



# Regional Resilience Toolkit - Toolbox Tuesday

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April 21, 2026

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# INTRODUCTION

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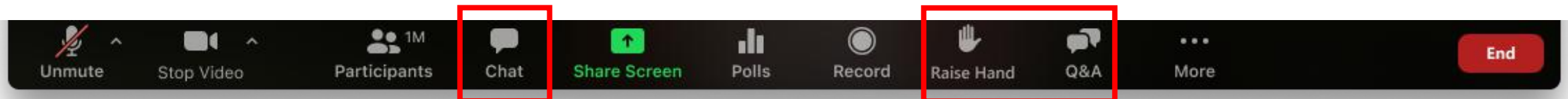
# Agenda

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- Introduction
- Background
- Framing the Toolkit
- Toolkit Walkthrough
- Recovery
- Funding, Financing, and Governance
- How You can Use the Toolkit

# Welcome and Housekeeping

1. This webinar is being recorded; slides and a recording will be shared after the session
2. All participant lines are muted to minimize background noise
3. Please submit questions using the Q&A feature or Zoom chat
4. We'll address questions during the Q&A portion at the end of the webinar





# BACKGROUND

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# Why now?



**"Every \$1 invested in resilience saves \$13 in damages and indirect consequences " - U.S Chamber of Commerce**





# REGIONAL RESILIENCE TOOLKIT PURPOSE

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# Regional Resilience Toolkit Purpose



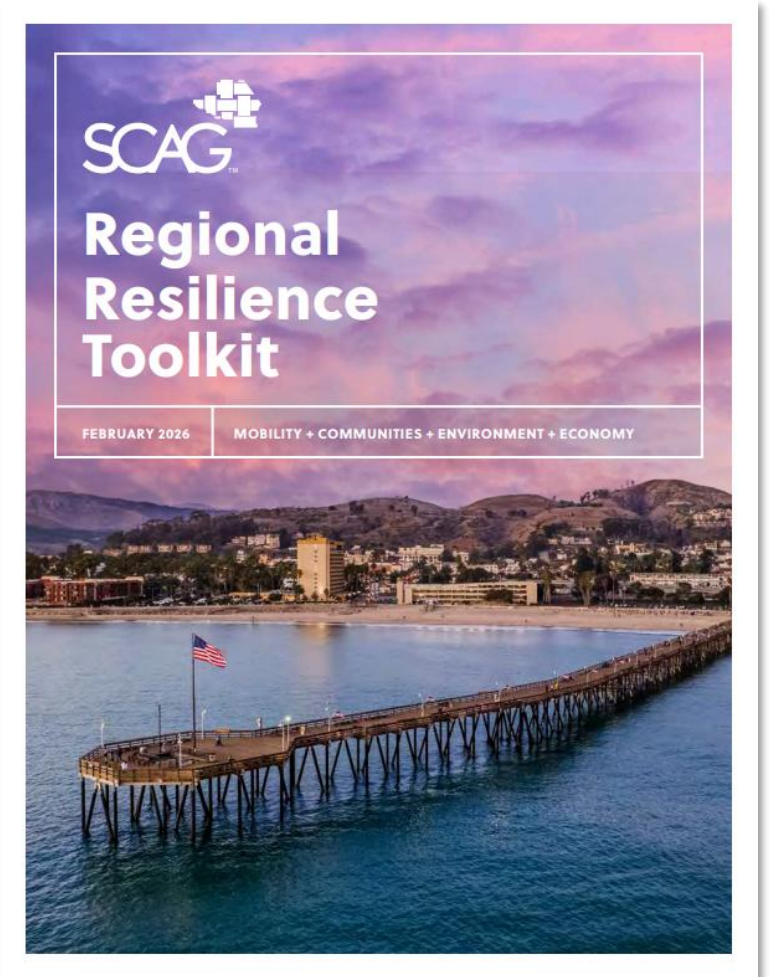
Provide technical guidance and resources to help local agencies plan for resilience



Offer data, tools, funding pathways, and best practices to support implementation



Convene jurisdictions, agencies, and other stakeholders to collaborate, share knowledge, and advance regional resilience goals



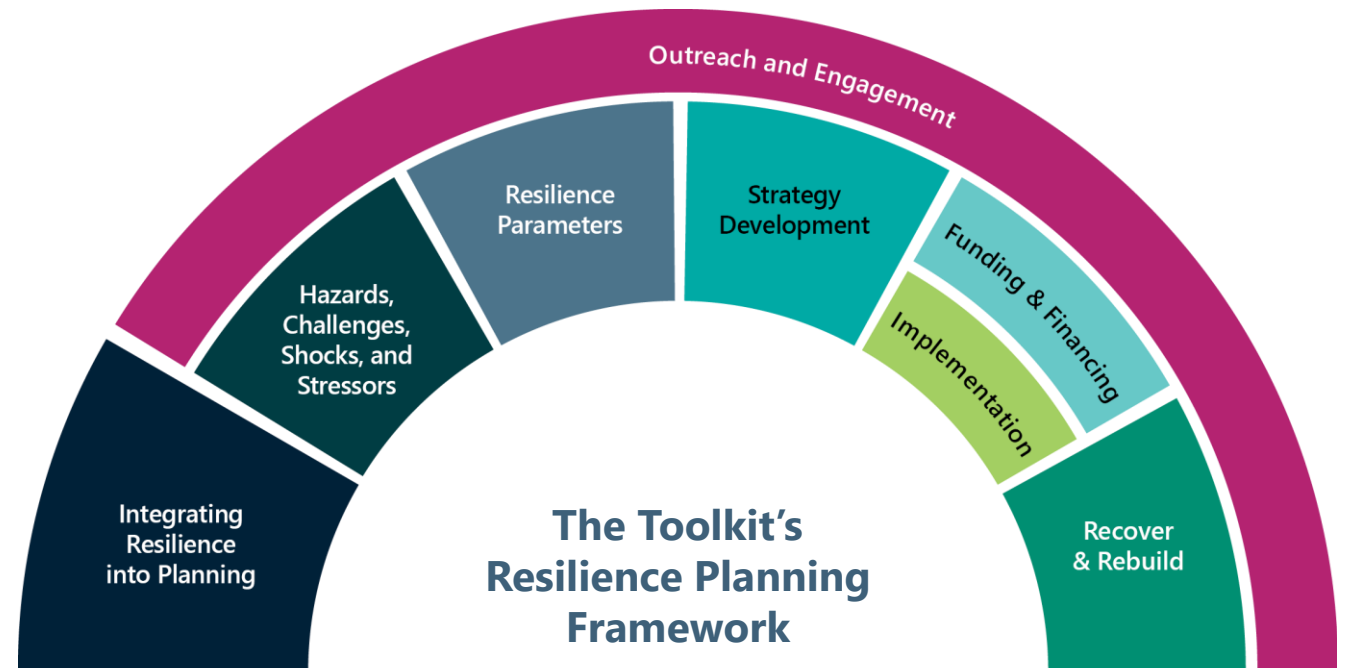
# Toolkit organization

## PURPOSE & AUDIENCE

- Flexible & scalable
- Local & regional focus
- Designing for jurisdictions with varying staff capacity, data availability, and resources

## HOW TO USE THE TOOLKIT

- Start anywhere - flexible entry points to meet jurisdictions where they are
- Use as a step-by-step guide or to fill specific gaps
- Includes tools, templates, case examples, and resources
- Supports compliance with state mandates & grant requirements



# How the toolkit fits into local planning



- ✓ Toolkit can plug into ongoing planning workflows
- ✓ Flexible pathways for agencies beginning at different points



# TOOLKIT WALKTHROUGH

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# Framing *Your* Resilience Plan

Before diving into the toolkit, it helps to have a shared language for the types of climate risks communities face — and a few key questions to guide your planning.

## SHOCKS

*Sudden, acute events that disrupt systems and communities*

Wildfire • Extreme heat event • Infrastructure failure • Earthquake

## STRESSORS

*Chronic, underlying challenges that weaken systems over time and make shocks harder to absorb*

Sea level rise • Air quality degradation • Drought • Aging infrastructure • Housing affordability

## GUIDING QUESTIONS

- 1 What shocks and stressors does your community face?**  
Which are most likely? Which would cause the most harm?
- 2 Who is most affected — and where?**  
Which populations, neighborhoods, and infrastructure are most exposed or vulnerable?
- 3 How do risks interact and compound?**  
e.g., Extreme heat + power outage + aging housing = cascading health crisis
- 4 What actions can reduce risk — and for whom?**  
Are strategies reaching the communities that need them most?

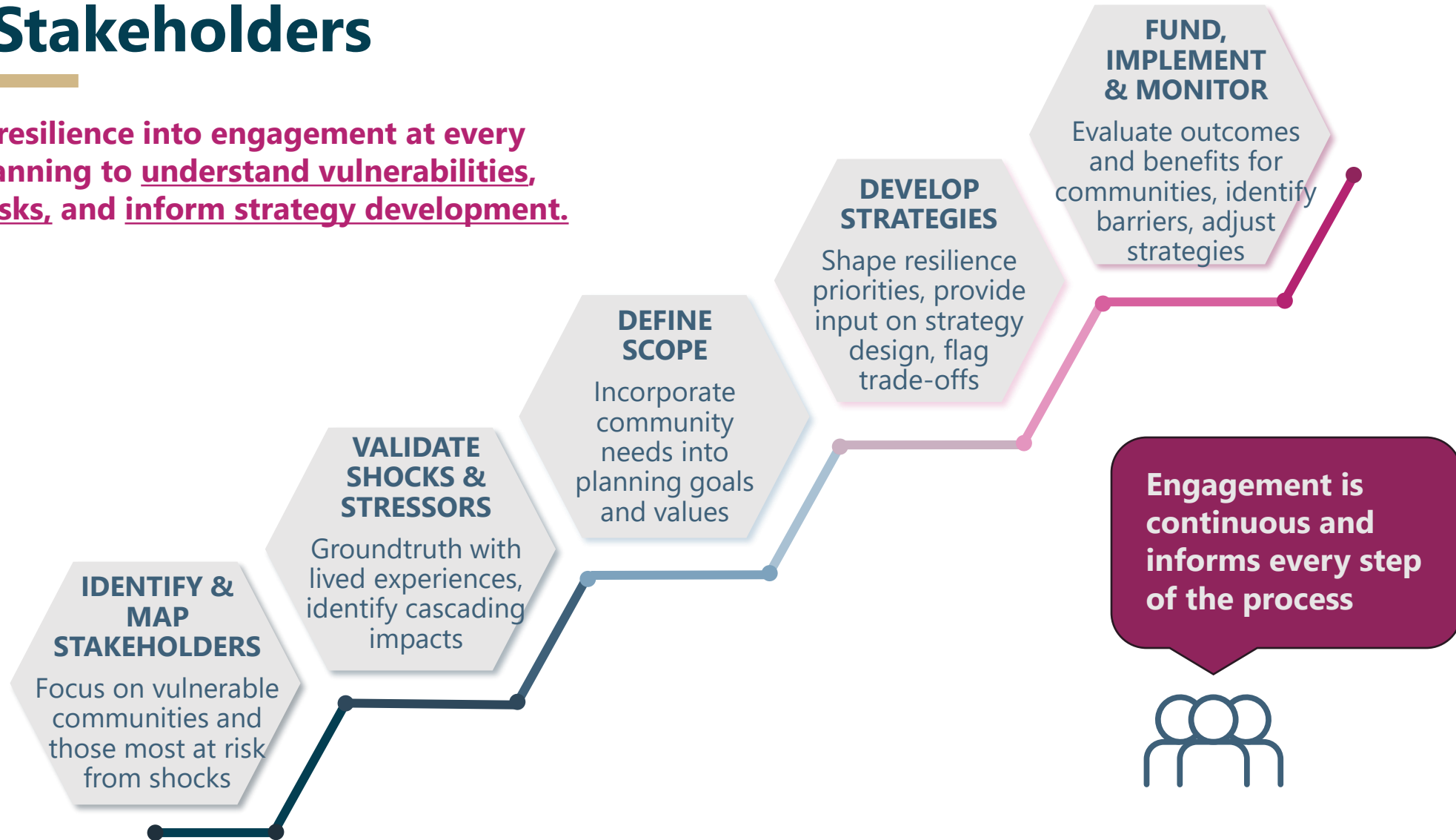
*Let's see how the toolkit helps answer these questions →*

# Engage Communities and Stakeholders

**Integrate resilience into engagement at every step of planning to understand vulnerabilities, validate risks, and inform strategy development.**

**OUTPUT →**

**Community-validated outcomes across the planning process**





# STEP 1: Identify Shocks and Stressors

## Shocks and Stressors Matrix

- Provides a structured way to identify shocks & stressors,
- Uses metrics and data sources to assess relevance
- Supports evaluation and comparison across risks
- Connects risk identification to strategy development in later steps

## How we apply it:

- Start with **local context and recent events** to select relevant shocks
- Identify **overlapping and cascading risks** (e.g., heat + power outages)
- Compare risks using **available data and indicators**
- Narrow down to **priority risks for planning and action**

Shocks		Metrics & Data Sources						Scale and Scope		
Shock	Category	Type of Metric	Directionality of Metric Relationship to Risk	Scale of Metric	Metric Description	Name of Dataset/Index/Report	Dataset/Index/Report Owner	Geographic Area (Coast Inland, Desert, and Forest)	Scale of Occurrence	Scale of Impact
Earthquake	Built	Current Status	Presence of active fault and/or liquefaction zone corresponds to greater risk	Site-specific	Presence of active fault and/or liquefaction zone	California Geological Survey	California Department of Conservation	All	Regional	Local and Regional
Fire: Public Safety Power Shutdown	Built	Current Status	Presence of threat district corresponds to greater risk	Site-Specific	Designates areas of extreme risk from wildfires associated with overhead utility power lines or overhead utility power-line facilities also supporting communication facilities.	CPUC High-Fire Threat District	California Public Utilities Commission (CPUC)	All	City/County and Regional	Local and Regional
Fire: Wildfire	Built	Current Status	Lower value corresponds to lower risk	Census tract	Percent of population currently living in high fire risk hazard zone	Climate Change and Health Vulnerability Indicators for California	California Department of Public Health	All (especially Forest)	Regional	Local and Regional
Fire: Wildland-Urban Interface (WUI)	Built	Current Status	Lower value corresponds to lower risk	County or Site-specific	Percent of the urban population in the WUI; or use map "Wildland Urban Interface" to identify WUI areas within jurisdiction	Wildland Urban Interface	Spatial Analysis For Conservation and Sustainability (SILVIS) Lab at the University of Wisconsin-Madison	Coastal, Forest	City	City/County
Flood	Built	Current Status	Location within floodplain corresponds to greater risk	Site-specific	Estimates for 100-year, 200-year, and 500-year floodplains	Best Available Map (BAM)	California Department of Water Resources	All	Local and Regional	Local and Regional
Infrastructure Failure: Aging Infrastructure	Built	Current Status	Higher value corresponds to lower risk	Agency-specific	Agencies should consult their capital planning department. This analysis did not identify a relevant region-wide dataset; recommended to focus on agency-specific data. The American Society of Civil Engineers report provides high-level context for the status of infrastructure in California.	Report Card for California's Infrastructure (2019)	American Society of Civil Engineers	All	City/County	Local and Regional
Infrastructure Failure: Power Utility	Built	Current Status	Higher value corresponds to lower risk	County	Percent of distribution lines that are buried underground, covered with insulation that could help prevent fires, or bare.	Investor-Owned Utilities' Electricity Distribution Lines That Are Underground or Covered (June 2021)	California State Auditor	All	City/County	Local and Regional
Infrastructure Failure: Transportation	Built	Current Status	Higher value corresponds to lower risk	County	PCI for each county (including cities within the county) based on a scale of 0 (failed) to 100 (excellent); weighted by the pavement area; i.e., long roads have more weight than short roads when calculating the average PCI.	California Statewide Local Streets and Roads Needs Assessment 2021	NCE	All	City/County	Local and Regional



# Step 2a: Select a Planning Framework

## STANDALONE PLAN

- A single, focused resilience plan
- Best when resilience needs dedicated visibility, and when funding is available

## INTEGRATED

- Weave resilience into General Plan, Safety Element, CIP, or others
- Best when leveraging existing plan updates and staff capacity

## HYBRID

- Standalone plan anchors the vision; integration and alignment advances it across documents
- Best when you have capacity and want durability

**Where does resilience already live in our plans, where are the gaps, and which upcoming plan updates create an opening to integrate?**



A clear roadmap for resilience plan development

# Step 2b: Define Scope & Set Goals

## DEFINE SCOPE & TIMEFRAME

- Determine which shocks, stressors, systems, and geographies to include
- Consider what triggered the planning process
- Identify resources available, staff capacity, and stakeholders to include
- Set a planning horizon (near-term actions vs. long-term resilience)

## SET GOALS

- Establish clear, outcome-driven resilience goals
- Consider community visions and goals outlined in prior planning efforts and align them with identified shocks and stressors and community priorities
- Define what success looks like (e.g., reduced exposure, faster recovery, improved equity outcomes)

**This step defines how your resilience plan is structured before strategies are developed**





# STEP 3: Evaluate the Impact/ Risks of Shocks & Stressors

## FACTORS TO CONSIDER

**Level of Detail**  
Planning goals will determine necessary level of detail

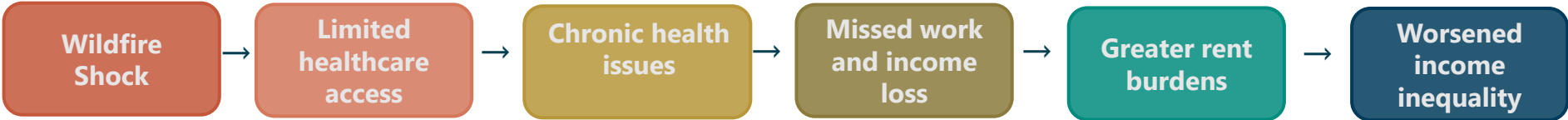
**Timeframe**  
How far into the future should we look? What is the uncertainty?

**Critical Systems**  
How redundant and robust are underlying infrastructure systems?

**Disproportionate Impacts**  
What communities or areas would be disproportionately impacted?



## EVALUATING CASCADING IMPACTS





# STEP 4: Develop Strategies



## STRATEGY PRIORITIZATION

- Compare strategies using evaluation criteria
- Focus limited funding and staff on **highest-value actions**
- Identify actions that address **near-term benefits**, prepare for **mid- and long-term challenges**, and provide **co-benefits**
- Support transparent & decision-making
- Select a **prioritized list for implementation**

## EXAMPLE EVALUATION CRITERIA

**Effectiveness** → Reduces risk

**Feasibility** → Cost, capacity, timeline

**Equity** → Benefits to vulnerable communities

**Alignment** → Consistency with plans



# STEP 4: Example Strategies

Strategies span four interconnected systems — a starting point for integrating resilience into plans and processes.



## Built Environment

- Seismic retrofits for critical infrastructure to latest standards
- Evacuation plans addressing access & functional needs
- Energy efficiency upgrades for homes and buildings



## Social Systems

- Resilience centers in trusted community spaces
- Community preparedness and capacity-building trainings with CBOs
- Park access within 1/2 mile of all neighborhoods



## Economic Systems

- Business continuity planning at local & regional level
- Integrate business recovery into hazard mitigation plans
- Communication protocols for post-disaster outreach



## Natural Systems

- Conservation easements to protect farmland, watersheds, and habitat
- Restore urban rivers and riparian corridors
- Restore and manage forests and wildlands

# Audience Poll

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## **Which resilience strategy area is most relevant to your community right now?**

- Built environment (infrastructure updates, evacuation, energy efficiency)
- Social systems (community resilience centers, preparedness, capacity building)
- Economic systems (business continuity, workforce recovery)
- Natural systems (conservation, forest restoration, watershed resilience)
- Not sure yet — still identifying priorities



An implementable and trackable resilience plan

# STEP 5: Implementation & Monitoring

## IMPLEMENT

- Integrate strategies into existing plans;
- Align actions with department **responsibilities, budgets, and timelines**;
- Coordinate across agencies to **embed resilience into ongoing programs and capital investments**

## ADAPT

- Evaluate whether strategies are **achieving intended impacts**;
- Adjust actions based on **performance, new data, and changing conditions**;
- **Update plans over time** to reflect lessons learned and evolving risks

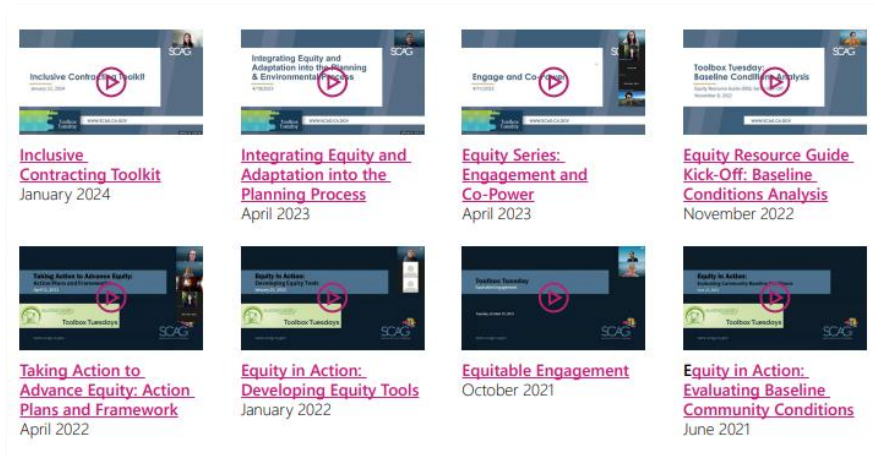


## MONITOR

- **Establish clear KPIs** tied to outcomes, not just activities (e.g., net tree canopy change vs. trees planted);
- Use indicators that are practical to **track (available data, low resource burden)**;
- **Track progress regularly** across implementation status and performance outcomes

# Resources

- ✓ General resilience planning resources
- ✓ Example plans and opportunities to incorporate resilience
- ✓ Tools for characterizing shocks and stressors
- ✓ Resources for engaging with vulnerable and impacted communities
- ✓ Example strategies



<h3>Tools to Support Social Resilience</h3>	<h4>Healthy Places Index Policy Guides</h4> <p>The HPI Policy Action Guides provide evidence-backed policies across the topics of social, transportation, economics, housing, and more. For each HPI indicator, it provides policies, evidence, and links to tool and resources.</p>
<h4>Trust for Public Land</h4> <p>Provides maps to support open space development and park planning.</p>	<h4>The Transformative Climate Communities (TCC) Program</h4> <p>The TCC Program evaluation reports, developed by the UCLA Luskin Center for Innovation, provide progress reports, lessons learned, and case studies on TCC implementation projects, which serve as models for comprehensive community-led action, including efforts to build social resilience.</p>
<h4>Resilience Before Disaster: The Need to Build Equitable, Community-Driven Social Infrastructure</h4> <p>by the Asia-Pacific Environment Network (APEN), SEIU California, and BlueGreen Alliance focuses on resilience hubs and resilience at home as a framework for supporting the resilience for California's most vulnerable communities.</p>	

Plan Type	Resilience Components	Advantages and Benefits	Disadvantages and Challenges
<b>PLANS FOR RESILIENCE INTEGRATION</b>			
<b>General Plan</b>	<p>Safety element (or LHMP) required to include climate adaptation by SB 379 (2015); integration of LHMP into safety element incentivized by AB 2140 (2006).</p> <p>Safety element also required to include climate adaptation and resilience at each update of the housing element or the LHMP at least every 8 years.</p> <p>Consider exposure to hazards in zoning code updates and land use plans.</p>	<p>Can comprehensively enhance resilience by incorporating into each general plan element, such as housing, land use, circulation, etc.</p> <p>Individual elements can be updated on their own.</p> <p>Carries force of law.</p> <p>Established public process.</p>	<p>Not all elements are updated regularly.</p> <p>General plan update processes can take 2-3 years.</p> <p>Requires political will.</p> <p>Limited funding for planning and implementation, especially for smaller jurisdictions.</p>
<b>Community Plans, Specific Plans, and Master Plans</b>	<p>Translate and implement general plan policies at the neighborhood level.</p> <p>Ensure investments in development areas do not perpetuate vulnerabilities.</p> <p>Incorporate resilience strategies into specific design features, plans, and guidelines (e.g., green infrastructure).</p>	<p>Reduce infrastructure and community vulnerability to hazards.</p> <p>Locally focused; reflect community-specific shocks, stressors, and priorities/solutions.</p>	<p>Limited funding available beyond developer impact fees.</p> <p>Potentially long update cycle.</p>
<b>Agency Budget</b>	<p>Fund resilience-related programs, projects, policies, and staff.</p> <p>Create dedicated resilience funds.</p> <p>Build resilience into decision making and life-cycle processes.</p>	<p>Requires justification and thorough outlining of resilience projects, which increases transparency and provides a clear path for implementation.</p> <p>Updated annually.</p> <p>Enables implementation.</p>	<p>Limited financial resources and competing priorities.</p> <p>May require policy or procedural changes to budget rules.</p>
<b>Capital Improvement Plan (CIP)</b>	<p>Fund specific resilience-related projects or incorporate resilience elements into existing planned projects.</p> <p>Embed resilience objectives into the overall goals of the CIP.</p> <p>Leverage funding opportunities for resilient infrastructure.</p>	<p>Ensures infrastructure investments are resilient.</p> <p>Updated annually, providing opportunity to prioritize new projects on a yearly basis.</p>	<p>May require data, tools, and technical expertise.</p> <p>Regulatory or policy barriers that hinder the integration of resilience measures.</p> <p>Limited funding resources and competing priorities.</p>



# STEP 6. RECOVERY

# Audience Poll

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## How prepared is your agency for post-disaster recovery?

- We have a recovery plan in place
- We've started planning but it's incomplete
- Recovery planning hasn't started yet
- Not sure

## Do you have dedicated resilience staff or do you rely on contractors?

- We have dedicated resilience staff
- We rely on contractors
- We have a combination
- Not sure

## Do you already have recovery contracts in place? (Yes/No/Not sure)

## Do you have capacity to manage response and/or recovery efforts? (Yes/No/Not sure)

## What's your biggest recovery planning gap?

- Dedicated recovery staff or capacity
- Pre-identified vendors and contracts
- Leadership support and governance structure
- Connection between recovery and existing plans
- Funding strategy for recovery

# Why Wildfire Recovery Matters in Southern California

Recovery is not just rebuilding  
— it's reshaping future risk



## POST-DISASTER RECOVERY

### AFTER DISASTER

**Disaster:**

- Increasing wildfire severity driven by WUI growth, climate change, and historical suppression
- January 2025 wildfires as a regional wake up call

**Post-disaster recovery** is both a necessity and a resilience opportunity

## PRE-DISASTER PLANNING

### BEFORE DISASTER

- ✓ Shift recovery thinking upstream into planning
- ✓ Expand beyond housing — to include infrastructure, workforce, health, and long term economic stability.
- ✓ Plan for faster, stronger recovery

**If this wildfire happened tomorrow, would our plans help us recover faster—or slow us down?**

The quality of long-term recovery is determined before the fire occurs.



# The Disaster Recovery Continuum



Requires **pre-disaster planning across all phases**



FEMA



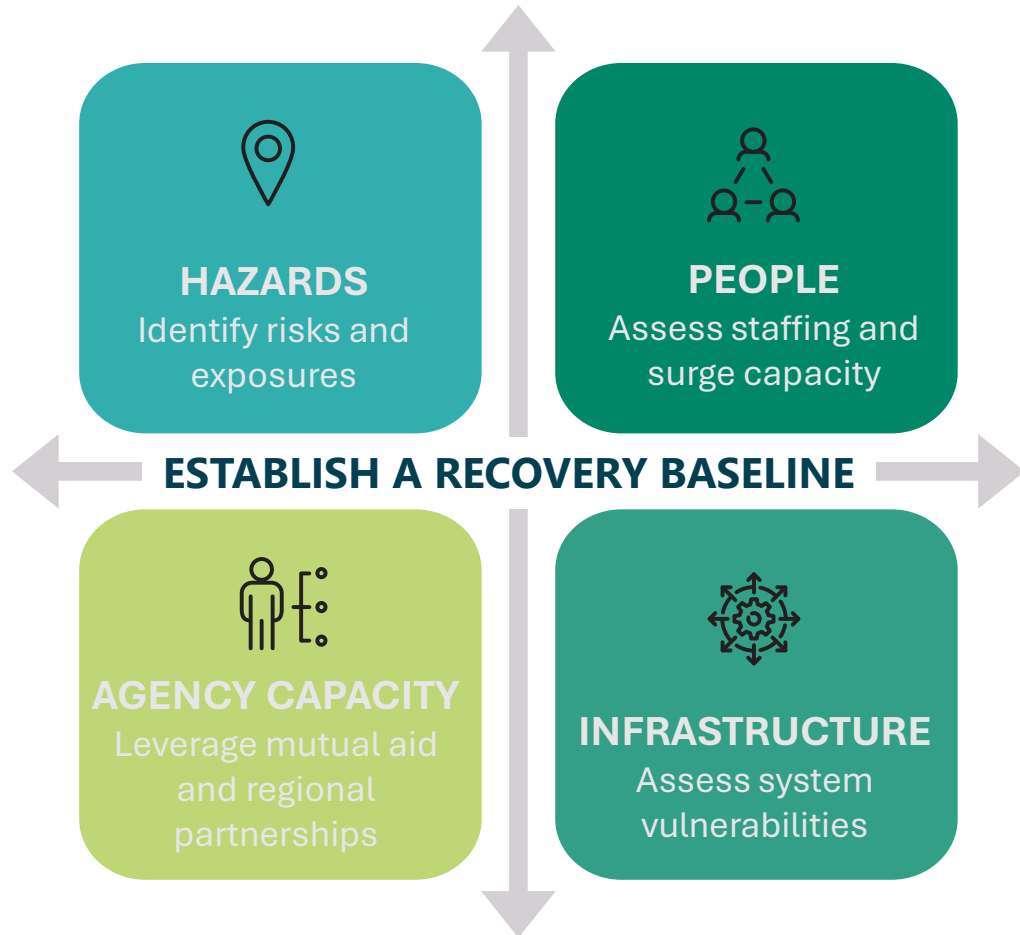
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OF EMERGENCY SERVICES

## PLANNING TAKEAWAY

- ✓ Map existing plans and departments against the recovery phases.
- ✓ Identify where plans:
  - ❑ Only address short term response, or
  - ❑ Fail to connect recovery to mitigation and land use decisions.
- ✓ Use as a checklist to find gaps in intermediate and long-term recovery planning.



# Pre-Disaster Recovery Planning



## PLANNING TAKEAWAY

- ❑ Incorporate recovery roles and responsibilities into emergency operations and administrative plans.
- ❑ Pre-identify vendors, staffing models, and data tools before a disaster.
- ❑ Justify regional solutions, shared services, or mutual aid recovery staffing models facilitated through SCAG.

Recovery must balance speed, safety, affordability, and resilience.



# Housing Recovery Framework

## Pre-disaster housing resilience



Zoning clarity



Home hardening



Fire-resistant standards

## Short-term housing recovery tools



Concierge services



Streamlined permitting

## Long-term tools



Reconstruction, buyouts, renter assistance



HUD CDBG-DR & mitigation funding

### PLANNING TAKEAWAY

- ❑ Pressure test housing policies for safety + speed
- ❑ Include renters, manufactured housing residents, and informal units
- ❑ Plan for post-fire permitting surge, temporary staffing, and fee policies
- ❑ Pre-approve resilient building typologies.
- ❑ Align Housing Elements, Safety Elements, and wildfire recovery goals

Community recovery depends on restoring both physical systems and livelihoods.



# Infrastructure, Economic, and Workforce Recovery



## PLANNING TAKEAWAY



Break down Infrastructure and economic recovery silos



Integrate into hazard mitigation plans



Justify resilience investments



SCAG coordination across jurisdictions

# Recovery for Vulnerable Communities

## Disproportionate impacts:

- ✓ Low income households
- ✓ Renters, undocumented workers, unhoused residents

## Health impacts from wildfire smoke

- ✓ Respiratory & cardiovascular harm
- ✓ Mental health trauma
- ✓ Long-term risks for outdoor workers & children

**Equity must be embedded, not added later.**



## Community Strategies

- Establish clean air centers and cooling stations for smoke events.
- Build resilience hubs as year-round community anchors.

## Pre-Disaster Equity Planning

- Identify vulnerable populations and high-risk areas in advance
- Integrate equity into hazard mitigation, housing, and emergency plans
- Pre-position resources, staffing strategies, and communication protocols



# EQUITY CENTERED RECOVERY

## Long-Term Equity & Public Health

- Address long-term housing, health, and economic recovery needs
- Fund and formalize partnerships with community-based organizations
- Use recovery to reduce existing inequities, not recreate them



## People-Centered Design

- Design recovery systems around people, not programs.
- Provide multilingual, culturally competent communication and services
- Prioritize direct outreach to disproportionately impacted populations





# Building Back Better, Regionally

Wildfires will continue — but outcomes can be dramatically improved

Recovery planning is a long-term resilience investment

Connected to implementation, monitoring & funding



## PLANNING TAKEAWAY

*Chapter 7 is not a standalone solution — it is a lens communities should apply across all planning.*

- 1 General Plans**  
Embed recovery and resilience goals into the planning framework
- 2 Capital Programs**  
Align infrastructure investment with long-term recovery priorities
- 3 Housing Policy**  
Ensure housing elements reflect post-disaster rebuilding needs
- 4 Economic Development**  
Connect workforce and business recovery to regional strategies



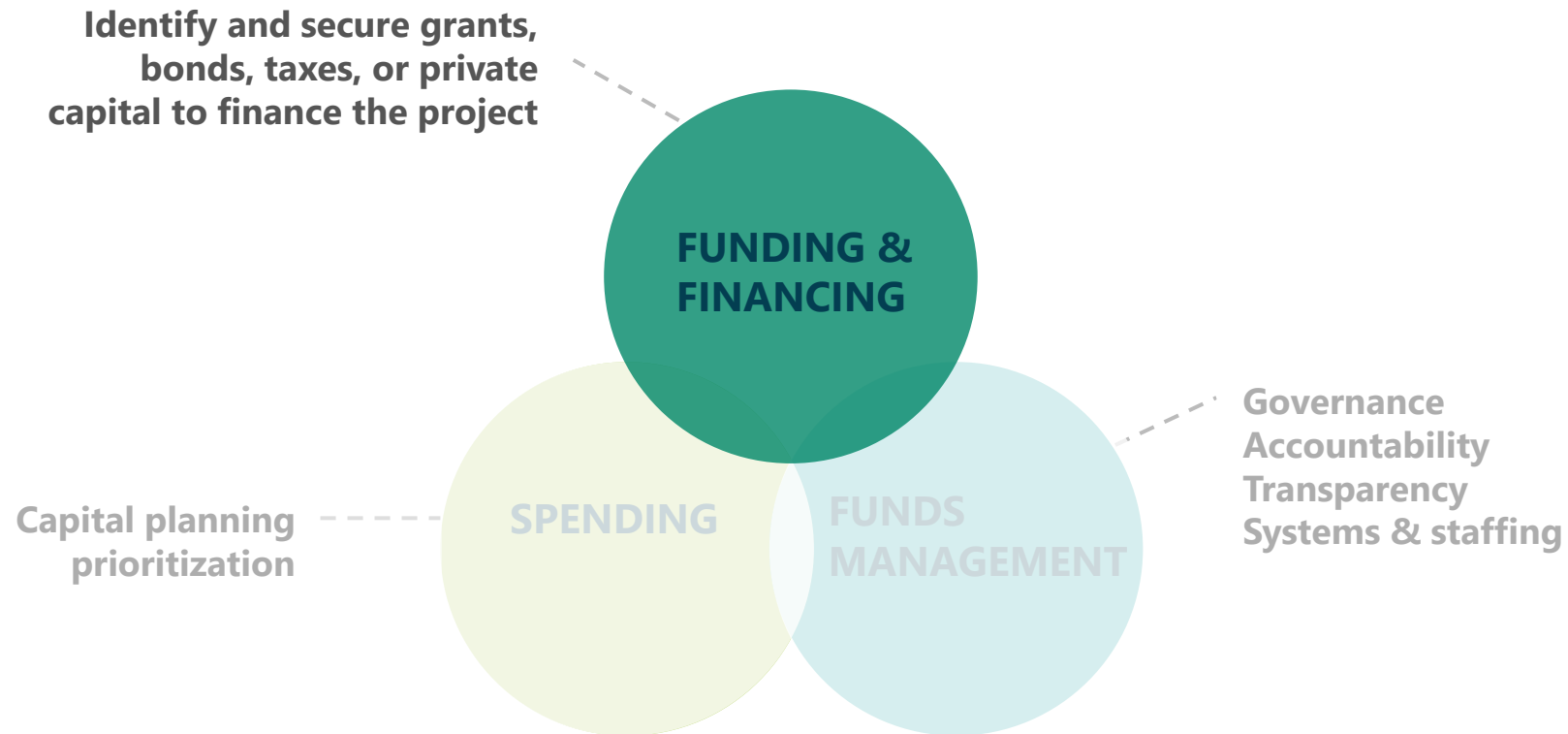
# FUNDING, FINANCING & GOVERNANCE

How recovery gets resourced, structured, and sustained

Funding is necessary but not sufficient — multiple elements must align



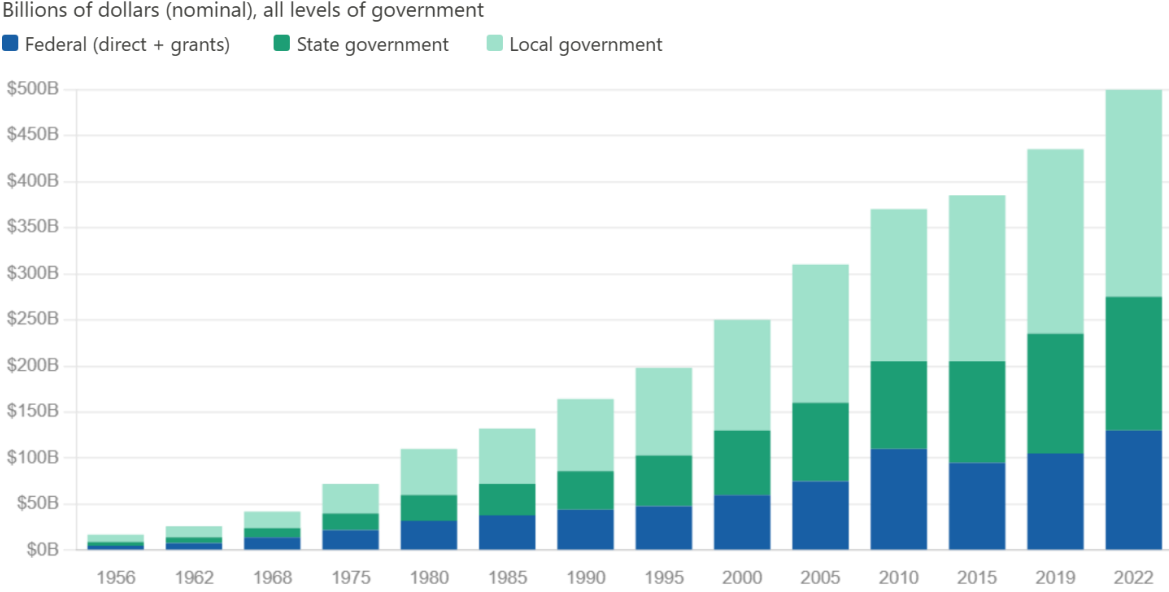
# Components of Infrastructure Investment





# State of the Funding Landscape Today

- Post 2024: Reduction in federal dollars, back to "normal" levels
- State-imposed constraints on local revenues (e.g., property and sales taxes)
- Major affordability concerns



After disaster strikes, federal dollars dominate the recovery landscape



# Post-Disaster Funding Sources

## Key Federal Post-Disaster Programs

<b>FEMA</b> Public Assistance, Individual Assistance, Hazard Mitigation Grant Program (HMGP)	<b>HUD</b> CDBG-DR, CDBG-MIT for long-term recovery and mitigation	<b>SBA</b> Disaster loans for homeowners, renters, and businesses	<b>USDA</b> Emergency watershed protection, rural development grants	<b>USACE</b> Emergency flood control and debris removal
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# California State Adaptation Spending

**\$2.1B**

Proposition 4 (Year 2)  
Safe Drinking Water, Wildfire  
Prevention & Clean Air Bond Act

**~\$4.3B**

Annual Greenhouse Gas Reduction Fund target — FY 2026-27 onward  
Recent auctions tracking ~\$100M below target.

⚠ Note: California's climate spending is declining. Total environmental agency funding proposed to drop from \$23.1B (FY 2025-26) to \$18.9B (FY 2026-27) as one-time COVID-era surpluses expire. The GGRF also absorbed a \$1B discretionary cut in 2025-26. Federal policy uncertainty adds further risk to forward spending.

## Proposition 4 — Proposed Spending by Category

### Water Resilience

**\$1.2B**

*FY 26-27: \$792M proposed | \$1.8B remaining in bond*

Dept. of Water Resources (DWR) & State Water Resources Control Board (SWRCB)

### Wildfire & Forest Resilience

**\$598M**

*FY 26-27: \$314M proposed | \$588M remaining in bond*

CA Dept. of Forestry & Fire Protection (CalFire)

### Coastal Resilience

**\$279M**

*FY 26-27: \$107M proposed | \$814M remaining in bond*

State Coastal Conservancy (SCC) & Ocean Protection Council (OPC)

### Nature-Based Climate Solutions

**\$390M**

*FY 26-27: \$199M proposed | \$611M remaining in bond*

Wildlife Conservation Board (WCB) & state conservancies

### Extreme Heat Mitigation

**\$110M**

*FY 26-27: \$241M proposed | \$99M remaining in bond*

Strategic Growth Council (SGC) / Governor's Office of Land Use & Climate Innovation (LCI)

### Clean Energy & Grid Resilience

**\$275M**

*FY 26-27: \$326M proposed | \$249M remaining in bond*

CA Energy Commission (CEC)



# Local Funding & Financing Options

## Financing Options



## Funding Sources

**Bonds**  
(General Obligation,  
Revenue, Green & Utility)

**Loans**  
(General Municipal Loans,  
Revolving Loans, & Lines  
of Credit)

**Tax Measures**  
(Sales, Special, Ad  
Valorem)

**Impact Fees &  
Assessments**

**Public-Private  
Partnerships (P3)**

**Parametric Insurance**

**Tax Increment  
Financing (TIF/EIFD)**

**Utility Rate  
Adjustments**



# Governance: Who Decides, How Funds Flow

## Identify funding sources

- Who benefits?
- Who should pay?
- How should funds be raised?
- Are the funds durable?  
Resilient?

FUNDING &  
FINANCING

## Capital planning prioritization

- What gets funded?
- When?
- Who decides?

SPENDING

FUNDS  
MANAGEMENT

## Governance, accountability, transparency

- Grants management
- Reporting & transparency
- Administrative capacity
- Leadership & oversight



# Governance Model - Highlights

1

## Climate Resilience District (CRD)

**What it is:** Principal act special districts intended to address climate resilience and adaptation. CRDs allow cross-jurisdictional collaboration using TIFs and other financing tools toward adaptation measures. They are legally structured as Enhanced Infrastructure Financing Districts (EIFDs).

**Funding powers:** Tax increment financing (TIF), benefit assessments, special taxes, user fees, property-related fees, gifts/grants, and bonds. Does not require new general taxes — can capture growth in existing property tax revenue.

### EXAMPLE

#### Altadena Fire Recovery District + Sonoma CRD

Sonoma CRD (Regional Climate Protection Authority) is the first and statewide precedent. LA County used SB 782 to create Disaster Recovery Financing Districts post-2025 fires — capturing tax increment to fund infrastructure without new taxes.

2

## Special District

**What it is:** Independent local government entities created to perform a specific function. Governed by elected or appointed boards. There are ~60 principal acts in California covering fire, water, flood, community services, and more. Can be independent (own elected board) or dependent (governed by city/county).

**Funding powers:** Voter-approved special taxes (2/3 majority, or 55% if Prop 5 passes). Property tax revenues, user fees, bonds for capital improvements. Enterprise districts charge user fees; non-enterprise rely on property taxes.

### EXAMPLE

#### OneShoreline (San Mateo County)

Dedicated sea level rise and flood protection district with independent taxing authority covering 20 cities and the county. Voter-approved parcel tax funds shoreline adaptation across jurisdictional lines.



# Governance Models

3

## Joint Powers Authority (JPA)

**What it is:** Formal legal agreements between two or more public agencies (counties, cities, special districts, state agencies, federally recognized tribes) to jointly exercise common powers or form a separate legal entity. JPAs can own property, issue revenue bonds, sue and be sued, and provide services of member agencies.

**Funding powers:** Can issue revenue bonds without voter approval. Can pool funds, refinance member agency debt, purchase equipment. Cannot levy new taxes directly — but member agencies can levy their own taxes and contribute revenues to the JPA.

### EXAMPLE

#### San Francisquito Creek JPA

Five agencies from two counties (Palo Alto, Menlo Park, East Palo Alto, San Mateo County, Santa Clara Valley Water District) formed a JPA to address shared flooding and sea level rise. Plans, designs, and implements capital projects from watershed to tidal marshes.

4

## Geologic Hazard Abatement District (GHAD)

**What it is:** Independent political subdivision of the state (enabled by the Beverly Act of 1979) formed by property owners to prevent, mitigate, abate, and control geologic hazards — landslides, subsidence, soil erosion, earth movement. Can encompass both private and public lands. ~50 active GHADs in California.

**Funding powers:** Can levy and collect property assessments (attached as liens, collected with general property taxes). Can issue bonds, borrow money, acquire property by eminent domain. Subject to Proposition 218.

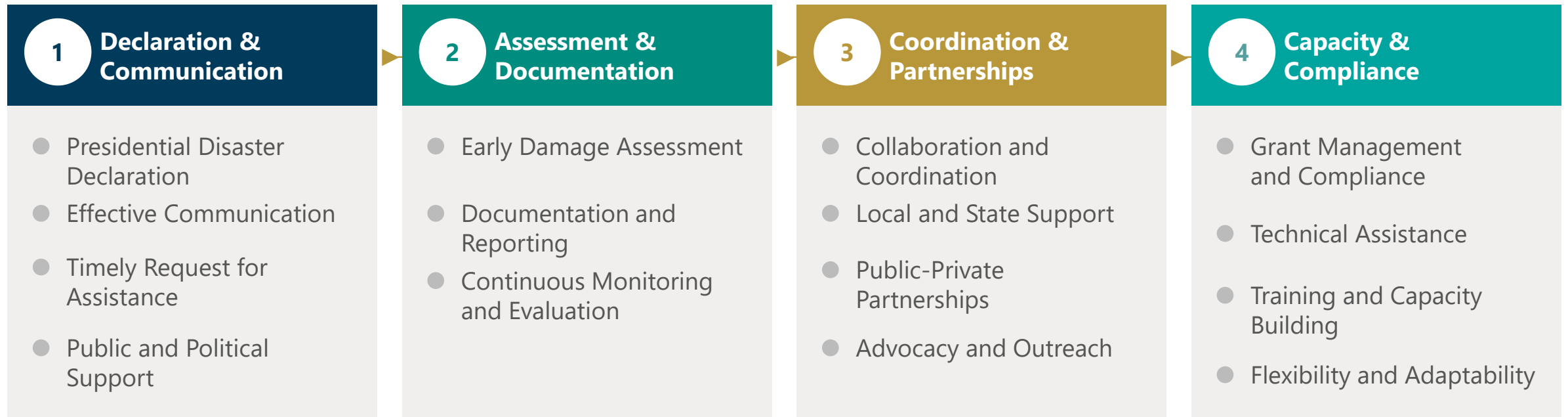
### EXAMPLE

#### Broad Beach GHAD (Malibu)

Malibu beachfront owners formed this GHAD to fund long-term coastal erosion protection through sand nourishment and dune restoration. Assessments based on linear beach frontage. Model for property-owner-funded climate hazard response across Southern California.



# Good Governance → Successful Post-Disaster Funding



*Communities that invest in governance before disaster strikes are far more successful at securing and deploying federal recovery dollars efficiently and equitably.*



# HOW YOU CAN USE THIS TOOLKIT

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# Use Cases

## Capital Improvement Programs (CIP)

- Fund specific resilience-related projects or incorporate resilience elements into existing planned projects;
- Embed resilience objectives into the overall goals of the CIP;
- Leverage funding opportunities for resilient infrastructure



## General Plan

- Can comprehensively enhance resilience by incorporating into each General Plan element ;
- Consider exposure to future hazards in zoning code updates land use plans for future development



## Agency Update

- Fund resilience-related programs, projects, policies, and staff ;
- Create dedicated resilience funds ;
- Build resilience into decision making and life-cycle processes



## Emergency Operations Plans

- Link response actions/processes to findings from the hazard mitigation assessment ;
- Provide training, education, and resources to community



# Use Cases

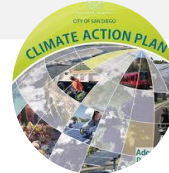
## Climate Adaptation Plans

- Focused effort to develop strategies to address climate change impacts ;
- Often incorporates a community-wide vulnerability assessment, goal setting, and strategy development



## Climate Action Plans

- Reduce greenhouse gas emissions, which will (theoretically) reduce adaptation required ;
- Identify strategies that have resilience co-benefits (health, air quality, energy savings, etc.)



## Comprehensive Economic Development Strategy

- Evaluate industry trends and support job training and transitions;
- Site new development in areas out of harm's way



## Active Transportation & Community Mobility Plans

- Incorporate future shocks and stressors in design and siting of transportation infrastructure ;
- Encourage sustainable forms of transportation, lowering carbon emissions





**THANK YOU!**

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## Key Takeaways

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- Resilience planning is **essential, cost-effective, and should be prioritized.**
- An integrated approach to resilience planning supports **communities, the built environment, and natural and economic systems.**
- The toolkit provides a **clear, flexible process** which can be used **at any stage of planning**
- Moves from **planning** → **implementation** → **recovery** → **funding**

# Tell us how we did!

Take a quick 2-minute survey to help us improve future Toolbox Tuesdays!

