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# Regional Resilience Initiative

## Governance Policy Paper



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## Introduction

A major Bay Area earthquake will have lasting impacts on our region, altering our built environment, economy, and many other characteristics that contribute to the Bay Area's high quality of life. How will Bay Area leaders work together to plan for and address the impacts? Who are the major players in this work? How will cities and counties come together with business, nonprofit and community partners to rebuild our region and restore our economy? What is the message and image we will send to the outside world after an earthquake? Will it be one of competition for limited resources or will we work together in the interest of the entire region and collectively advocate for our common needs? How will priorities be set?

Stakeholders who participated in ABAG's Regional Resilience Initiative process indicate that a financing strategy to address rebuilding of the Bay Area's economy, infrastructure and housing is a regional necessity. In addition, advocacy for state and federal funding, along with needed legislative and regulatory changes could be successfully crafted through a consensus process. ABAG's role has been to examine how we come together as a region to grapple with these questions and build regional resilience.

Governance in the context of this paper refers to the broad spectrum of regional actors, stakeholders, and institutions that will be involved in regional recovery from an earthquake. This paper addresses the major issues uncovered during the Regional Resilience Initiative about setting priorities, making decisions, and implementing policy. Our key recommendation is to facilitate a regional resilience policy forum to enhance resilience. The desired end product is a region that makes coordinated decisions and works for common resilience goals, at both the jurisdictional and the regional levels.

The San Francisco Bay Area governance structure is complex, with: 101 cities, nine counties, and hundreds of special districts with overlapping jurisdictional boundaries. Four regional agencies are responsible, respectively, for land use (Association of Bay Area Governments), transportation (Metropolitan Transportation Commission),

air quality (Bay Area Air Quality Management District), and shoreline development planning, programming, and regulation (Bay Conservation and Development Commission). The agencies connect through the Joint Policy Committee (JPC). As well, many other organizations and agencies have a stake in our region's recovery, including state and federal agencies, businesses, nonprofits, and faith-based and community organizations. Their interests should be folded into local and regional discussions and planning efforts.

The Bay Area has already developed a nationally recognized structure for emergency response to disasters. The planning that supports this response includes diverse stakeholders.<sup>1</sup> The long-term recovery process, however, is more complex and less defined. Few jurisdictions have developed recovery plans and even fewer plans or studies have been performed to develop a regional recovery process. The time period for recovery can last decades, and all levels of government and the private sector have roles to play. The recently released *National Disaster Recovery Framework* from Federal Emergency Management Agency (FEMA) provides some guidance for recovery roles and responsibilities, but maintains the emergency response in the city-county-state-federal structure. As a region with an interconnected economy, the Bay Area has a long history of effective planning across counties. How should we organize to continue this tradition to build a more resilient region and plan our recovery from earthquakes and other regional scale disasters?

Long term disaster recovery begins immediately after a disaster. A recovery plan needs to be adopted by the region with an assertive strategy for securing supplemental

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<sup>1</sup> *During the 1991 Oakland-Berkeley Hills Fire (Tunnel Fire), regional first responders could not effectively coordinate to fight the blaze. Consequently, Bay Area legislators, Tom Bates and Nicholas Petris, sponsored legislation requiring the California Office of Emergency Services (now CalEMA) to develop a Standardized Emergency Response System (SEMS)—a comprehensive system for multi-agency and multi-jurisdictional response to emergencies. This system was taken to scale and adapted nationally as the National Incident Management System (NIMS). Through SEMS aid and resources are requested by cities to the county, by counties to the state, and finally by states to the federal government. Response coordination is organized and managed effectively. In addition, the Urban Areas Security Initiative has developed five Regional Emergency Coordination Plans.*

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federal assistance. Given the federal deficit and increasing frequency of climate change related disasters, this assistance will be increasingly difficult to obtain in the future; consequently, the regional recovery plan will need to be comprehensive, detailed, and as accurate as possible. Community and elected leaders must recognize that few Bay Area assets, whether housing or infrastructure, are insured for earthquake damages. The region will rely upon a recovery plan that is funded from local, state, and federal sources – but also needs to provide security such that private property and business owners choose to re-invest.

Jurisdictions can and should plan for their own recovery. To adequately address regional recovery objectives, we need more than a few local plans. We need a coordinated regional effort that balances the needs and priorities of cities and counties. Only through coordination can a recovery plan be expedited that includes interjurisdictional and local priorities.

We recognize that regional agencies simultaneously grapple with similar questions about strengthening the regional economy and adapting to a rising bay. It is ABAG's intention that these efforts coalesce into a unified campaign to build resilience to all major threats. The recommendations are crafted as a regional policy agenda specific to earthquake risks, but can have a great impact if also applied to support and strengthen regional policy around all threats. Many of the recommendations are similar to those made by other policy bodies to address other regional disasters or threats.

## The Overarching Goal: Regional Communication and Collaboration

Recommendations from ABAG's Regional Resilience Initiative interview process confirm both the research and workshop findings that regional coordination and decision-making can speed disaster recovery and improve resilience if accomplished before the unexpected occurs. There is region-wide agreement that crises are the worst time to come together to craft public policy. Though many

small and large cities make up the region, our economy shares physical and social systems. Environmental issues and regulations cut across jurisdictions and require coordination among levels of government and agencies well before these systems are disrupted. More than half of the Bay Area residents cross county lines to commute to work, making housing workers a regional concern.<sup>2</sup> Many assets are regional, including our transportation, power, sewer, water, and communications systems.

Our ability to recover from a disaster as a region is uneven. The capacity to fully prepare for disruptions is a challenge for many local jurisdictions given current economic difficulties. This uneven ability can impede a consistent, region-wide recovery. Many municipalities don't have the financial resources to fund or manage disaster recovery; all would benefit from a regional approach to overcome resource disparities and support regional neighbors. Best practices and technical assistance for planning can be effectively provided at a region-wide level to coordinate regional information in support of local decisions and needs. Examining recovery at a regional level can strengthen restoration of local economies, address environmental concerns, and project confidence that encourages private sector business and financial institutions to continue to invest in the region.

The Regional Resilience Initiative's participants agreed that more region-wide coordination could support resilience-building at the local level. Bay Area leaders coming together to identify and address these issues now will reduce disaster impacts and promote an accelerated recovery that is equitable and strengthens our economy. Though commonly agreed upon issues emerged in the process and are presented below, findings from the stakeholder participation process must be further explored to plan better implementation and overcome barriers to disaster recovery. Our recommended actions begin to suggest ways in which to prioritize further research and action.

The overarching drive towards increased regional communication and collaboration, facilitated by the region while driven by jurisdictions, spurs ABAG's recommended actions in this paper, the other issue papers, and the Ac-

<sup>2</sup> *The Bay Area Regional Economic Assessment. A Bay Area Council Economic Institute Report (October 2012)*

tion Plan. Improved regional communication will help facilitate our recommended actions, and in mutual support, each of our recommended actions work to increase regional communication. All issues and recommendations laid out aim to use a regional forum to increase collaboration to enhance jurisdictions' ability to be more resilient to disasters.

## Goal #1: Create a Regional Resilience Policy Forum

No regional coordinating body or disaster recovery framework is currently in operation to facilitate sharing and decision-making in the aftermath of a major disaster, although FEMA's *National Disaster Recovery Framework* and California Emergency Management Agency (CalEMA)'s *Regional Emergency Coordination Plans* may provide guidance on such a framework. Jurisdictions independently work their way through FEMA regulatory system and make recovery decisions on their own, based on their current situation. The urgency for quick action and competing demands for time may inhibit decision-makers' awareness of and access to information about other actions occurring around the Bay Area, or where their rebuilding decisions fit within the regional agenda. This can lead to fragmented recovery efforts and competition for federal funds, particularly an issue with the restoration and recovery of regional assets, such as infrastructure systems. A forum to help coordinate and guide jurisdictions within the region could not only speed restoration of regional services but expedite jurisdictional recovery as well and ensure that the recovery process fits with larger regional goals.



**G-1: Use existing intergovernmental committees to convene jurisdictions and facilitate communication around disaster recovery collaboration**

The Joint Policy Committee (JPC) is tasked with overseeing and coordinating the work of the four regional agencies, including Association of Bay Area Governments (ABAG), the Bay Conservation Development Commission (BCDC), Metropolitan Transportation Agency (MTC), and the Bay Area Air Quality Management District (BAAQMD). Since recovery spans all four agencies, the JPC, as one option, is uniquely poised to facilitate a regional conversation around recovery, including local stakeholders from all four agencies.

Additionally, ABAG's Regional Planning Committee (RPC) is an existing body that convenes regularly to bring together regional stakeholders around planning issues in the Bay Area. The RPC seeks to represent the greater interests of the Bay Area and find planning solutions that consider and accommodate a wide variety of Bay Area stakeholders. Since the Committee is composed of Bay Area elected officials representing jurisdictions and special districts, with a diverse stakeholders and the nonprofit community, the perspectives and opinions uniquely represent the local perspective, yet seek regional solutions. Such an existing body, along with a staff-level task force, could serve as the structure for convening jurisdictions and facilitating recovery planning that comes up from the jurisdictions, rather than down from the region.

The role of a regional convener is to create a forum for policy discussions and information sharing, as the jurisdictions direct the content. Such a regional facilitator could involve varied stakeholders, convene in person on a regular basis, provide timely information, and facilitate projects and initiatives designated by the stakeholders. Desired outcomes would be more involved and informed stakeholders, consensus on major recovery decisions, and a coordinated regional policy platform. Providing a platform to develop disaster recovery planning could facilitate regional, state, and federal policy changes that benefit all jurisdictions.



**G-2: Examine the feasibility of a regional disaster recovery framework**

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## Case Study: Houston-Galveston Area Council

Following Hurricane Ike in 2008 the Houston-Galveston Area Council of Governments (HGAC), a 13-county region with more than 5.7 million people, helped rebuild its region. The COG's robust databases on infrastructure and household information provided decision makers with damage estimates for the whole region within days. The COG acted as an impartial mediator as funding and programmatic decisions were made, and facilitated regional discussions about economic development and needed structural protections such as seawalls.

*We had people and staff who were not heavily impacted by the storm, while a lot of our communities were literally digging out—trying to clear roads and get sewage plants back online—we were able to focus on some of those high-level needs we knew would be important as people moved at the federal and state levels to allocate disaster funds.*

– Chuck Wemple, HGAC's economic development program director

Within a broader forum, a regional disaster recovery framework could allow jurisdictions to develop procedures for making decisions about operations or processes as well as financial management issues that cross jurisdictional boundaries or are too cumbersome for one jurisdiction to manage alone. Jurisdictions will make many decisions independently based on their unique needs, and will largely run their recovery process within their own boundaries. Agreeing upon larger regional goals can help the Bay Area present a coordinated coalition to better attract and utilize resources and assistance.

A decision-making structure or framework could also

speed the transition between disaster response, which has an existing regional system, and disaster recovery, where a system needs to be developed. Facilitating a transition ensures that communication and coordination take place and that decisions made during disaster response are considered in recovery, and allows recovery stakeholders to communicate their goals and priorities during the response phase. Often, decisions made during response have long-term repercussions on recovery, such as when rebuilding is allowed to take place in highly vulnerable areas, driven by the desire to return to “normal” as fast as possible. Having a structure in place for communication and decision-making that has consensus-driven goals during the response phase can help avoid mistakes in recovery. Certainly, rebuilding in recovery must take into account future hazard mitigation, as well as long term community sustainability.

A regional recovery framework must incorporate input from a wide variety of stakeholders. The roles of local, state, and federal agencies and regional organizations in recovery vary and overlap; cities and local jurisdictions must integrate the practical application of resources from the public and private sectors and institutions that are partnering in the recovery collaboration. Outreach to local community political leaders is also needed in recovery planning, along with boosted public outreach and education campaigns for community resilience, with defined recovery guidance measures and standards.

This framework may take the form of a written recovery plan, outlining procedures, roles, and tasks for all stakeholders involved, similar to FEMA's recently released *National Disaster Recovery Framework*. It should align with and incorporate other established recovery structures and concepts, such as the National Academy of Science's *Disaster Resilience: A National Imperative*. Model post-disaster recovery plans, such as those released by the American Planning Association, San Francisco's *Resilient City Initiative*, and Florida's *Post-Disaster Redevelopment Planning: A Guide for Florida Communities* could also serve as templates for a regional plan.

This framework should also be flexible enough to consider other long-term growth issues, such as economic chal-

allenges, environmental sustainability, sea level rise, and other threats to the Bay Area's long-term quality of life. However, the final product should be guided by stakeholders' needs. The framework can provide information to help local jurisdictions identify staff and leadership roles as a part of local recovery plans, with guidance on how to fulfill those roles. If operational authority at both the regional and local levels is identified before a disaster, responsibility and accountability are defined, ensuring that the recovery process succeeds.



### **G-3: Integrate resilience policy into existing current plans and practices**

Many elements that support resilience and recovery can be integrated into existing regional and local work. The region should seek ways to integrate resilience work with existing projects to facilitate increased resilience without significant additional resources. Regionally, disaster resilience policy should be incorporated into ABAG's Sustainable Communities Strategy (SCS), the Joint Policy Committee's work on climate change, and other regional initiatives towards sustainability, economy, land use planning, and quality of life. These efforts create a regional vision with the potential to effectively guide disaster recovery.

For example, through Plan Bay Area<sup>3</sup> the Bay Area has already begun developing a vision for its future which will be carried out over the coming decades to create a more sustainable, equitable, prosperous place to live. The plan is a blueprint for sustainable future growth; this vision could be incorporated as we rebuild damaged neighborhoods and cities. The Bay Area has a rich history of visioning and implementing plans. We decided to reroute the Cypress

<sup>3</sup> *Plan Bay Area is an integrated regional land use and transportation plan that combines the Sustainable Communities Strategy (SCS), Regional Transportation Plan (RTP), and Regional Housing Needs Allocation (RHNA) into a single vision for the Bay Area. This plan identifies anticipated growth and where it should be focused in coordination with jobs and transportation. Jurisdictions participate by nominating Priority Development Areas (PDAs) to focus future growth. ABAG and MTC presented multiple growth scenarios and solicited feedback from ABAG Executive board as well as the general public to arrive at the preferred growth plan, the Jobs-Housing Connection Strategy.*

freeway to better connect the Port of Oakland and enhance the West Oakland neighborhood; the Embarcadero and Central freeways in San Francisco were torn down to better connect the city with the waterfront and revive nearby neighborhoods. We know that such decisions can take years to reach and are hotly contested. However, having a common vision and guiding principles before a disaster can help guide and hasten our decision making process after the disaster.

Local leaders already grapple with difficult issues in their daily work, including finding affordable housing solutions, attracting good jobs and businesses, competing with other jurisdictions for tax dollars, providing services for residents, and reducing greenhouse gas emissions. Language and policy on recovery can be integrated into existing city-level documents to formalize policy and procedures rather than requiring new initiatives.

Discussion of recovery can be integrated into the General Plan's Community Safety Element during a routine General Plan update, and Climate Adaptation Plans can be updated to acknowledge liquefaction as a threat that is often concurrent with areas vulnerable to sea level rise. Such efforts provide a solid basis for policy and action for disaster recovery. Robust, well-developed plans for the future adopted now can serve as blueprints for the future, whether or not a disaster hits. If a disaster does hit, the plans serve as a framework already in place for a recovery plan and reduce the need for a lengthy planning process after a disaster, which delays recovery.

## **Goal #2: Develop Regional Resilience Leaders**

Initiative stakeholders felt that disaster recovery was well handled by emergency managers. However, long-term recovery can extend years or even decades after response ends and requires many specific capabilities and expertise in addition to those required of an emergency manager. Disaster recovery actively requires input from the whole community and requires coordination among a wide range of departments over a very long period of time. It also re-

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quires knowledge, understanding of and coordination with state and federal agency policies, programs and both public and private funding sources.

In the recovery phase, many local government staff and officials will find themselves conducting similar tasks and fulfilling similar roles as they do today – only with the added pressure of how to permit quickly the rebuilding of housing, businesses, their own buildings, their economy, and major infrastructure systems. Everyday tasks will become elevated with higher stakes, more and impassioned input, and extreme pressure on quick implementation. The fiscal base of many cities will be severely damaged, necessitating the layoff of staff. They may also find that they are asked to perform tasks well beyond the original scope of their jobs. Helping staff and officials understand their post-disaster responsibilities before disaster hits can help ensure that adequate authorities and tools and are prepared for what may be needed in the recovery phase. Identifying champions and professionals with expertise in recovery policy and are adept in working with senior officials can assist recovery in strategic roles that leverage their skills.



#### **G-4: Lead reconnaissance missions for local leaders, staff, and community stakeholders to areas undergoing disaster recovery**

Many of our local leaders who have led their jurisdictions to greater resilience began to do so after they experienced firsthand the disaster recovery process, such as visiting New Orleans after Hurricane Katrina. Many of our region's earthquake planning champions were staff and elected officials during the Loma Prieta earthquake and the Oakland-Berkeley Hills Fire (Tunnel Fire); they vividly remember the challenges they faced in responding to and recovering from those disasters with little training or planning. For those who haven't experienced them firsthand and without recent local disasters in recent collective memory, disaster recovery tends to be abstract. It becomes easy to ignore risks and focus on short-term, urgent issues. However, seeing, speaking to, and relating to official counterparts in disaster-stricken cities can make tangible

the reality of the recovery process and spur action at home. Experiencing the aftermath of a disaster can be a strong motivator for elected and community leaders to assume new responsibilities and guide action in their jurisdictions.

Professional groups already conduct such reconnaissance trips. The Earthquake Engineering Research Institute's (EERI) *Learning from Earthquakes* Program sends out reconnaissance teams into the field after major disasters to assess damage, document initial observations, and assess the need for follow-up research. The region could consider working with EERI to expand reconnaissance teams to include local and community leaders and appropriate staff. SPUR also leads annual learning trips for members, which could be geared towards disaster recovery as suitable.

## **Goal #3: Use Information and Data Analytics for Disaster Resilience**

Jurisdictions need many different types of information after a disaster. Local officials must have essential damage impact information for utilities, government, and private sector organizations to assist with decisions about outages, damaged infrastructure, transportation disruptions, and related debris and transportation hazards issues. The same damage impact information can support decisions about long-term sheltering, temporary housing, and expedited disaster assistance. Information needs may range from information on individual buildings to a general picture of damage in other parts of the region.

Activities underway in the Bay Area support this information sharing, and existing technologies can be leveraged for this purpose to expand current efforts. More focused development of and integration with existing capabilities are called for to advance a system that communicates a common operating picture and supports regional situational awareness.



#### **G-4: Establish and maintain a recovery clearinghouse to house resources for pre-disaster recovery planning and post-disaster recovery guidance**

Currently, there is no central repository for information on long-term recovery, so knowledge distribution throughout the region is uneven and lacking. Many stakeholders simply don't have sufficient information to plan for recovery and don't know where to find the information. The region could benefit from an informational clearinghouse to house and share case studies, best practices, model ordinances, checklists, recovery plans, financing strategies, and other forms of guidance to help stakeholders better understand the recovery process and to have easily accessible tools to enact relevant policy, before and after a disaster. A sample of such information was shared at ABAG's 2012 Fall General Assembly for all participants and regional members.

The clearinghouse should not just collect information, but direct stakeholders to the information they need most at the times they need it most –for example, just-in-time checklists, ordinances, and other information readily accessible to them immediately after a disaster strikes. The clearinghouse should allow for contributions and updated content from the users within the region as it is developed, which can be vetted and organized by clearinghouse managers. Staff can also provide technical assistance so users can understand what kind of resources and information is available to them at critical points in their recovery process. For example, distributing FEMA reimbursement checklists before money is spent to ensure that jurisdictions comply with reimbursement requirements.

In addition to collecting information and tools, the clearinghouse should manage regional hazards data and data on the recovery process. Data by itself, such as building damage data, does little for stakeholders who need to make decisions quickly and under immense pressure in the post-disaster period. The data needs to be analyzed to tell its story and find its role in the larger disaster and recovery

narrative. Specialized analysis can detect trends and patterns of land and building damage, population movement, and recovery trends; such analysis can inform policy decisions and plans and incite action. For example, mapping analysis can indicate to jurisdictions areas of concentrated damage, where significant demolition and rebuilding will need to occur, and where services for residents will need to be concentrated. At a regional scale, identifying jurisdictions with disproportionately severe damage can help inform where funding for rebuilding may go. Elected officials and the media can use maps, charts, or tables, or even narratives and statistics to convey understandable damage and recovery data. Analyzing data and crafting useful messages for varied stakeholders requires technical skills as well as understanding of who needs what information, at what time, and how to convey it effectively.

ABAG's Planning Group currently manages and analyzes land use, planning, and population data for the region and uses this data to work with local jurisdictions to meet long-term regional goals. Expanding the type of data sets it manages and analysis it performs to include disaster data, such as HAZUS™ results or vulnerability analysis before a disaster, and damage data after a disaster, would enable local jurisdictions to more fully understand disaster planning implications without major significant resources. •