REGIONAL RESILIENCE FRAMEWORK

A TOOLKIT FOR LOCAL & REGIONAL GOVERNMENTS

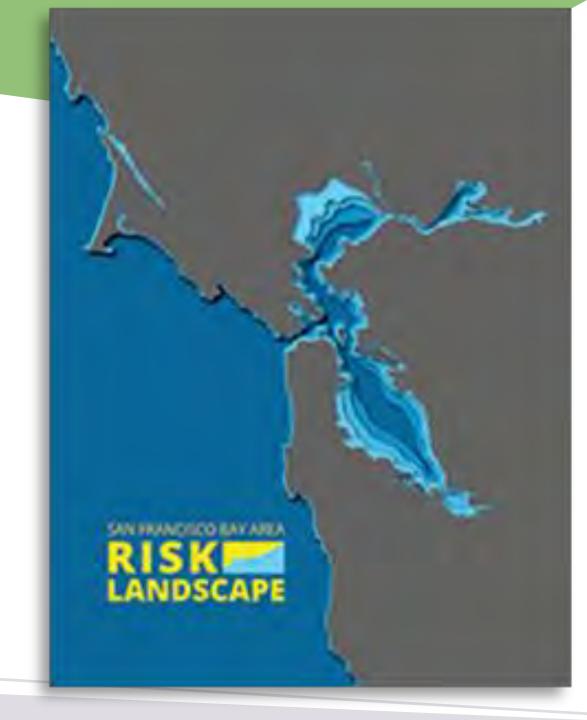


Intro and Background

Abby Hall U.S. EPA Office of Community Revitalization





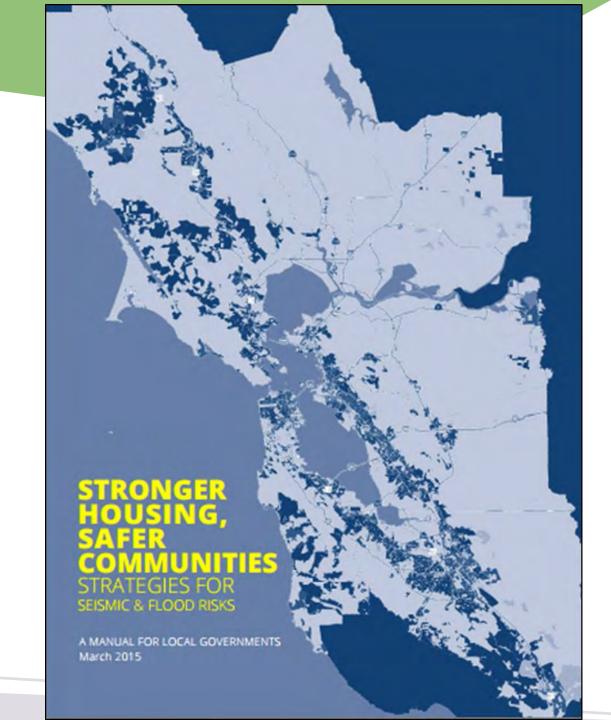


Four Phases of Disaster Planning



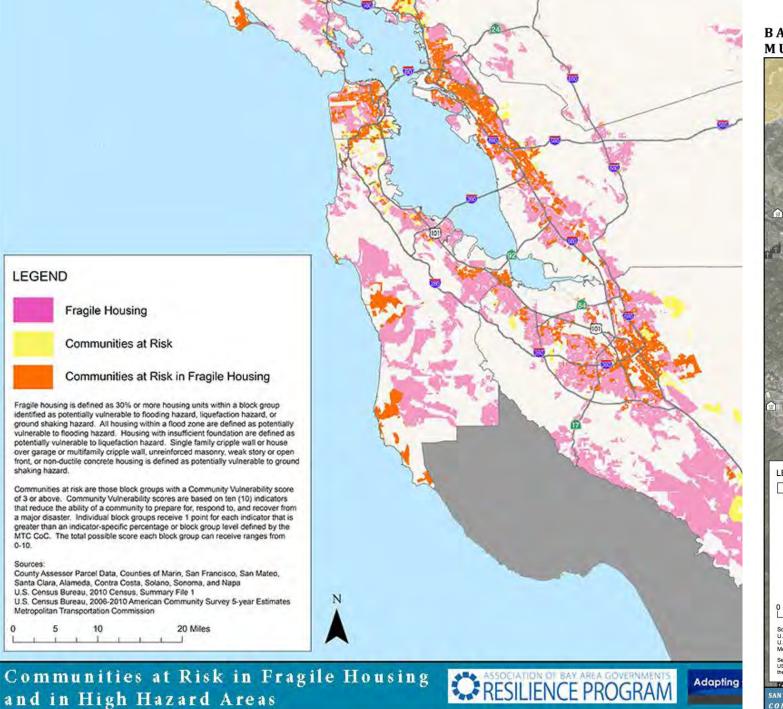
Regional Scale

- Link recovery and resilience to community values
- Strategic planning for land use, infrastructure, economic resilience, and social justice
- Convene cities, counties, community groups, NGOs, private sector, and other partners to work together



Multihazard Approach

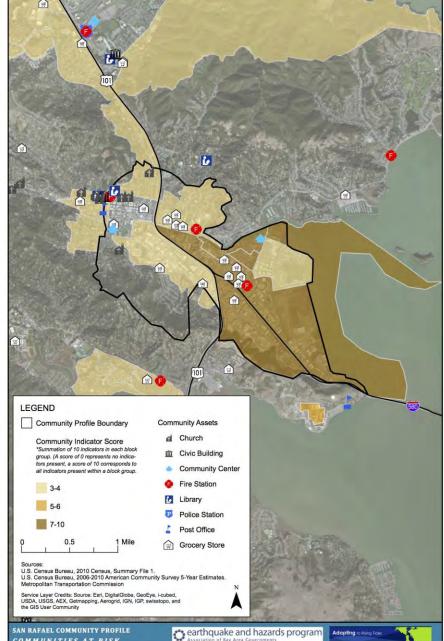




BAY AREA HOUSING AND COMMUNITY MULTIPLE HAZARD RISK ASSESSMENT







COMMUNITIES AT RISK

Strategies

- Specific ways to address hazards & assets
- Education for homeowners, retrofit programs, insurance and state policy changes, and more
- Community-centric solutions for local issues

HAZARDS

Key consideration to address	Indicator to address	Strategies to consider			
	Ground shaking (MMi Xili or above)	Strategy 1: Complete seismic hazard mappi urbanizing areas Strategy 2: Evaluate current guidelines and practice* for mapping hazards, particularly r			
		Strategy 11: Develop			
		Also see strategies for 1	COMN		
		Strategy 1: Complete urbanizing areas			
Hazards will have significant	Moderate to high liquefaction	Strategy 2: Evaluate of practice" for mapping hazards, particularly of	considerat to addre		
		Strategy 11: Develop	information		
		Also see strategies for !	about the ne		
	Current and future flooding	Strategy 5: Establish a program	and location of elderly an		
		Strategy 31: Incorpor capital planning proce	community members is		
communities		Also see strategies for 1	limited		
that live in high hazard areas	Any hazard	Strategy 6: Develop g transit-oriented devel	Many		
		Strategy 10: Host a re competition	members have limited		
		Strategy 12: Increase lifelines in high hazarr	or inadequa information		
		Strategy 13: Reduce of hazardous areas while	about hazar Housing		
		these areas	affordability is an existing		
		Strategy 14: Establish safe and smart new d	challenge		
		Strategy 15: Establish program to redirect d preferred, low hazard	that will mak recovery mo difficult		
		Strategy 34: Create a	Renters hav limited abilit to improve t resillence of		
		Strategy 35: Revise lo allow temporary land disaster recovery			

COMMUNITY VULNERABILITY

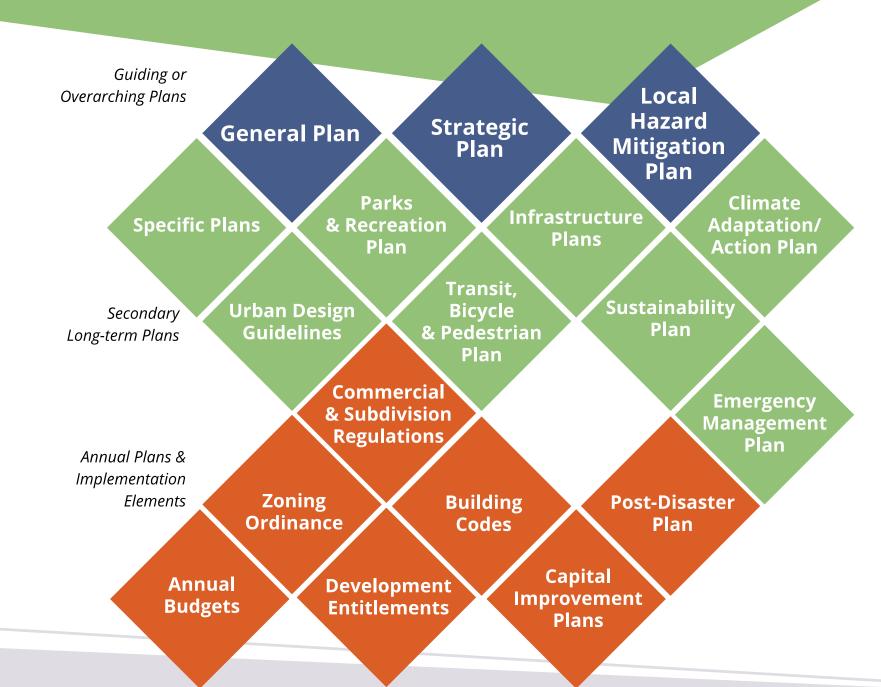
seismic hazard mapping of urban and

urrent guidelines and the "state of

Key consideration to address	Indicator to address	Strategies to consider		
Information about the needs and location of elderly and very young community members is limited	Dependent ages young children or Elderly	Strategy 39: Create a community capacity inventory		
Many community members have limited or inadequate information about hazards	Language and ethnicity -community of color and non-English speakers	Strategy 3: Develop education program(s) to encourage homeowners and renters to purchase of hazard insurance Strategy 40: Disseminate best available hazard and climate risk information through community-based organizations and non-traditional partners		
Housing affordability is an existing challenge that will make recovery more difficult	Housing cost burdened	Strategy 3: Develop education program(s) to encourage homeowners and renters to purchase of hazard insurance Strategy 7: Encourage innovative insurance solutions at the state and federal levels, and in partnership with the private sector Strategy 38: Protect affordable housing during recovery		
Renters have a limited ability to improve the resillence of the housing they live in	Renters, low- income renters	Strategy 3: Develop education program(s) to encourage homeowners and renters to purchase of hazard insurance Strategy 8: Advocate for changes to federal and state programs to improve multi-family rebuilding efforts Strategy 19: Require hazard disclosure for renters Strategy 37: Improve the resilience of rental units and ensure they are re-built after loss or damage due to a natural disaste		
Many community members are resource constrained and less able to prepare for or recover after a disaster	Access to resources: housing and transportation cost burdened, transit dependent (no vehicle), very low income or low graduation rate	Strategy 7: Encourage innovative insurance solutions at the state and federal levels, and in partnership with the private sector Strategy 9: Decrease reliance on grid-supplied power		

Flexible Approach

- Streamline
- Leverage
- Implement!



Regional Resilience Framework













Engage: Engagement for Resilience

SB 1000 – Environmental Justice in Land Use Planning

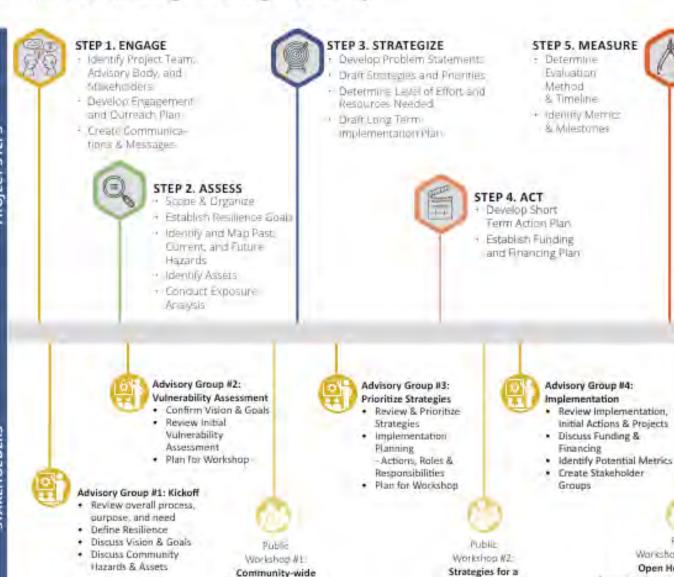
- Low-income residents, communities of color, indigenous communities and immigrant communities.
- Disproportionate environmental and health impacts.
- Vulnerability indicators should be built into the process.
 - Housing and transit cost
 - Income
 - Education
 - Etc.



Tactical Tools

- Engagement & outreach plan
- Audience-focused messaging
- Effective workshops and meetings
- Managing and sustaining a long-term relationship!

Resilience Planning Meeting Roadmap



Vision & Vulnerability

Warkshop #3:

Open House:

Launch Initial Actions

Resilience Community



ASSESS: Conduct a Risk & Vulnerability Assessment

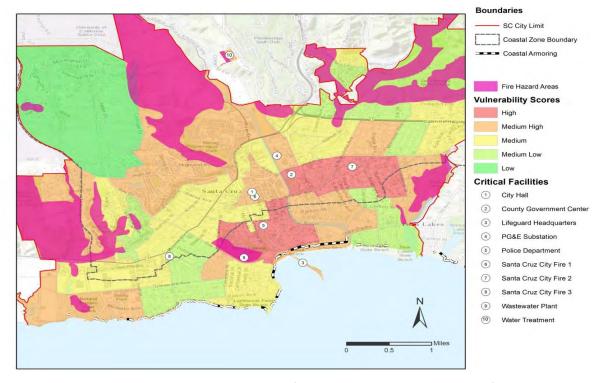


- What is motivating you to do this work?
- Identify triggers, lenses, and plans to coordinate
- Linking in sustainability and social equity
- Establishing goals to guide process





- Describe hazards succinctly in hazard impact statements
- **Prioritize hazards** that concern the community most



Citation: Wise-West, T. *et al.* 2018. 2018-2023 Climate Adaptation Plan Update. City of Santa Cruz, CA.

Asset Classes & Assets · Natural Infrastructure · Forest & Woodlands Lakes, Rivers, & Wetlands Major Employers · Wildlife/Habitat Areas Manufacturing & · Parks & Recreation Areas Industrial Uses **Natural Environment** · Commercial Districts/ Areas Primary Economic Drivers (Recreation, agriculture, Tourism, etc.) Community Financial Facilities (Banks) & People Residents Critical Economy Employees Services Visitors First Responders · At Risk Populations · Culture & Ethnicity · Pets and Animals · Public Buildings & Schools · Utilities: Electricity, Water, Sewer, · Community Facilities Storm Water, & Propane (Grocery, Food Banks, Places of worship, etc.) Communication Infrastructure Housing **Built Environment** · Emergency Response Systems & Facilities Cultural Resources • Public Health/Hospitals · Future Growth & **Development Areas** Shelters · Bike and Pedestrian · Transportation Infrastructure Infrastructure · Hazardous Facilities



STRATEGIZE: Identify & Prioritize Strategies



- Develop long-term implementation plans (5-20 years) to achieve resilience goals
- Establish a short-term action plan (up to 5 years) to get started now

Worksheets & Tools

Strategy Development and Implementation Guide Handout

Purpose

This handout provides two tools to help to fill out a Strategy Development and Implementation Worksheet: a description of what to include in each field, and an example from a real life strategy. Review this handout with the project team prior to developing a worksheet for each strategy to ensure that worksheets are filled out consistently and that everyone understands the key pieces of information that are needed to effectively develop an appropriate and responsive strategy and plan for its implementation.

STRATEGY DEVEL	OPMENT INFOR	MATION									
Problem Statement	This is the problem statement that the strategy is responding to. This should come out of the vulnerability assessment and should include community goals.										
Strategy Name	This is the name of the strategy – try to keep it to a few words.										
Strategy Summary	This is a short description of what the strategy does.										
Hozard(s) Addressed	Identify which hazard this strategy responds to.										
Strategy Type	Operational Strategies to enact operational and gover- nance related improvements	Programmatic Strategies to expand or create new programs, activities, and initiatives		a De St deve pol regu	Plans, gulations, nd Policy velopment rategies to lop or revise icies, plans, plations, and ruidelines	Capital Improvement/ Infrastructure Projects Strategies designed to address physical and functional deficiencies and needs in the built environment	Education/ Outreach/ Coordination Strategies related to initiating or expanding partnerships and relationships, communicating and sharing information, and building awareness	Evaluation Strategies to improve feedback, input, data and infor- mation or conduct further or new analysis			
Process/ Implementation Mechanism	Long Range Planning e.g., master plans, climate action plans	Land Use Planning e.g., general plan, specific plan	Capii Plann e.g., ca improve plai	ing pital ment	Operations e.g., annual budgeting	Emergency & Hazards Planning e.g., hazard mitigation plans	Project Planning & Design e.g., private and public devel- opment projects	New Initiatives e.g., legis- lation, ballot measure			
Responsible Agency	Which department has the proper authority, capacity, and knowledge to implement the strategy.										
Partners	Internal or external stakeholders who have some decision making authority, political influence, policy or regulation authority, or who can assist with implementation.										



ACT: Funding Action



MEASURE: Evaluate Results & Refine Methods

What to Measure & Why?

- Ties actions to goals
- Metrics can help tell a story to support resilience
- Informs where and when strategies should be updated, abandoned, or strengthened
- Fosters buy-in and long-term support

