place. Depending on the need, the Federal Government may also establish its own assistance centers, known as Disaster Assistance Centers.

Services provided at both LACs and DRCs focus on providing displaced or affected households with access to the nongovernmental or local, State, and Federal Government assistance programs. While the LACs and DRCs will provide

individuals access to a range of assistance program, housing-related assistance provided at the LAC may include:

- Helping households to identify available housing resources, including rental housing, transitional shelters, and temporary housing units
- Helping households to access financial assistance through local, State, Federal, and nongovernmental resources
- Ensuring that households register for FEMA assistance, because this information is used to determine Federal program eligibility and is also shared with the State to determine State of California Disaster Grants (State Supplemental Grant Program) eligibility
- Helping households to access additional resources through local, State, Federal, and nongovernmental resources

Following the earthquake, some portions of the population may be displaced to other states or jurisdictions. The Host-State Housing Protocol is one program that supports evacuees when sufficient housing resources are not available in the affected area. FEMA may choose to implement the protocol when a large number of evacuees are concentrated in one location. Under the Host-State Housing Protocol, FEMA (through a contracting entity) coordinates to directly contract with landlords for apartments and rental payments under IHP for up to 18 months. If the State requests and FEMA approves the provision of Federal disaster case management, individual case management services are provided by HHS through the FEMA/HHS interagency agreement. Case managers are deployed to disaster areas where Individual Assistance is approved, and help individuals and households to develop disaster recovery plans. These case managers are able to help connect households with local resources to meet unmet needs, such as housing or medical needs. The program intends to transition case management services to a State-managed program funded through a direct grant from FEMA. This management agency will be identified by the State of California.

5.3.4 Establishment of Interim Housing

In order to provide interim housing as described in the SCHTF housing plan and as described above, certain activities must occur at the local, State, and Federal level for each type of housing. To provide for any form of interim housing, local and State governments consider zoning and development restrictions or processes that may delay the delivery of interim housing. For example, some counties require obtaining a building permit before erecting, constructing, enlarging, altering, moving, repairing, improving, converting, or demolishing any building or structure. In order to expedite the repair or reconstruction of damaged housing, or the installation of temporary housing units, local and State governments pre-identify which codes or regulations can be waived or streamlined.

For local, State, and Federal regulations, the following are considered to expedite repairs and interim housing delivery:

- Regulatory laws, zoning, and permit requirements for repair, reconstruction, and temporary housing units
- · Flood zoning restrictions for temporary housing units
- Hauling restrictions and required permits for temporary housing units
- Installation requirements such as anchoring, blocking, etc., for temporary housing units
- Environmental requirements and hazard mitigation for repair, reconstruction, and temporary housing units

5.3.5 Implementation of Interim Housing Solutions

The SCHTF housing plan is not likely to rely on one type of interim housing. Instead, it is likely to use a combination of options to house displaced individuals and households. The following summarizes the steps that may be required to implement the Plan by the different types of housing those steps provide. Where possible, it is indicated if these steps can be implemented before an earthquake to expedite assistance afterward.

5.3.6 Transitional Shelters

FEMA may, through a contracting agency, directly lease hotels/motels through the FEMA Transitional Shelter Assistance (TSA) Program. TSA provides hotel and motel lodging costs for families displaced by an event. TSA is phased out as individuals and households access interim housing options in or outside the region. FEMA does not provide transportation from disaster shelters to transitional shelter in hotels or motels, but such transportation costs, if incurred by an eligible applicant (local, State, or eligible nonprofit), may be eligible for reimbursement under Section 403 of the Stafford Act. The steps for obtaining and phasing out TSA are summarized in **Table 5-7**.

Table 5-7.	Steps required to obtain and phase out FEMA
Transitional	Shelter Assistance.

Acti	vity	Responsible Entity	
1.	Register family for FEMA assistance	Household	
2.	Conduct damage inspection	FEMA/contracting entity	
3.	Determine eligibility	FEMA	
4.	Request TSA from FEMA	State	
5.	Approve TSA for initial period	FEMA	
6.	Identify hotel and motel locations for transitional shelters	FEMA/contracting entity	
7.	Transport eligible households from shelters to transitional shelters	Households/local government/ State	
8.	Pay eligible costs directly to hotels	FEMA/contracting entity	
9.	Extend TSA as necessary	FEMA	
10.	Access rental assistance, insurance payments, or repair/replacement payments	Household	
11.	Transition from hotel/motel locations to rental housing or repaired housing	Household	
12.	Terminate TSA	FEMA	

FEMA = Federal Emergency Management Agency TSA = Transitional Shelter Assistance

5.3.7 FEMA Rental Assistance

FEMA Rental Assistance is facilitated through the FEMA Individual Assistance Program. Rental resources are provided largely thorough the private sector, although some rental resources may be accessed through habitable public housing resources. Rental assistance is provided based on HUD-provided Fair Market Rent for the locality where the applicant is currently living. Applicants also hold responsibility for signing a lease for the rental unit. Based on the severity of damage, urgency of need, and the State's request, FEMA may implement Emergency Assistance, which provides immediate limited funding to individuals for rental and other assistance, before the completion of damage inspections and other steps. FEMA may also choose to extend the normal rental assistance period beyond 18 months. The steps for implementing rental assistance are summarized in **Table 5-8**.

Ac	tivity	Responsible Entity	
1.	Register family for FEMA assistance	Homeowner	
2.	Provide emergency assistance to individuals	FEMA	
3.	Conduct insurance assessment and pay out to homeowners	Homeowner/private sector	
4.	Submit insurance information to FEMA	Homeowner	
5.	Inspect damage	FEMA/FEMA contractors /private sector	
6.	Eligibility determinations	FEMA	
7.	Identify rental housing, including through private resources and the Housing Portal ¹	Local government/State/FEMA	
8.	Sign lease agreement signed between household and landlord	Household/private sector	
9.	Send assistance payments to eligible household	FEMA	

Table 5-8. Steps required to obtain FEMA Rental Assistance.

¹ Housing Portal = FEMA tool that combines all housing resources from various agencies (Housing and Urban Development, Department of Veterans Affairs, and U.S. Department of Agriculture). See https://asd.fema.gov/inter/hportal/home.htm.

FEMA = Federal Emergency Management Agency

5.3.8 SBA Loans/FEMA Repair and Replacement Assistance

SBA may make loans of up to \$200,000 to repair or replace damaged housing. If the family is not eligible for the SBA loan, it may be eligible for FEMA Repair and Replacement Assistance. Both FEMA Repair and Replacement Assistance and SBA loans may only be used to pay for repairs or replacement of components of primary residences, not for rental or vacation properties. The steps for implementing FEMA Repair and Replacement Assistance are summarized in **Table 5-9**.

5.3.9 Host-State Housing Protocol

The Host-State Housing Protocol is often implemented when large numbers of evacuees are concentrated in a city following a disaster. While this congregation has historically occurred following a hurricane, the Protocol can provide for housing following an earthquake if large numbers of displaced households congregate in a specific location. The Host-State Housing Protocol can provide for housing both in the state and in other states where displaced households locate. Assistance is subject to Individual Assistance Program limits and HUD Fair-Market Rent restrictions. Additionally, instead of direct payments to households, as in the FEMA Individual Assistance Program, payments under the Protocol are made directly to landlords. The steps to implement Host-State Housing Protocol are summarized in **Table 5-10**.
Table 5-9. Steps required to obtain FEMA/SBA Repair and
Replacement Assistance.

Ac	tivity	Responsible Party
1.	Register family for assistance	Homeowner
2.	Conduct insurance assessments and pay out to homeowners	Homeowner/private sector
3.	Submit insurance information	Homeowner
4.	Inspect damage	FEMA/FEMA Contractors/ private sector
5.	Referral to SBA loans for assistance	FEMA
6.	Apply for SBA disaster loan	Household
7.	Determine eligibility for SBA Loan/ FEMA Assistance	SBA
8.	Send loan payout to homeowner	SBA
9.	Send assistance payment to homeowners for eligible damage not covered by insurance and/or for households not eligible for SBA loans	FEMA

FEMA = Federal Emergency Management Agency SBA = Small Business Administration

Table 5-10. Steps required to implement the Host-StateHousing Protocol.

Ac	tivity	Responsible Party		
1.	Identify locations where evacuees are concentrated	SCHTF/FEMA/State/host state		
2.	Identify number of eligible evacuees requiring assistance	FEMA		
3.	Identify whether it is feasible for evacuees to return to the region	SCHTF		
4.	Request host state assistance	State		
5.	Contract with entity to provide payments	FEMA		
6.	Register households for assistance	FEMA/host state		
7.	Identify rental locations	FEMA/contracting entity		
8.	Contract with landlords for payments	FEMA/contracting entity		
9.	Place families in rental units	FEMA/contracting entity		

FEMA = Federal Emergency Management Agency SCHTF = State-Coordinated Housing Task Force

5.3.10 Direct Housing

Direct Housing can be provided on private sites, commercial sites, or community sites. Private sites, such as individual homeowner properties, must be able to accommodate a temporary housing unit, including both the space required and appropriate utility hookups. The use of private sites is desirable, as it allows the displaced people to remain on their property while repairs are completed on their homes. However, in the Bay Area, specifically in the major metropolitan areas, private sites are not large enough to accommodate temporary housing units. Commercial sites, such as existing mobile home sites, can provide for the installation of temporary units, as long as those sites are not damaged or fully occupied. Community sites, publicly or privately owned locations that can accommodate a cluster of temporary units, provide for accommodating a larger number of displaced households in one location. Often, these sites require the full installation of infrastructure, such as electrical lines and sewage, and require the establishment of wraparound services, including site security.

Housing units are leased directly to the applicant by FEMA and in some cases can require rental payments from the households. The steps to implement Direct Housing are summarized in **Table 5-11**.

To facilitate the implementation of Direct Housing, the State adopts an acceptable level of formaldehyde for temporary housing units used to provide interim housing. The State of California can develop and adopt a formaldehyde standard, or it can accept the standard as established by FEMA.

5.3.11 Rental Repair Program

To implement a Rental Repair Program, the SCHTF requests authorization of the program from FEMA. If FEMA authorizes use of the program, local or State government designates a lead agency to identify properties and vet identified property owners. Properties are identified through damage assessments, public outreach campaigns, knowledge of community resources or other means. The Task Force develops criteria for the selection of such properties, which may include:

- Housing that is moderately damaged, but uninhabitable in the current state
- Housing that was previously vacant or underused
- Housing that can be repaired and made available to eligible displaced households in a short period of time
- · Complexes that provide for a larger number of available units
- Complexes that are close to wraparound services or are in areas where services and utilities have been restored

Any strategy to implement a Rental Repair Program is written into the Housing Task Force plan. Additional items to consider include populations that are placed in repaired housing and the number of apartment complexes that are repaired through a Rental Repair Program.

Table 5-11. Activities required to provide traditional or alternative interim housing.

Activity	Responsible Entity	Implemented Pre-Event?			
Families register for assistance	Individuals/FEMA	No			
Determine eligibility of applications	• FEMA	No			
Waive State/County/local restrictions on temporary housing units	 HCD County and city zoning departments	Yes			
Convey jurisdictional restrictions/limitations on temporary housing to FEMA	Local governmentSCHTF	No			
Determine whether household can take temporary housing unit on property	 FEMA County and city zoning departments 	No			
Identify commercial site location and potential capacity	Local governmentSCHTF	Yes			
Identify potential community site locations	Local governmentFEMAUSACE	Yes			
Identify infrastructure installation requirements for potential private/commercial/community site locations	Local governmentFEMAUSACE	No			
Approve new community site locations	Local governmentState	Yes			
Approve augmentation of commercial site locations, if necessary	 HCD Mobile home and Special Occupancy Parks Program 	No			
Approve THUs, including traditional and alternative unit types	 Local government HCD Mobile home and Special Occupancy Parks Program Local government 	No			
Ensure provision of utilities at selected private, commercial, and community sites	 Private sector Municipal utilities USACE 	No			
Prepare private, commercial, and/or community site locations	FEMAUSACEPrivate sector	No			
Acquire requested number of THUs	FEMAUSACEPrivate sector	No			
Transport requested number of THUs	FEMAUSACE	No			
Install units in private, commercial, and/or community sites	FEMAUSACE	No			
Determine which households will move into commercial/community sites based on eligibility and other criteria	• FEMA • SCHTF	No			
Source: URS analysis (2009) SCHTF = State-Coordinated Housing					

FEMA = Federal Emergency Management Agency HCD = California Department of Housing and Community Development

THU = Temporary housing unit USACE = U.S. Army Corps of Engineers For all types of interim housing, utilities that were damaged must be restored to communities as soon as possible. A unit must have access to water, sewer, and electricity to be considered habitable. In some cases, a unit that is structurally habitable may lack access to utilities, rendering it uninhabitable. Additionally, electrical, water, and septic systems must be evaluated to determine if they are capable of supporting fully functional community sites or other new developments that will rely on those systems. While these services are primarily restored through private-sector organizations, local governments, with assistance from the State or Federal Government as needed, provide traffic control, debris removal, and other services necessary to enable the restoration of utilities.

In addition to the need to restore utilities to areas where interim housing is located, it is necessary to the extent possible to provide wraparound services, such as health care, grocery stores, public transit, access to schools and employment, and services for those with access and functional needs. The restoration of additional services, including schools and transportation, also assists communities in the transition into interim and permanent housing. Local governments and nonprofit organizations may assist by providing transportation and other assistance to help families access these services. Case management services, provided by nonprofits and local, State, or Federal Government, can help families connect to needed services.

Whether for community sites or the repair and reconstruction of existing communities, local governments and Housing Task Force participants should consider whether resources and development should be allocated in phases. By phasing repairs or new development, the government may also allow wraparound services to phase or ramp up their capability for those communities.

5.3.12 Activating the Interim Housing Plan

Once the SCHTF housing plan is developed and consented to by the task force, it is submitted to the Governor's Authorized Representative or the State Coordinating Officer, and the Federal Coordinating Officer, for approval and signature. When the Housing Plan has been approved, the courses of action outlined in the "Operations" and "Recommendations" sections can be executed by the appropriate parties. Certain types of assistance programs, such as any Rental Repair Programs, require authorization by FEMA because they are not formalized under the Individual Assistance Program.

6 Long-Term Recovery

Long-term recovery follows response and immediate recovery and may last for years. The goal underlying long-term recovery is to move the affected community toward self-sufficiency, sustainability, and resilience. In terms of housing, long-term recovery addresses issues associated with the permanent restoration of housing and the return of residents to their communities. There are many issues in addition to housing that affect long-term recovery, and this range of issues is addressed in this section. Long-term recovery may include the following:

- · Reconstructing public and private facilities and infrastructure
- Planning, restoration, and reconstruction of housing
- Implementing waivers, zoning changes, and other land use planning to promote recovery
- Providing long-term assistance to displaced families, including financial support as well as social and health services
- Restoring the local economy to pre-disaster levels
- Integrating mitigation strategies into rebuilding efforts
- Recovering disaster-related costs for infrastructure restoration through Federal grant programs

During long-term recovery, post-disaster housing issues become even more intertwined with other community recovery issues, including economic recovery, transportation, and continuity of government services. The focus shifts from provision of shelter and temporary housing to restoration of damaged housing, development of new housing, incorporation of mitigation measures into housing, and planning how communities should be organized.

6.1 Transition to Long-Term Recovery

As the emphasis shifts from response and relief to long-term recovery efforts, local and State governments transition out of the EOC-oriented operations and to organizations that are designed to facilitate recovery operations. A jurisdiction may transition to a recovery organization that is not based in the EOC, or it may move recovery functions to specific departments where they are part of the departments' missions. Thus, agencies outside of the emergency response function, including those responsible for planning, land use, housing, economic development, and social services, take on more responsibility in the transition to recovery.

Similarly, emphasis shifts from response to recovery; Federal support shifts from direct Federal assistance for response operations to Federal recovery programs. These programs provide financial assistance to individuals or grants to State or local governments and nonprofits. In addition to financial assistance, FEMA provides planning support through ESF #14. The Federal Government manages its recovery

programs initially from the JFO before transitioning to a long-term recovery office that focuses on supporting local and State recovery efforts.

Following a major disaster, the Cal EMA Advanced Planning Unit initiates planning for regional recovery. The Advanced Planning Unit is in the Intelligence and Planning Section of the SOC but also functions as part of the JFO when active. Interim housing issues are addressed by the SCHTF, which coordinates with the Planning Section at the JFO or SOC. As response operations are completed, the Recovery Task Force assumes responsibility for coordinating recovery planning and implementation across the region, and continues to operate in this role throughout the recovery process, even after the JFO has closed and the SOC and REOC functions for this incident have ceased to function. During the first several months of the disaster, the SCHTF will work with the JFO and the SOC. As the emphasis shifts to long-term recovery, the SCHTF will become one of several groups reporting to the Recovery Task Force.

Figure 6-1 shows the transition of interim housing coordination responsibilities from immediate recovery to long-term recovery at each level of government.



Figure 6-1. Transition to long-term recovery.

Throughout the recovery process, Cal EMA continues to be responsible for coordinating with FEMA to obtain Public Assistance funds and for administering State recovery programs.

6.2 Local Government Roles and Responsibilities

Local governments organize recovery operations according to their priorities and internal processes. Local governments have primary responsibility for the recovery of their jurisdiction. Activities they may implement include:

- Assisting individuals and families with recovery
- Working with State and Federal officials to identify needs and secure financial assistance for response and recovery
- Assessing damage to facilities; issuing permits for repairs and demolition
- Resuming governmental functions
- Planning for long-term recovery
- Enacting appropriate zoning variances to accommodate business and commercial repairs
- Convening local recovery task forces or committees to coordinate recovery activities
- Soliciting input from the public through town hall meetings or other public forums

6.3 Regional Recovery Task Force

The Governor may appoint a Regional Recovery Task Force to provide a mechanism for coordinating recovery priorities within the region. The Task Force provides a venue for local jurisdictions and regional entities to raise issues and coordinate priorities, ensure that important regional priorities are not neglected, and encourage effective use of resources. It reports to the Governor or a designee, and includes local, regional, State, and private-sector leaders representing important components of the recovery, such as transportation and business sectors on which the region depends. The Task Force also integrates local NGOs, either into the Task Force or as a Working Group to the Task Force. These organizations may provide resources in the recovery process, extend their regular programs to include additional disaster-related needs, or provide services to populations with unmet disaster needs.

The Regional Recovery Task Force:

- Establishes a vision for the long-term recovery of the region
- Provides coordination and other assistance to promote the achievement of the recovery vision
- Provides a forum for community leadership for recovery issues that are regional in scope

- Develops regional solutions to issues involving multiple jurisdictions and counties
- Facilities the prioritization of activities if there is competition for recovery resources
- Represents the region's interests in discussions with the State and Federal governments, particularly with regard to long-term recovery planning under ESF #14 and disaster-specific initiatives at the State and Federal levels
- Coordinates community recovery plans to ensure that regional issues are addressed appropriately
- Efficiently applies State and Federal resources to regional recovery issues

The Chair of the Task Force is appointed by the Governor. Participants in the Task Force may include representatives from Cal EMA, other State agencies, County governments, major cities, ABAG, private business, and nonprofit organizations. Local involvement in the Regional Recovery Task Force is critical to ensure that it makes relevant and effective decisions for regional recovery. Working Groups may be established to manage the regional approach to specific recovery issues. These Working Groups may include the following topics and participants:

- Housing: As the focus on the housing mission shifts towards permanent housing and long-term recovery, the SCHTF becomes the housing component of the Regional Recovery Task Force.
- Economic Recovery: The SCSA and local economic development and redevelopment agencies, and business groups such as the Bay Area Council and the Business Recovery Managers Association.
- Transportation: Local transportation agencies, the MTC, and Caltrans.
- Human Services: CDSS and local social service agencies and nonprofits.

6.4 Recovery Planning

At the request of local governments through Cal EMA, Federal ESF #14 provides assistance to local governments, generally at the county level, to develop community recovery plans. FEMA is the lead agency for ESF #14. In some cases, individual cities within a county work with ESF #14 to create their own long-term recovery plans. The recovery planning process may take 3 to 6 months and may commence shortly after the conclusion of immediate response activities.

Preparation of a local community recovery plan includes the following steps:

- Formation of planning teams consisting of representatives from local government agencies with responsibility for planning, housing, economic development, and transportation; the business community; nonprofits; community
- Formation of committees to address specific recovery areas, such as economic development and transportation
- Organization of public meetings to obtain the input of residents

- Inventory and analysis of needs
- Identification of recovery projects and programs, and determination of which projects have the greatest recovery impact
- Identification of sources of recovery funding and technical assistance
- Selection of strategies, tools, and recommendations for implementation

Following development of specific recovery plans, the jurisdictions implement the plans, which may take several years.

In developing community recovery plans, the local governments must consider existing comprehensive plans, redevelopment plans, education system initiatives, and economic development strategies in affected communities. Because a disaster can change the physical or economic landscape, recovery provides an opportunity to inject resources into promising ventures or to recast the existing ones into new concepts. Examples include rebuilding of schools or revitalization of major industries and blighted commercial areas.

In addition to the community recovery plans, the Bay Area may consider developing a regional plan to address long-term recovery plans across county lines. The Regional Recovery Task Force may play a coordinating role in the development of the regional recovery plan.

6.5 Managing Recovery

In addition to planning for recovery, managing recovery is critical. While private companies and local government agencies conduct much of the actual recovery work, coordination is required to implement these initiatives effectively.

Local governments are primarily responsible for managing recovery in their jurisdiction. They form Recovery Task Forces or Committees comprised of businesses, governments, or nonprofits, to organize recovery in their communities.

In previous disasters, recovery organizations have been organized in two ways. The first, generally referred to as a Long-Term Recovery Organization (LTRO), works as a single entity to address disaster-related needs. While an LTRO is composed of disaster response and/or recovery organizations, it is organized as a 501(c)(3), either independently or under an existing 501(c)(3). This organization operates from a common pool of funds, often allocated by partner organizations or through grants, and is led by a board and staff members.

The second, generally referred to as a Long-Term Recovery Committee (LTRC), addresses issues as they arise in the recovery process. The Committee members share decision-making authority with each other, and the LTRC is unlikely to have dedicated staff. An LTRC is unlikely to have resources granted by member organizations, although in some cases it has been appointed guardian and

distributor of funds. Other assistance is available in VOAD's long-term-recovery manuals.¹²

6.6 Recovery Issues, Considerations, and Strategies

The earthquake presents a range of challenges for successful community and regional recovery, many of which are addressed in sections of this Plan and other plans, such as the RECP Recovery and Transportation Subsidiary Plans, the CONPLAN, and the Regional Debris Management Plan. Selected issues that need to be addressed to ensure community recovery and potential strategies for addressing them are discussed in the following subsections.

6.6.1 Facilitating Repairs to Housing and Infrastructure

Even when plans, organizational structures, and funding are in place, constraints on resources, including contractors and materials, can stall recovery. Some strategies to secure resources and speed recovery include:

- Establish pre-disaster on-call contracts with contractors to conduct critical recovery work and provide critical materials and supplies. Ensure that contracts meet Federal contracting requirements, and that contractors have sufficient capacity to meet recovery needs.
- Streamline the licensing of out-of-state contractors. After a catastrophic earthquake, it is likely that the recovery demands will outstrip the locally available resources, requiring the government and individuals to contract with vendors from outside the State. Streamlining the process of licensing out-ofstate contractors increases the pool of resources available to participate in recovery activities.
- Develop a plan to concentrate resources on the restoration of services, infrastructure, and housing in certain neighborhoods. Given limited resources, it may be more efficient to concentrate recovery resources in a certain area, restoring services, infrastructure, and housing before moving on to other areas. In this way, whole neighborhoods can become habitable quickly, as opposed to spreading resources thinly across the entire jurisdiction, resulting in many neighborhoods having only some critical services restored.

6.6.2 Economic Recovery

Recovery of the regional economy is the linchpin to overall community recovery. If businesses leave the area and do not return, residents will follow suit. Similarly, loss of tax revenue from departed businesses can have a crippling effect on the provision of services by government and may stall recovery efforts due to lack of funding. Strategies to speed economic recovery may include:

• Provide workforce housing for critical employers. This may be accomplished by reserving Federally-funded temporary housing for workers in certain industries,

¹² Available at http://www.nvoad.org/NewsInformation/PlanningDocuments/tabid/83/Default.aspx.

in coordination with FEMA, or by working with private companies to facilitate the provision of temporary housing funded by the companies themselves.

- Restore critical services. Restoring sewage, water, energy, access, and transportation is critical to helping businesses resume operations. Local governments and the Regional Recovery Task Force can work to prioritize restoration of services to areas that are critical to economic recovery. For example, in New York following 9/11, the City of New York, in coordination with FEMA, quickly put into place temporary ferry service to lower Manhattan, thereby enabling workers in key industries to get to work and helping maintain these companies in New York despite massive damage to infrastructure.
- Involve representatives of key businesses in recovery planning. Including representatives from key industries in local long-term-recovery planning groups and/or the Regional Recovery Task Force may send a message that business interests will be taken seriously in the recovery process, which may in turn encourage companies to stay in the region or return quickly.
- Provide targeted tax or other incentives to keep businesses in place. While this
 may work against the goal of quickly restoring tax revenue, targeted tax
 incentives may help keep key businesses in place, and ultimately result in
 higher tax revenues and a range of other benefits than if the incentives were
 not provided. It should be noted that evidence of the effectiveness of financial
 incentives in luring and retaining businesses is mixed, and is generally not as
 critical as other actions.

6.6.3 Funding Government Operations, Including Recovery

Major disasters can decimate a community's tax base, rendering it unable to provide basic services, let alone fund recovery operations. Some strategies to address this issue include:

- Maximize use of Federal recovery resources. For example, the State of Mississippi was able to obtain millions in additional Federal funding for programs such as the Alternative Housing Pilot Program, mostly based on the strength of their application for the funding. Other communities have requested direct Federal assistance with debris removal and other response and recovery activities, freeing up resources and funds for other critical activities. While decisions regarding recovery must be based on what is best for the community, understanding and effectively using Federal resources can help communities to stretch their recovery dollars.
- Ensure sufficient cash flow. Many communities have difficulty funding basic services and conducting recovery activities because of cash flow issues. Even if they may eventually be reimbursed by the government for at least some portion of reconstruction costs, they find it difficult to initiate projects due to lack of cash on hand. Cash flow problems may be mitigated by establishing a standing line of credit with a bank, contributing to a disaster reserve fund each year, and obtaining sufficient insurance. Following Hurricane Katrina, the State of Louisiana set up a \$200 million revolving loan account for the City to draw

from in order to meet short-term obligations, while revenues, including FEMA Public Assistance funds, were pending. A county in Florida has a provision that increases the flexibility of funds following a disaster, enabling more funds to be used for recovery activities.

• Facilitate the speedy recovery of the economy, as discussed above.

6.6.4 Facilitating the Return of Displaced/Evacuated Individuals

When families are forced to leave their communities following a disaster, they may or may not return. While this decision is ultimately up to each individual and family and is based on a range of factors, steps can be taken to increase the likelihood that individuals will return. Some strategies to address this issue include:

- Encourage individuals and families to stay near their communities. Studies after Hurricane Katrina suggest that the farther away a family relocates following a disaster, the less likely it is to return to its home community. Allowing the use of temporary housing units near damaged homes and facilitating relocation of families to nearby communities may increase the chances of families returning.
- Provide information to relocated residents regarding restoration of their communities. By providing displaced residents with information about recovery timelines, restoration of services, and available housing, local governments can promote the return of families. Information can be provided through Federal case managers, who have provided services to displaced victims of Katrina, Rita, and Ike, through websites and media, or by direct mailing and e-mailing to displaced residents.
- Provide transportation assistance to displaced residents returning home. Under some circumstances, families may receive Federal transportation assistance to return home. Local governments or nonprofits can provide additional assistance so that lack of transportation is not an obstacle to returning home.
- Restore services to support access and functional needs populations. In addition to restoring critical services, consideration should be given to restoration of wraparound services and other social services to support access and functional needs populations. Access to these services encourages households to stay in, or return to, the community. In order to facilitate the restoration or provision of services, representatives of community service organizations can be invited to participate in the Regional Recovery Task Force, or to participate in a Working Group specifically targeted to the provision of services to access and functional needs populations.

6.7 Programs to Support Long-Term Community Recovery

Programs that can provide support to long-term community recovery operations, including community and housing redevelopment following a disaster, include:

• **CDBG for Disaster Recovery Assistance**. While FEMA provides for shortterm disaster relief, the use of CDBG through HUD is better suited to meet long-term community recovery needs. HUD regularly provides funding to States through the CDBG Program for affordable housing, economic revitalization, public services, and infrastructure restoration programs. Congress may appropriate emergency supplemental funding for the CDBG program as disaster recovery grants to rebuild the affected areas. Alternatively, communities may elect to reprogram previously awarded grants and use their CDBG funds for emergency short-term assistance, assuming that such activities are not funded by FEMA or SBA. HUD may offer assistance by expediting grant awards for grantees, permitting grantees to change their program start dates or waiving certain program requirements to increase fund flexibility.

- **FEMA Public Assistance Funds**. FEMA uses these Public Assistance funds to provide assistance to State and local governments for a variety of eligible activities. One primary use for these funds is to rebuild damaged public infrastructure by removing debris, repairing roads, reconstructing government buildings, and restoring utilities. These grants help restore community services and infrastructure that are vital prerequisites for successful housing efforts.
- FEMA Community Disaster Loan Program. FEMA provides loans to local governments to provide funds for areas that have suffered a substantial loss of revenue after a disaster. In order to qualify for these funds, jurisdictions must demonstrate that the funds are required to perform essential government functions. Loans will not exceed 25 percent of the local government annual operating budget, up to \$5 million.
- Hazard Mitigation Grant Program (HMGP). The HMGP takes a percentage of • Federal money spent on recovering from a disaster and uses it for projects that reduce future risk. Grants are provided to local and State governments, which implement long-term hazard mitigation measures that reduce the loss of life and property from natural disasters. By law, FEMA can contribute 15 or 20 percent of a disaster's cost to this grant program. How the money is used is determined by the State, which prioritizes mitigation programs with input from local communities. Local and State hazard mitigation plans must be submitted and approved by FEMA before applicants can receive a grant or sub-grant. These plans, which are based on public participation, must identify the hazards and risks to the built environment, which serve as the justification for the specific mitigation projects funded by the program. The plans must also contain a work plan outlining the responsible organization(s) and staff that will carry out the HMGP projects. Planning in the pre-disaster period provides the framework on which post-disaster actions are carried out, resulting in faster delivery of assistance. In the case that HMGP funds are used for a mitigation project, the application is prepared by local officials and not by the individual homeowner. FEMA reviews all applications to ensure that they follow the program rules, are environmentally sound and are a cost-effective use of funds.

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7 Response/Recovery Timeline

The comprehensive timeline that shows the phases, the tasks to be completed, the objectives they support, and the entities involved are found in **Table 7-1**.

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ne Frame	Line	Task/Action Being Taken or Event Being Observed	Objective	Coordinating Entity	Supporting Entity	Details/Comments
E+72h to E+14d	1	Begin accepting tele-registration for Federal assistance via phone and registration via Internet to determine eligibility and initiate provision of Federal assistance to individuals	Initiate registration for individual housing assistance	FEMA	SBA	N/A
	2	Bring on additional personnel to staff multiple call centers	Initiate registration for individual housing assistance	FEMA	N/A	Coordinate with 211 system
	3	Establish LACs, which will be staffed and supported by local, State, and Federal agency staff as well as NGO staff	Establish LACs/DRCs	Operational Areas and local governments	Cal EMA, CDSS and other State agencies, CBOs, VOAD	N/A
	4	Advertise FEMA assistance number and information to families at shelters and the LAC/DRC	Initiate registration for individual housing assistance	FEMA	CDSS, VOAD, Cal EMA JIC	N/A
	5	Establish FEMA Internet registration capabilities at the LAC/DRC	Initiate registration for individual housing assistance	FEMA	Local governments	N/A
	6	Identify potential locations of LACs and the specific local government agencies and NGOs to be represented in the LAC	Establish LACs/DRCs	Operational Areas and local governments, Cal EMA	CBOs, VOAD	Include reps for organizations serving populations with access and functional needs
	7	Co-locate or coordinate State assistance program services with FEMA DRCs	Establish LACs/DRCs	Cal EMA	FEMA	N/A
	8	Connect families to local, State, Federal, and nonprofit services and programs	Establish LACs/DRCs	Cal EMA	N/A	N/A
	9	Initiate eligibility analysis for State Supplemental Grant Program	Initiate registration for individual housing assistance	CDSS	Other state assistance agencies	N/A
	10	Identify the State departments and regionally-based NGOs to help families identify, locate, and connect to local, State, and Federal programs; identify rental housing; and access financial assistance	Initiate registration for individual housing assistance	Operational Areas and local governments, SCHTF	FEMA, VOAD	Ensure assistance available for people with access and functional needs
	11	Begin damage assessments of places and facilities that might be used for interim housing as soon as initial damage assessments are done for shelter facility suitability and priority roadways	Collect data from damage assessments and building inspections of housing	Cal EMA SAP	FEMA Individual Assistance Program, USACE, ESF #6, Operational Areas and local governments	N/A
	12	Begin more formal inspections of shelter facilities, because the initial damage assessments and evaluations for immediate and most urgent shelter set-up are likely to have been incomplete	Collect data from damage assessments and building inspections of housing	Cal EMA SAP	USACE, Operational Areas and local governments	N/A
	13	Create local and centralized databases of results of damage assessments and formal inspections of shelters and interim housing options	Collect data from damage assessments and building inspections of housing	Cal EMA SAP	Operational Areas and local governments	N/A
	14	Deliver compiled data to ARC, the EOCs, REOC and SOC, the LACs, the DRC, and any MACS group established with mass care and sheltering as part of its duties	Collect data from damage assessments and building inspections of housing	Cal EMA	CDSS, ARC, Operational Areas and local governments, ESF #6	The MAC groups, LAC, and DRC "audiences" for this information would be initiated as described in other objectives in this table
	15	Initiate an SCHTF that includes local, regional, State, and Federal entities with expertise and resources	Convene an SCHTF to develop housing plan and coordinate interim housing strategy	Governor's Office, Cal EMA	CDSS	SCHTF should incorporate the authorities, roles, responsibilities, and goals/objectives of its member
	16	Select an SCHTF Lead	Convene an SCHTF to develop housing plan and coordinate interim housing strategy	Governor's Office, Cal EMA	N/A	This individual may be pre-identified
	17	Assign SCHTF roles and responsibilities	Convene an SCHTF to develop housing plan and coordinate interim housing strategy	SCHTF Chair, Cal EMA	FEMA, Operational Areas and local governments	General roles and responsibilities can be pre- determined.
	18	Activate Task Force	Convene an SCHTF to develop housing plan and coordinate interim housing strategy	SCHTF Chair, Cal EMA	FEMA, Operational Areas and local governments	Representatives from each jurisdiction and support staff may be pre-determined
	19	Convene meetings at JFO/SOC or via teleconference	Convene an SCHTF to develop housing plan and coordinate interim housing strategy	SCHTF Chair, Cal EMA	FEMA, Operational Areas and local governments	N/A
	20	Establish communication/coordination between the JFO/SOC Planning and Operations Sections and affected jurisdictions	Convene an SCHTF to develop housing plan and coordinate interim housing strategy	Cal EMA	N/A	N/A
	21	Develop housing plan for affected areas based on input from participants	Initiate development of an interim housing strategy that describes interim housing options	SCHTF	FEMA	See other tasks under this objective

Fime Frame	Line	Task/Action Being Taken or Event Being Observed	Objective	Coordinating Entity	Supporting Entity	Details/Comments
E+72h to E+14d (cont.)	22	Survey shelter populations in each county to estimate housing need	Assess interim housing requirements, including accessibility for various access and functional needs populations	Operational Areas and local governments	CDSS, Member agencies of the SCHTF	N/A
	23	Use other information, including safety assessments, GIS, FEMA registration information, and FEMA scoping tool to refine estimate of housing need	Assess interim housing requirements, including accessibility for various access and functional needs populations	SCHTF, Operational Areas and local governments	Member agencies of the SCHTF	N/A
	24	Develop local, County, and regional counts of the demand and need types	Assess interim housing requirements, including accessibility for various access and functional needs populations	Operational Areas and local governments	SCHTF	N/A
	25	Incorporate housing need estimates into Housing Plan	Assess interim housing requirements, including accessibility for various access and functional needs populations	SCHTF	N/A	N/A
	26	Identify locations/facilities within each jurisdiction that would accommodate community housing sites, private sites, commercial sites and/or other housing alternatives.	Initiate development of an interim housing strategy that describes interim housing options	Operational Areas and local governments	SCHTF	N/A
	27	Consolidate housing needs information to present a common picture of interim housing demand	Initiate development of an interim housing strategy that describes interim housing options	SCHTF, Operational Areas and local governments	FEMA	N/A
	28	Identify and prioritize housing alternatives based on input from Operational Areas and local governments	Initiate development of an interim housing strategy that describes interim housing options	SCHTF	Operational Areas and local governments, FEMA	This will be based on local government and other stakeholder input or decisions
	29	Governor or designee signs off on plan, FCO signs off on plan, desired assistance requested from Federal Government	Initiate development of an interim housing strategy that describes interim housing options	Governor's Office, SCHTF	FEMA	Plan will be submitted to FEMA, which will provide assistance in accordance with plan
E+14d to E+60d	30	Continue to establish or activate vendor contracts as needed	Continue to integrate appropriate private-sector resources	CDSS	DGS	N/A
	31	Enhance the integration of private-sector resources into interim housing by providing information about housing locations, supplies, equipment needed, and other important information to relevant private-sector companies	Continue to integrate appropriate private-sector resources	Cal EMA	SCHTF	N/A
	32	Ensure rapid processing of contracts, invoices, and payments to encourage the full cooperation of private-sector companies	Continue to integrate appropriate private-sector resources	DGS	CDSS	N/A
	33	Monitor flows out of other shelter options and into the interim housing facilities as interim housing is established	Maintain ongoing situational awareness of shelter activities	CDSS	Members of the SCHTF	N/A
	34	Monitor shelter inspections and the progress of damage assessments of possible interim housing sites or facilities	Maintain ongoing situational awareness of shelter activities	Building and Construction Branch	CDSS	N/A
	35	Regularly update all public information announcements with appropriate and useful changes	Maintain ongoing situational awareness of shelter activities	CDSS	Cal EMA JIC	N/A
	36	Create a list of shelters ready to be closed and the steps that would need to be taken to close them	Identify opportunities to close shelters and return residents to homes or available housing	Local governments and CDSS	ARC	N/A
	37	Restore utility systems	Identify opportunities to close shelters and return residents to homes or available housing	CUEA	N/A	N/A
	38	Repair or restore facilities suitable for interim housing sites	Identify opportunities to close shelters and return residents to homes or available housing	Local governments	Operational Areas, SCHTF	N/A
	39	Work with private sector to restore and repair primary residences, to the extent possible	Identify opportunities to close shelters and return residents to homes or available housing	Local governments	Operational Areas, SCHTF	Private-sector firms must be involved but are not a "supporting" entity
	40	Convert other facility types (e.g., warehouses) into interim housing	Identify opportunities to close shelters and return residents to homes or available housing	Local governments	Operational Areas, SCHTF	N/A
	41	Identify unused or underutilized public housing, hotels/motels, or other private-sector options that could be used as interim housing	Identify opportunities to close shelters and return residents to homes or available housing	Operational Areas and local governments	SCHTF	N/A
	42	Compile all of these options into a roster of soon-to-be-available interim housing or permanent housing opportunities	Identify opportunities to close shelters and return residents to homes or available housing	Cal EMA	SCHTF	N/A
	43	Continue to provide financial assistance	Implement interim housing programs and strategies	FEMA	Cal EMA, CDSS	Including IHP for house, transportation, SBA loans etc.

Time Frame	Line	Task/Action Being Taken or Event Being Observed	Objective	Coordinating Entity	Supporting Entity	Details/Comments
E+14d to E+60d (cont.)	44	Identify and provide existing housing resources, which include the steps in lines 45 to 48 below	Implement interim housing programs and strategies	(See lines 45-48)	SCHTF, CDSS, Cal EMA- Recovery	Including apartments, hotels, motels
	45	Identify available units	Implement interim housing programs and strategies	Operational Areas and local governments, SCHTF	Cal EMA-Recovery, CDSS	N/A
	46	Communicate availability through LACs and shelters	Implement interim housing programs and strategies	Operational Areas and local governments, CDSS	SCHTF	N/A
	47	Provide financial assistance; directly lease units	Implement interim housing programs and strategies	FEMA, Operational Areas and local governments, CDSS	SCHTF, CDSS	N/A
	48	Coordinate transportation to units, when needed	Implement interim housing programs and strategies	FEMA, Operational Areas and local governments	SCHTF	N/A
	49	Provide temporary housing units on private sites, which includes the steps in the lines below	Implement interim housing programs and strategies	FEMA	Cal EMA, local government, SCHTF	N/A
	50	Identify types of housing units to be provided in the housing plan	Implement interim housing programs and strategies	SCHTF	N/A	N/A
	51	Obtain necessary approvals and permits for movement and installation of units	Implement interim housing programs and strategies	Local governments	N/A	N/A
	52	Approve zoning modifications and facilitate permitting for units and unit types	Implement interim housing programs and strategies	Local governments	N/A	Amending zoning and permitting requirements may create incentives for reinvestment and speed recovery
	53	Determine eligibility through pre-placement interview process	Implement interim housing programs and strategies	FEMA	N/A	N/A
	54	Inspect private-site location, prepare site, and install temporary housing units	Implement interim housing programs and strategies	FEMA	N/A	N/A
	55	Identify families to be placed in housing units	Implement interim housing programs and strategies	FEMA, SCHTF	N/A	N/A
	56	Develop community sites, which includes the steps in the lines below	Implement interim housing programs and strategies	See lines 56-61	N/A	Local governments will identify these sites to FEMA through SCHTF, GSA acquires sites, and FEMA provides funding
	57	Identify site locations	Implement interim housing programs and strategies	Local governments, SCHTF	N/A	N/A
	58	Acquire non-public sites	Implement interim housing programs and strategies	FEMA, GSA	N/A	N/A
	59	Design site, including provisions for infrastructure and unit installation	Implement interim housing programs and strategies	FEMA, USACE	N/A	N/A
	60	Provide security and other services	Implement interim housing programs and strategies	FEMA, local governments	Law Enforcement Mutual Aid	FEMA and contractors will provide security at community group sites. FEMA will consult with loca governments in establishing security.
	61	Identify families to place in community sites	Implement interim housing programs and strategies	SCHTF, FEMA	N/A	N/A
	62	Provide apartments, hotels/motels outside the region, which includes the steps in the lines below.	Implement interim housing programs and strategies	FEMA, host states or communities	SCHTF	N/A
	63	Identify potential host communities	Implement interim housing programs and strategies	FEMA, host states or communities	SCHTF	N/A
	64	Communicate availability of housing outside the region to residents at LAC and shelters	Implement interim housing programs and strategies	FEMA, host states or communities	SCHTF	N/A
	65	Provide financial assistance; directly lease units	Implement interim housing programs and strategies	FEMA, host states or communities	SCHTF	N/A
	66	Coordinate transportation when needed	Implement interim housing programs and strategies	FEMA, host states or communities	SCHTF	N/A
	67	Establish reception centers in selected communities	Implement interim housing programs and strategies	FEMA, host states or communities	SCHTF	N/A

ne Frame	Line	Task/Action Being Taken or Event Being Observed	Objective	Coordinating Entity	Supporting Entity	Details/Comments
E+14d to E+60d (cont.)	68	Conclude all damage assessments and safety inspections and create local and centralized databases of results	Evaluate safety assessments and building inspections of homes	Local governments, Cal EMA	SCHTF, FEMA	N/A
	69	Distribute compiled data to ARC, the EOCs, the Cal EMA REOC and SOC, the LACs, the DRC, any MACS groups established with mass care and sheltering as part of their duties, and the SCHTF	Evaluate safety assessments and building inspections of homes	CDSS	Planning Section	The MACS groups, LAC, and DRC "audiences" for this information would be initiated as described in other objectives in this table
	70	Use those results to identify lists of homes, apartments, etc. that can be returned to their normal use	Evaluate safety assessments and building inspections of homes	Local governments, SCHTF	N/A	N/A
	71	Inform the owners and residents of those homes that they may be re-entered, as well as occupied, if desired, though electricity and water services are not necessarily available	Evaluate safety assessments and building inspections of homes	Local governments	Operational Areas	N/A
	72	Use inspection results to provide county-specific and regionwide inventory of possible interim housing sites	Evaluate safety assessments and building inspections of homes	SAP	CDSS, Operational Areas and local governments	N/A
	73	Communicate those results to EOCs, the REOC and SOC, MACS groups, and the SCHTF to that they can all begin using it in their planning	Evaluate safety assessments and building inspections of homes	CDSS	N/A	N/A
	74	Implement Rental Repair Program	Facilitate restoration of moderately damaged dwellings	FEMA	N/A	Consider prioritizing structures or facilities that can easily be repaired/restored and made available
	75	Contract with private sector to provide for repair of identified units/structures	Facilitate restoration of moderately damaged dwellings	FEMA	SCHTF	N/A
	76	Transition families from other interim housing options into repaired units	Facilitate restoration of moderately damaged dwellings	SCHTF, Operational Areas and local governments	FEMA, CDSS	N/A
	77	Assign staff with the appropriate communications skills to conduct outreach to individuals, groups, or communities that have not availed themselves of either available shelter or transportation out of the region	Educate and support occupants of nontraditional shelters to encourage them to return to their habitable homes or move to interim housing	Operational Areas and local governments	Member agencies of the SCHTF, CDSS	Be clear about the limited ability of the County, region, and State government to continue providing support services and encourage them to seek transport out of the region or more centralized care within it. Address any concerns about legalities, especially immigration and naturalization status, making it clear that those topics are extremely low priorities for responding to catastrophic events.
	78	Prepare and distribute materials explaining the available resources, the locations where and schedules at which they are distributed, any registration or informational requirements, and any relevant plans for increasing, decreasing, or relocating these support services	Educate and support occupants of nontraditional shelters to encourage them to return to their habitable homes or move to interim housing	Operational Areas and local governments, Cal EMA Recovery	FEMA, CDSS, member agencies of the SCHTF	Be clear about the limited ability of the County, region, and State government to continue providin support services and encourage them to seek transport out of the region or more centralized care within it. Address any concerns about legalities, especially immigration and naturalization status, making it clear that those topics are extremely low priorities for responding to catastrophic events.
	79	Establish LACs for communications and support services (not limited to supply distribution) near spontaneous-shelter or self-shelter settlements	Educate and support occupants of nontraditional shelters to encourage them to return to their habitable homes or move to interim housing	Local Government	CalEMA, FEMA and other State and Federal Agencies	Include information about these assistance centers in all public information and other announcements
	80	Ensure Transportation Branch to ensure access to these LACs	Educate and support occupants of nontraditional shelters to encourage them to return to their habitable homes or move to interim housing	Transportation Branch	N/A	N/A
	81	Continue to coordinate with FEMA, state agencies, NGOs, CBOs, FBOs, and other entities to improve and manage the resupply of points of distribution, mass feeding sites, medical facilities, and other non-shelter-based support services; this will reduce gaps in service provision and duplication of services	Educate and support occupants of nontraditional shelters to encourage them to return to their habitable homes or move to interim housing	CDSS	Operational Areas and local governments	This task will require use of all information collecte under the "monitoring" tasks described above and coordination with the Debris Clearance and Transportation Branches to improve and increase the available transportation network, road access, and other vital infrastructure

ne Frame	Line	Task/Action Being Taken or Event Being Observed	Objective	Coordinating Entity	Supporting Entity	Details/Comments
-14d to E+60d ont.)	82	Compile lists of spontaneous shelters and areas with high densities of self-sheltering, and other non-shelter-seeking populations	Educate and support occupants of nontraditional shelters to encourage them to return to their habitable homes or move to interim housing	Operational Areas and local governments, CDSS	N/A	N/A
	83	Use lists to evaluate the unmet needs for basic support services and to plan for future efforts to educate those individuals about support services	Educate and support occupants of nontraditional shelters to encourage them to return to their habitable homes or move to interim housing	Operational Areas and local governments, CDSS	VOAD	N/A
	84	Provide assistance to willing individuals as they seek transport out of the affected area either into a more suitable shelter or directly into interim housing, as it becomes available	Educate and support occupants of nontraditional shelters to encourage them to return to their habitable homes or move to interim housing	Operational Areas and local governments, Cal EMA	CDSS, ARC, VOAD	N/A
	85	Match shelter residents with longer-term housing opportunities	Transition families from short-term solutions (e.g., hotels) to longer-term solutions	Operational Areas and local governments, Cal EMA	CDSS, SCHTF	Use the databases on shelter residents, inspected homes marked as safe, and identified and implemented interim housing locations
	86	Implement fully the aforementioned interim housing alternatives, including the resources and recommendation of the SCHTF	Transition families from short-term solutions (e.g., hotels) to longer-term solutions	Local governments	Cal EMA Recovery, SCHTF	N/A
	87	Identify rental, permanent, or temporary housing units	Transition families from short-term solutions (e.g., hotels) to longer-term solutions	SCHTF	CDSS	N/A
	88	Provide financial assistance, as required, or temporary housing units	Transition families from short-term solutions (e.g., hotels) to longer-term solutions	FEMA	CDSS	N/A
	89	Provide transportation to temporary housing units as needed	Transition families from short-term solutions (e.g., hotels) to longer-term solutions	FEMA	Cal EMA	N/A
	90	Monitor the transport and transition of individuals and coordinate with support service agencies or NGOs	Transition families from short-term solutions (e.g., hotels) to longer-term solutions	Operational Areas and local governments, CDSS	VOAD, ARC	N/A
	91	Provide advance notification of shelter closure or relocation plans, in combination with interim housing information, so shelter residents can begin to plan their transitions	Transition families from short-term solutions (e.g., hotels) to longer-term solutions	JIC	CDSS	N/A
	92	Provide information about various forms of Federal and State support for interim housing (e.g., FEMA's Individual Assistance Program)	Transition families from short-term solutions (e.g., hotels) to longer-term solutions	JIC	Cal EMA Recovery, CDSS	N/A
	93	Coordinate with FEMA and nonprofit organizations to provide outreach and caseworkers to assist with registration for recovery assistance programs	Transition families from short-term solutions (e.g., hotels) to longer-term solutions	FEMA	CalEMA, CDSS, VOAD, FEMA	N/A
	94	Coordinate direct assistance appropriate for and needed by the members of the general population and individuals with access and functional needs	Transition families from short-term solutions (e.g., hotels) to longer-term solutions	Operational Areas and local governments, CDSS	VOAD, FEMA	N/A
	95	Appoint Regional Recovery Task Force Chair	Convene a long-term recovery task force to coordinate regional recovery	Governor's Office	N/A	N/A
	96	Convene Regional Recovery Task Force to develop a regional recovery plan and coordinate long-term recovery efforts	Convene a long-term recovery task force to coordinate regional recovery	Regional Recovery Task Force Chair, Cal EMA	Joint Federal-State Recovery functions, Operational Areas and local governments	N/A
	97	Establish Regional Working Groups for housing, transportation, and economic development to facilitate recovery in these areas	Convene a long-term recovery task force to coordinate regional recovery	Regional Recovery Task Force	Cal EMA	N/A
	98	Establish recovery task forces/committees in each affected Operational Area to coordinate long-term recovery efforts	Convene a long-term recovery task force to coordinate regional recovery	Operational Areas and local governments	N/A	Develop a regional recovery plan (in E+60 days to 1 year)
	99	Begin to collect data and conduct initial assessments to support long-term recovery	Convene a long-term recovery task force to coordinate regional recovery	ESF #14, EF 14 and Recovery Task Force	N/A	N/A
	100	Begin process of determining which jurisdictions will require ESF #14 assistance	Convene a long-term recovery task force to coordinate regional recovery	Joint Federal-State Recovery functions	N/A	N/A

Time Frame	Line	Task/Action Being Taken or Event Being Observed	Objective	Coordinating Entity	Supporting Entity	Details/Comments
E+14d to E+60d (cont.)	101	Identify populations for restricted use housing	Identify restricted use housing for populations necessary to remain in the region	Operational Areas and local governments	N/A	May include first responders and other critical government workers, recovery contractors, and/or members of critical industries
	102	Identify locations and housing availability	Identify restricted use housing for populations necessary to remain in the region	Operational Areas and local governments, SCHTF	N/A	N/A
	103	Communicate populations and housing locations to FEMA through SCHTF	Identify restricted use housing for populations necessary to remain in the region	SCHTF, Operational Areas and local governments	N/A	Include in Housing Plan
	104	Provide restricted use housing	Identify restricted use housing for populations necessary to remain in the region	FEMA	SCHTF, local governments	N/A
E+60d to E+1 year	105	Continue the interim housing solutions as described in the earlier response phases	Continue to implement interim housing programs	FEMA, HUD	VOAD, CDSS, SCHTF, Cal EMA-Recovery	N/A
	106	Continue using private-sector contracts, vendors, and support as long as effective; meet the various CMIST access and functional needs; provide security, site management, and child care; and include animal shelters, support, and relocation as necessary	Continue to implement interim housing programs	Operational Areas and local governments	CRA, VOAD	N/A
	107	Transition families from transitional shelter to longer-term interim housing or permanent housing	Continue to implement interim housing programs	FEMA, SCHTF, Operational Areas and local governments	VOAD, CDSS	N/A
	108	Recertify residents in government-funded interim housing for continued eligibility and need	Continue to implement interim housing programs	FEMA	VOAD, CDSS	N/A
	109	De-activate units when assistance is complete	Continue to implement interim housing programs	FEMA	N/A	N/A
	110	Create list of needed "wraparound" support services, including financial, transit, grocery, child care, schools, home repair, furnishings, and housing options for displaced residents	Provide wraparound services to support those in interim housing	Operational Areas and local governments	SCHTF	The list should include the additional services required by individuals with access and functional needs
	111	Identify whether these services can be provided by the private sector in an efficient and equitable manner or whether government provision is likely to be required for some time	Provide wraparound services to support those in interim housing	Operational Areas and local governments	CRA, VOAD	N/A
	112	Identify the appropriate agency or agencies for cases where government must continue providing — or assisting the private sector in providing — these services	Provide wraparound services to support those in interim housing	Operational Areas and local governments	SCHTF	N/A
	113	Identify the NGOs, CBOs, FBOs, or other entities that can provide the services	Provide wraparound services to support those in interim housing	Operational Areas and local governments	VOAD	N/A
	114	Include the relevant companies in coordinating access route restoration, set-up area designation, and other forms of assistance to speed the provision, where the private sector can do so effectively	Provide wraparound services to support those in interim housing	Recovery Task Force	CRA	N/A
	115	Include information on "wraparound" services in all public information releases and updates, and to all residents of formal shelters, occupants of spontaneous shelters, and those who are self-sheltering	Provide wraparound services to support those in interim housing	JIC	CDSS	N/A
	116	Provide case management services through interagency agreement with FEMA	Provide wraparound services to support those in interim housing	HHS, Cal EMA, local housing authorities	FEMA, CDSS, SCHTF	Case management services may be provided through HHS or through local public housing authorities
	117	Provide case managers to the region and DRCs/LACs	Provide wraparound services to support those in interim housing	CDSS	N/A	N/A
	118	Facilitate case management services	Provide wraparound services to support those in interim housing	Operational Areas and local governments, HHS or HUD	Including access to Federal, State, local, and nongovernmental resources	N/A
	119	Identify State entity or appoint an entity to provide case management services, if applicable	Provide wraparound services to support those in interim housing	Cal EMA	CDSS	N/A

Time Frame	Line	Task/Action Being Taken or Event Being Observed	Objective	Coordinating Entity	Supporting Entity	Details/Comments
E+60d to E+1 year (cont.)	120	Transition case management services to State, or State-appointed entity	Provide wraparound services to support those in interim housing	HHS, FEMA, CDSS	N/A	N/A
	121	Provide funding to State for continued case management services	Provide wraparound services to support those in interim housing	FEMA	CDSS	N/A
	122	Continue the steps from earlier response phases that included listing and prioritizing damaged housing for repair	Restore damaged housing and develop replacement housing	SCHTF	Local governments	N/A
	123	Provide SBA loans to homeowners	Restore damaged housing and develop replacement housing	SBA	FEMA	N/A
	124	Use Federal programs to repair housing, including workforce housing, as necessary	Restore damaged housing and develop replacement housing	SCHTF, local governments	HUD	CDBG funding may be available
	125	Use Federal programs, such as Public Assistance, to finance the repair and restoration of infrastructure	Restore damaged housing and develop replacement housing	Counties, local governments, HUD, FEMA	SCHTF	Programs include CDBG funding
	126	Continue the steps from earlier response phases that included identifying suitable locations for replacement housing	Restore damaged housing and develop replacement housing	Local governments	SCHTF	N/A
	127	Facilitate private investment in developing replacement housing	Restore damaged housing and develop replacement housing	Local governments	SCHTF, HUD	N/A
	128	Expedite permitting and licensing of contractors to facilitate and promote rebuilding	Restore damaged housing and develop replacement housing	Local governments	SCHTF	N/A
	129	Amend or alter community-specific zoning restrictions or codes to provide for expedited redevelopment	Restore damaged housing and develop replacement housing	Local governments	Recovery Task Force, SCHTF	N/A
	130	Develop standard zoning waiver forms that will be provided to disaster victims to allow them to reconstruct or rehabilitate their homes	Restore damaged housing and develop replacement housing	Local governments	Recovery Task Force, SCHTF	N/A
	131	Begin preliminary recovery planning	Develop and implement long-term recovery plans	Local Governments	N/A	This process will begin in JFO within first 60 days
	132	Request FEMA ESF #14 assistance to develop long-term-recovery plans, as needed	Develop and implement long-term recovery plans	State of California	Local governments	ESF #14 will support County planning efforts, if requested
	133	Establish long-term recovery vision for the region	Develop and implement long-term recovery plans	Regional Recovery Task Force 4	ESF #14, local governments	N/A
	134	Establish local recovery planning teams, including representative for housing, economic recovery, transportation and other issues.	Develop and implement long-term recovery plans	Local governments	ESF #14	Includes cross-section of government, private, an nonprofit stakeholders
	135	Develop regional recovery plan, in coordination with ESF #14 and local recovery planning teams	Develop and implement long-term recovery plans	Regional Recovery Task Force	Local governments	N/A
	136	Organize public meetings to obtain the input of residents	Develop and implement long-term recovery plans	Local governments	ESF #14, Regional Recovery Task Force	N/A
	137	Conduct inventory and analysis of long-term recovery needs	Develop and implement long-term recovery plans	Local governments	FEMA ESF #14	FEMA ESF #14 has tools and technical experts to assist with this process
	138	Identify and prioritize recovery projects and programs	Develop and implement long-term recovery plans	Local governments	FEMA ESF #14, Regional Recovery Task Force	N/A
	139	Identify sources of recovery funding and technical assistance	Develop and implement long-term recovery plans	Local governments	FEMA ESF #14, Regional Recovery Task Force	N/A
	140	Develop strategies to incorporate existing redevelopment plans into long-term recovery, including a consideration of opportunities to rebuild in ways that are smarter and better	Develop and implement long-term recovery plans	Local governments	FEMA ESF #14, Regional Recovery Task Force	N/A
	141	Incorporate mitigation strategies into plans	Develop and implement long-term recovery plans	Local governments	ESF #14, Recovery Task Force	N/A
	142	Select strategies, tools, and recommendations for implementation	Develop and implement long-term recovery plans	Local governments	ESF #14, Recovery Task Force	N/A
	143	Coordinate local recovery efforts to further regional goals	Develop and implement long-term recovery plans	Regional Recovery Task Force	ESF #14	N/A
	144	Apply for and secure Public Assistance funding for infrastructure restoration	Identify and access sources of funding for long-term recovery	Cal EMA	Local governments	N/A

Time Frame	Line	Task/Action Being Taken or Event Being Observed	Objective	Coordinating Entity	Supporting Entity	Details/Comments
E+60d to E+1 year (cont.)	145	Identify and prioritize Hazard Mitigation Grant Program projects	Identify and access sources of funding for long-term recovery	Cal EMA	Local governments	Cal EMA is responsible for evaluating and prioritizing hazard mitigation projects for funding through HMGP.
	146	Apply for Community Disaster Loans, access and/or obtain lines of credit, and/or work with State to establish revolving fund to meet immediate funding needs	Identify and access sources of funding for long-term recovery	Local governments	Regional Recovery Task Force	N/A
	147	Identify and seek Federal and State grants for private-sector companies	Identify and access sources of funding for long-term recovery	Local governments	Regional Recovery Task Force, ESF #14	N/A
	148	Seek tax incentives for public, private, and joint-venture investments in long-term recovery and reconstruction, and other opportunities	Identify and access sources of funding for long-term recovery	Local governments	Regional Recovery Task Force, FEMA ESF #14	N/A
	149	Publicize all of these opportunities to industry groups, private citizens, universities, and others	Identify and access sources of funding for long-term recovery	Cal EMA, JIC	Regional Recovery Task Force, local governments	N/A
	150	Maintain contact with displaced residents who are receiving State Supplemental Grant Program funds and encourage/facilitate their return	Facilitate the return of displaced families to local communities	CDSS	ARC, FEMA, HHS	Federal caseworkers from HHS/HUD may facilitate this process.
	151	Prioritize repair of homes, infrastructure, and utilities in certain communities and repopulate accordingly	Facilitate the return of displaced families to local communities	SCHTF	Local governments	N/A
	152	Implement policies to retain employment and other services so that residents have an incentive to return	Facilitate the return of displaced families to local communities	Local governments	Regional Recovery Task Force	See actions described under "Develop Long-term Recovery Plan" and "Identify sources of funding."
	153	Coordinate with the Transportation Branch to provide transportation to restored, repaired, or newly created permanent housing	Facilitate the return of displaced families to local communities	CDSS	Transportation Branch, ARC	N/A
	154	Update all relevant databases and information systems with returned individuals so that these systems can be properly closed out	Facilitate the return of displaced families to local communities	CDSS	ARC, Operational Areas, and local governments	N/A
Source: URS analysis (2009) ARC = American Red Cross Cal EMA = California Emergency Management Agency CBO = Community-based organization CDBG = Community Development Block Grant CDSS = California Department of Social Services CMIST = Communication, Medical Care, (Maintaining) Independence, Supervision, Transportation CRA = California Resiliency Alliance CUEA = California Utilities Emergency Association DGS = (California) Department of General Services DRC = Disaster Recovery Center E = Event		s gency Management Agency rganization poment Block Grant ent of Social Services <i>M</i> edical Care, (Maintaining) Independence, Supervision, Transportation / Alliance Emergency Association eent of General Services	EOC = Emergency Operations Center ESF = Emergency Support Function FBO = Faith-based organization FEMA = Federal Emergency Management Agency GSA = (U.S.) General Services Administration HHS = Health and Human Services HMGP = Hazard Mitigation Grant Program HUD = Housing and Urban Development IHP = Individuals and Households Program JFO = Joint Field Office JIC = Joint Field Office JIC = Joint Information Center LAC = Local Assistance Center MACS = Multi-Agency Coordination System	N/A = Not applicable NGO = Nongovernmental organization REOC = Regional Emergency Operations Center SAP = California Safety Assessment Program SBA = Small Business Administration SCHTF = State-Coordinated Housing Task Force SOC = State Operations Center USACE = U.S. Army Corps of Engineers VOAD = Voluntary Organizations Active in Disaster		

8 Plan Maintenance

This section describes the process for maintaining this Plan. The discussion identifies who will receive and review the Plan, how updates are to be integrated into the Plan, how the Plan will be tested, what type of training will be developed to learn the Plan, and how after-action review will be conducted after the Plan has been implemented, whether as part of an exercise or in response to a real emergency.

8.1 Plan Distribution

Once completed and approved, the Regional Catastrophic Earthquake Interim Housing Plan will be distributed to the Mass Care and Sheltering Steering Committee and UASI Management Team. Electronic versions of the Final Plan will also be distributed to each of the 12 counties and core cities in the RCPGP area and to the office of the ARC state lead, and Cal EMA.

8.2 Plan Updates

Cal EMA is responsible for the maintenance, revision, and distribution of the Regional Catastrophic Earthquake Interim Housing Plan. In coordination with the Mutual Aid Regional Advisory Committee and with the CDSS, Cal EMA will annually assess the need for revisions to the RECP and subsidiary plans based on the following considerations:

- Changes to State or Federal regulations, requirements, or organization.
- The need for additional subsidiary plans to develop regional response capabilities or eliminate gaps in capabilities, as suggested by Mutual Aid Regional Advisory Committee members and coordinated with the Bay Area UASI Management Team.
- Implementation of tools or procedures that alter or improve on Plan components.
- Cal EMA will maintain a record of amendments and revisions, as well as executable versions of all documents, and will be responsible for distributing the Plan to all applicable agencies.

8.3 Plan Testing, Training, and Exercises

Exercising the Plan and evaluating its effectiveness involves using training, exercises, and evaluation of actual disasters to determine whether goals, objectives, decision, actions, and timing outlined in the Plan led to a successful response.

Exercises are the best method of evaluating the effectiveness of a plan and are also a valuable tool in training emergency responders and government officials. Exercises allow emergency responders and government officials to become familiar with the procedures, facilities, and systems that they will actually use or manage in emergency situations. Cal EMA is responsible for planning and conducting emergency exercises for the region. Exercises will be conducted on a regular basis to maintain readiness. Exercises should include as many Operational Areas, other regions, and State and Federal agencies as is practical.

8.4 After-Action Review

After every exercise or disaster, an After-Action Review/Improvement Plan (AAR/IP) should be completed. The AAR/IP has two components: an AAR, which captures observations and recommendations based on incident objectives as associated with the capabilities and tasks; and an IP, which identifies specific corrective actions, assigns them to responsible parties, and establishes targets for their completion. Cal EMA is the lead agency for the development of the AAR/IP and will convene participants to discuss action items and solicit recommendations for improvement.

Appendix A: Glossary This page intentionally left blank

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Appendix A: Glossary

A.1 Acronyr	ns and Abbreviations
AAR	After-Action Report
ABAG	Association of Bay Area Governments
AHPP	Alternative Housing Pilot Program
ARC	American Red Cross
BTHA	Business, Transportation, and Housing Agency
CAN	(Bay Area) Coordinated Assistance Network
Cal EMA	California Emergency Management Agency
СВО	Community-based organization (local non-governmental agency that typically provides daily social services to people in need)
CHHS	California Health and Human Services Agency (according to the SEP, the lead agency for mass care and shelter)
CDBG	Community Development Block Grant (administers community development funding)
CDSS	California Department of Social Services (a department of HHSA, leads the care and shelter branch of the REOC and SOC)
CMIST	Communication, Medical, (maintaining) Independence, Supervision, Transportation (five categories of access and functional needs)
CONOP	Concept of Operations
CONPLAN	San Francisco Bay Area Earthquake Readiness Response: Concept of Operations Plan (FEMA)
CRA	California Resiliency Alliance
CUEA	California Utilities Emergency Association
DDS	California Department of Developmental Services
DGS	California Department of General Services (maintains State facilities, and contracts with providers of resources)
DOC	Department Operations Center (located within a government department, the DOC coordinates information and the deployment of department resources)
DRC	Disaster Recovery Center (established by FEMA in the affected area; provides a single location for people to access various Federal assistance programs)
E	Event (occurrence of the scenario disaster)
EMAC	Emergency Management Assistance Compact (agreement between jurisdictions to support one another with emergency management expertise)

EOC	Emergency Operations Center (site where response functions are managed)
ESF	Emergency Support Function (function-specific annexes to the National Response Framework that describe the responsibility of the respective lead and support agencies)
FBO	faith-based organization (congregations, religious associations, both locally and nationally based)
FEMA	Federal Emergency Management Agency
GIS	geographic information system
GSA	U.S. General Services Administration
HAT	Housing Assessment Tool
HAZUS	Hazards U.S., modeling software used to project damage from a given event
HCD	California Department of Housing and Community Development
HHS	U.S. Department of Health and Human Services
HMGP	Hazard Mitigation Grant Program
HSIP	Homeland Security Infrastructure Program
HUD	U.S. Department of Housing and Urban Development (Federal agency provides affordable housing, administers the Disaster Housing Assistance Program)
ICS	Incident Command System
IHP	Individuals and Households Program (FEMA-managed disaster assistance for disaster victims)
IP	Improvement Plan
JFO	Joint Field Office (FEMA operations center to coordinate Federal response and recovery activities in the affected area)
JHSG	Joint Housing Solutions Group
JIC	Joint Information Center (managed by Cal EMA, the coordination center for local, regional, and State-level public information in disaster response and recovery)
LAC	Local Assistance Center (established by the State in an affected area, provides a single location for people to access various State and non-governmental assistance programs)
LTRC	Long-Term Recovery Committee
LTRO	Long-Term Recovery Organization
Μ	moment magnitude (a measure of energy released by an earthquake)

MACS	Multi-Agency Coordination System (describes groups that may be convened by the EOC to resolve specific issues in response operations; members consist of agencies with resources relevant to the issue)
MM	Modified Mercalli (a measure of earthquake intensity)
NGO	nongovernmental organization (a national or locally based nonprofit organization providing response or recovery resources for the region)
NIBS	National Institute of Building Sciences
NIMS	National Incident Management System (describes the organization and coordination processes of the levels of Federal government during management of disaster operations)
NRF	National Response Framework
NSS	National Shelter System (FEMA- and ARC-managed database of disaster shelters)
PDA	Preliminary Damage Assessment (damage is reviewed firsthand to support local disaster victims' application for financial assistance)
PGA	peak ground acceleration
PKEMRA	Post-Katrina Emergency Management Reform Act
Plan	Regional Catastrophic Earthquake Interim Housing Plan
POD	point of distribution
RCPGP	Regional Catastrophic Preparedness Grant Program (annual funding program that supports catastrophic planning in the San Francisco Bay Area)
RECP	Regional Emergency Coordination Plan (describes the coordination between levels of government in response to a regional event)
REOC	Regional Emergency Operations Center (operations center used by the State to coordinate response from within the affected region)
SAP	California Safety Assessment Program (provides teams of engineers to support counties and local government in the inspection of building damage)
SBA	Small Business Administration (provides Federal financial assistance to homeowners, renters, and businesses)
SCSA	State Consumer Services Agency (lead State agency for communication, construction, and engineering resources)
SEMS	Standardized Emergency Management System (describes the organization and coordination processes of the levels of California government during the management of disasters)

		State Emergency Plan (describes the organization and activities of the State and its agencies in response to an emergency)
;	SCHTF	State-coordinated Housing Task Force
	SOC	State Operations Center
;	SSGP	State Supplemental Grant Program
-	THU	Temporary Housing Unit (term for housing units supplied through FEMA)
-	TSA	Transitional Shelter Assistance (Federal financial support for hotel or motel lodging)
	UASI	Urban Area Security Initiative (federally funded program to develop plans and mitigation measures to prepare for regional disasters)
I	USACE	U.S. Army Corps of Engineers (inspection, construction, and installation of housing options)
I	U.S.C	U.S. Code
I	USDA	U.S. Department of Agriculture
,	VOAD	Voluntary Organizations Active in Disaster (coalition of nationally based non-governmental organizations that have disaster response as a mission)

A.2 Key Terms

- Access and functional needs. Access and functional needs populations are populations whose members may have additional needs before, during, and after the scenario event in specific functional areas. Access and functional needs populations include, but are not limited to, those who have needs associated with:
 - **Communication.** Individuals who have limitations that interfere with the receipt of and response to information will need that information provided in ways they can understand and use. They may not be able to hear verbal announcements, see directional signs, or understand how to get assistance due to hearing, vision, speech, cognitive, or intellectual limitations, and/or limited English proficiency.
 - Medical. Individuals who are not self-sufficient or who do not have adequate support from caregivers, family, or friends may need assistance with: managing unstable, terminal, or contagious conditions that require observation and ongoing treatment; managing intravenous therapy, tube feeding, or vital signs; receiving dialysis, oxygen, or suction administration; managing wounds; or operating power-dependent equipment to sustain life. These individuals require the support of trained medical professionals.

- (Maintaining) Independence. Individuals that require support to be independent in daily activities may lose this support during an emergency or a disaster. Such support may include consumable medical supplies (diapers, formula, bandages, and other supplies), durable medical equipment (wheelchairs, walkers, or scooters), service animals, or attendants or caregivers. Supplying needed support to these individuals will enable them to maintain their pre-disaster level of independence.
- Supervision. Individuals may lose the support of caregivers, family, or friends or may be unable to cope in a new environment (particularly if they have dementia, Alzheimer's, or psychiatric conditions, such as schizophrenia or intense anxiety). If young children are separated from their caregivers, they may be unable to identify themselves, and when in danger, they may lack the cognitive ability to assess the situation and react appropriately.
- Transportation. Individuals who cannot drive or who do not have a vehicle may require transportation support for successful evacuation. This support may include accessible vehicles (such as lift-equipped vehicles or those suitable for transporting individuals who use oxygen) or information about how and where to access mass transportation during an evacuation.
- **Bulk distribution.** Refers to the distribution of emergency goods (e.g., food, water, sanitation supplies, first-aid supplies) to individuals who shelter outside of government-supported shelters. These may include people who remain close to their damaged homes, as well as those who are in spontaneous shelters and may not be able to reach a general shelter.
- **Community-based organization (CBO)**. Nonprofit organization that operates within a single local community. CBO constitute a subset of the wider group of NGOs. They are often run by volunteers and are often self-funding. Some are formally incorporated with a written charters and boards of directors, while others are much smaller and are more informal.
- Emotional support animal. See service animal / support animal.
- **Evacuation point.** A location in a safe place where people are directed to gather after an event, in order to be transported to care and sheltering facilities or to a subsequent transportation hub.
- **Faith-based organization (FBO).** A form of NGO that is to a significant degree religious in nature, as opposed to being a commercial, governmental, or private, secular organization. The term most commonly refers to organizations associated with a major religion, such as Catholic Charities. FBOs have played major roles in delivering a variety of services to the public, such as caring for the infirm and elderly, delivering humanitarian aid, or responding to disasters. These may operate and be managed at local, national, or international levels.
- **HAZUS.** Hazards U.S, a loss-estimation software program developed by the National Institute of Building Sciences (NIBS) for FEMA.

- **Interim housing.** The National Disaster Housing Strategy defines interim housing as housing assistance between sheltering and the return of disaster victims to permanent housing. Generally, this period is from E to E+1 year (and up to 18 months after the event). In this Plan, it also includes the early steps in the transition to long-term recovery.
- **Mass care and sheltering.** As used in this Plan, refers to the provision of temporary shelter for people displaced from their residences and to the support that is needed for the transition of the residents into interim housing.
- **National Shelter System.** A national database of shelters managed by FEMA and ARC. All shelters listed for the 12 counties of the San Francisco Bay Area region have statements of understanding with ARC to make the sites available as shelters if they are needed after an event. All sites were inspected by ARC to ensure that they meet ARC standards for shelters. The database has information about each shelter, including the number of people it can support, and details about utilities, bathroom facilities, and other features related to shelter operations.
- Nongovernmental organization (NGO). A legally constituted organization that operates independently from any government, though funding often comes wholly or partly from governments. In those cases, NGOs maintain their nongovernmental status by excluding government representatives from membership in the organization. In many places, NGOs are called "civil society organizations" or referred to by other names. Locally based NGOs include community-based organizations (CBOs) and faith-based organizations (FBOs).
- **Pickup point**. A location in a safe place where people are directed to gather after an event, in order to be transported to care and sheltering facilities or to a subsequent transportation hub.
- **Primary shelter.** Given the limited capability to support all shelters listed in the NSS soon after an event, local governments and ARC designate a small group of shelters that they will initially support until more resources and personnel become available. Priority shelters are facilities that are expected to withstand major damage. They are located near expected population needs, and sufficient supplies and staff are available to support them.
- **Service animal / service animal.** The ADA defines a service animal as any guide dog, signal dog, or other animal individually trained to provide assistance to an individual with a disability. If they meet this definition, animals are considered service animals under the ADA regardless of whether they have been licensed or certified by a local or State government. In addition, State law defines emotional support animals as animals that provide assistance to a person with a psychiatric/emotional disability. Although not always as specifically trained as service animals, emotional support animals are still considered an essential aid to a person with a disability that allows them to function in their daily life; therefore, they are also exempt from restrictions regarding facility and transportation access.
Shelter capacity. In the National Shelter System (NSS) database, which is prepared by the American Red Cross and the Federal Emergency Management Agency, "shelter capacity" refers to shelter space that allows 40 square feet per person. The availability of equipment and staff to support shelters is not included in the NSS calculation of capacity.

- **State-Coordinated Housing Task Force (SCHTF).** A group of government and non-governmental agencies convened by the Governor's representative after a significant event to identify and facilitate the provision of interim housing for displaced populations. The task force includes local, regional, State, Federal, and non-governmental entities with expertise and resources to support interim and longer term housing. The task force identifies interim housing options, sets priorities, and develops a Housing Plan to guide interim housing operations.
- **Spontaneous shelter**. In the Plan, "spontaneous shelter" refers to sites where affected residents stay who choose not to sleep at shelters. This may include people who stay close to their damaged residences in vehicles, in tents, or at other temporary shelters. Spontaneous shelters may be open within hours after the event by groups of neighbors or CBOs. The shelters are not predesignated or initially known by local government.

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Appendix C: Summary of State and Federal Plans

The following State and Federal authorities, regulations, requirements, and guidelines apply to the preparation of this document, the Regional Catastrophic Earthquake Interim Housing Plan (Plan), and to the interim housing operations that are conducted in the response to a catastrophic earthquake.

C.1 Standardized Emergency Management System

The Standardized Emergency Management System (SEMS) is used to manage multi-agency and multi-jurisdictional responses to emergencies in California. SEMS consists of five hierarchical levels: field, local, Operational Area, Regional, and State. The SEMS incorporates the principles of the Incident Command System (ICS), the Master Mutual Aid Agreement, existing discipline-specific mutual aid agreements, the Operational Area concept, and multi-agency or interagency coordination and communication. Under SEMS, response activities are managed at the lowest possible organizational level.

C.2 National Incident Management System

The National Incident Management System (NIMS) provides a comprehensive approach to emergency management for all hazards. NIMS integrates existing best practices into a consistent nationwide approach to domestic emergency management that is applicable to all jurisdictional levels (public and private) and across functional disciplines. NIMS is based on a balance of flexibility and standardization. NIMS is flexible, and allows government and private entities at all levels to work together to manage domestic emergencies, regardless of their cause, size, location, or complexity. NIMS also provides a set of standardized organizational structures.

The ICS is a standardized on-scene emergency management concept designed to provide an integrated organizational structure for single or multiple emergencies, and to enable emergency response across jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during emergencies. It is based on proven management tools that contribute to the strength and efficiency of the overall system.

C.3 Regional Emergency Coordination Plan

The Regional Emergency Coordination Plan (RECP), which was prepared for the California Emergency Management Agency, Coastal Region, comprises a Base Plan and nine subsidiary plans that address specific disciplines and operational activities such as care and shelter, hazardous waste, fire and rescue, and transportation. The RECP provides a framework for collaboration among responsible entities and coordination during emergencies in the Bay Area. The RECP also

defines procedures for regional coordination, collaboration, and resource sharing among emergency response agencies in the Bay Area.

The RECP provides critical linkages to ensure that existing Bay Area emergency response systems work together effectively during the response to an event. In addition, the RECP complies with the requirements of NIMS, and is consistent with the National Preparedness Goal.

C.4 Emergency Management Assistance Compact

The Emergency Management Assistance Compact (EMAC) is a congressionally ratified organization that provides form and structure to interstate mutual aid. It was established in 1996 and is administered by the National Emergency Management Association.

Through EMAC, a disaster-affected State can request and receive assistance from other member states quickly and efficiently, resolving two key issues up front: liability and reimbursement.

EMAC provides another way for states to receive interstate aid in a disaster. Even when Federal assistance is merited, EMAC assistance may be more readily available or less expensive. EMAC assistance may supplement Federal assistance when the latter is available, or it may replace Federal assistance when the latter is unavailable. Most important, EMAC allows for a quick response to disasters using the unique resources and expertise possessed by member states. Since EMAC was approved by Congress in 1996 as Public Law 104-321, 50 states, Puerto Rico, the U.S. Virgin Islands, Guam, and the District of Columbia have ratified the Compact.

C.5 National Response Framework

The National Response Framework is a guide to national all-hazards incident response. The framework, which is coordinated by the U.S. Department of Homeland Security, is built on flexible, scalable, and adaptable coordinating structures to align key roles and responsibilities across the nation. It is intended to capture specific authorities and best practices for managing incidents ranging from the serious but strictly local, to large-scale terrorist attacks and catastrophic natural disasters. It features an approach that:

- Integrates a wide range of emergency management disciplines
- Describes the roles and responsibilities of Federal agencies in emergency response and the organization of those agencies into Emergency Support Functions (ESFs)
- Provides the structure and mechanisms for national-level policy and operational direction
- Provides the framework for Federal interaction with state, local, and tribal governments, the private sector, and nongovernmental organizations

The National Response Framework also describes the Federal response to a catastrophic incident. The Federal Government defines a catastrophic incident as

"any natural or manmade incident, including terrorism, which results in levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions."

The National Response Framework states that the Federal Government may take protective measures to mobilize and deploy assets in anticipation of a request from a state before, and during, catastrophic events, especially for those that occur without notice. Federal protocols for responding to such incidents are further outlined in the Catastrophic Incident Annex to the National Response Framework and the Catastrophic Incident Supplement, which establishes a coordinated strategy for accelerating the delivery of the applications of Federal, and federally accessible, resources and capabilities. The Catastrophic Incident Supplement establishes an execution schedule and implementation strategy for delivery of key resources for a range of natural and human-caused catastrophic incidents.

C.6 California Catastrophic Incident Base Plan: Concept of Operations

The California Catastrophic Incident Base Plan: Concept of Operations established the Concept of Operations (CONOP) for the joint Federal and State response to and recovery from a catastrophic incident in the State of California. It was prepared through a collaborative effort between the Federal Emergency Management Agency (FEMA) and the State of California. The CONOP defines the Federal/State operations and organizations the support the affected local governments and other entities in the incident area.

Although it is applicable to a wide range of incidents, the CONOP does not provide details specific to a particular location or event type. Therefore, other plans have been developed as incident-, hazard-, and function-specific annexes, some of which have been developed for particular locations.

C.7 San Francisco Bay Area Earthquake Readiness Response: Concept of Operations Plan

The San Francisco Bay Area Earthquake Readiness Response: Concept of Operations Plan (CONPLAN) describes the joint State and Federal response to a catastrophic earthquake in the Bay Area. The CONPLAN was prepared in accordance with the U.S. Department of Homeland Security (DHS) National Planning and Execution System through a collaborative effort by FEMA and the California Emergency Management Agency. The CONPLAN is a component of the CONOP for the joint State and Federal response to a catastrophic incident in California.

C.8 Bay Area Urban Area Security Initiative Guide for Shelter Operations after a Disaster

The Bay Area Urban Area Security Initiative Guide for Shelter Operations after a Disaster, prepared by the Bay Area Urban Area Security Initiative Program, contains detailed guidance for opening, running, and closing a shelter after a disaster.

C.9 California Department of Social Services Mass Care and Shelter Plan

The California Department of Social Services (CDSS) Mass Care and Shelter Plan describes the organization and standard operating procedures for meeting mass care and shelter needs in California. The CDSS Plan identifies the public and private organizations responsible for providing mass care, shelter, registration and inquiry services, and medical and public health services. In conjunction with the State Emergency Plan, the CDSS Mass Care and Shelter Plan describes the CDSS planned response to extraordinary emergency situations associated with natural disasters, technological incidents, events of national significance and national security emergencies. The CDSS Plan does not address normal day-to-day emergencies or the well-established and routine procedures used in coping with such emergencies. Instead, the operational focus is on potential large-scale disasters which can generate unique situations requiring unusual emergency responses.

C.10 People with Disabilities and Elderly Shelter Annex to the CDSS Mass Care and Shelter Plan

The People with Disabilities and the Elderly (now referred to as "people with access and functional needs") Shelter Annex to the CDSS Mass Care and Shelter Plan provides a structure and procedures for activating and running CDSS's Disaster Operation Center when sheltering people with access and functional needs. The catastrophic scope and impact of recent events like Hurricane Katrina have pointed out the complexity of providing mass care and shelter for these segments of the population. This annex provides guidance to accomplish those tasks.

C.11 Robert T. Stafford Disaster Relief and Emergency Assistance Act

The Robert T. Stafford Disaster Relief and Emergency Assistance Act of 1988 gives the President broad powers to supplement the efforts and available resources needed to support disaster response activities; coordinates the supply, distribution, and delivery of resources so that they arrive where and when most needed and maintain accountability for the resources used.

C.12 FEMA Comprehensive Preparedness Guide 301: Special Needs Planning

Comprehensive Preparedness Guide (CPG) 301 is a tool for state, territorial, tribal, and local emergency managers to use in the development of emergency operations plans that are inclusive of the entire population of a jurisdiction of any size. It provides recommendations for planning for special needs populations. CPG-301 was developed jointly by FEMA and the U.S. Department of Homeland Security's Office for Civil Rights and Civil Liberties, benefiting from extensive stakeholder involvement.

C.13 Chapter 7 of the ADA Best Practices Tool Kit for State and Local Governments

The ADA [Americans with Disabilities Act] Best Practices Tool Kit for State and Local Governments is a technical assistance document intended to guide government officials in identifying and addressing problems that prevent people with disabilities from gaining equal access to State and local government programs, services, and activities. It contains instructions on conducting accessibility surveys and removing architectural barriers to access. Chapter 7, Emergency Management under Title II of the ADA, focuses on applying this guidance to emergency management and disaster situations. This chapter includes an ADA Checklist for Emergency Shelters that is highly relevant to this Plan.

C.14 FEMA Public Assistance Program

Authorized by the Stafford Act, the Public Assistance Program provides funding to local, State, and tribal governments to assist them with extraordinary costs of disaster response and recovery.

C.15 FEMA Individual Assistance Program

Authorized by the Stafford Act, the Individual Assistance Program provides funding to individuals and households impacted by a disaster, including financial assistance for rent and/or to repair a damaged dwelling, and direct assistance in the form of a temporary housing unit.

Appendix D: HAZUS Earthquake Analysis

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Appendix D: HAZUS Earthquake Analysis

This appendix describes the Hazards U.S. (HAZUS) analysis that URS Corporation (URS) used to prepare the earthquake scenarios for the Regional Catastrophic Preparedness Grant Program (RCPGP) on behalf of the Bay Area Urban Area Security Initiative Program. The appendix describes the modifications that URS made to adapt existing HAZUS analyses prepared by the Earthquake Engineering Research Institute, supported by the U.S. Geological Survey and others, for the RCPGP. It also describes the limitations associated with the resulting data.

URS prepared the HAZUS analysis with assistance of Hope Seligson of MMI Engineering, Eduardo Escalona of the Federal Emergency Management Agency (FEMA) Region IV, and Douglas Bausch and Jesse Rozelle of FEMA Region VIII.

D.1 Default HAZUS Analysis

The default HAZUS analysis is a Level 1 analysis that uses earthquake ground motions calculated within HAZUS using a simplified model of the seismic source along with the "default" inventory available with the HAZUS software. A Level 2 analysis may incorporate additions or modifications to the HAZUS inventory, as well as imported maps that display refined and area-specific estimates of ground shaking, liquefaction, and/or landslide potential. A Level 3 analysis is the highest level of analysis and constitutes a significant incorporation of updated and region-specific inventory data, seismic hazard maps, revisions of fragility and damage functions, and other refinements. The inputs to the HAZUS analysis in this study are described in the following sections, along with other modifications to bring it to a Level 2 HAZUS analysis.

D.2 ShakeMap for the San Andreas Fault M 7.9 Earthquake Scenario

The RCPGP is based on the prediction of a recurrence of the San Francisco Earthquake of 1906. This earthquake occurred along the northern San Andreas fault. The map for this scenario event was developed by Boatwright and Bundock (2005), who reevaluated and relocated over 600 observations of damage and shaking reports compiled by Lawson (1908). The ShakeMap methodology was used to map shaking intensities.

URS performed a loss estimation study using the software Hazards U.S. – Multi-Hazard (HAZUS-MH) MR3, developed by FEMA. The HAZUS analysis was performed using a liquefaction susceptibility map developed by the California Geological Survey and the Boatwright and Bundock (2005) ShakeMap as input. The characteristics of the ShakeMap scenario for the San Andreas fault (1906 rupture from Mendocino to San Juan Bautista) are as follows:

- Moment magnitude: 7.9
- Depth: 6 miles (10 kilometers)

- Latitude: 37.75 degrees
- Longitude: -122.44 degrees
- Rupture length: 296 miles (476.37 kilometers)

A Level 2 HAZUS analysis was performed for 12 counties in the San Francisco Bay Area. **Map D-1** shows the study region.

D.3 Liquefaction Map

A liquefaction susceptibility map of the Bay Area was developed by Witter et al. (2006) and refined by Knudsen et al. (in progress) (**Map D-1**). The liquefaction susceptibility map was derived from recently produced Quaternary geologic maps. The geologic map units were compared against observations of liquefaction from historical earthquakes. A classification of liquefaction susceptibility units was developed from these two datasets. **Map D-1** illustrates the liquefaction susceptibility zones used in HAZUS. HAZUS predicts liquefaction-related damage to highways and railroads. HAZUS software calculates road damage based on the liquefaction susceptibility because roads are highly susceptible to ground deformation. In recent earthquakes, liquefaction damage to roadways has generally been repaired within days. Consequently, few organizations responsible for maintaining roadways have chosen to mitigate against future liquefaction damage. This is not true of bridges; it can take months or years to repair bridges. Consequently, there has been significant investment in recent decades to mitigate against damage to bridges.

D.4 URS Modifications to the HAZUS Analysis

To achieve the objectives of the RCPGP, it was necessary for URS to modify the default HAZUS analysis, both to incorporate updated data and to extract the specific data required for planning. This section describes these modifications to bring the HAZUS analysis to a Level 2 analysis.

D.4.1 Modifications to Kircher Data

The building inventory information used to create a study region appropriate for the 12 Bay Area counties was derived from a HAZUS study performed by Kircher et al. (2006) (herein referred to as "Kircher"), who evaluated the losses in a repeat of the 1906 earthquake. Kircher's study region replaced the single default occupancy mapping scheme in HAZUS with 22 custom mapping schemes that relate building occupancy to model building type (Kircher et al., 2006). The building mapping scheme reflects the changes in occupancy as a function of age distribution and hence seismic design level across the region. No changes were made to the databases of square footage, counts, or exposure value. Building height and seismic design level are also included in the mapping scheme. A good example of the changes caused by using Kircher's occupancy scheme for San Francisco is that more multistory wood-frame buildings with pre-code design are included in the census tracts near the Marina District section of San Francisco.



The Kircher study region also differs from the default HAZUS inventory in that it has categories for retrofitted wood frame, concrete, and unreinforced masonry buildings. These were new building categories added under the special-code designation. URS applied Kircher's fragility and capacity curves, part of HAZUS damage functions, to the special category designated for each additional retrofitted building type (Kircher et al., 2006). **Table D-1** is a summary of the revised building-type mapping schemes.

	Kircher Study Region			Translated to Special Code	
Structure Model Building Type	Design Level	Description	Building Height	Translated	Design Level
C1LR	MC	Concrete moment frame	Low-rise	C1L	L
C1MR	MC	(retrofitted)	Mid-rise	C1SM	L
C1HR	MC		High-rise	C1SH	L
C3LR	MC	Concrete frame with	Low-rise	C3SL	L
C3MR	MC	unreinforced masonry infill walls (retrofitted) Mid-rise	Mid-rise	C3SM	L
C3HR	MC		High-rise	C3SH	L
UMLR (URMLR)	LC	Unreinforced masonry bearing walls (retrofitted)	Low-rise	URML	L
UMLR (URMLR)	MC		Low-rise	URML	М
UMMR (URMMR)	LC	Unreinforced masonry bearing walls (retrofitted)	Mid-rise	URMM	L
UMMR (URMMR)	MC		Mid-rise	URMM	М
W1R	MC	Wood, light frame (≤ 5,000 square feet)	N/A	W1	L
W2R	None	Wood, commercial and industrial (> 5,000 square feet)	N/A	W2	L

Table D-1. Remapped retrofitted building types and corresponding design levels.

L = Special Low

LC = Low Code

M = Special Moderate

MC = Moderate Code

N/A = Not applicable

The Kircher study region incorporated changes to fragility curves in the default HAZUS inventory that was available when the inventory was created in 2005. The default HAZUS inventory in MR1 was modified by Kircher, and those changes to the fragility curves were transferred to later versions of HAZUS MR3. When a ShakeMap is used in HAZUS MR3, the new user-defined fragility curves are used. Thus, URS was able to update the fragility curves for all building structure types by utilizing the existing user-defined fragility curves, utilizing Kircher's curves for default building types, and inputting modified fragility curves under the special-code distinction for Kircher's retrofitted building types (Kircher et al., 2006).

Kircher made two additional damage function changes that were incorporated into the URS study. Collapse probabilities are used to estimate the number of buildings that have the potential to collapse in an earthquake. Kircher modified the collapse probabilities by adjusting wood frame collapse probabilities slightly downward and increasing the unreinforced masonry structure rates by a factor of 2. The other change Kircher made was to the damage-state weighting factors. These weighting factors are used to estimate the number of units that are uninhabitable due to structural damage (Kircher et al., 2006). **Table D-2** shows the differences between the default HAZUS data and the factors used in the URS study.

Weight		Default	URS
Factor	Description	Value	Value
wSFC	Single-Family Dwelling: Complete Damage	1.0	1.0
wSFE	Single-Family Dwelling: Extensive Damage	0.0	0.5
wSFM	Single-Family Dwelling: Moderate Damage	0.0	0.0
wMFC	Multi-Family Dwelling: Complete Damage	1.0	1.0
wMFE	Multi-Family Dwelling: Extensive Damage	0.9	1.0
wMFM	Multi-Family Dwelling: Moderate Damage	0.0	0.1

Table D-2. Damage-state weighting factors.

Source: Kircher et al. (2006)

Kircher also made changes to demographic data for the "time-of-day" populations to better reflect local trends in the commuting populations. For example, the commuting population was increased in counties such as Contra Costa that have many residents who work in San Francisco. During the day, those populations would be in San Francisco and at night in Contra Costa County. These changes are reflected in the injury and fatality estimates for different times of the day (although results are reported only for 1400 hours).

D.4.2 Modifications to Essential Facilities

In HAZUS, essential facilities include hospitals, schools, police stations, fire stations, and Emergency Operations Centers (NIBS, 2003). All of the essential facilities inventories were updated in 2007 from default HAZUS inventory using Homeland Security Infrastructure Program (HSIP) data (HSIP, 2007). The HSIP data is a national inventory used by FEMA for disaster planning. The national inventory was updated in HAZUS by FEMA Region IV using information in the HSIP (2007) data and augmented the inventory with replacement cost estimates provided by:

- The Veterans Affairs Office of Facilities Management for hospital replacement costs
- Construction Report, published by School Planning & Management for schools, using square footage as a proxy for replacement cost
- · College Planning and Management statistics for colleges and universities

Though all five essential facility types defined by HAZUS were updated using the HSIP data, not all of these results were used in the URS analysis. URS did not use fire stations or police stations in planning results. The Emergency Operations Centers in the HSIP are not an improvement on the default HAZUS inventory and are not used in the URS analysis. Hospitals and schools are used in the URS analysis, and the development of these two datasets is described below.

School damage and functionality was examined because schools often serve as locations of temporary shelters. URS examined the National Shelter System list, which is a database of primarily American Red Cross-designated shelters. URS compared the shelter list with the school inventory in HAZUS and identified vulnerable schools that are likely to be used as shelters. URS also used a California Division of the State Architect inventory of vulnerable schools to identify schools that response planners may not want to use as shelters. The goal is to identify schools for shelters that are most likely to be used as key shelters.

D.4.3 General Description of HAZUS Results Reported for RCPGP Assumptions Report

The HAZUS results are only as good as the input data used. The changes to the default data set that have been made in the HAZUS runs were explained at the beginning of this appendix. Even with perfect data, which can never be obtained, loss estimation methodologies cannot precisely estimate earthquake loss. Predictive methods are approximate and have large uncertainty (NIBS, 2003). In HAZUS parlance, the calculation performed in this study was a Level 2 study. The largest source of uncertainty in earthquake loss estimation is the ground-shaking parameters, and also of importance are the structural fragilities, both of which directly impact structural damage.

The following discusses some of the more significant limitations in this study.

D.4.3.1 Population

The HAZUS results do not take into account inflation or population growth, and represent values and demographics from the year 2000. These factors were applied at the county level for the casualties and shelter data. The increase in population in the counties in the Bay Area region from 2000 to 2009 is provided in **Table D-3**.

D.4.3.2 Shelter and Displaced Households Data

The displaced household results from HAZUS are derived from populations potentially displaced by building damage. Building damage results are only for strong ground shaking and liquefaction. The short-term shelter needs are derived from estimates of vulnerable populations based upon ethnicity, income level, age, and whether the population rents or owns their homes. Population data is derived from the 2000 census. The HAZUS results do not take into consideration displaced

population due to post-earthquake fire or landslides. URS adjusted the HAZUS results by a population increase for each county (as in **Table D-3**).

region from 2000 to 2009.	ease in the Day Alea
County	Percent Increase
Alameda	7 81%

Table D 2 Deputation increases in the Pay Area

Average	7.94%
Sonoma	6.11%
Solano	8.05%
Santa Cruz	5.10%
Santa Clara	10.40%
San Mateo	5.47%
San Francisco	8.86%
San Benito	8.98%
Napa	10.7%
Monterey	7.50%
Marin	4.58%
Contra Costa	11.76%
Alameda	7.81%

Source: California Department of Finance

D.4.3.3 Data for Households without Potable Water

Estimates of the number of households without potable water depend on how long it will take to repair breaks to water pipeline systems. This estimate is calculated from strong ground shaking and liquefaction hazards. The pipeline distribution is estimated as a street length proxy and has a default material assumption of 80 percent brittle and 20 percent ductile. Estimates of repair time to fix pipes and breaks depend on the diameter of the pipes and material the pipe is composed of. Repair estimates are only for pipelines within the 12-county study area. Reservoir capacity and pipelines transporting potable water from distant sources (e.g., Hetch Hetchy) are not considered in this study. It is expected that additional information from individual water agencies will augment the HAZUS results. URS adjusted the HAZUS results by a population increase for each county (as in **Table D-3**).

D.4.3.4 Data for Households without Electricity

Estimates for numbers of households without electricity are based on estimates of damaged substations. Damage is estimated based on strong ground shaking (primarily, peak ground acceleration [PGA]) and liquefaction hazards. Substations are not well represented in the default HAZUS inventory, which is used in this analysis, and should be taken as approximate. Components of the utility system

such as circuit breakers outside the 12-county area that feed into the area are not considered.

The methodology used to estimate the number of people without electrical power is driven by the ground motions. If the PGA exceeds 0.44 acceleration due to gravity (g), then the substations affected by census tract are used to estimate the number of people that will be without power. In the case of the San Andreas earthquake scenario, the PGA does not exceed 0.44 g for any census tracts in Contra Costa, Monterey, Napa, San Benito, and Solano counties. Consequently, HAZUS results indicate that there are no households in these counties without power. However, it is likely that Contra Costa, Napa, and Solano counties will have electrical power losses based on their proximity to the earthquake and on ground motion distributions. Because Alameda and Marin counties both have 4 percent power losses on average at E+24 hours, URS has applied the same power loss estimate to Contra Costa, Napa, and Solano counties. For Monterey and San Benito counties, it is likely that there will be some power loss, but it cannot be quantified using these analyses.

Other hazards to electric utilities that are not considered in this HAZUS analysis include post-earthquake fires, landslide-related damage, and flooding. URS adjusted the HAZUS results by a population increase for each county (as in **Table D-3**).

D.4.3.5 School Functionality

The schools inventory used in the HAZUS analysis are derived from the HSIP Gold 2007 datum (HSIP, 2007). The school inventory is based on national estimates of children in each school, and the building square footage is based on the school population. The school building type inventory has not been validated on a county or city level. School damage calculations, which depend upon building type, are dependent on the level of strong ground shaking and liquefaction at each school location. These HAZUS runs do not calculate losses due to post-earthquake fire or loss of power or water at the school.

D.5 Limitations

The largest sources of uncertainty are the input ground-shaking parameters and possibly structural fragilities. The limitations in the HAZUS results are from the following:

- Runs do not include effects from fire following earthquake, landslides, and flooding.
- HAZUS does not address damage to infrastructure networks, such as water systems, that extend beyond the study region.
- The resolution is good to census tract level only.
- ShakeMap for the San Andreas fault scenario is based on only 600 data points, and therefore ground motions are interpolated between points. Data points from the 1906 earthquake are based on information that is more than 100 years old and subject to interpretation (Lawson, 1908).

- ShakeMap for the Hayward fault earthquake scenario (**Map D-2**) is based on ground-motion simulations and not actual earthquake observations. The resolution is about 1/60 of a degree, or 0.01666667 deg (Aagaard et al., 2009).
- ShakeMaps used in this study represent two possible scenario events. Other combinations of faulting, direction of rupture, magnitude, and hypocenter location will produce a different set of ground motions.



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Appendix E: Interim Housing Background Information

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Appendix E: Interim Housing Background Information

This appendix provides a brief description of programs that support interim housing and recovery operations and sources of additional information.

Program	Description	Additional Information	Source
State-Coordinated Housing Task Force (SCHTF)	Performs a lead role, supported by FEMA, addressing all disaster-related housing needs. Brings together representatives of local, tribal, State, and Federal governments, along with NGOs and private-sector organizations, to evaluate housing requirements after the disaster, discuss potential solutions, and develop recommendations.	About the SCHTF	http://www.fema.gov/emergency/disasterhousing/state_task_force.shtm
		SCHTF key activities	http://www.fema.gov/pdf/emergency/disasterhousing/HousingTaskForceKey Activities.pdf
		SCHTF Plan example	Appendix G: State-Coordinated Housing Task Force Plan Example
National Disaster Housing Strategy	Describes responsibilities for local, State, and Federal government and provides information on disaster housing programs, including funding sources.	National Disaster Housing Resource Center	http://www.fema.gov/emergency/disasterhousing/index.shtm
		National Disaster Housing Strategy Core Document	http://www.fema.gov/pdf/emergency/disasterhousing/NDHS-core.pdf
		National Disaster Housing Strategy Annexes	http://www.fema.gov/pdf/emergency/disasterhousing/AnnexesAll.pdf
		Interim Housing Resources	http://www.fema.gov/emergency/disasterhousing/interim_housing.shtm
		Permanent Housing Resources	http://www.fema.gov/emergency/disasterhousing/permanent_housing.shtm
Joint Housing Solutions Group (JHSG)	A multiyear FEMA effort to develop a systematic process to evaluate and rate disaster housing options, identify viable alternatives to traditional direct housing, and recommend improvements for disaster housing operations. The JHSG considers multiple factors of interim housing, including: production time, code compliance, maintenance cost of the unit, and amenities and aesthetics.	Joint Housing Solutions Group: Joint Housing	http://www.fema.gov/emergency/disasterhousing/interim_housing.shtm
		Joint Housing Solutions Group, About	https://asd.fema.gov/inter/hat/public/aboutJHSG.htm
		National Disaster Housing Strategy, Core Document, Chapter 3	http://www.fema.gov/pdf/emergency/disasterhousing/NDHS-core.pdf

Table E-1. Interim housing background information.

Program	Description	Additional Information	Source
JHSG Housing Assessment Tool (HAT)	Assessment tool used by the JHSG to evaluate alternative housing options based on timeliness, livability, range of use, and cost.	About the HAT, National Disaster Housing Strategy Core Document, Chapter 3	http://www.fema.gov/pdf/emergency/disasterhousing/NDHS-core.pdf
		Joint Housing Solutions Group, About	https://asd.fema.gov/inter/hat/public/aboutJHSG.htm
		Joint Housing Solutions Group HAT Vendor Registration Portal	https://asd.fema.gov/inter/hat/public/login.htm
		HAT Instructions	https://asd.fema.gov/inter/hat/public/instructions.htm
JHSG Mission Scoping Tool	Determines the potential number of applicants that may require temporary housing. Tool compares data from the Census Bureau, Preliminary Damage Assessments (PDAs), shelters, and eligible applicants with available resources.	National Disaster Housing Strategy Annex 4, Description	http://www.fema.gov/pdf/emergency/disasterhousing/AnnexesAll.pdf
Essential Assistance	Provides funding for shelters, including non- congregate shelters (hotels, motels, cruise ships). Authorizes Transitional Sheltering Assistance, which provides lodging for victims in hotels / motels for prequalified households with payments made directly to the hotel / motel.	Stafford Act Section 403	http://www.fema.gov/about/stafact.shtm
and Transitional Sheltering Assistance		National Disaster Housing Strategy Annex 1	http://www.fema.gov/pdf/emergency/disasterhousing/AnnexesAll.pdf
		Disaster Assistance Policy 9523.15: Eligible Costs Related to Evacuations and Sheltering	http://www.fema.gov/government/grant/pa/9523_15.shtm
Interim Housing—	Funds are provided to disaster victims to rent a housing unit, or households are directly provided with a housing unit acquired by government lease.	Stafford Act Section 408	http://www.fema.gov/about/stafact.shtm
Rental Assistance		National Disaster Housing Strategy Annex 1	http://www.fema.gov/pdf/emergency/disasterhousing/AnnexesAll.pdf
		Individual Assistance	http://www.fema.gov/media/fact_sheets/individual-assistance.shtm
Interim Housing—	Through Individual Assistance program, includes the provision of interim housing units (travel trailers, mobile homes, manufactured housing) as well as the establishment of interim housing on private, commercial, or community sites.	Stafford Act Section 408	http://www.fema.gov/about/stafact.shtm
Direct Housing		National Disaster Housing Strategy Annex 1	http://www.fema.gov/pdf/emergency/disasterhousing/AnnexesAll.pdf
		Individual Assistance Program	http://www.fema.gov/media/fact_sheets/individual-assistance.shtm

Table E-1. Interim housing background information.

Program	Description	Additional Information	Source
Repair and Replacement of Housing	Programs that facilitate the repair or replacement of housing, including owner-occupied and rental, single family and multifamily buildings.	All programs, National Disaster Housing Strategy Annex 1	http://www.fema.gov/pdf/emergency/disasterhousing/AnnexesAll.pdf
		Individual Assistance	Stafford Act Section 408 http://www.fema.gov/about/stafact.shtm
		Program	Individual Assistance <u>http://www.fema.gov/media/fact_sheets/individual-assistance.shtm</u>
		SBA	SBA Disaster Assistance: http://www.sba.gov/services/disasterassistance/
			SBA Loans Fact Sheet: http://www.sba.gov/idc/groups/public/documents/sba_homepage/serv_da_d sastr_loan_factsht.pdf
		HUD	Community Development Block Grant Disaster Recovery Assistance: http://www.hud.gov/offices/cpd/communitydevelopment/programs/drsi/
			HOME Investment Partnership Program: http://www.nls.gov/offices/cpd/affordablehousing/programs/home/
			HUD Section 203(k) Home Rehabilitation Mortgage: http://www.fhasecure.gov/offices/hsg/sfh/203k/203kmenu.cfm
Other Needs Assistance	Assistance available for necessary expenses and serious needs caused by the disaster. Provided for expenses not covered by insurance, FEMA, and SBA assistance. Includes medical, dental, funeral, personal property, transportation, and storage expenses, among others authorized.	Disaster Assistance for Individuals, Other Needs Assistance	http://www.fema.gov/media/fact_sheets/individual-assistance.shtm
Case Management Services	Promotes self-sufficiency to disaster-affected households by providing access to health care, mental health services, emergency aid, and recovery assistance. Services begin with the U.S. Department of Health and Human Services (HHS), Administration for Children and Families, and are transferred to the State or designee of the State, such as a local government or NGO.	News Release on FEMA / HHS Interagency Agreement	http://www.fema.gov/news/newsrelease.fema?id=50037
		HHS Disaster Case Management, Overview	http://www.acf.hhs.gov/ohsepr/dcm/dcm_overview.html
		HHS Disaster Case Management Implementation Guide	http://www.acf.hhs.gov/ohsepr/dcm/dcm.guide.html

Table E-1. Interim housing background information.

Program	Description	Additional Information	Source
FEMA Public Assistance Program	Provides support through FEMA to public-sector applicants (communities, States) for eligible disaster-related costs. Provides assistance for sheltering, and provides funding to restore communities to predisaster condition.	FEMA Public Assistance Program	http://www.fema.gov/government/grant/pa/index.shtm
		Public Assistance Program Policy Guidance	http://www.fema.gov/government/grant/pa/policy.shtm
FEMA Individual Assistance Program	Provides support through FEMA to individuals and households, including financial assistance and housing assistance.	Individual Assistance Program	http://www.fema.gov/media/fact_sheets/individual-assistance.shtm
		Individual Assistance Program guide	http://www.fema.gov/assistance/process/guide.shtm
Long-Term Community Recovery— Emergency Support Function #14 (ESF #14)	ESF #14 provides coordination of Federal resources to support long-term recovery of States and communities, including technical support. ESF #14 may employ the Long-Term Community Recovery (LTCR) Assessment Tool to analyze the disaster impact on the community, and assist Federal decision makers in identifying the type of recovery assistance needed.	National Response Framework, ESF #14	http://www.fema.gov/pdf/rebuild/ltrc/nrp_esf14annex.pdf
		ESF #14 Information	http://www.fema.gov/rebuild/ltcr/index.shtm
		ESF #14 Planning Resources	http://www.fema.gov/rebuild/ltcr/plan_resource.shtm
		Federal Recovery Resources	http://www.fema.gov/pdf/rebuild/ltrc/recoveryprograms229.pdf
Rental Repair Pilot Program	Authorized through the Post-Katrina Emergency Management Reform Act (PKEMRA), funds	PKEMRA, Section 689i	http://frwebgate.access.gpo.gov/cgi- bin/getdoc.cgi?dbname=109_cong_public_laws&docid=f:publ295.109.pdf
	repairs to multifamily rental properties damaged by the disaster. In exchange, owners rent repaired units to FEMA disaster applicants.	National Disaster Housing Strategy, Annex 5	http://www.fema.gov/pdf/emergency/disasterhousing/AnnexesAll.pdf
		Rental Repair Pilot Program, Iowa Recovery	http://www.fema.gov/medialibrary/media_records/569

Program	Description	Additional Information	Source
Alternative Housing Pilot Program (AHPP)	Provided for the acquisition of alternative housing by four states for disaster-displaced households. Options included single-family,	National Disaster Housing Strategy Core Document, Chapter 3	http://www.fema.gov/pdf/emergency/disasterhousing/NDHS-core.pdf
	multifamily, permanent, and temporary units.	AHPP Grant Announcement	http://www.fema.gov/government/grant/ahpp.shtm
		AHPP Fact Sheet	http://www.fema.gov/pdf/media/factsheets/2009/dad_ahpp_pub.pdf
		FEMA AHPP Home Page	http://www.fema.gov/about/programs/ahpp/index.shtm
		Alabama AHPP	http://www.fema.gov/about/programs/ahpp/alabama.shtm
		Louisiana AHPP	http://www.fema.gov/about/programs/ahpp/louisiana.shtm
		Mississippi AHPP	http://www.fema.gov/about/programs/ahpp/mississippi.shtm
		Texas AHPP	http://www.fema.gov/about/programs/ahpp/texas.shtm
Association of Bay Area Governments (ABAG) Resources	Provides regional community recovery planni information, including housing recovery and l community recovery resources.		http://quake.abag.ca.gov/recovery/
State Supplemental Grant Program (SSGP)	Provides additional financial assistance to individuals and households that have receive the maximum grant from the FEMA IHP. Gra can be used for specific eligible items, includ rental and housing assistance.	nts	http://www.ocgov.com/SSGP.pdf
FEMA Hazard Mitigation Grant	igation Grant recovering from a disaster for projects to mitigate		http://www.fema.gov/about/stafact.shtm
Program (HMGP)	future risk. By law, FEMA can contribute 15% 20% of the total disaster cost to the HMGP.	to HMGP	http://www.fema.gov/government/grant/hmgp/
AHPP = Alternative Ho ESF = Emergency Sup FEMA = Federal Emer HAT = Housing Assess HMGP = Hazard Mitiga HHS = Department of	Dusing Pilot ProgramLTCoport FunctionNGopency Management AgencyNRsment ToolPKIation Grant ProgramSCHealth and Human ServicesSSHousing and Urban DevelopmentSB	G = Joint Housing Solutions Group R = Long-Term Community Recove D = nongovernmental organization F = National Response Framework MRA - Post-Katrina Emergency Ma ITF = State-Coordinated Housing Ta GP = State Supplemental Grant Prog A = Small Business Administration .C. = U.S. Code	nagement Reform Act ask Force

Appendix F: Resources Provided by Voluntary Organizations Active in Disaster (VOAD) Member Organizations

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Appendix F: Resources Provided by Voluntary Organizations Active in Disaster (VOAD) Member Organizations

Table F-1 contains a list of the organizations that are members of the nationalVoluntary Organizations Active in Disaster (VOAD) and the services theorganizations provide during emergencies and disasters. Membership in VOADdoes not guarantee that services will be provided.

The list of services in the table is not comprehensive. The services provided by VOAD members depend on the type of disaster, the services provided by other coordinating nonprofits, and local resources.

Some of the national organizations have local chapters that are part of the Northern California VOAD, which meets regularly to plan event response and recovery operations for a regional event.

The national VOAD has the following functions:

- Facilitating and encouraging collaboration, communication, cooperation, and coordination and building relationships among members while groups plan and prepare for emergencies and disaster incidents.
- Assisting in communicating to the government and the public the services provided by its national member organizations.
- Facilitating information sharing during planning and preparedness and response and recovery after a disaster.
- Providing members with information pertaining to the severity of the disaster, identified needs, and actions of volunteers throughout the response, relief, and recovery process.

Member Organization	Services
Adventist Community Services (ACS)	 Distributes relief items such as drinking water, groceries, and clothing. Provides warehousing and other donation-coordination services, such as Points of Distribution centers (PODs). Operates volunteer centers where community members can volunteer during disaster response. Provides victims with emotional and spiritual counseling.
American Baptist Men/USA	 Provides cleanup, repair, and initial rebuilding. Short-term volunteers work cooperatively with Church World Service. Provides financial assistance to victims during both the relief and recovery stages. Operates volunteer centers to serve as clearinghouses for relief teams.
American Radio Relay League (ARRL)—Amateur Radio Emergency Services (ARES)	 Operators set up and run organized communication networks locally for governmental and emergency officials, as well as noncommercial communication for private citizens affected by the disaster. They activate after disasters damage regular lines of communications due to power outages and destruction of telephone, cellular, and other infrastructure-dependent systems. ARRL volunteers act as communications volunteers with local public safety organizations. In addition, in some disasters, radio frequencies are not coordinated among relief officials, and amateur radio operators step in to coordinate communication when radio towers and other elements in the communication infrastructure are damaged. At the local level, hams may participate in local emergency organizations or organize local "traffic nets."
American Red Cross	 Provides mass care operations such as shelter, fixed and mobile feeding services for disaster victims and emergency workers in the affected area, and the distribution of supplies and commodities. Provides emergency and preventive health services to people affected by disaster. Provides individual assistance at service delivery sites and through outreach, by referral to government and/or voluntary agencies through distribution or financial assistance. Provides services leading to reunification of family members in the affected area. Performs damage assessments. Provides emergency and preventive mental health services.
Ananda Marga Universal Relief Team (AMURT)	 Provides food and clothing, shelters, counseling; it also renders emergency medical services, sanitation, and short-term case management.
Billy Graham Rapid Response Team	 Provides emotional and spiritual care. National database of more than 3,200 crisis-trained chaplains and ministry volunteers.

Member Organization	Services		
Brethren Disaster Ministries	 Engages a network of volunteers to repair or rebuild homes for disaster survivors who lack sufficient resources to hire paid labor, focusing on vulnerable communities. 		
	Trained, skilled project leaders supervise volunteers.		
	 Cooperates with the local disaster recovery organization to enhance the long-term recovery of the community. 		
	Children's Disaster Services (CDS) alleviates disaster-related anxiety in children through specially trained and certified volunteers.		
	 Provides children a safe, secure, and comforting environment in shelters and assistance centers. 		
	 Offers specialized care for children experiencing grief and trauma. 		
	 Educates parents and caregivers on how to help children cope. 		
Catholic Charities, USA	• Provides assistance, including direct financial assistance, to communities in addressing the crisis and recovery needs of local families.		
	Performs initial damage assessments.		
	 Provides ongoing and long-term recovery services for individuals and families, including temporary and permanent housing assistance for low-income families, counseling programs for children and the elderly, and special counseling for disaster relief workers. 		
	 Provides relief stage services including shelter and emergency food. 		
Christian Reformed World Relief	Fully equipped and trained rapid response teams for cleanup, chain-saw work, and flood repair.		
Committee (CRWRC)	 Trained volunteer managers assist local communities in the formation and operation of long-term recovery organizations. 		
	 Provides community-wide unmet needs assessments for long-term recovery organizations. 		
	 Provides construction estimating services using skilled volunteers. 		
	 Provides accounting services for long-term recovery and VOAD organizations using volunteer CPAs. 		
	 Provides skilled teams for long-term housing repair and construction. 		
	Chaplaincy services.		
	Community development consultants after the recovery.		
Churches of Scientology Disaster	 Emotional and spiritual care for survivors, responders, and caregivers. 		
Response	 POD volunteers and management. 		
	Cleanup.		
	 Direct services to individuals for unmet needs. 		
	Volunteer coordination.		
	Onsite needs assessment and help.		
	 Volunteer assistance to other organizations for shelter management and other needs. 		

Member Organization	Services
Church World Service	Provides advocacy services for survivors.
	 Provides case management for low-income and marginalized groups.
	 Provides emotional and spiritual care as well as physical rebuilding programs.
	 Assists in long-term recovery of those in need.
	 Restores and builds community relationships.
City Team Ministries	Supports first responders during rescue phase.
	 Provides food, water, and shelter during the relief phase.
	 Provides emotional and spiritual care and case management to assess the needs of victims.
	 Is committed to the effort of rebuilding homes and communities.
Convoy of Hope	 Facilitates relief efforts between churches and other organizations to help best serve the needs of survivors. With a fleet of trucks, 300,000 square-foot warehouse, and Mobile Command Center, and utilizing the first-response POD model,
Episcopal Relief and Development	 Sends immediate relief grants for such basics as food, water, medical assistance, and financial aid within the first 90 days following a disaster.
	 Provides ongoing recovery activities through rehabilitation grants, which offer the means to rebuild, replant ruined crops, and counsel those in trauma.
	 Delivers relief kits and other emergency supplies and food to emergency shelters and camps.
	 Works primarily through Church World Service in providing its disaster-related services.
	 Rebuilds individual homes damaged during disasters.
	• Helps residents to restore the social and economic fabric of their communities by providing economic and educational opportunities and improving access to legal services and home ownership.
	• Trains and equips local denominations to prepare for and respond to disasters that devastate their communities.

Member Organization	Services
Feeding America	 Collects, transports, warehouses, and distributes donated food and grocery products for other agencies involved in both feeding operations and distribution of relief supplies through its national network of food banks.
	 Processes food products collected in food drives by communities wishing to help another disaster-affected community.
	 Develops, certifies, and supports their food banks.
	 Positions frequently used emergency food products and personal care items in strategic locations and regularly cycles inventories to ensure usage by survivors immediately following a disaster.
	 Serves as a liaison between the food banks and the donors.
	 Educates the public about the problems and solutions of hunger.
	 Specializes in disaster training for its network, and continually improves standard operating procedures that enable member food banks to develop seamless, coordinated approaches to delivering disaster assistance.
Feed the Children	 Provides help to survivors of natural disasters occurring in the United States and around the world.
	• Provides food, water, blankets, cleaning supplies, or other relief supplies to individuals and families affected.
	 Through a subsidiary, picks up in-kind contributions from corporate warehouses and individual donors, delivering them to any of its six regional distribution centers for bulk distribution or directly to individual relief boxes for families.
Foundation of Hope—ACTS World	• Establishes PODs to rapidly and efficiently distribute goods within six hours of their arrival by common carrier.
Relief	 Cooks and distributes hot meals with self-contained mobile disaster kitchens of various sizes and capacities.
	 Staging area or base camp management at the request of State or local EOCs.
	Mobile public address systems (mobile sound stages).
	Debris removal and personal item recovery teams.
	• Registration and coordination of unaffiliated volunteers in the affected area. Using mobile volunteer registration centers, we are able to organize and form work teams to provide workforce resources to assist in recovery.
Habitat for Humanity International	Conducts community housing assessments for long-term recovery.
	• Works with partner families to build or rehabilitate simple, decent, and affordable homes after a disaster.
	Offers construction and development technical assistance to communities.
	 Facilitates community involvement and support during the long-term recovery process.
	 Introduces alternative construction technologies (e.g., modular, panelized housing) to communities to speed up the delivery of permanent housing solutions.

Table F-1. Voluntary Organizations Active in Disaster (VOAD): Member organizations and services.
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Member Organization	Services
HOPE Coalition America (Operation Hope)	 Supports disaster survivors by assisting with budgeting and developing financial recovery plans, such as disaster preparedness seminars.
	Emergency budget counseling.
	Emergency credit management.
	Assistance with working with creditors.
	Referrals to government and private agencies.
	 Assistance with obtaining copies of destroyed financial documents.
	Insurance claim assistance.
Humane Society of the United States	Provides assistance with animal rescue, handling, and transport in a timely and humane way:
	 Assessment of animal-related needs.
	 Establishment and management of temporary emergency animal shelters.
	Evacuation support.
	Veterinary evaluation of animals.
	 Relocation and support of disaster-affected animal facilities.
	 Transition of support to local resources during the recovery phase.
	 Donations and volunteer management, including emergent volunteers.
	 Serves as resource for individuals, animal-related organizations, and others concerned about the urgent needs of animals before, during, and after disasters.
International Critical Incident Stress	Emotional and spiritual care:
Foundation	Pre- and post-incident training.
	Risk and crisis communication.
	 Crisis planning and intervention with communities and organizations.
	Spiritual assessment and care.
International Relief & Development	Distributes food and critical relief supplies.
	• Helps communities to develop effective social services through collaborative efforts to improve roads, renovate schools, rebuild utilities (water and sewage systems), and establish health facilities.
	• Collaborates with other organizations to provide shelter and necessary tools such as financial counseling to disaster victims.
	 Performs needs assessment and mapping.

Table F-1. Voluntary Organizations	Active in Disaster (VOAD): Member organizations and services.

Member Organization	Services
Latter-Day Saint Charities	 Provides food and other emergency supplies and kits during response.
Lutheran Disaster Response	 Provides response efforts through a preselected group of Lutheran social service agencies with established standing in the affected communities.
	 Provides spiritual and emotional counseling for affected persons.
	 Helps in coordinating volunteer teams for cleaning up and rebuilding disaster-affected homes.
	 Provides case management services for long-term recovery.
	 Provides training and expertise on volunteer coordination, case management, long-term recovery, construction, and database management.
Mennonite Disaster Services	 Assists disaster victims by providing volunteer personnel to clean up and remove debris from damaged and destroyed homes and personal property.
	 Repairs or rebuilds underinsured primary residences for homeowners, with emphasis on assisting with the special needs of vulnerable populations such as the elderly and people with disabilities.
Mercy Medical Airlift (Angel Flight)	 Transport into disaster response areas of small, high-priority nonhazardous cargo (including blood) up to 300–400 pounds (boxed) when commercial ground or air is not available.
	Aerial reconnaissance of disaster area.
	• Air transport of disaster response personnel and evacuees into/from/within disaster area when commercial ground or air is not available.
	 Relocation of special populations, including special "surge services" using commercial air ambulance services (by prearranged Memorandum of Understanding [MOU] only).
	 Coordination of available corporate jet aircraft for disaster response in cooperation with NBAA.
	 Management of large-scale airline-provided relocation movements in support of FEMA, the American Red Cross, etc.
National Association of Jewish Chaplains (NAJC)	 Provides spiritual crisis counseling, short-term pastoral care and long-term pastoral counseling through its board-certified chaplains and professionally trained chaplains.
	Provides education and training in disaster spiritual care.
	 Helps organize volunteer disaster chaplains, through its association with American Red Cross Critical Response Team and other professional chaplaincy organizations, who wish to provide immediate disaster spiritual care services in the aftermath of disasters.

Table F-1. Voluntary Organizations Active in Disaster (VC	(OAD): Member organizations and services.
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Member Organization	Services
National Baptist Convention USA	 To lessen the impact of disasters and potential catastrophic incidents by meeting the needs of communities through preparedness and mitigation.
	Provides the following services:
	 Mass care
	 Emergency assistance and casework
	 Emotional and/or spiritual care
	 Supporting services to state and local VOAD member agencies
	- Recovery
	 Donations management
	 Volunteer management
	 Outreach and/or information and referral
National Emergency Response Team	 Provides coordinated emergency services with local, State, and Federal government agencies and nonprofit agencies.
(NERT)	 Transports food and other disaster goods through trailer units.
	 Provides communications services through trailers equipped with ham radios, scanners, etc.
	 Provides direct financial aid to victims.
	 Home repair services for special needs group (elderly).
National Organization for Victim Assistance (NOVA)	 Provides social and mental health services for individuals and families who experience major trauma after disaster, including psychological first aid, crisis intervention, crime victim resources, crisis management consultation.
Nazarene Disaster Response (NDR)	 Provides cleanup and rebuilding assistance, especially to the elderly, persons with disabilities, the widowed, and those least able to help themselves.
	 Works in the recovery phase by assisting with the emotional needs of disaster victims.

Member Organization	Services
Noah's Wish	The mission of Noah's Wish is to save animals during disasters by providing:
	 Rapid deployment of disaster response teams.
	Operation of temporary animal shelters.
	Rescue and evacuation assistance.
	 Veterinary care for disaster-related injuries or illness.
	Short- and long-term foster care for animals.
	 Permanent placement for all unclaimed or surrendered animals.
	 Coordination and distribution of donated supplies and food.
Operation Blessing	Transports food and emergency supplies to disaster survivors.
	Assists in disaster medical relief.
	Provides direct financial assistance to victims.
Points of Light Institute / Hands On Network	 Creates innovative, actionable models for citizen-centered problem solving, and direct, tangible tools and opportunities for people and organizations to apply their interests and passions to make a difference.
	 Helps people plug into volunteer opportunities in their local community, helping nonprofits manage volunteer resources and developing the leadership capacity of volunteers.
Presbyterian Disaster Assistance	Works primarily through Church World Service in providing volunteers to serve as disaster consultants.
(PDA)	 Provides funding for local recovery projects that meet certain guidelines.
	 Provides trained volunteers, who participate in the Cooperative Disaster Child Care program.
	 Provides volunteer labor and material assistance at the local level.
	 Supports volunteer base camps for volunteer groups assisting with the rebuilding efforts.
REACT International	 Provides emergency communications facilities for other agencies through its national network of Citizens' Band radio operators and volunteer teams.

Member Organization	Services
Salvation Army	 Provides emergency assistance including mass and mobile feeding, temporary shelter, counseling, missing person services, and medical assistance.
	 Provides warehousing services, including the distribution of donated goods such as food, clothing, and household items.
	 Provides referrals to government and private agencies for special services.
	Provides individual and family counseling.
	 Recruits, trains, houses, and transports volunteers.
	Coordinates economic reconstruction efforts.
	 Provides financial assistance to victims through case management, including housing needs and disaster-related medical and funeral expenses.
	Emotional and spiritual care.
Samaritan's Purse	Provides emotional and spiritual care.
	Provides cleanup assistance.
	Emergency home repairs.
Save the Children	 Provides disaster relief services for children in shelters, including food, clothing, diapers, and evacuation backpacks.
	 Provides supervision in designated areas within shelters.
Society of St. Vincent De Paul	 Provides social services to individuals and families, and collects and distributes donated goods.
	• Makes store merchandise available to disaster victims. Operates retail stores, homeless shelters, and feeding facilities that are similar to those run by the Salvation Army.
	 Provides warehousing facilities for storing and sorting donated merchandise during the emergency period.
Southern Baptist Disaster Relief/North	 Provides mobile feeding units staffed by volunteers, who prepare and distribute thousands of meals a day.
American Mission Board	 Provides disaster child care: mobile units transport equipment and supplies to a facility where trained workers provide safe and secure care for children.
	 Provides units and trained volunteers to assist with cleanup activities, temporary repairs, reconstruction, chaplains, , and bilingual services.
	 Provides water purification, shower and laundry units, and trained volunteers for disaster responses.
Tzu Chi Foundation	Provides emotional and spiritual care.
	Provides medical and financial assistance.

Member Organization	Services
United Church of Christ	 Organizes volunteers for cleanup and rebuilding efforts, as well as participating in response and long-term recovery efforts in communities affected by natural disasters.
United Jewish Communities (UJC)	 Organizes direct assistance, such as financial and social services, to Jewish and general communities in the United States following disaster.
	 Provides rebuilding services to neighborhoods and enters into long-term recovery partnerships with residents.
United Methodist Committee on Relief	 Raises and distributes funds equitably to the most vulnerable populations in affected communities.
(UMCOR)	 Provides case management services and related training for the long-term recovery of victims.
	 Coordinates shipments of disaster relief supplies and kits, including cleanup supplies.
	 Provides spiritual and emotional care to disaster victims, and long-term care of children affected by disaster.
	Offers training in support of volunteer activities in disaster recovery.
United Way of America	• Provides experience, expertise, and resources to local United Ways facing local, regional, state, or national emergencies.
	 Gives direct grants to support disaster recovery, such as home repairs, food vouchers, counseling.
	 Acts as a resource and information guide for survivors, through its 2-1-1 call centers.
World Hope International (WHI)	 Establishes distribution sites and housing facilities for volunteers.
	Cleans up, guts, or rebuilds homes.
	 Distributes relief kits and tool resources available for disaster response.
World Vision	 Trains and mobilizes community-based volunteers in major response and recovery activities.
	• Provides consultant services to local unaffiliated churches and Christian charities involved in locally designed recovery projects.
	 Collects, manages, and organizes community-based distribution for donated goods.

Source: Voluntary Organizations Active in Disaster

CPA = Certified Public Accountant

EOC = Emergency Operations Center

FEMA = Federal Emergency Management Agency

NBAA = National Business Aviation Association

POD = point of distribution

Appendix G: Example of a State-Coordinated Housing Task Force Housing Plan

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Appendix G: Example of a State-Coordinated Housing Task Force Housing Plan

This appendix contains examples of the types of information that can be included in a State-Coordinated Housing Task Force (SCHTF) Housing Plan. The example information is based on housing plans developed in events throughout the United States. The types of information may change based on direction from FEMA, lessons learned from other events, or the needs of an incident.

State of California Housing Task Force Housing Plan

For

[FEMA Disaster Declaration Number]

[Date]



Include additional seals such as the Department of Homeland Security's Federal Emergency Management Agency, local government entities, and nongovernmental organizations as appropriate. Seals are determined by the composition of the task force.

1 Purpose

Instructions: Provide a description of the purpose Proposal. This does not require great detail and can be changed as the housing mission progresses. For example:

This Housing Plan delineates the recommended actions to address the disaster housing need resulting from the [EVENT]. This proposal is based upon a thorough assessment of the current housing situation. The recommendations contained in this document are those of the SCHTF that was established at the Joint Field Office in accordance with the National Disaster Housing Strategy.

2 Goals

Instructions: Provide a description of the goals of the Proposal. The goals should be specific to the incident, and can draw upon State, regional, or local housing plans. The goals may also relate to the SCHTF Housing Strategy, if developed. Examples include:

- A. Present the real-time data identifying housing needs and gaps and develop necessary housing actions.
- B. Identify the housing solutions recommended by the SCHTF to meet the projected needs and provide safe, secure, and cost-effective housing solutions.
- C. Provide recommendations, courses of action, and responsible entities to implement a complete housing solution to address the needs of households displaced by [EVENT]."

Goals can also be more prescriptive to the overall goals of the housing mission.

3 Participating Agencies

Instructions: Provide an overview of what organizations are included in the Task Force. For the State of California, the SCHTF can include:

- State and Local Agencies
 - Operational areas impacted by the incident
 - Cities impacted by the incident
 - The Governor's office
 - California Emergency Management Agency
 - California Health and Human Services Agency
 - California Department of Social Services
 - California State Parks
 - California Housing Finance Agency
 - California Department of Housing and Urban Development

- California Department of Health Care Services
- California Emergency Management Agency, Recovery Office
- State Manufactured Housing Association
- California State Independent Living Council
- State Protection and Advocacy Agency
- Governor's Disability Office
- State Developmental Disability Council
- Federal Government
 - Federal Emergency Management Agency
 - U.S. Department of Housing and Urban Development
 - Small Business Administration
 - Veterans Administration
 - U.S. Department of Health and Human Services
 - U.S. Army Corps of Engineers
- Nongovernmental Organizations
 - Voluntary Agencies
 - Local Voluntary Organizations Active in Disaster (VOAD)
 - Corporation for National and Community Services
 - National VOAD
 - State Associations for Independent Living Centers
 - Private Sector
 - Independent Living Centers
 - Aging and Disability Centers
 - Developmental Disability Agencies
 - Advocates for populations not covered under specific authorities

4 Assumptions

Instructions: List assumptions necessary to implement the Plan. These may include situation-specific assumptions related to the conditions of the incident, assumptions related to the participation of the Task Force, or assumptions specific to resources that are available or that have been taken in order to develop the Housing Plan. Examples include:

A. No additional damage, by aftershock, fire, or other earthquake-related damage, is expected. The incident period closed on [MM/DD/YYYY].
- B. The SCHTF will continue to coordinate with State, local, tribal, Federal, and voluntary agencies to evaluate and implement housing solutions.
- C. Registration for disaster assistance will continue during the entire Application Period.

5 Damage Assessment

Instructions: Include specific information about the damage identified. To the extent possible, classifies damage severity, damage location, number of applications for housing assistance, and any additional progress on assessing damage. Should include estimates of damage to sewer, water, electric, and transport, as this damage will also impact housing. Should include locations of damage to this infrastructure. May include financial damage estimate totals.

6 Needs Assessment

6.1 Current Data

Instructions: Describe the current housing need based on current data, including:

- Valid Federal Emergency Management Agency (FEMA) Registrations
- Safety Assessment Program Data
- Private-sector damage assessments

Provide, to the extent possible, the extent of damage and a breakdown of the households (that is, renter/owner, individual/family).

6.2 Projections

Instructions: Describe any projections, including additional applications expected, or projections of housing need.

6.3 Special Considerations / Concerns

Instructions: Include any specific items that need to be considered in developing a housing plan. These may include:

- · Consideration of the geography of region
- Consideration of damage concentration in the region
- · Consideration of the demographics in the region
- Consideration of the demographics of displaced households
- Weather conditions
- Infrastructure conditions
- Insurance coverage
- Compliance challenges
- Utility damage

6.4 Available Resources

Instructions: Include resources that can be provided to displaced households for housing. Include, to the extent possible, the location and type of resources that are available. Also include timeline in which resources can be provided to house displaced households (immediately, several weeks, several months). Also include non-housing resources that are critical to the provision of housing, including number of assessors, contractors, or other non-housing resources that are relevant.

7 Concept of Operations

Instructions: Describe how housing resources will be provided. Include responsible parties, type of resources, locations, and any phases required to implement the interim mission.

8 Recommendations

Instructions: Recommend housing solutions. To the extent possible, describe the different courses of action that should be taken in order to facilitate the implementation of the housing plan. Describe the different housing types that can be utilized to provide for interim housing.

9 Action Items

Instructions: Describe any steps that need to be taken in order to implement the recommendations. Provide who is responsible for taking these steps.

10 Additional Proposed Solutions / Additional Approval Requested

Instructions: Include items that might need additional consideration or items that are not under the purview of the State of California and require some additional action by Department of Homeland Security (DHS)/FEMA, another Federal entity, or an operational area / local government. These might include:

- DHS/FEMA
 - Requesting that DHS/FEMA issue guidance on a certain action.
 - Requesting that DHS/FEMA temporarily suspend or augment a rule to accommodate the housing mission.
 - Requesting that DHS/FEMA extend the timeline for certain benefits, as necessary.
- Other Federal Agencies
 - Requesting the suspension or augmentation of certain roles.
 - Augmenting participation in certain Federal programs, such as the Community Development Block Grant program.

- Local Government
 - Requesting that local government implement certain regulations in order to facilitate a certain option.

11 Long-Term Actions

Instructions: Include a discussion of activities that will affect long-term housing. May include additional waivers necessary to facilitate expedited repairs to long-term housing, or other actions that are not focused on immediate/interim housing. This page intentionally left blank

Appendix H: Response Timeline for Interim Housing Operations This page intentionally left blank

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Appendix H: Response Timeline for Interim Housing Operations, by ObjectiveH-1

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Appendix H: Response Timeline for Interim Housing Operations, by Objective

Objective	Line	Time Frame	Task/Action Being Taken or Event Being Observed	Coordinating Entity	Supporting Entity	Details/Comments
A1. OBJECTIVE Assess interim housing	1	E+72h to E+14d	Survey shelter populations in each county to estimate housing need	SCHTF, Operational Areas and local governments	CDSS, Member agencies of the SCHTF	N/A
requirements, including accessibility for various access and functional needs populations	2	E+72h to E+14d	Utilize other information, including safety assessments, GIS, FEMA registration information, FEMA scoping tool to refine estimate of housing need	SCHTF, Operational Areas and local governments	Member agencies of the SCHTF	N/A
	3	E+72h to E+14d	Develop local, county, and regional counts of the demand and need types	SCHTF, Operational Areas and local governments	Housing Task Force	N/A
	4	E+72h to E+14d	Incorporate housing need estimates into Housing Plan	SCHTF	N/A	N/A
A2. OBJECTIVE Collect data from damage assessments and building	5	E+72h to E+14d	After initial damage assessments are done for shelter facility suitability and priority roadways, begin damage assessments of places and facilities that might be used for interim housing	Cal EMA SAP	FEMA IA, USACE, ESF #6, Operational Areas and local governments	N/A
inspections of housing	6	E+72h to E+14d	Begin more formal inspections of shelter facilities, because the initial damage assessments and evaluations for immediate and most urgent shelter set-up are likely to have been incomplete	Cal EMA SAP	USACE, Operational Areas and local governments	N/A
	7	E+72h to E+14d	Create local and centralized databases of results of damage assessments and formal inspections of shelters and interim housing options	Cal EMA SAP	Operational Areas and local governments	N/A
	8	E+72h to E+14d	Deliver compiled data to ARC, the EOCs, Cal EMA Regional and State Levels, the LACs, the DRC, any MACS group established with mass care and sheltering as part of their duties	Cal EMA	CDSS, ARC, Operational Areas and local governments, ESF #6	The MACS groups, LAC, and DRC "audiences" for this information would be initiated as described in other Objectives in this table
A3. OBJECTIVE Convene a State-Coordinated Housing Task Force (SCHTF) to	9	E+72h to E+14d	Initiate a SCHTF that includes local, regional, State, and Federal entities with expertise and resources	Governor's Office, Cal EMA	CDSS	SCHTF should incorporate the authorities, roles responsibilities, and goals/objectives of its members
develop housing plan and coordinate interim housing strategy	10	E+72h to E+14d	Select a SCHTF Lead	Governor's Office, Cal EMA	N/A	This individual may be pre-identified
	11	E+72h to E+14d	Assign SCHTF roles and responsibilities	Task Force Chair, Cal EMA	FEMA, Operational Areas and local governments	General roles and responsibilities can be pre- determined.
	12	E+72h to E+14d	Activate Task Force	Task Force Chair, Cal EMA	FEMA, Operational Areas and local governments	Representatives from each jurisdiction and support staff may be pre-determined
	13	E+72h to E+14d	Convene meetings at JFO/SOC or via teleconference	Task Force Chair, Cal EMA	FEMA, Operational Areas and local governments	N/A
	14	E+72h to E+14d	Establish communication/coordination between the JFO/SOC Planning and Operations Sections and impacted jurisdictions	Cal EMA	N/A	N/A
A4. OBJECTIVE Establish Local Assistance	15	E+72h to E+14d	Establish LACs, which will be staffed and supported by local, State, and Federal agency staff as well as NGO staff	Operational Areas and local governments	Cal EMA, CDSS and other State agencies, CBOs, VOAD	N/A
Centers/Disaster Recovery Centers	16	E+72h to E+14d	Identify potential locations of LACs and the specific local government agencies and NGOs to be represented in the LAC	Operational Areas and local governments, Cal EMA,	CBOs, VOAD	Include reps for organizations serving populations with access and functional needs
	17	E+72h to E+14d	Co-locate or coordinate State assistance program services with FEMA DRCs	Cal EMA	FEMA	N/A
	18	E+72h to E+14d	Connect families to local, State, Federal, and non-profit services and programs	Cal EMA	N/A	N/A

Objective	Line	Time Frame	Task/Action Being Taken or Event Being Observed	Coordinating Entity	Supporting Entity	Details/Comments
A5. OBJECTIVE Initiate development of an interim	19	E+72h to E+14d	Develop Housing Plan for impacted areas based on input from participants	SCHTF	FEMA	See other tasks under this Objective
housing strategy that describes interim housing options	20	E+72h to E+14d	Identify locations/facilities within each jurisdiction that would accommodate community housing sites, private sites, commercial sites and/or other housing alternatives.	SCHTF, Operational Areas and local governments	N/A	N/A
	21	E+72h to E+14d	Consolidate housing needs information to present a common picture of interim housing demand	SCHTF, Operational Areas and local governments	FEMA	N/A
	22	E+72h to E+14d	Identify and prioritize housing alternatives based on input from Operational Areas and local governments	SCHTF, Operational Areas and local governments	FEMA	This will be based on local government and other stakeholder input or decisions.
	23	E+72h to E+14d	Governor or designee signs off on plan, FCO signs off on plan, desired assistance requested from Federal government	Governor's Office, SCHTF	FEMA	Plan will be submitted to FEMA, which will provide assistance in accordance with plan.
A6. OBJECTIVE Initiate registration for individual housing assistance	24	E+72h to E+14d	Begin accepting tele-registration for federal assistance via phone and internet to determine eligibility and initiate provision of federal assistance to individuals	FEMA	SBA	N/A
	25	E+72h to E+14d	Bring on additional personnel to staff multiple call centers	FEMA	N/A	Coordinate with 211 system
	26	E+72h to E+14d	Advertise FEMA assistance number and information to families at shelters and the LAC / DRC	FEMA	CDSS, VOAD, Cal EMA JIC	N/A
	27	E+72h to E+14d	Establish FEMA internet registration capabilities at the LAC / DRC	FEMA	Local governments	N/A
	28	E+72h to E+14d	Begin provision of Expedited Assistance (FEMA IHP) to eligible families	FEMA	N/A	N/A
	29	E+72h to E+14d	Initiate eligibility analysis for State Supplemental Grant Program	CDSS	Other State Assistance Agencies	N/A
	30	E+72h to E+14d	Identify the State departments and regionally based NGOs to help families identify, locate, and connect to local, State, and Federal programs; identify rental housing; and access financial assistance	Operational Areas and local governments, SCHTF	FEMA, VOAD	Ensure assistance available for people with access and functional needs
B1. OBJECTIVE	31	E+14d to E+60d	As needed, continue to establish or activate vendor contracts	CDSS	DGS	N/A
Continue to integrate appropriate private-sector resources	32	E+14d to E+60d	Enhance the integration of private-sector resources into interim housing by providing information about housing locations, supplies, equipment needed, and other important information to relevant private-sector companies	Cal EMA	SCHTF	N/A
	33	E+14d to E+60d	To encourage the full cooperation of private-sector companies, ensure rapid processing of contracts, invoices, and payments	DGS	CDSS	N/A
B2. OBJECTIVE	34	E+14d to E+60d	Appoint Recovery Task Force Chair	Governor's Office	Cal EMA	N/A
Convene a long-term recovery task force to coordinate regional recovery	35	E+14d to E+60d	Convene Recovery Task Force to develop a Regional Recovery Plan and coordinate long-term recovery efforts and	Recovery Task Force Chair, Cal EMA, BTHA, SCSA	Joint Federal-State Recovery functions, Operational Areas and local governments	N/A
	36	E+14d to E+60d	Establish Regional Working Groups for housing, transportation, economic development to facilitate recovery in these areas	Recovery Task Force	N/A	N/A
	37	E+14d to E+60d	Establish recovery task forces/committees in each county to coordinate long-term recovery efforts	Operational Areas and local governments	N/A	See Develop a Regional Recovery Plan (in E+60 days to 1 year)
B3. OBJECTIVE Educate and support occupants of non-traditional shelters to encourage them to return to their habitable homes or move to interim housing	38	E+14d to E+60d	Assign staff with the appropriate communications skills to conduct outreach to individuals, groups, or communities that have not availed themselves of either available shelter or transportation out of the region	Operational Areas and local governments	Member agencies of the SCHTF, CDSS	Be clear about the limited ability of the county, region, and State government to continue providing support services and encourage them to seek transport out of the region or more centralized care within it. Address any concerns about legalities, especially immigration and naturalization status, making it clear that those topics are extremely low priorities for responding to catastrophic events.

Objective	Line	Time Frame	Task/Action Being Taken or Event Being Observed	Coordinating Entity	Supporting Entity	Details/Comments
B3. OBJECTIVE (cont.)	39	E+14d to E+60d	Prepare and distribute materials explaining the available resources, the locations where and schedules at which they are distributed, any registration or informational requirements, and any relevant plans for increasing, decreasing, or relocating these support services	Operational Areas and local governments, Cal EMA Recovery	FEMA, CDSS, Counties, member agencies of the SCHTF	Be clear about the limited ability of the county, region, and State government to continue providing support services and encourage them to seek transport out of the region or more centralized care within it. Address any concerns about legalities, especially immigration and naturalization status, making it clear that those topics are extremely low priorities for responding to catastrophic events.
	40	E+14d to E+60d	Establish LACs for communications and support services (not limited to supply distribution) near spontaneous-shelter or self-shelter settlements	Cal EMA Recovery	Counties, member agencies of the SCHTF	Include information about these assistance centers in all public information and other announcements
	41	E+14d to E+60d	Coordinate with Transportation Branch to ensure access to these LACs	Cal EMA Recovery	N/A	N/A
	42	E+14d to E+60d	Continue coordinating with FEMA, state agencies, NGOs, community- based and faith-based organizations, and other entities to improve and manage the resupply of PODs, mass feeding sites, medical facilities, and other non-shelter-based support services; this will reduce gaps in service provision and reduce duplication of services	CDSS	Operational Areas and local governments	This task will require use of all information collected under the "monitoring" tasks described above and coordination with the Debris Clearance and Transportation Branches to improve and increase the available transportation network, road access, and other vital infrastructure
	43	E+14d to E+60d	Compile lists of spontaneous shelters and areas with high densities of self-sheltering, and other non-shelter-seeking populations	Operational Areas and local governments, CDSS	N/A	N/A
	44	E+14d to E+60d	Use lists to evaluate the unmet needs for basic support services and to plan for future efforts to educate those individuals about support services	Operational Areas and local governments, CDSS	VOAD	N/A
	45	E+14d to E+60d	If individuals are willing, provide assistance to them as they seek transport out of the affected area either into a more suitable shelter or directly into interim housing, as it becomes available	Operational Areas and Local Governments, Cal EMA	CDSS, ARC, VOAD	N/A
B4. OBJECTIVE Evaluate safety assessments and	46	E+14d to E+60d	Conclude all damage assessments and safety inspections and create local and centralized databases of results	Local governments, Cal EMA	SCHTF, FEMA	N/A
building inspections of homes	47	E+14d to E+60d	Distribute compiled data to ARC, the EOCs, the Cal EMA Regional and State Levels, the LACs, the DRC, any MACS groups established with mass care and sheltering as part of their duties, and the SCHTF	CDSS	Planning Section	The MACS groups, LAC, and DRC "audiences" for this information would be initiated as described in other Objectives in this table
	48	E+14d to E+60d	Use those results to identify lists of homes, apartments, etc. that can be returned to their normal use	Local governments, SCHTF	N/A	N/A
	49	E+14d to E+60d	Inform the owners and residents of those homes that they may be re- entered, as well as occupied, if desired, though electricity and water services are not necessarily available	Operational Areas and local governments	N/A	N/A
	50	E+14d to E+60d	Use inspection results to provide county-specific and regionwide inventory of possible interim housing sites	SAP	CDSS, Operational Areas and local governments	N/A
	51	E+14d to E+60d	Communicate those results to EOCs, Cal EMA Regional and State Levels, MACS groups, and the SCHTF to that they can all begin using it in their planning	CDSS	N/A	N/A

Objective	Line	Time Frame	Task/Action Being Taken or Event Being Observed	Coordinating Entity	Supporting Entity	Details/Comments
B5. OBJECTIVE Facilitate restoration of moderately damaged dwellings	52	E+14d to E+60d	Implement Rental Repair Program	FEMA	N/A	Consider prioritizing structures or facilities that can easily be repaired/restored and made available
	53	E+14d to E+60d	Contract with private sector to provide for repair of identified units/structures	FEMA	SCHTF	N/A
	54	E+14d to E+60d	Transition families from other interim housing options into repaired units	SCHTF, Operational Areas and local governments	FEMA, CDSS	N/A
B6. OBJECTIVE dentify opportunities to close	55	E+14d to E+60d	Create a list of shelters ready to be closed and the steps that would need to be taken to close them	CDSS and others - see below	ARC	N/A
shelters and return residents to homes or available housing	56	E+14d to E+60d	Restore utility systems	CUEA	N/A	N/A
0	57	E+14d to E+60d	Repair or restore facilities suitable for interim housing sites.	Operational Areas and local governments	SCHTF	N/A
	58	E+14d to E+60d	Work with private sector to restore and repair primary residences, to the extent possible	Operational Areas and local governments	SCHTF	Private-sector firms must be involved but are no a "supporting" entity.
	59	E+14d to E+60d	Convert other facility types (e.g., warehouses) into interim housing	Operational Areas and local governments	SCHTF	N/A
	60	E+14d to E+60d	Identify unused or underutilized public housing, hotels/motels, or other private-sector options that could be used as interim housing	Operational Areas and local governments	SCHTF	N/A
	61	E+14d to E+60d	Compile all of these options into a roster of soon-to-be-available interim housing or permanent housing opportunities	Cal EMA	SCHTF	N/A
B7. OBJECTIVE Identify restricted use housing for populations necessary to remain in	62	E+14d to E+60d	Identify populations for restricted use housing	Operational Areas and local governments	N/A	May include first responders and other critical government workers, recovery contractors, and/or members of critical industries
the region	63	E+14d to E+60d	Identify locations and housing availability	Operational Areas and local governments, SCHTF	N/A	N/A
	64	E+14d to E+60d	Communicate populations and housing locations to FEMA through SCHTF	SCHTF, Operational Areas and local governments	N/A	Include in Housing Plan
	65	E+14d to E+60d	Provide restricted use housing	FEMA	SCHTF, local governments	N/A
B8. OBJECTIVE Implement interim housing programs	66	E+14d to E+60d	Continue to provide financial assistance	FEMA	Cal EMA, CDSS	Including IHP for house, transportation, SBA loans, etc.
and strategies	67	E+14d to E+60d	Identify and provide existing housing resources, which includes the steps in the lines below	Various - see below	SCHTF, CDSS, Cal EMA-Recovery	Including apartments, hotels, motels
	68	E+14d to E+60d	Identify available units	Operational Areas and local governments, SCHTF	Cal EMA-Recovery, CDSS	N/A
	69	E+14d to E+60d	Communicate availability through LACs and shelters	Operational Areas and local governments, CDSS	SCHTF	N/A
	70	E+14d to E+60d	Provide financial assistance; directly lease units	FEMA, Operational Areas and local governments, CDSS	SCHTF, CDSS	N/A
	71	E+14d to E+60d	Coordinate transportation to units, when needed	FEMA, Operational Areas and local governments	SCHTF	N/A
	72	E+14d to E+60d	Provide temporary housing units on private sites, which includes the steps in the lines below	FEMA	Cal EMA, local government, SCHTF	N/A
	73	E+14d to E+60d	Identify types of housing units to be provided in the Housing Plan	SCHTF	N/A	N/A
	74	E+14d to E+60d	Obtain necessary approvals and permits for movement and installation of units	Local governments	N/A	N/A

Objective	Line	Time Frame	Task/Action Being Taken or Event Being Observed	Coordinating Entity	Supporting Entity	Details/Comments
B8. OBJECTIVE (cont.)	75	E+14d to E+60d	Approve zoning modifications and facilitate permitting for units and unit types	Local governments	N/A	Amending zoning and permitting requirements may create incentives for reinvestment and speed recovery
	76	E+14d to E+60d	Determine eligibility through pre-placement interview process	FEMA	N/A	N/A
	77	E+14d to E+60d	Inspect private-site location, prepare site, and install temporary housing units	FEMA	N/A	N/A
	78	E+14d to E+60d	Identify families to be placed in housing units	FEMA, SCHTF	N/A	N/A
	79	E+14d to E+60d	Develop community sites, which includes the steps in the lines below	Various - see below	N/A	Local governments will identify these sites to FEMA through SCHTF, GSA acquires sites, and FEMA provides funding
	80	E+14d to E+60d	Identify site locations	Local governments, SCHTF	N/A	N/A
	81	E+14d to E+60d	Acquire non-public sites	FEMA, GSA	N/A	N/A
	82	E+14d to E+60d	Design site, including provisions for infrastructure and unit installation	FEMA, USACE	N/A	N/A
	83	E+14d to E+60d	Provide security and other services	FEMA, Operational Areas and local governments	Law Enforcement Mutual Aid	FEMA and contractors will provide security at community group sites. FEMA will consult with local governments in establishing security.
	84	E+14d to E+60d	Identify families to place in community sites	SCHTF, FEMA	N/A	N/A
	85	E+14d to E+60d	Provide apartments, hotels/motels outside the region, which includes the steps in the lines below.	FEMA, Host states or communities	SCHTF	N/A
	86	E+14d to E+60d	Identify potential host communities	FEMA, Host states or communities	SCHTF	N/A
	87	E+14d to E+60d	Communicate availability to residents at LAC and shelters	FEMA, Host states or communities	SCHTF	N/A
	88	E+14d to E+60d	Provide financial assistance; directly lease units	FEMA, Host states or communities	SCHTF	N/A
	89	E+14d to E+60d	Coordinate transportation when needed	FEMA, Host states or communities	SCHTF	N/A
	90	E+14d to E+60d	Establish reception centers in selected communities	FEMA, Host states or communities	SCHTF	N/A
B9. OBJECTIVE Initiate coordination with ESF #14	91	E+14d to E+60d	Begin collecting data and conduct initial assessments to support long- term recovery	Cal EMA-Recovery, FEMA ESF #14, Recovery Task Force	N/A	N/A
(Long-term Recovery)	92	E+14d to E+60d	Begin process of determining which jurisdictions will require ESF #14 assistance	Joint Federal-State Recovery functions	N/A	N/A
B10. OBJECTIVE Maintain ongoing situational	93	E+14d to E+60d	As interim housing is established, monitor flows out of other shelter options and into the interim housing facilities	CDSS	Members of the Housing Task Force	N/A
awareness of shelter activities	94	E+14d to E+60d	Monitor shelter inspections and the progress of damage assessments of possible interim housing sites or facilities	Building and Construction Branch	CDSS	N/A
	95	E+14d to E+60d	Regularly update all public information announcements with appropriate and useful changes	CDSS	Cal EMA JIC	N/A
B11. OBJECTIVE Transition families from short-term solutions (e.g., hotels) to longer term	96	E+14d to E+60d	Match shelter residents with longer term housing opportunities	Operational Areas and Local Governments, Cal EMA	CDSS, SCHTF	Use the databases on shelter residents, inspected homes marked as safe, and identified and implemented interim housing locations
solutions	97	E+14d to E+60d	Fully implement the aforementioned interim housing alternatives, including the resources and recommendation of the SCHTF	Counties	Cal EMA Recovery, SCHTF	N/A
	98	E+14d to E+60d	Identify rental, permanent, or temporary housing units	SCHTF	CDSS	N/A
	99	E+14d to E+60d	Provide financial assistance, as required, or temporary housing units	FEMA	CDSS	N/A
	100	E+14d to E+60d	Provide transportation to temporary housing units as needed	Transportation Branch	Cal EMA	N/A

Objective	Line	Time Frame	Task/Action Being Taken or Event Being Observed	Coordinating Entity	Supporting Entity	Details/Comments
B11. OBJECTIVE (cont.)	101	E+14d to E+60d	Monitor the transport and transition of individuals and coordinate with support service agencies or NGOs	Operational Areas and Local Governments, CDSS	VOAD, ARC	N/A
	102	E+14d to E+60d	Provide advance notification of shelter closure or relocation plans, in combination with interim housing information, so shelter residents can begin to plan their transitions	Cal EMA-JIC	CDSS	N/A
	103	E+14d to E+60d	Provide information about various forms of Federal and State support for interim housing (e.g. FEMA's Individual Assistance Program)	Cal EMA-JIC	Cal EMA Recovery, CDSS	N/A
	104	E+14d to E+60d	Coordinate with FEMA and non-profit organizations to provide outreach and caseworkers to assist with registration for recovery assistance programs	Cal EMA, CDSS	VOAD, FEMA	N/A
	105	E+14d to E+60d	Coordinate direct assistance as appropriate for and needed by those members of the general population and individuals with access and functional needs	Operational Areas and Local Governments, CDSS	VOAD, FEMA	N/A
C1. OBJECTIVE Continue to implement interim	106	E+60d to E+1 year	Continue the interim housing solutions as described in the earlier response phases	FEMA, HUD	VOAD, CDSS, SCHTF, Cal EMA-Recovery	N/A
housing programs	107	E+60d to E+1 year	Continue using private-sector contracts, vendors, and support as long as effective; meet the various CMIST access and functional needs; provide security, site management, and child care; and include animal shelters, support, and relocation as necessary	Operational Areas and Local Governments	CRA, VOAD	N/A
	108	E+60d to E+1 year	Transition families from transitional shelter to longer term interim housing or permanent housing	FEMA, SCHTF, Operational Areas and Local Governments	VOAD, CDSS	N/A
	109	E+60d to E+1 year	Recertify residents in government funded interim housing for continued eligibility and need	FEMA	VOAD, CDSS	N/A
	110	E+60d to E+1 year	De-activate units when assistance is complete	FEMA	N/A	N/A
C2. OBJECTIVE Develop and implement long-term	111	E+60d to E+1 year	Begin preliminary recovery planning	Cal EMA, SCSA, BHTA	FEMA ESF #14	This process will begin in JFO within first 60 days
recovery plans	112	E+60d to E+1 year	Request FEMA ESF #14 assistance to develop long-term-recovery plans, as needed	Cal EMA, Recovery Task Force	Local governments	ESF #14 will support county planning efforts, if requested
	113	E+60d to E+1 year	Establish long-term recovery vision for the region	Recovery Task Force	Cal EMA, local governments	N/A
	114	E+60d to E+1 year	Establish local recovery planning teams, including representative for housing, economic recovery, transportation and other issues.	Local governments	Cal EMA, FEMA ESF #14, SCSA, BHTA	Includes cross-section of government, private, and non-profit stakeholders
	115	E+60d to E+1 year	Develop regional recovery plan, in coordination with ESF #14 and local recovery planning teams	Recovery Task Force	Local governments	N/A
	116	E+60d to E+1 year	Organize public meetings in each county to obtain the input of residents	Local governments	FEMA ESF #14, Recovery Task Force	N/A
	117	E+60d to E+1 year	Conduct inventory and analysis of long-term recovery needs	Local governments	FEMA ESF #14	FEMA ESF #14 has tools and technical experts to assist with this process
	118	E+60d to E+1 year	Identify and prioritize recovery projects and programs	Local governments	FEMA ESF #14, Recovery Task Force	N/A
	119	E+60d to E+1 year	Identify sources of recovery funding and technical assistance	Local governments	FEMA ESF #14, Recovery Task Force	N/A
	120	E+60d to E+1 year	Develop strategies to incorporate existing re-development plans into long-term recovery, including a consideration of opportunities to rebuild in ways that are smarter and better	Local governments	FEMA ESF #14 , Recovery Task Force	N/A
	121	E+60d to E+1 year	Incorporate mitigation strategies into plans	Local governments	FEMA ESF #14, Recovery Task Force	N/A
	122	E+60d to E+1 year	Select strategies, tools, and recommendations for implementation	Local governments	FEMA ESF #14, , Recovery Task Force	N/A
	123	E+60d to E+1 year	Coordinate local recovery efforts to further regional goals	Recovery Task Force	Cal EMA, SCSA, BHTA	N/A

Objective	Line	Time Frame	Task/Action Being Taken or Event Being Observed	Coordinating Entity	Supporting Entity	Details/Comments
C3. OBJECTIVE Facilitate the return of displaced families to local communities	124	E+60d to E+1 year	Maintain contact with displaced residents that are receiving State Supplemental Grant Program funds and encourage/facilitate their return	CDSS	ARC, FEMA, HHS	Federal caseworkers from HHS/HUD may facilitate this process
	125	E+60d to E+1 year	Prioritize repair of homes, infrastructure, and utilities in certain communities and repopulate accordingly	SCHTF	Local governments	N/A
	126	E+60d to E+1 year	Implement policies to retain employment and other services so residents have an incentive to return	Local governments, counties	Long-term	See actions described under "Develop Long- term Recovery Plan" and "Identify sources of funding"
	127	E+60d to E+1 year	Coordinate with the Transportation Branch to provide transportation to restored, repaired, or newly created permanent housing	CDSS	Transportation Branch, ARC	N/A
	128	E+60d to E+1 year	Update all relevant databases and information systems with returned individuals so that these systems can be properly closed out	CDSS	ARC, Operational Areas and local governments	N/A
C4. OBJECTIVE Identify and access sources of	129	E+60d to E+1 year	Apply for and secure Public Assistance funding for infrastructure restoration	Cal EMA	Local governments	N/A
funding for long-term recovery	130	E+60d to E+1 year	Identify and prioritize Hazard Mitigation Grant Program projects	Cal EMA	Local governments	Cal EMA is responsible for evaluating and prioritizing hazard mitigation projects for funding through HMGP
	131	E+60d to E+1 year	Apply for Community Disaster Loans, access and/or obtain lines of credit, and/or work with state to establish revolving fund to meet immediate funding needs.	Local governments	Recovery Task Force,	N/A
	132	E+60d to E+1 year	Identify and seek Federal and State grants for private-sector companies	Local governments	Recovery Task Force, FEMA ESF #14	N/A
	133	E+60d to E+1 year	Seek tax incentives for public, private, and joint-venture investments in long-term recovery, reconstruction, and other opportunities	Local governments	Recovery Task Force, FEMA ESF #14	N/A
	134	E+60d to E+1 year	Publicize all of these opportunities to industry groups, private citizens, universities, and others	Cal EMA-JIC	Recovery Task Force, local governments	N/A
C5. OBJECTIVE Provide wrap-around services to support those in interim housing	135	E+60d to E+1 year	Create list of needed "wrap-around" support services, including financial, transit, grocery, child care, schools, home repair, furnishings, and housing options for displaced residents	Operational Areas and Local Governments	SCHTF	The list should include the additional services required by individuals with access and functional needs
	136	E+60d to E+1 year	Identify whether these services can be provided by the private sector in an efficient and equitable manner or whether government provision is likely to be required for some time	Operational Areas and Local Governments	CRA, VOAD	N/A
	137	E+60d to E+1 year	Where government must continue providing-or assisting the private sector in providing-these services, identify the appropriate agency or agencies	Operational Areas and Local Governments	SCHTF	N/A
	138	E+60d to E+1 year	Where NGOs, faith-based organizations, or community-based organizations can provide the services, identify those entities	Operational Areas and Local Governments	VOAD	N/A
	139	E+60d to E+1 year	Include information on "wrap-around" services in all public information releases and updates, and to all residents of formal shelters, occupants of spontaneous shelters, and those who are self-sheltering	Cal EMA-JIC	CDSS	N/A
	140	E+60d to E+1 year	Provide case management services through interagency agreement with FEMA	CHHS, Cal EMA, local housing authorities	FEMA, CDSS, SCHTF	Case management services may be provided through HHS or through local public housing authorities
	141	E+60d to E+1 year	Provide case managers to the region and DRCs/LACs	CDSS	N/A	N/A
	142	E+60d to E+1 year	Facilitate case management services	Operational Areas and local governments, HHS or HUD	Including access to Federal, State, local, and non-governmental resources	N/A

Objective	Line	Time Frame	Task/Action Being Taken or Event Being Observed	Coordinating Entity	Supporting Entity	Details/Comments
C5. OBJECTIVE (cont.)	143	E+60d to E+1 year	Identify State entity or appoint an entity to provide case management services	Cal EMA	CDSS	N/A
	144	E+60d to E+1 year	Transition case management services to State, or state-appointed entity	HHS, FEMA, CDSS	N/A	N/A
	145	E+60d to E+1 year	Provide funding to State for continued case management services	FEMA	CDSS	N/A
C6. OBJECTIVE Restore damaged housing and	146	E+60d to E+1 year	Continue the steps from earlier response phases that included listing and prioritizing damaged housing for repair	SCHTF	Counties, local governments	N/A
develop replacement housing	147	E+60d to E+1 year	Provide SBA loans to homeowners	SBA	FEMA	N/A
	148	E+60d to E+1 year	Use Federal programs to repair housing, including workforce housing, as necessary	SCHTF, local governments	HUD	CDBG funding may be available
	149	E+60d to E+1 year	Use Federal programs, such as PA, to finance the repair and restoration of infrastructure	Counties, local governments, HUD, FEMA	SCHTF	Programs include CDBG funding
	150	E+60d to E+1 year	Expedite permitting and licensing of out of state contractors to facilitate and promote rebuilding	Local governments	SCHTF	N/A
	151	E+60d to E+1 year	Amend or alter community-specific zoning restrictions or codes to provide for expedited redevelopment	Counties	Recovery Task Force, SCHTF	N/A
	152	E+60d to E+1 year	Develop standard zoning waiver forms that will be provided to disaster victims to allow them to reconstruct or rehabilitate their homes	Counties	Recovery Task Force, SCHTF	N/A
	153	E+60d to E+1 year	Continue the steps from earlier response phases that included identifying suitable locations for replacement housing	Local governments	SCHTF	N/A
	154	E+60d to E+1 year	Facilitate private investment in developing replacement housing	Local governments	SCHTF, HUD	N/A
Source: URS analysis (2009) ARC = American Red Cross BTHA = Business, Transportation, and Housing Agency Cal EMA = California Emergency Management Agency CAN = Coordinated Action Network CBO = Community-based organization CDBG = Community Development Block Grant CDSS = California Department of Social Services CMIST = Communication, Medical, (maintaining) Independence, Supervision, Transportation CRA = California Resiliency Alliance		gency	d = days DDS = (California) Department of Developmental Services DGS = (California) Department of General Services DOC = Disaster Operations Center DRC = Disaster Recovery Center E = Event EOC = Emergency Operations Center ESF = Emergency Support Function FBO = faith-based organization FEMA = Federal Emergency Management Agency	HHS = Health and Human Services HMGP = Hazard Mitigation Grant Program HUD = Housing and Urban Development IHP = Individuals and Households Program JFO = Joint Field Office JIC = Joint Information Center LAC = Local Assistance Center MACS = Multi-Agency Coordination System N/A = Not applicable NGO = Nongovernmental organization		NSS = National Shelter System POD = Point of distribution REOC = Regional Emergency Operations Center SAP = California Safety Assessment Program SBA = Small Business Administration SCHTF = State-Coordinated Housing Task Force SCSA = State Consumer Services Agency SEMS = Standardized Emergency Management System SOC = State Operations Center USACE = U.S. Army Corps of Engineers