

Chapter 02

Planning Process

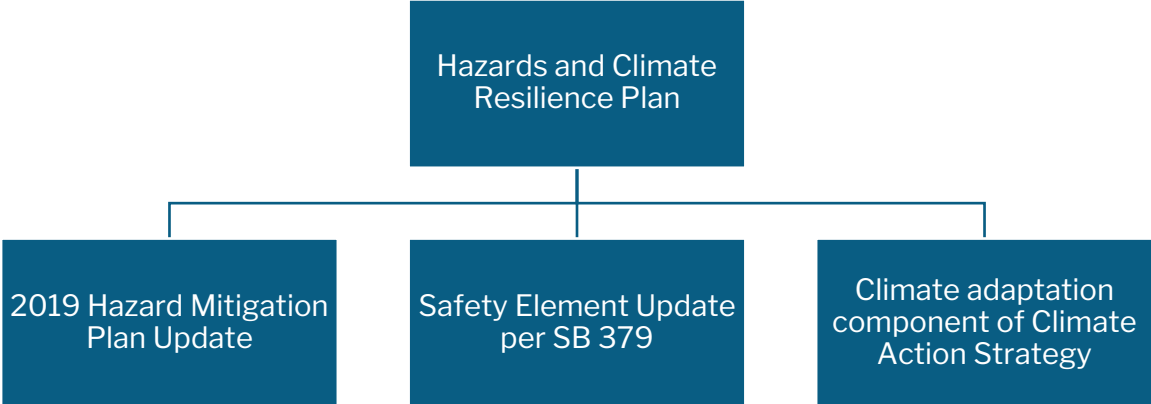


To develop the HCR, the City and County of San Francisco developed a comprehensive approach to incorporate the feedback of departments and the greater San Francisco community to the greatest extent possible given time and resource constraints. This chapter describes the process used to develop the 2019 HCR, including engagement with stakeholders and the public.

2.1 Planning Process Overview

As illustrated in Figure 2-1, the HCR process was designed to meet three primary planning needs: the 2019 update to the HMP, the incorporation of climate hazards and an update to the Safety Element that incorporates climate resilience, and a climate adaptation component to the 2020 Climate Action Strategy.

**FIGURE 2-1:
HAZARDS AND CLIMATE RESILIENCE PLANNING NEEDS**



In addition to meeting the above requirements and commitments, the Plan development process sought to achieve the following outcomes:

- Build greater understanding of San Francisco’s hazard and climate risks among staff, stakeholders
- Provide strategic policy guidance and direction for on-going and future citywide multi-hazard risk reduction efforts
- Build the capacity of City staff and partners to develop hazard and climate resilience actions and programs

In order to meet the above requirements and desired outcomes, the Plan development process was led by the Office of Resilience and Capital Planning (ORCP) in partnership with the following departments:

- Office of the City Administrator (ADM)
- Department of Emergency Management (DEM)
- Planning Department (Planning)
- Department of the Environment (SFE)
- Department of Public Health (DPH)
- Department of Public Works (DPW)
- Mayor’s Office (MYR)

The HCR builds on the 2014 HMP and it was determined that the updates summarized in Table 2-1 would be needed to meet the above requirements and commitments. A Technical Working Group comprised of staff from the agencies noted above met every two weeks to undertake these updates.

**TABLE 2-1:
SUMMARY OF UPDATES FROM 2014 HMP**

2014 HMP	Actions Needed	Location in 2019 HCR
Planning Process	Re-form Planning Team with expanded membership	Section 2.2, Appendix C
	Expand engagement with stakeholders, especially those that serve vulnerable community members	Section 2.3 and Appendix C
Hazard Analysis and Vulnerability Assessment	Update discussion of climate science to reflect the latest science	Section 4.2
	Incorporate climate projections into relevant hazard profiles	Section 4.3- 4.13
	Develop sector-based vulnerability assessment with clear issue statements	Chapter 05 and Appendix A
Capabilities and Existing Actions Assessment	Update and simplify capabilities and actions that have been initiated since 2014	Section 6.1 and Appendix F
	Update Goals	Section 7.1

2014 HMP	Actions Needed	Location in 2019 HCR
Mitigation Strategy	Update status of 2014 HMP actions	Section 6.2
	Develop new strategies that reflect priorities since 2014 and longer-term climate resilience needs	Section 7.3
	Update strategy evaluation criteria	Section 7.6

2.2 City Agency Engagement

The Technical Working Group led engagement with City agencies through the Planning Team, comprised of staff from over 28 agencies with expertise in hazards, asset management, and mitigation and adaptation capabilities. Appendix C includes a roster of the Planning Team members and meeting agendas. The Technical Working Group engaged the Planning Team over the course of six meetings, which are summarized in Table 2-2 below. In addition to the meetings, the Technical Working Group engaged with Planning Team members to develop and review hazard profiles, vulnerability and consequence profiles, and strategies.

**TABLE 2-2:
PLANNING TEAM MEETING TOPICS**

Meeting No.	Topics	Date
1	Project introduction, goals, hazards	May 2018
2	Asset inventory Vulnerability and consequences methodology	July 2018
3	Preliminary vulnerability and consequences findings	Sep 2018

Meeting No.	Topics	Date
4	Key Planning Issues/ Strategy Development Process	January 2019
5	Strategy review and refinement	April 2019
6	City-wide draft review	November 2019

Additional City agencies and staff not on the Planning Team were engaged during the drafting of vulnerability and consequence profiles due to their expertise on assets and vulnerabilities, including: Animal Care and Control (ACC), Office of Community Investment and Infrastructure (OCII), SFPUC Water Division (SFPUC), SFPUC Power Division (SFPUC), and San Francisco Public Library (LIB).

Additional agencies external to the City and County were also engaged during the development of vulnerability and consequence profiles to help make sure that information regarding their assets and vulnerabilities were accurately reflected in the vulnerability and consequence profiles. These include BART, Caltrain, Golden Gate National Recreational Area (GGNRA), PG&E, and San Francisco Unified School District (SFUSD).

In addition to Planning Team meetings, City departments and divisions were engaged through smaller strategy development sessions and briefings. These include:

- Neighborhood Empowerment Network (NEN)
- San Francisco Department of Public Health (DPH)
- San Francisco Department of the Environment (SFE)
- Mayor’s Office of Housing and Community Development (MOHCD)
- Office of Resilience and Capital Planning (ORCP)
- San Francisco Planning Department (Planning)
- Port of San Francisco (Port)
- San Francisco Department of Emergency Management (DEM)

- San Francisco Department of Technology (DT)
- San Francisco Fire Department (SFFD)
- San Francisco Public Utilities Commission (SFPUC)
- San Francisco Public Utilities Commission (SFPUC)
- San Francisco Public Works (DPW)
- San Francisco Municipal Transportation Agency (SFMTA)
- San Francisco International Airport (SFO)
- San Francisco Board of Supervisors (BOS)
- Department of Aging and Adult Services (DAAS)
- Office of Workforce and Economic Development (OEWD)
- San Francisco Police Department (SFPD)

2.3 Stakeholder and Public Engagement

This section describes engagement during the planning process with stakeholders, including:

- Community based organizations (CBOs)
- Neighborhood serving organizations
- Interest organizations
- Neighboring jurisdictions
- Regional, State, and Federal Agencies

This section also describes opportunities for the public to provide feedback during the drafting stage.

HCR Engagement Goals

The goal of stakeholder and public engagement for the HCR was to share information about local risks (as outlined in the HCR); solicit input from a broad community of San Franciscans on their values, concerns and priorities; and reflect them in the HCR's strategies. The community engagement process was designed to maximize the ways in

which information gathered from community members can be used with the overall goal of improving City preparedness. Therefore, community members were invited to share feedback on HCR strategies, as well as on emergency preparedness and response. As part of the HCR Plan development, the City and County of San Francisco designed a community engagement process that included 1) stakeholder engagement workshops and 2) a community survey. Both the workshops and survey were designed to:

- Help the City understand people’s experience with hazard events to inform how to improve the response to future hazards;
- Gather community feedback on draft plan strategies to incorporate into the Hazards and Climate Resilience Plan; and
- Educate stakeholder groups about
 - Prioritized hazard issues and impacts for San Francisco,
 - Existing and planned work to increase resilience within San Francisco, and
 - Purpose and contents of the HCR Plan.

Stakeholder Engagement Workshops

As a first step in the engagement process, the interdepartmental HCR team met with a group of leaders from CBOs that work on resilience in the San Francisco to get their advice on how best to achieve the goals above with the communities they serve. This meeting took place on February 28 and is documented in Appendix C. Based on this feedback from this meeting, the HCR team went on to hold five thematic workshops with leaders of community based organizations, non-governmental organizations, and other groups that serve the San Francisco community and especially vulnerable populations. These workshops are summarized in Table 2-3 below and documented in Appendix C.

**TABLE 2-3
SUMMARY OF STAKEHOLDER MEETINGS**

Date	Theme/Topic	Examples of Unique Perspective for Each Group
July 9 th	Business/ Commercial Properties	<p>Provided feedback on relative effectiveness and likely impacts of incentivizing or mandating specific strategies, including for small businesses</p> <p>Identified challenges and opportunities to partner with businesses in implementing strategies</p>
July 9 th	Housing Stakeholders and Residential Property Managers/Owners	<p>Provided feedback on relative effectiveness and likely impacts of incentivizing or mandating specific strategies (e.g., installing or upgrading HVAC systems, communicating about hazards to residents/tenants)</p> <p>Identified challenges and opportunities for implementing strategies in supportive housing</p>
July 12 th	Disability and Functional Needs (DAFN)/Older Adults	<p>Identified unique needs when responding to hazards (e.g., to charge motorized wheelchairs’ batteries, to maintain power for residents with assisted respiration)</p> <p>Emphasized the need to ensure that communication is accessible to people with a range of different disabilities</p>
July 12 th	Racial, Social, and Environmental Justice	<p>Emphasized the need to set up processes prior to a hazard to ensure that critical information about hazards reaches and is easily understood by low-income, immigrant, homeless, and other vulnerable communities</p> <p>Provided additional information on how hazards impact vulnerable, disenfranchised, and under-resourced communities, as well as critical needs for these communities</p>
July 16 th	Children, Youth, and Families	<p>Identified challenges in keeping young people of different ages groups safe during and immediately following a hazard</p> <p>Identified challenges and opportunities for implementing strategies in schools and out-of-school programming (e.g., summer camps, afterschool care)</p>

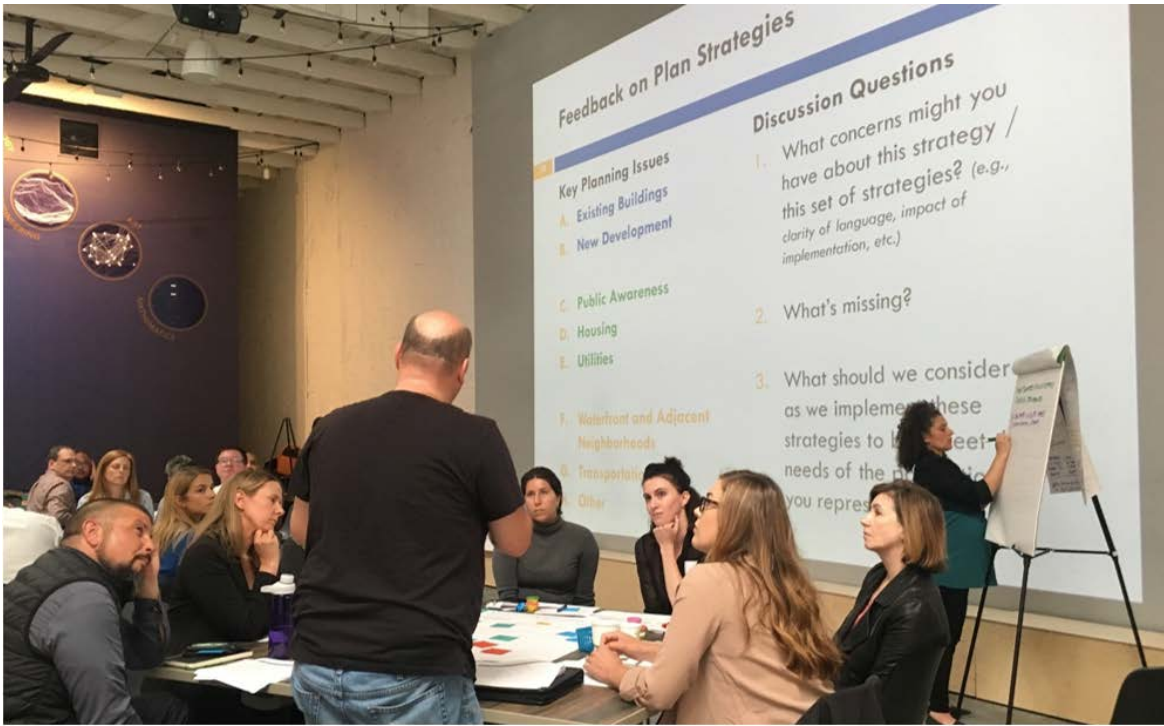
Themes from Across Stakeholder Workshops

Stakeholders consistently expressed their interest in learning more about the hazard risks relevant to the neighborhoods in which they work as well as the City’s recommendations (or general best practices) to prepare for the hazards they are most likely to experience. Many participants were excited to learn that the HCR Plan would include maps with citywide risks and vulnerabilities. Many participants also wanted to know what the City considered to be key community facilities (both which specific facilities and more general types of facilities).

Recognizing the significant impacts that some hazards will have and the many jurisdictions that will be involved in recovering from such hazards, participants emphasized how important it is for the City to support and participate in coordinating planning between City departments, with overlapping jurisdictions (e.g., SFUSD, SF Port, National Park Service), with neighboring jurisdictions (e.g., Marin County, Daly City, San Mateo County, Alameda County), and potentially with geographically remote partners (for example, to provide supportive housing while the City and region recover from a major earthquake).

Workshop participants agreed that resources should be prioritized for and directed to vulnerable populations and the critical facilities that serve those populations. However, different stakeholder groups had different ideas of what populations are most vulnerable and what types of facilities are “critical.” Participants in most workshops identified the importance of involving Single-Room Occupancy hotels (SROs) and temporary shelters, as well as residents who are currently experiencing homelessness, in the implementation of resilience strategies.

**FIGURE 2-2:
STAKEHOLDER ENGAGEMENT WORKSHOP**



**FIGURE 2-3:
STAKEHOLDER ENGAGEMENT WORKSHOP**



Public Engagement

The HCR Plan development process offered several opportunities for members of the public to provide their feedback during the drafting stage.

Webpage

A webpage for the Hazards and Climate Resilience Plan was launched in July 2019 on the OneSF website, which included information on the Plan Update Process and how community members could provide feedback and suggest changes to the plan. In December 2019, the web page was updated to include the Draft Plan for public comment.

Survey

A survey was distributed during the stakeholder workshop and available on the webpage from July 2019 to September 2019. All individuals who attended any of the stakeholder workshops and/or were invited to participate were sent the information to share with their colleagues, community members, and populations served by each of their organizations. City agencies and individual employees also encouraged their networks to participate in the survey. It was also advertised through City social media accounts. The survey had a total of 597 responses and the results of the survey can be found within the Community Engagement Report in Appendix C.

Community Engagement Highlights

The following are some of the highlights from the stakeholder workshops and survey:

Solutions Need to be Diversified, Multi-Pronged, and Coordinated. The most common theme from community engagement was that there is no “one-size-fits all” solution to addressing any of the hazards that may impact San Francisco. Workshop participants emphasized the importance of using different strategies to effectively engage with, communicate information to, and provide resources to the City’s diverse communities. Workshop and survey participants also recognized the complexity and interdependence of the City’s buildings, infrastructure, and economy, as well as how all of those impact residents.

Most Concerning Hazards. The vast majority of survey and workshop participants reported being the most concerned about earthquakes and poor/unhealthy air quality. Additionally, one of five survey respondents identified the following as one of the three hazards they are most concerned about: disease outbreaks, urban fires, drought, extreme heat, and flooding. Some workshop participants discussed concerns about hazardous materials and tsunamis.

Support for Improving Resilience of Key City Assets. Nearly all survey and workshop participants agreed that it is important for the City & County of San Francisco to improve the resilience of infrastructure (e.g., utilities and transportation), buildings (including housing, existing buildings, and new development), and communities (e.g., community connections, neighborhood preparedness).

Only half of survey respondents said they know their neighbors well enough to help each other in an emergency.

Importance of Community Cohesion. Workshop participants emphasized the importance of strengthening relationships and interactions within individual neighborhoods, at the block-by-block level, within large multi-unit buildings, and through face-to-face social networks. Only half of survey participants said they know their neighbors well enough to help each other in an emergency. Increasing relationships and connections between neighbors and community members helps ensure that

vulnerable residents stay safe during and following a hazard event, as traditional communication and outreach strategies will not reach everyone. This may require expanding support for community-serving organizations that address neighborhood resilience).

Information about Hazards and Emergency

Preparedness. Most survey participants get information about hazard events from AlertSF and/or social media, while some rely on television, radio, and personal contacts (i.e., friend, family member, neighbor). Workshop participants also identified specific methods and types of media that will be especially effective at reaching specific populations. Workshop participants were excited about the maps that will be shared with the Hazards & Climate Resilience Plan and how they and

[I am] extremely concerned about an earthquake and the potentially devastating impact it would have on the housing stock.

Survey
Respondent

other community members will be able to use them to prepare for the specific types of hazards which they are likely to experience.

Level of Preparedness. Most survey respondents believe that they and the people they live with are prepared for extreme heat days, earthquakes, and poor/unhealthy air quality days, while fewer are prepared for flooding. At the same time, more survey respondents felt that their housing in San Francisco would be a safe place to stay during flooding and extreme heat while fewer felt it would be safe place during a poor/unhealthy air quality day or earthquake. Workshop participants requested more concise information about how the organizations, businesses, and facilities in which they work should prepare for emergencies with specific recommendations based on location in the city and the people served (e.g., how much water an afterschool program should store on-site relative to the number of children served, what supplies are most important for managers of single-resident occupancy/SRO hotels to have available).

Experience with the Impacts of Hazards in San Francisco. More than half of survey participants shared how they, their homes, their workplaces, and their neighborhoods had been impacted by poor/unhealthy air quality, extreme heat, and earthquakes. Many respondents also reported how wind, storm flooding, hazardous materials, and urban fires have impacted them and their communities.

Presentations at Existing Public Meetings

City staff presented the Hazards and Climate Resilience Plan at several public meetings, including:

**TABLE 2-5
PRESENTATIONS AT EXISTING PUBLIC MEETINGS**

Date	Meeting Title	Notable Feedback
May 15, 2018	Disaster Council	Interest in future updates
Dec 11, 2018	Port Commission	Interest in future updates

Date	Meeting Title	Notable Feedback
April 10, 2019	Municipal Green Building Task Force	Interest in building codes that incorporate future climate conditions
May 6, 2019	Richmond Community Health Fair	n/a
October 22, 2019	Port Commission	Interest in future updates
November 14, 2019	SPUR Lunch Panel	Interest in planning for sea level rise, inclusion of businesses in strategy implementation, support for agency coordination
December 9, 2019	Capital Planning Committee	TBD
December 10, 2019	Public Utilities Commission	TBD

Engagement with Other Regional, State, and Federal Agencies

These agencies/jurisdictions were notified of the draft plan and offered the opportunity to provide comment (update this as needed):

- Presidio Trust
- San Mateo County
- Daly City
- Oakland
- Alameda County
- Marin County
- GGNRA
- SPUR
- Bay Area Council

2.4 Existing Reports, Plans, and Other Resources

A key element of the Planning Process included drawing on existing resources regarding hazards, vulnerabilities, and potential strategies. The hazard analysis and vulnerability assessment include citations of source material and this section provides an overview of some of the key resources referenced in this Plan. Please note that this is not a complete bibliography. Please see footnotes/references section for additional resources used.

Local Resources

The following highlights key existing reports and studies developed by the City and County of San Francisco used during the Planning Process.

Sea Level Rise Vulnerability and Consequences Assessment (2019)

The Sea Level Rise vulnerability and consequences assessment was launched in response to the findings from the Sea Level Action Plan in 2016, to move the San Francisco towards the goal of having a City-wide Sea Level Rise Adaptation Plan. The

assessment identifies publicly owned infrastructure within the SLR Vulnerability Zone and assess their vulnerability to short-term and long-term inundation from coastal flooding. Following this, consequences are identified for people (through the lens of society and equity), the economy, the environment, and governance. The resulting information was then consolidated into neighborhood profiles to describe the impacts to neighborhoods over time. Future efforts will focus on incorporating robust neighborhood engagement to develop neighborhood based adaptation solutions.

Lifelines Restoration Project (2019)

The lifelines restoration project aims to help the City and County of San Francisco recover more quickly from a major earthquake by assessing and improving the restoration performance of a variety of interdependent lifeline infrastructure systems. These systems include: Electric Power, Natural Gas, Water and Wastewater, Telecommunications, Highways and Local Roads, Fuel, Transit Systems, Airport, Port, and Fire Suppression. These systems are critical for the recovery of hospitals, homes, businesses, non-profit organizations, and city government following a disaster. The project benchmarks current expected restoration performance based on interviews with subject matter experts, determines desired restoration performance based on public expectations and existing goals, and details prioritized strategies to achieve performance goals through a restoration performance improvement plan.

Here Today—Here Tomorrow: The Road to Earthquake Resilience in San Francisco, Community Action Plan for Seismic Safety (CAPSS) (2010)

The CAPSS provided information on the extent and impact of seismic-related hazards on San Francisco. The results of this analysis set the stage for the future actions and strategies that the City and County of San Francisco plans to pursue to furthering seismic resiliency.

Earthquake Safety Implementation Program: Workplan 2012-2042, City and County of San Francisco Work plan 2012-2042 (2011)

This document lays out a 30-year program of mitigation strategies and projects to be undertaken by the City and County of San Francisco to improve its seismic safety and resiliency, in essence, it operationalizes the insights and suggested strategies from the aforementioned CAPSS study

Tall Buildings Safety Strategy (2019)

The tall building safety strategy is a part of the ongoing effort to improve the City's preparedness and ability to recover from major earthquakes. This strategy is comprised of 16 recommendations developed through the study of 156 tall buildings in San Francisco and represents a first of its kind effort to characterize and address the unique seismic risks of this subgroup of buildings. The initiatives suggested as a part of the tall buildings strategy were integrated into the suggested strategies for hazard mitigation in this plan.

Lifelines Interdependency Study (2014)

This study involved convening over lifelines service providers, a lifelines Council, and the City and County of San Francisco to collaborate on disaster planning, restoration, and response to improve lifeline system reliability and post-disaster function after a major disaster.

SFPUC Climate Adaptation Plan (Draft)

This briefing booklet explains how climate change will be impacting PUC, the SSIP program, and San Francisco at large. The briefing booklet evaluates the climate-related vulnerabilities and risks across the entire combined storm water and wastewater system, identifying assets that are at risk over the next century in order to recommend adaptation strategies to reduce those risks and protect those assets.

State and Regional Resources

2018 State Hazard Mitigation Plan

This draft report provides important current and historical information on the hazards facing the State of California, as well as the actions, resources, goals, and priorities the State of California takes into consideration when mitigating these hazards. For the 2019 HCR update, hazard information was integrated where relevant to the City and County of San Francisco, for example, in the Large Urban Fire hazard profile.

Cal-Adapt

Cal-adapt provides local jurisdictions across the state with robust information produced by the State of California's scientific and research community. In this way, it is a valuable

and essential resource to glean local climate change impacts and facilitate understanding of the latest science and projections as the science advances. For this report, this was most essential for understanding projected changes in extreme heat and precipitation patterns, for integration into relevant hazard profiles.

California Adaptation Planning Guide (2013)

This planning guide is made of 4 complementary documents that guide communities through an adaptive planning process to address climate change. It walks through an in-depth understanding of climate change impacts, with a focus on regional characteristics that vary across the state as well as environmental and socioeconomic considerations. The guide also assists in thinking through the selection of adaptation strategies.

Hazard Mitigation and Climate Adaptation Risk Assessment (ABAG) (2017)

This document was created for the 9-county bay area in order to characterize the risk profile of the San Francisco Bay area. This report provided vital information on the required information to perform actionable resilience, adaptation, and mitigation planning. The hazards addressed through this report overlapped heavily with the ones addressed through the 2019 HCR plan and, therefore, was a valuable starting point.

Integration with Current and Future Planning Processes

The Hazard and Climate Resilience Plan (HCR) begins the process of capturing the hazard mitigation and climate adaptation efforts being pursued by the City and County of San Francisco, across the range of city departments. In parallel with this planning effort has been the update to the Climate Action Strategy (CAS) being led by the San Francisco Department of Environment (SFE). Following the completion of the HCR and CAS, these two planning efforts will be aligned through a newly created climate resilience program in