

Hazards and Climate Resilience Plan

2021 Annual Progress Report



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1 Executive Summary

The annual progress report for the Hazards and Climate Resilience Plan (HCR) provides updates on hazards and risk, capabilities, and progress towards implementing the strategies during the 2020 reporting period. The HCR serves as San Francisco’s Local Hazard Mitigation Plan and was adopted by the Mayor and Board of Supervisors on June 16, 2020 and approved by the Federal Emergency Management Agency on July 22, 2020. The HCR provides a roadmap for reducing the impacts of hazards and climate change impacts before they occur.

Hazard and Risk Profile Update

Three major hazards occurred in San Francisco during 2020:

- **COVID-19 Pandemic:** The City issued shelter-in-place orders on March 16, 2020. San Francisco saw over 36,000 COVID-19 cases and 500 deaths and an increase in social vulnerability due to economic impacts and closures of in-person social support systems.
- **Poor Air Quality:** The 2020 wildfire season was the worst in modern history for the state of California, which led to severe poor air quality in the Bay Area due to wildfire smoke. The Bay Area Air Quality Management District (BAAQMD) declared a “Spare the Air” advisory for over 30 consecutive days.
- **Extreme Heat:** The Bay Area experienced record setting extreme heat in late August and early September that led to San Francisco seeing 100°F temperatures for the first time since 2017.¹ This period of extreme heat not only presented a direct hazard to public health, but also contributed to the wildfire conditions.

Capabilities Update

Changes in San Francisco’s capabilities related to implementing HCR strategies, include:

- Revenue, budget, and staffing impacts from COVID-19 pandemic
- 2020 Health and Recovery Bond

¹ <https://abc7news.com/san-francisco-heat-wave-california-sf-fran-weather/6412112/>

- Economic Recovery Task Force Report
- Department Racial Equity Action Plans
- General Plan updates
- COVID Command Center
- New Permit Center opened

Strategy Progress Update

Even as the City swiftly marshalled resources towards responding and recovering from the COVID-19 pandemic, San Francisco made significant progress on implementing multi-hazard HCR strategies during the first year of the plan:

- Over half of strategies are progressing on schedule or on-going.
- 20 (21%) of strategies have not yet started.
- 17 (18%) of strategies have started but are facing some delay
- 6 (6%) of strategies changed significantly
- 2 (2%) of strategies have been completed
- 65% of strategies are included in a budget or capital plan
- 1 new strategy was added around groundwater data collection efforts

Details on the progress of each strategy can be found the Appendix. Strategy accomplishments from this period include:

- Integrated HCR strategies into other City policy documents, including [Climate Action Plan](#) and [Safety and Resilience Element](#) of the General Plan
- Citywide mobilization to support resilience and [recovery from COVID-19](#)
- Activated and expanded [Neighborhood Empowerment Network HUBs](#)
- Launched the Heat and Air Quality Resilience Project
- Published [Lifelines Restoration Performance Project Report](#)
- Secured Hazard Mitigation Grant Program (HMGP) funding
- Conducted outreach and engagement for [Islais Creek Adaptation Strategy](#)
- Adopted an updated [Floodplain Management Ordinance](#)
- Secured a grant to conduct groundwater data collection and modeling

In addition, a new strategy was added based on continued community engagement through the Climate Action Plan update added calling for studies to understand how sea level rise may interact with contaminated lands and the potential public health risks.

2 Introduction

2.1 Background and Purpose

This report is the annual progress report for the Hazards and Climate Resilience Plan (HCR), which provides a roadmap for reducing the impacts of hazards and climate change impacts before they occur. The HCR serves as San Francisco’s Local Hazard Mitigation Plan and was adopted by the Mayor and Board of Supervisors on June 16, 2020 and approved by the Federal Emergency Management Agency on July 22, 2020. Associated resources can be found at the following links:

- [Adopted 2020 Hazards and Climate Resilience Plan](#)
- [Summary Report](#)
- [Hazards StoryMap](#)
- [Strategy Dashboard](#)

The City has committed to maintaining the HCR and evaluating progress towards implementation in accordance with federal Hazard Mitigation Planning requirement and described in Chapter 8 and Appendix D of HCR. This report provides an update on hazards, risks, capabilities, and strategy implementation in calendar year 2020. This update was drafted through a workshop with the Planning Team and a strategy update reporting form.

2.2 Overview of the Report

This report includes the following sections:

- **3. Hazard and Risk Profile Update:** Summarizes impacts of natural hazards that occurred in 2020.
- **4. Capabilities Update:** Provides updates to San Francisco capabilities to implement resilience strategies.
- **5. Strategy Update:** Describes and evaluates progress towards strategy implementation and highlights notable accomplishments.
- **Appendix:** Details strategy progress from departments leading strategies.

3 Hazard and Risk Assessment Update

This section provides hazard profile and risk assessment information for three hazards that occurred or are on-going since the 2020 HCR was drafted: COVID-19 Pandemic, Poor Air Quality, and Extreme Heat.

3.1 COVID-19 Pandemic

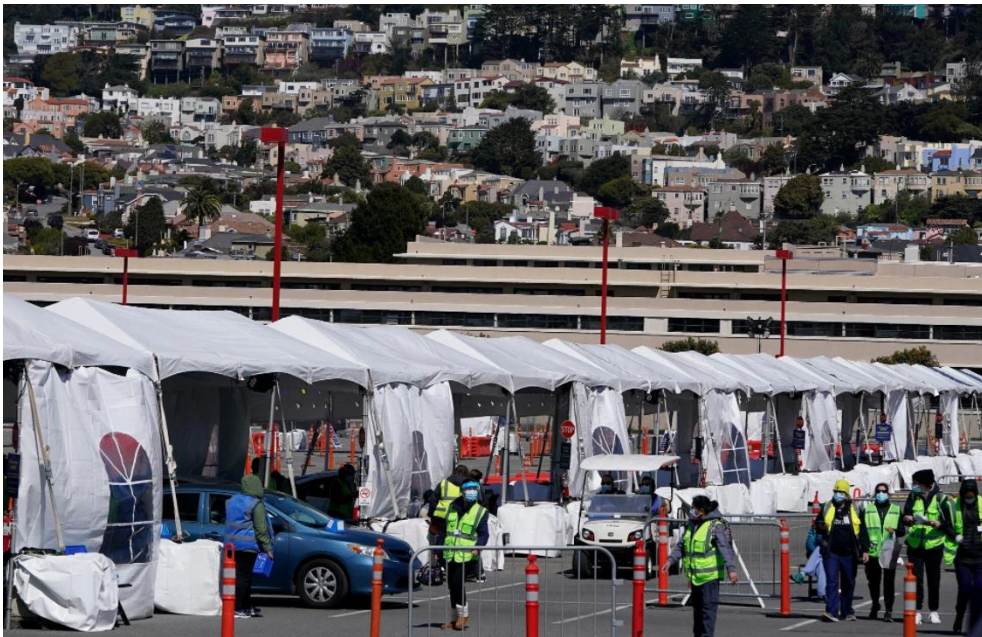
San Francisco was one of the first cities to respond to the global COVID-19 pandemic, with Mayor London Breed enacting an emergency declaration on February 25th 2020 in partnership with the Department of Public Health, and Department of Emergency Management. This declaration was voted on and approved by the Board of Supervisors on March 3rd and started the processes of mobilizing resources and broadening the capabilities for the city to marshal a response. The first patients confirmed to be positive for the virus in the city were identified on March 5th. Shortly thereafter, Mayor London Breed issued a public health, shelter in place order requiring that all residents remain in place, with the only exception being for essential needs, effective March 16th, 2020.

At the time of this report, the COVID-19 pandemic has been impacting the city, nation, and world for over a year. As of June, 2021, there have been over 33.5 million cases of COVID-19 in the United States, with over 600,000 deaths. The course of the pandemic nationally has been characterized by peaks and troughs, with surges of outbreaks sweeping across the country in early summer 2020 before declining until early winter. California was particularly hard hit by a winter surge that leveled off and declined with the arrival of vaccines.²

The U.S FDA authorized the first COVID-19 mRNA vaccine for emergency use on December 11th, 2020. Vaccine distribution began shortly thereafter. Vaccination rates increased as the federal government implemented a series of measures to increase rates as part of it's [National Strategy for the Covid-19 Response and Pandemic](#)

² New York Times (2021). "The Coronavirus Outbreak: Maps and Cases

Preparedness. At the time of writing in June 2021, 77% of San Francisco adults 16 and over have received at least one vaccine dose.



Mass vaccination site at San Francisco City College

3.1.1 San Francisco Impacts to Date

As of June 2021, San Francisco has experienced over 36,000 reported cases of COVID-19, and 550 deaths. San Francisco has fared better than many other metropolitan areas in the management of the spread of the disease. Compared to other cities, San Francisco has among the lower deaths per 100,000 people, case fatality rates, high testing rates, high vaccinates rates, and success targeting support to vulnerable populations.³ A large part of the overall success has been attributed to the decision to shelter in place earlier than many other jurisdictions, which meant that hospitals avoided becoming overwhelmed and patients were able to receive personalized care.⁴

Up to date information on COVID-19 public health indicators, vaccinations, cases and deaths, and testing is available at the [San Francisco's COVID-19 Data Tracker](https://www.sfchronicle.com/bayarea/article/Two-big-reasons-S-F-has-the-lowest-death-rate-15597761.php). For more

³ <https://www.sfchronicle.com/bayarea/article/Two-big-reasons-S-F-has-the-lowest-death-rate-15597761.php>

⁴ <https://www.sfchronicle.com/bayarea/article/Two-big-reasons-S-F-has-the-lowest-death-rate-15597761.php>

information on the city’s recovery efforts to the crisis, please see [Appendix F](#) of the Economic Recovery Task Force Report.

Impacts on Vulnerable Populations

Since the start of the COVID-19 pandemic, there has been significant progress in understanding the impacts the virus can have on the community. Structural oppression has led to disparities in outcomes of COVID-19 disease and deaths due to pre-disposing co-morbidities, leading to severe illness or increased transmission. In order to address this, in concert with the traditional medical vulnerabilities, the City of San Francisco has committed to accounting for the role that structural barriers have in putting individual and groups at higher risk.⁵

COVID-19 has had significant impacts on the social vulnerability of San Francisco residents, with many of these impacts stemming from the precarious economic situation many experienced. Employment data from April 2020 showed a loss of as many as 175,000 jobs in the San Francisco Metropolitan division in comparison to March 2020, with 62,000 of the job losses not returning by April 2021 even with the partial recovery seen from the phased business reopening.

These impacts have fallen disproportionately on low-income communities and communities of color due to job losses primarily impacting lower-wage industries such as food service and hospitality. Additionally, jobs in this sector are the kind that cannot be done through working remotely and therefore many in these industries must choose between risking exposure or keeping a job.

School closures also contributed to issues of social vulnerability, with both immediate impacts as well as expected long-term implications. The impacts to students have been particularly pronounced and effecting the academic, emotional, and mental well-being of many young students. General enrollment has dropped, as families struggle to make online instruction work.⁶ An analysis by the state has called attention to the “Learning Loss” being experienced by students and how many vulnerable groups can be impacted,

⁵ <https://www.sfcddp.org/wp-content/uploads/2020/06/COVID19-Health-Advisory-StructurallyVulnerablePops-FINAL-06.2.2020.pdf>

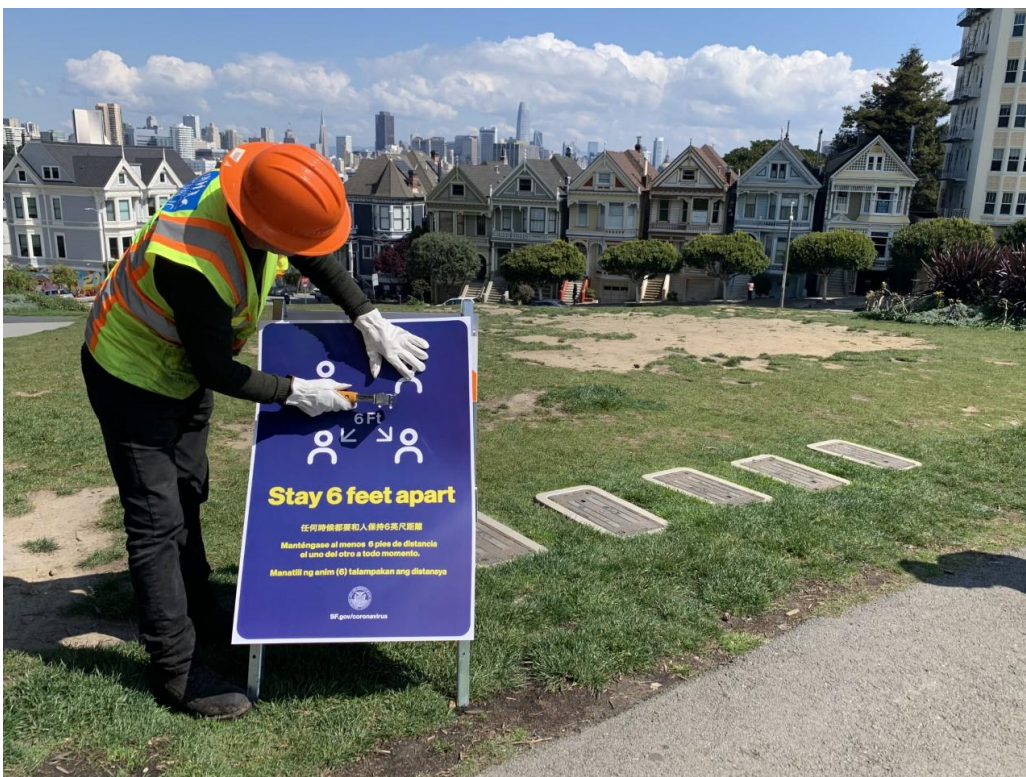
⁶ <https://www.sfchronicle.com/education/article/After-nearly-a-year-of-Zoom-school-Bay-Area-15955421.php#photo-20618633>

including low-income students and English language learners being particularly affected by the lack of in-person support.⁷

Additionally, the pandemic impacted municipal operations. For example, SF Muni had to suspend or shorten some routes and lines that it operates and this can negatively impact those relying on public transit to access jobs and services.

Overall population changes

According to an analysis by the Postal Service, the number of households entering San Francisco stayed relatively constant between 2019 to 2020 but there were significant increases in out-migration. This led to a net-outward flow from the city of 53, 251 households leaving the city, a change of 207.4%.⁸ The data points to people moving relatively close, to other Bay Area counties such as Alameda, San Mateo, or Marin and other locations within the state as well.



A sign reminds park users of social distancing to mitigate the spread of COVID-19

⁷ <https://edpolicyinca.org/newsroom/covid-19-and-educational-equity-crisis>

⁸ <https://www.sfchronicle.com/bayarea/article/People-are-leaving-S-F-but-not-for-Austin-or-15955527.php>

3.2 Poor Air Quality

The 2020 wildfire season was not only the worst in modern history for California, but also for the entire western region, with record breaking fire events occurring across the entire west.⁹ By the end of the year, nearly 10,000 fires had burned over 4.2 million acres across the state (roughly 4% of the state’s 100 million acres of land). Many of these fires were sparked by intense thunderstorms in August 16-17th, including the August fire complex which exceeded 1 million acres, spanned seven counties, and doubled the Mendocino Complex to become the largest recorded fire in California’s history.

According to the Bay Area Air Quality Management District (BAAQMD), 22 of the 30 poorest air quality days in the Bay Area occurred over the last three years as a direct result of wildfires.¹⁰ This unprecedented fire season directly led to historic poor air quality across the state, with the Bay Area experiencing 12 days of the worst air-quality since tracking began in 1999¹¹. The impacts to the region were severe, with BAAQMD declaring a “Spare the Air” advisory for over 30 consecutive days. In addition, a Stanford study found that this year’s air quality events led to between 1,200 and 3,000 premature deaths in California between August 1st and September 10th.

It is still too early to quantify the impacts from this event, but it forced many to shelter-in-place even further and cut off access to the outdoors which had been an important outlet for many people during the pandemic. September 9th was particularly memorable, as the area was blanketed in an orange haze due to the dynamics between smoke layers persisting at multiple altitudes from multiple wildfire sources (Northern California as well as the Pacific Northwest), being filtered through the marine fog layer.¹²



Orange skies on Sep 9, 2020 due to wildfires smoke. Credit: Christopher Michel

⁹ <https://www.sfchronicle.com/california-wildfires/article/Not-just-California-Colorado-and-other-Western-15667992.php>

¹⁰ <https://www.sfchronicle.com/california-wildfires/article/Yes-the-Bay-Area-just-suffered-some-of-its-15567137.php>

¹¹ <https://www.sfchronicle.com/california-wildfires/article/Yes-the-Bay-Area-just-suffered-some-of-its-15567137.php>

¹² <https://www.sfchronicle.com/california-wildfires/article/The-orange-sky-was-Bay-Area-s-latest-extreme-15558001.php#photo-19939422>

3.3 Extreme Heat

Influencing the wildfires and air quality events over the summer in 2020, was a period of record setting extreme heat in late August and early September that impacted the Bay Area broadly and led to San Francisco seeing 100°F temperatures for the first time since 2017.¹³ On Sunday September 6th 2020, over 10 Bay Area cities set new records for extreme temperatures. This period of extreme heat not only presented a direct hazard to public health, but also contributed to the wildfire conditions.¹⁴ The extreme heat events also put strain on the electrical grid, leading to rolling black outs across the state as the grid operator and PG&E tried to manage the increased demand on the system as well as the decreased resiliency of the grid from the high temperatures.¹⁵ The Department of Public Health is currently analyzing the data to determine the impacts on public health and hospitalization rates from this event.



People seek relief from extreme heat at Ocean Beach

¹³ <https://abc7news.com/san-francisco-heat-wave-california-sf-fran-weather/6412112/>

¹⁴ <https://www.washingtonpost.com/weather/2020/09/04/california-heat-wave-fires/>

¹⁵ <https://www.abc10.com/article/news/local/california/flex-alert-issued-for-labor-day-weekend/103-73e2c146-469d-41fb-a256-d1700e54abcf>

4 Capability Update

Capabilities related to implementing mitigation strategies are organized into five categories: (1) Funding and Finance, (2) Public Asset Owner (3) Planning, Research, Guidance, (4) Adopt and Enforce Regulations, and (5) Deliver Community Services.

4.1 Funding and Finance

4.1.1 Revenue impact of COVID-19

The Five-Year Financial Plan for the City (from FY21-22 through FY 25-26) details a budget shortfall of 293.6M for FY21-22.¹⁶ Revenue declines have particularly impacted the City's transportation agencies, including SFO and SFMTA. The FY2022-31 Capital Plan is \$1 Billion lower than previous update, despite additional of \$1.4 million in Affordable Housing funding. However, as of May 13th, 2021, there is a budget revenue surplus for the current fiscal year of \$177.3 million dollars. This is largely due to higher than expected tax revenues.

4.1.2 2020 Health and Recovery Bond

Voters approved the 2020 Health and Recovery Bond (totaling \$487.5M) which provides \$207M to invest in permanent supportive housing, shelters, and facilities that deliver services. Additionally, the bond provides resources for infrastructure improvements to key citywide parks, community gardens, and trails. With these investments comes opportunities to mitigate impacts to infrastructure and our communities from future hazard events.

4.2 Public Asset Owner

No significant changes to the City's Public Asset Owner capabilities.

¹⁶

<https://sfcontroller.org/sites/default/files/Documents/Budget/Five%20Year%20Financial%20Plan%20FY21-22%20through%20FY%2025-26.pdf>

4.3 Planning, Research, and Guidance

4.3.1 Economic Recovery Task Force

Mayor London Breed and the Board of Supervisor's President Norman Yee created the COVID-19 Economic Recovery Task Force in order to guide the city's efforts through the COVID-19 recovery in a way that will sustain and revive local businesses and employment opportunities, mitigate the economic hardships already affecting our most vulnerable San Franciscans, and build a resilience and equitable future for the city.

[The Task Force report](#) recommends recovery strategies that also advance resilience goals. Strategy 1.7 calls for the City to partner with business and philanthropic communities exploring opportunities for public-private partnership to deliver an equitable and resilient recovery. Strategy 8.1 also calls for the City to plan collaboratively for San Francisco's resilience future through updating the Mayor's five-year financial plan to reflect planned investments in resilience. Additionally, this strategy calls for the Office of Resilience and Capital Planning to work with asset-owning departments to articulate priority resilience enhancement projects for fiscal planning.

4.3.2 Department Racial Equity Action Plans

During August 2019, the Board of Supervisor's passed legislation to create San Francisco's Office of Racial Equity, which requires all City departments to create Racial Equity Action Plans by 2020. This phased process is nearing the completion of Phase I which primarily focuses on achieving equity in internal operations. Phase II will encourage departments to set and achieve equity goals around external processes and this represents an opportunity to achieve more equitable outcomes from the City's hazard mitigation and resilience efforts.

4.3.3 General Plan Updates

San Francisco Planning is updating the City's General Plan. The General Plan creates a roadmap for the City's growth and change over time. It consists of goals and policies that will help the City address topics such as racial and social equity, housing, mobility, safety, climate resilience, environmental justice, and land use. The Housing Element, Transportation Element, and Safety and Resilience Elements are being updated, and the General Plan will also incorporate a new Environmental Justice Framework.

This update will comply with:

- California law to update the Housing Element every eight years;
- California State Senate Bill 379 ([Jackson, 2016](#)) ensuring consistency between the Community Safety Element and the City's local hazard mitigation plan (2020 Hazards and Climate Resilience Plan);
- California State Senate Bill 1000 ([Leyva, 2016](#)) directives around environmental justice in the General Plan through a map of Disadvantaged Communities and policies that address unique or compounded health risks;
- ConnectSF, an interagency vision for transportation future;
- Planning Commission and Historic Preservation Commission [Resolutions](#) to incorporate racial and social equity into the General Plan, with a focus on American Indian communities, Black communities, and communities of color
- Closely coordinate with the City's [Climate Action Plan updates](#).

This work also actively informs the Department's response to the devastating health, economic, and housing crises resulting from the COVID-19 pandemic.

4.4 Adopt and Enforce Regulations

4.4.1 Permit Center

The City opened a new office building at 49 South Van Ness, which features a 39,000 square foot One-Stop Permitting Center and consolidates operations for the Departments of Building Inspection, Public Works, Planning, Public Health, and other departments, which will help to physically streamline the permitting process and enhance regulatory enforcement.



49 South Van Ness which includes new Permit Center

4.5 Deliver Community Services

4.5.1 COVID Command Center

The City and County of San Francisco established the COVID Command Center at Moscone Center South on March 16th, 2020 to serve as the centralized location to coordinate the cities response. At the height of the response, this location had over 400 city employees working diligently, and safely to coordinate the numerous aspects of the response efforts. In this role, the center handles a wide range of tasks while interfacing with numerous community partners supporting the response. For a comprehensive list of response activities being pursued by the city, see [Appendix F](#) of the Economic Task Force Report.

Many of these efforts have the potential to facilitate more effective hazard mitigation, particularly in the realm of outreach and communications. For example, through the COVID Command Center, a list of all multi-family property owners in the city was generated for outreach. This resource may be useful in the future for outreach about other hazard mitigation or response efforts.



Disaster Service Workers at the COVID Command Center at Moscone Center South

5 Strategy Update

5.1 Summary of Strategy Progress

Even as the City marshalled resources towards responding and recovering from the COVID-19 pandemic, San Francisco made significant progress on implementing the HCR strategies. Figure 5.1 shows that just over half of strategies are progressing on schedule / on-going. 20 (21%) of strategies have not yet started, which is not unexpected given the 5-year horizon of the HCR and many medium to long-term adaptation strategies included. 17 (18%) of the strategies have started but are facing some delay. Many of the explanations provided related to the intense focus of staff on COVID-19 response and recovery efforts during this reporting period. 6 (6%) of the strategies changed significantly since the report was drafted and 2 (2%) of the strategies have been completed. Details on the progress of each strategy can be found in Appendix A.

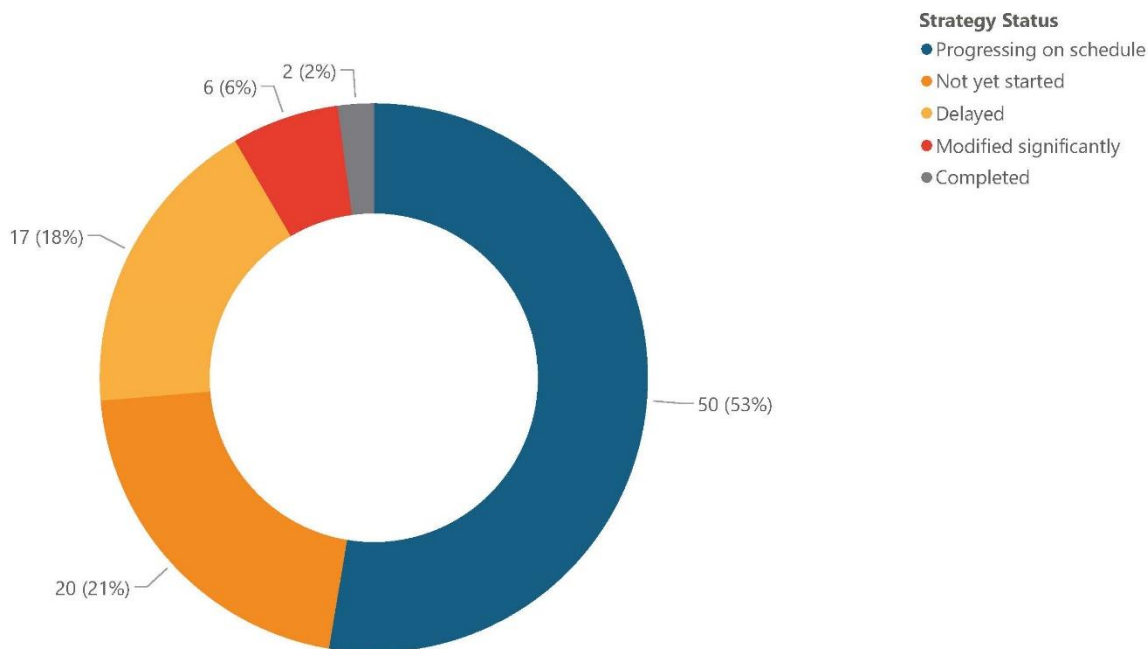


Figure 5.1: Strategy Implementation Status

Another indicator of progress towards implementation is the inclusion of the strategies in budgets and capital plans. As Figure 5.2 illustrates, nearly two-thirds of the HCR strategies are already integrated into budgets or capital plans.

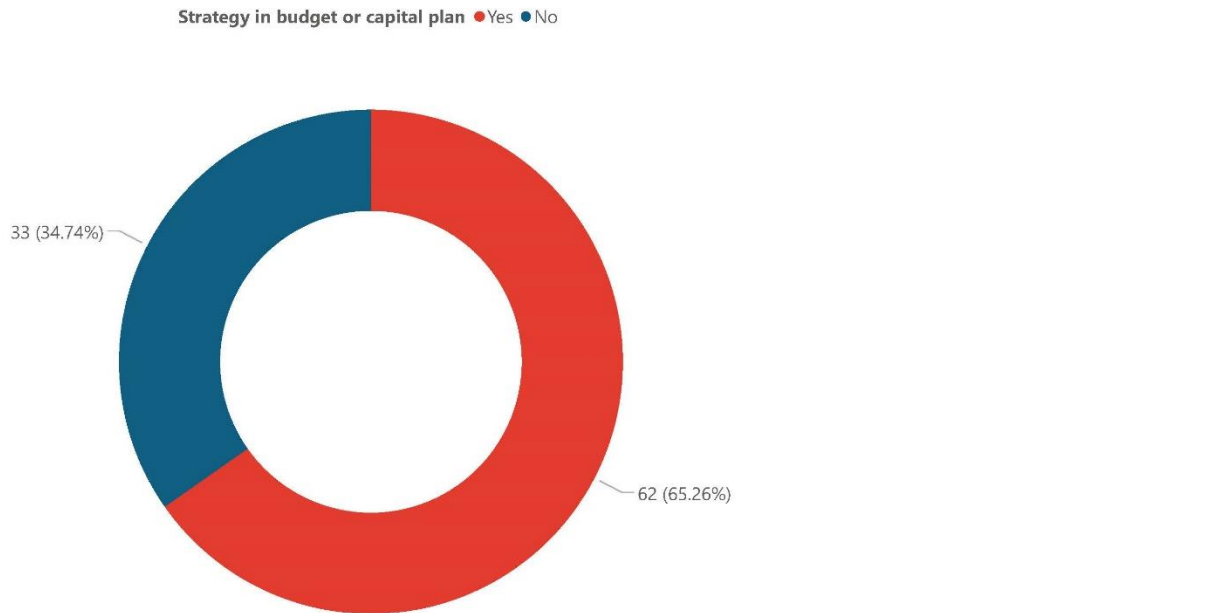


Figure 5.2: Strategy integration in budget or capital plan

5.2 Accomplishments

Below are notable accomplishments during the 2020 reporting period including reference to the HCR Chapter or strategy number.

- Integrated HCR strategies into other City policy documents (Chapter 08)
 - Public engagement on the Climate Action Plan (CAP) update started in December, 2020 and included an interactive online open house, online workshops, and pop-up presentations.
 - Staff conducted analysis of HCR strategies for integration with updated Safety and Resilience Element policies in 2020, with public engagement beginning in March, 2021. Two virtual workshops were held for the Safety and Resilience Element and well attended.

- FY 2022-31 Year Capital Plan was drafted in late 2020 and was adopted by the Board and Mayor in late April, 2021. The Capital Plan calls for \$38 Billion in investment and includes several HCR strategies, including seismic retrofits, Ocean Beach adaptation, and affordable housing production and preservation.
- Mobilized resources citywide to support COVID-19 resilience and recovery:
 - Focused support for the health and recovery of vulnerable populations, including with accessible testing, vaccine distribution, and economic relief (C-4.04).
 - The City rapidly launched and scaled several small business relief efforts, and provided information and support for workers facing layoffs (C-1.04, C-5.10, C-5.11, C-5.13).
 - Activated existing NEN HUBs to respond to the Pandemic, onboarded one new community as a HUB partner community (Lakeshore) and initiated HUB development process in Visitation Valley (C-5.06).
- Launched the Heat and Air Quality Resilience Project to coordinate the implementation of extreme heat and air quality adaptation strategies. The project is advancing strategies related to emergency response, existing buildings, green infrastructure, and community readiness. (B-3.01, B-3.02, C-5.04, C-5.05, C-5.15, C-5.19)
- Published Lifelines Restoration Performance Project Report. (IN-1.05)
- Secured Hazard Mitigation Grant Program (HMGP) funding to seismically retrofit Castro Mission Health Center (B-1.01) assess City-owned concrete buildings. (B-1.07)
- Conducted outreach and engagement events to introduce the Islais Creek Adaptation Strategy to the Islais Creek and Bayview community, map community assets, and discuss co-benefits of the project and climate adaptation, allowing for the creation of proposed district-scale concept alternatives. (IN-2.01)
- Amended and adopted San Francisco's Floodplain Management Ordinance enabling property owners, renters, and business to purchase federally subsidized flood insurance through the National Flood Insurance Program (NFIP).
- The City secured a grant to conduct groundwater data collection and modeling to better understand the shallow groundwater response to sea level rise,

including liquefaction risks. This effort has been added to the HCR strategies as C-2.01 and can be found in the Appendix.

New Strategy

In addition to the progress on the existing strategies, this Progress Report includes a new strategy not previously included in the HCR. As a result of continued community engagement about climate change and resilience through the Climate Action Plan update, a strategy has been added calling for studies to understand how sea level rise may interact with contaminated lands and the potential public health risks (C-2.01). This strategy is provided below in full and will be incorporated into future progress reports.

C-2.01			Conduct studies to better understand how sea level rise may interact with contaminated lands and the potential public health risks		
KEY PLANNING ISSUES: Assessment, Waterfront		VULNERABILITY ADDRESSED: Not enough is known about the potential exposure of contaminated land sites to future sea level rise, including groundwater rise, and the potential risks to public and environmental health. Contaminated land sites are disproportionately located near low-income and communities of color that are disproportionately burdened by pollution.			
LEAD: DPH PARTNERS: ORCP, OCII, Planning, Port, SFE, CBOs, state and federal agencies		STRATEGY SUMMARY: This strategy involves identifying and seeking funding to conduct modeling studies using the best available science to better understand how future sea level rise, including groundwater rise, may interact with contaminated land sites to mobilize pollutants. Such studies should be designed to help the City and community organizations better understand and communicate the potential risks to public and environmental health and what measures can be taken to protect people and the environment. The findings should inform waterfront planning and adaptation efforts.			
COST: Medium: \$500K - \$5M		SF GOVERNMENT ACTIVITY: Research, Planning, & Guidance		STATUS: New	

5.3 Conclusions

When the HCR was drafted in 2019, we could not have predicted that the COVID-19 global pandemic was about to hit and all the ways it would transform our lives and city, including the over 500 San Franciscans that lost their lives and those living with long-term health impacts from the disease. The unpredictability of hazards and climate change impacts means that we have to keep moving forward on all of our resilience efforts even as we continue to recover from the Pandemic. As described in the San Francisco Economic Recovery Task Force report, collaborative planning and priority capital investments are key elements of recovering in an equitable and resilient way.

The impacts of COVID-19 also highlight the importance of continuing and strengthening the City's resilience focus on supporting vulnerable populations and proactively working to achieve racial equity in hazard risk and a just distribution of resilience and recovery benefits. Department's Phase 2 Racial Equity Plans will be a critical opportunity for departments examine ways to implement resilience projects and programs to support the elimination of racial inequities.

The Heat and Air Quality Resilience Project is also a critical next step that supports the implementation of several HCR strategies in partnership with community organizations, academic institutions, and regional agencies. This is a particular priority given the repeated extreme heat and air quality events San Francisco has experienced and the projected increase in these events due to climate change.

Appendix: Strategy Progress Tables

List of Acronyms

ADM	Office of the City Administrator
BOS	San Francisco Board of Supervisors
CBOs	Community Based Organizations
DAAS	Department of Disability and Aging Services
DBI	Department of Building Inspection
DEM	Department of Emergency Management
DPH	Department of Public Health
HSA	Human Services Agency of San Francisco
MOD	Mayor's Office on Disability
MOHCD	Mayor's Office of Housing and Community Development
NEN	Neighborhood Empowerment Network
OEWD	Office of Economic and Workforce Development
ORCP	Office of Resilience and Capital Planning
Planning	San Francisco Planning Department
Port	Port of San Francisco
Public Works	San Francisco Public Works
RPD	San Francisco Recreation & Parks Department
SFDT	San Francisco Department of Technology
SFE	San Francisco Department of Environment
SFFD	San Francisco Fire Department
SFMTA	San Francisco Municipal Transportation Agency
SFPL	San Francisco Public Library
SFO	San Francisco International Airport
SFPUC	San Francisco Public Utilities Commission

DOMAIN: RESILIENT INFRASTRUCTURE (IN)

Primary Hazard Group: Geological

IN-1.01	Conduct a seismic assessment of critical City assets along the Southern Waterfront	
LEAD: Port	PROGRESS IN 2020: The Southern Waterfront Seismic Study was initiated in 2020. The first phase consists of consolidating data from previously developed geotechnical assessments of the Port's Southern Waterfront.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-1.02	Conduct a research project for earthquake mitigation of marine structure piles	
LEAD: Port	PROGRESS IN 2020: The matching funds (in the form of a FEMA grant) were not approved and Port funding was severely constrained. The project was reconfigured to move forward with other funding.	
STATUS: Modified significantly	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): The study would have combined large-scale physical testing in conjunction with computer simulation to study the resilience of steel pipe piles in marine structures subjected seismic-related loads to develop strain limits for piles. However, FEMA funding was not obtained and the Port's ability to contribute to the project was substantially reduced due to pandemic-related budget issues. Currently, the project has been funded for one year at \$50k by a research institution to start computer modeling of the steel pipe pile in soil. The Port has volunteered to provide review and guidance on the project, but has not committed to funding the ongoing research.	

IN-1.03.01		Develop technologies, systems, and capacity to treat sanitary sewage at SFO	
LEAD: SFO		PROGRESS IN 2020: The Airport conducted a long-term strategy to identify options for meeting future nutrient limits and is currently conducting a pilot for nutrient removal process. Based on the current fiscal situation and evolving effluent limits, the Airport is evaluating most economical options. The RFP for Sanitary Treatment Plant headworks project which includes upgrades to critical treatment plant infrastructure was also completed in 2020. Construction is tentatively scheduled to commence in Q4 2021, as well as electrical and SCADA upgrades at several sanitary sewer pump stations campus wide.	
STATUS: Progressing on schedule		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-1.03.02		Develop redundant and resilient electrical power capacity and distribution at SFO	
LEAD: SFO		PROGRESS IN 2020: Further developed studies to increase capacity and resiliency of electrical infrastructure into SFO from SFPUC and PG&E.	
STATUS: Delayed		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): Recent impacts to the economy and SFO revenues due to Covid-19 delayed certain projects related to redundancy and resiliency.	

IN-1.04		Conduct a Risk and Resilience Assessment and Emergency Response Plan for the City's water infrastructure system	
LEAD: SFPUC		PROGRESS IN 2020: Conducted Risk and Resiliency Assessment, and updated components of Emergency Plans to fully comply with America's Water Infrastructure Act	
STATUS: Completed		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-1.05	Complete the Lifelines Restoration Performance Project and implement recommendations	
LEAD: ORCP	PROGRESS IN 2020: The Lifeline Restoration Performance Report was published in October 2020 and presented to the Lifelines Council.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-1.06	Increase the resilience of the Municipal Fiber Optic Network	
LEAD: DT	PROGRESS IN 2020: Minimal progress thus far, mainly through leveraging work order funding.	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): No funding received	

IN-1.07	Increase the resilience of the 911 Radio System	
LEAD: DT	PROGRESS IN 2020: Minimal improvements made to system.	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): No funding received	

IN-1.08		Implement multi-hazard mitigation improvements for harbor dock infrastructure	
LEAD: Port / RPD		PROGRESS IN 2020: No notable progress this reporting period.	
STATUS: Not yet started		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): The project requires a champion to support and move it forward as a priority effort.	

IN-1.09		Develop a hazard mitigation and emergency response evacuation plan for SF Zoo	
LEAD: SF Zoo / RPD		PROGRESS IN 2020: This project has not started due to staff engagement on high priority issues during this reporting period, including COVID-19 response and recovery.	
STATUS: Not yet started		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-1.10		Implement the East Harbor Renovation Project	
LEAD: Port / RPD		PROGRESS IN 2020: This strategy has been folded into the harbor infrastructure strategy 1.08.	
STATUS: Modified Significantly		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

Note: Missing Data

IN-1.11	Implement San Francisco Metropolitan Transportation Agency (SFMTA) Security Strategy	
LEAD:	PROGRESS IN 2020:	
STATUS:	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY):	

DOMAIN: RESILIENT INFRASTRUCTURE (IN)

Primary Hazard Group: Weather-Related

IN-2.01		Develop projects to address flooding around Islais Creek
LEAD: Planning	PROGRESS IN 2020: Finalized guiding principles and goals for the Islais Creek Adaptation Strategy after several public workshops and web-based surveys. Conducted outreach and engagement events to introduce the project to the Islais Creek and Bayview community, map community assets, and discuss co-benefits of the project and climate adaptation, allowing for the creation of proposed district-scale concept alternatives.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-2.02		Develop a process to move utilities from under pier structures
LEAD: Port	PROGRESS IN 2020: No notable progress this reporting period.	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): This strategy was delayed due to limited staff resources. Staff was fully engaged on high-priority life safety capital improvement projects throughout 2020.	

IN-2.03		Continue to implement the Ocean Beach Master Plan
LEAD: SFPUC	PROGRESS IN 2020: This project is moving forward 2 of the 6 key moves identified in the Ocean Beach Master Plan. The project team completed 35% design, CEQA NOP was released and several public/key stakeholder meetings have been held.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-2.04		Adapt shoreline parks to sea level rise and salt water intrusion, using marshes and plant diversity
LEAD: RPD	PROGRESS IN 2020: Design of 900 Innes Boatyard Park and the redesigned India Basin Shoreline Park were finalized this year.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-2.05		Assess the current stormwater catchment potential of open space managed by the Recreation and Parks Department
LEAD: RPD	PROGRESS IN 2020: This project has not been started due to staff engagement on high priority issues, including COVID response and recovery.	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-2.06		Expand the StreetTreeSF Climate Resilient Tree Planting Initiative
LEAD: Public Works	PROGRESS IN 2020: SF Public Works and partner non-profits funded by SF Public Works planted 702 trees during the reporting period.	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): Funding was reduced due to COVID-19 budget impacts. Ability for non-profit partners to plant was also impacted during shelter-in-place order, slowing rate of planting.	

IN-2.07		Complete the Extreme Precipitation Study
LEAD: SFPUC	PROGRESS IN 2020: Future modeling scenarios were completed by Lawrence Berkeley National Laboratory	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): COVID-19 and power grid temporary shutdowns impacted progress on super computer modeling.	

IN-2.08	Complete a comprehensive assessment of combined flood risks for San Francisco	
LEAD: SFPUC	PROGRESS IN 2020: SFPUC pursued processes to develop the mapping of pluvial and coastal flooding and flood risks. The City also is also part of a regional grant-funded study to collect groundwater data and conduct modeling better understand how groundwater is expected to respond to sea level rise and where and when (which sea level rise scenarios) rising groundwater may become a hazard.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-2.09	Participate in US Army Corps of Engineers (USACE)/Port Flood Study	
LEAD: Port	PROGRESS IN 2020: Developed first version of Future without Project and developed the Focused Array of Alternatives for the project moving forward.	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): The project will continue to be worked on until September 5, 2021 when the initial timeframe and budget is complete. The project is requesting a waiver from the Assistant Secretary of the Army for additional budget and schedule.	

IN-2.10	Explore increasing tree canopy and shade structures in parks	
LEAD: RPD	PROGRESS IN 2020: RPD designers and project managers are exploring these elements in current park planning where appropriate.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-2.11	Assess current plant palettes and tree canopy needs to increase consideration of future climate conditions in the selection options	
LEAD: RPD	PROGRESS IN 2020: This project has not been started due to staff engagement on high priority issues, including COVID response and recovery.	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-2.12	Diversify water supply options year-round by improving the use of new water sources and drought management	
LEAD: SFPUC	PROGRESS IN 2020: Conducted feasibility studies, established Alternative Water Supply Program, and hired staff to support strategy.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-2.13	Continue to conserve and monitor water use by capital projects	
LEAD: Public Works	PROGRESS IN 2020: Public Works continues to monitor existing water usage and incorporate water conservation techniques into landscape, building, and infrastructure design.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY):	

IN-2.14	Develop a Long-term Vulnerability Assessment and Adaptation Plan for the Hetch Hetchy Regional Water System	
LEAD: SFPUC	PROGRESS IN 2020: Performed large internal review. This included presentations of results to upper management at SFPUC Water. Additionally, improvements to the hydrologic models was also achieved.	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): During internal review of modeling results, it was decided to attempt to reduce hydrologic modeling error. We are now preparing the final report.	

IN-2.15		Implement a Coastal Multimodal Resilience Strategy	
LEAD: SFMTA		PROGRESS IN 2020: Developed draft Islais Creek report with adaptation pathways, implemented traffic calming measures to support the temporary re-purposing of the Great Highway between Lincoln and Sloat. Additionally, we have also been conducting outreach and engagement and supporting the SFPUC Climate Change Adaptation project.	
STATUS: Progressing on schedule		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-2.16		Strengthen citywide efforts to conserve, restore, and steward biodiversity	
LEAD: SFE		PROGRESS IN 2020: The creation of the Healthy Ecosystems Chapter of the Climate Action Plan, which contains 9 strategies and 47 actions to create a biodiverse, carbon-sequestering, resilient city.	
STATUS: Progressing on schedule		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

DOMAIN: RESILIENT INFRASTRUCTURE (IN)

Primary Hazard Group: Combustion-Related

IN-3.01	Complete studies, analysis, and capital projects to improve and expand the Emergency Firefighting Water System (EFWS)	
LEAD: SFPUC	PROGRESS IN 2020: ESER Bond 2020 passed by San Francisco voters. This money will fund completion of Phase 1 of the Westside Potable EFWS, as well as two three manifold projects. Additionally, staff initiated completed two reports, as requested by the Board of Supervisors. The reports were submitted to the Board in June 2021., that are due to the Board by June 30, 2021. The first report will complete a study analyzing additional EFWS seawater pump stations. The second report will continue and completed the more detailed analysis of emergency firefighting water needs by neighborhood today and over the next three decades.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

Note: Missing Data

IN-3.02	Improve the capacity of the Portable Water Supply System to fight fires following earthquakes and other large urban fires	
LEAD: SFFD	PROGRESS IN 2020:	
STATUS:	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY):	

IN-3.03	Continue to mitigate wildfire hazards in SFPUC owned-watersheds to protect source water quality and minimize risk to SFPUC water and power infrastructure.	
LEAD: SFPUC	PROGRESS IN 2020: Annual wildfire risk reduction/fuel load reduction projects were completed	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-3.04	Improve fire prevention in recreation areas	
LEAD: RPD	PROGRESS IN 2020: Fire fuels on RPD property have been reduced within 30 feet of structures in line with State law and CAL FIRE best practices.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

DOMAIN: RESILIENT INFRASTRUCTURE (IN)

Primary Hazard Group: All Hazards

IN-5.01	Conduct a system-wide, multi-hazard vulnerability and operational assessment for Muni	
LEAD: SFMTA	PROGRESS IN 2020: Within the last 5 years SFMTA has made significant structural and seismic improvements to both the Sunset and Twin Peak Tunnels which provide muni light rail service to the outer neighborhoods and support over 700,000 daily trips (pre COVID-19). Investments include replacing track, drainage system upgrades, and seismic reinforcements to ensure the tunnels' overall structure and stability. These improvements not only increase the overall reliability the Muni Metro Light Rail System but also improve safety and resiliency of these 100-year-old assets for years to come.	
STATUS: Modified significantly	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): The scope of a systemwide multihazard vulnerability and operational impact assessment is extensive. Due to COVID-19, the SFMTA does not have the fiscal or staffing resources to take on the project. Therefore, it will collaborate with SF DEM on a citywide multihazard vulnerability review to better address the interdependence among different service sectors instead of transportation alone.	

IN-5.02	Reduce seismic and flood risk along three miles of the San Francisco Waterfront from Fisherman's Wharf to Mission Creek	
LEAD: Port	PROGRESS IN 2020: Completed Multi-Hazard Risk Assessment and advanced Planning and Program Development	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-5.03	Continue to advance Sewer System Improvement Program (SSIP) projects to meet level of service objectives	
LEAD: SFPUC	PROGRESS IN 2020: Completed Multi-Hazard Risk Assessment and advanced Planning and Program Development	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-5.04	Implement the Pipe Replacement Prioritization Program	
LEAD: SFPUC	PROGRESS IN 2020: No notable progress during the reporting period.	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-5.05	Continue to improve power distribution infrastructure to support new development and increase resilience	
LEAD: SFPUC	<p>PROGRESS IN 2020:</p> <p>Progress has been made on constructing the Bay Corridor Transmission Distribution Project (BCTD). SFPUC Power Enterprise worked with master developers on the design and construction of new underground electric distribution infrastructure and facilities that the SFPUC will own, operate, and maintain. Additionally, SFPUC has established a strategic distribution investment planning team responsible for identifying opportunities to plan and construct SFPUC-controlled electric distribution infrastructure. The group is now commissioning an outside engineering study to identify specific investment opportunities beyond the BCTD.</p> <p>In 2020, the SFPUC completed two projects providing 200-kilowatts of new solar generating capacity to its energy portfolio. These projects provide power directly to their host buildings as part of the Hetch Hetchy Power program's electricity service.</p> <p>In 2020, SFPUC also documented standard operating procedures to effectively respond and communicate during Power Safety Power Shutoffs (PSPS), rolling blackouts, and other outages.</p>	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-5.06	Enhance flood and earthquake resilience of regional dams and ancillary facilities	
LEAD: SFPUC	PROGRESS IN 2020: Capital improvement program has been established	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-5.07	Develop a Citywide Climate Resilience Framework	
LEAD: ORCP	PROGRESS IN 2020: This strategy depends on the Updated Climate Action Plan, which is expected June 2021	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

Note: Missing Data

IN-5.08	Implement SFMTA Communications and IT Strategy	
LEAD: SFMTA	PROGRESS IN 2020:	
STATUS:	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-5.09	Implement SFMTA Asset Management and State of Good Repair Strategy	
LEAD: SFMTA	PROGRESS IN 2020: SFMTA Asset Management Unit finished the annual update to the Capital Asset Inventory and produced the FY2019 State of Good Repair Report. The SFMTA Asset Management Unit also moved forward the condition assessment program; executing a contract for an assessment of the existing condition of the City's traffic signals. 2020 also marked the first year the SFMTA Asset Management Unit was fully staffed.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

IN-5.10	Implement SFMTA Transit Fixed Guideway Strategy	
LEAD: SFMTA	PROGRESS IN 2020: Over last the last year, SFMTA staff and contractors have delivered work and improvements in a variety of areas including replacement of track fasteners, overhead wire and supporting components, and transit signals in the subway. SFMTA also conducted rail grinding and finished replacement of the ballast in the Eureka Curve of the Sunset Tunnel. Additionally, extensive testing and certification of the subway is underway to ensure that everything works properly, reliably, and safely.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

DOMAIN: RESILIENT BUILDINGS (B)

Primary Hazard Group: Geological

B-1.01	Assess and seismically retrofit municipal buildings	
LEAD: ORCP	PROGRESS IN 2020: Through the 10-Year Capital Plan and the Capital Budget, the City is making progress on mitigating seismic risks at priority buildings, including the Hall of Justice, 170 Otis, Kezar Pavillion, and homeless shelters. The City received grants from CalOES/FEMA to retrofit the Castro Mission Health Center and assess vulnerable concrete buildings and the City continues to pursue additional grant funding.	
STATUS: Progressing on Schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY):	

B-1.02	Develop an earthquake risk improvement program for non-structural components of municipal buildings	
LEAD: ORCP	PROGRESS IN 2020: No notable progress this reporting period	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

B-1.02	Develop a voluntary program for seismic retrofits of one- to four-unit wood frame, soft-story buildings	
LEAD: ORCP	PROGRESS IN 2020: No notable progress this reporting period.	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

B-1.04		Implement the Tall Building Strategy to address seismic vulnerability of buildings taller than 250 feet	
LEAD: ORCP	PROGRESS IN 2020: Bulletin AB-111 (Guidelines for Preparation of Geotechnical and Earthquake Ground Motion Reports for Foundation Design and Construction of Tall Buildings) published and adopted by the San Francisco Building Inspection Commission on June 15th, 2020. Additional, training for DBI on implementation is still forthcoming.		
STATUS: Progressing on schedule		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

B-1.05		Extend and improve the Building Occupancy Resumption Program (BORP)	
LEAD: ORCP	PROGRESS IN 2020: Developed scope of work for the program.		
STATUS: Progressing on schedule		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

B-1.06		Complete the Mandatory Soft-Story Retrofit Program (pre-1978 buildings with 5+ units and 2+ stories)	
LEAD: DBI	PROGRESS IN 2020: As of 10/14/2020, 84% of eligible buildings (4,163) are compliant based on their permit status.		
STATUS: Progressing on schedule		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

B-1.07		Develop a program to screen, evaluate, and retrofit non-ductile concrete and older steel buildings	
LEAD: ORCP	PROGRESS IN 2020: In 2020, the concrete building safety retrofit program had its official kick-off with the convening of the first executive panel meeting. Additionally, the structural engineering firm consulting on the project was brought on board and retained on contract. Development of the comprehensive concrete building database began which is being used to identify where buildings are located around the city as well as compile information regarding ownership and potential economic implications of disruption from a seismic event.		
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A		

B-1.08		Implement the SFMTA Parking Strategy	
LEAD: SFMTA	PROGRESS IN 2020: No notable progress for this reporting period		
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): Staff was engaged on high priority issues related to COVID-19 response and recovery during this reporting period.		

DOMAIN: RESILIENT BUILDINGS (B)

Primary Hazard Group: Weather-Related

B-2.01	Develop multi-hazard resilience design guidelines for municipal buildings	
LEAD: ORCP	PROGRESS IN 2020: No notable progress this reporting period	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

B-2.02	Review the Guidance for incorporating sea level rise into capital planning	
LEAD: ORCP	PROGRESS IN 2020: The Sea Level Rise Capital Planning Guidance was updated during the reporting period. The guidance will be expanded in the future to include citywide design guidance.	
STATUS: Completed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

B-2.03	Develop a program to analyze, identify, and evaluate properties at risk of stormwater flooding	
LEAD: SFPUC	PROGRESS IN 2020: Work plan has been initiated and funds have been identified.	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): Due to COVID, our work plan was delayed. However, we fully intend to continue with this work and have integrated into our plans for the coming fiscal year.	

B-2.04	Implement floodproofing and elevation projects for properties at risk of stormwater flooding citywide	
LEAD: SFPUC	PROGRESS IN 2020: A work plan was initiated and funds identified for the development of a program to analyze, identify, and evaluate properties at risk of stormwater flooding. This necessarily proceeds the implementation of these strategies.	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): Due to COVID, our work plan was delayed. However, we fully intend to continue with this work and have integrated into our plans for the coming fiscal year.	

DOMAIN: RESILIENT BUILDINGS (B)

Primary Hazard Group: Fire-Related

B-3.01	Study emergency clean air and cooling capacity at key community facilities	
LEAD: DPH	PROGRESS IN 2020: Respite Centers were opened during extreme heat and wildfire smoke events.	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): We do this strategy every year (somewhat) and especially this year because HVAC was important for the COVID-19 response. A more strategic process is expected in alignment with the Heat and Air Quality Resilience (HAQR) Project.	

B-3.02	Increase privately-owned building weatherization rates	
LEAD: SFE	PROGRESS IN 2020: 43 individual home retrofits received rebates from BayREN (Bay Area Regional Energy Network) consisting of: roof insulation, wall insulation, and/or building envelope air sealing in calendar year 2020.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

B-3.03	Support increased building electrification (fuel switching) and mechanical upgrades	
LEAD: SFE	PROGRESS IN 2020: 31 projects consisting of energy efficient mechanical system and/or electrification projects were completed using BayREN rebates in 2020.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY):	

DOMAIN: RESILIENT BUILDINGS (B)

Primary Hazard Group: All Hazards

B-5.01	Amend the capital improvement program for transportation facilities to consider hazard mitigation opportunities	
LEAD: SFMTA	PROGRESS IN 2020: Our facility capital program criteria include hazard mitigation criteria as part of the project prioritization exercise. The capital program is an ongoing exercise, so as our facilities are evaluated for projects, we add seismic, energy efficiency, and sea level rise hazard mitigation into the projects, where feasible.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

B-5.02	Install solar and storage systems at critical facilities	
LEAD: SFE, Public Works, others	PROGRESS IN 2020: The update to Chapter 7 of the Environment Code is an opportunity to develop a pathway towards solar plus storage at new and renovated Essential Facilities. This update is currently being studied at the Municipal Green Task Force and with other stakeholders. Additionally, the City has completed the first solar + storage project at the SFPD Academy in Diamond Heights	
STATUS: Modified significantly	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): The Chapter 7 update provides an opportunity to study this issue and develop an approach for essential municipal facilities. The City will continue to explore funding opportunities.	

B-5.03	Secure a resilient public safety training facility for San Francisco Fire Department (SFFD)	
LEAD: SFFD	PROGRESS IN 2020: No notable progress this reporting period.	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): SFFD/City Real Estate have not been able to identify available property.	

B-5.04	Increase resilience and operation efficiency of maintenance yards	
LEAD: Public Works	PROGRESS IN 2020: No notable progress this reporting period.	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): Project was delayed due to Covid-19 Pandemic and limited capital planning funding.	

B-5.05	Explore options to use Recreation Centers as public respite facilities	
LEAD: RPD	PROGRESS IN 2020: See C-5.01	
STATUS: Significantly Modified	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): This strategy has been folded into C-5.01 Identify and create Clean Air/Cooling Hub (CACH) Public Respite Facilities and is being advanced through the Heat and Air Quality Resilience Project.	

B-5.06	Develop comprehensive and coordinated code amendments for multi-hazard resilience of private development	
LEAD: Planning	PROGRESS IN 2020: Process has been identified to integrate code amendments, however this work will not commence until around June-August 2021	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

DOMAIN: RESILIENT COMMUNITY (C)

Primary Hazard Group: Geological

C-1.01	Address seismic retrofit needs within San Francisco’s affordable housing stock	
LEAD: MOHCD	PROGRESS IN 2020: Several buildings received some level of seismic improvement over the course of the reporting period.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

C-1.02	Develop a downtown resilience strategy	
LEAD: ORCP	PROGRESS IN 2020: We applied for a FEMA HMGP grant to support community engagement for this strategy.	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): The task force assembled to oversee this work was put on hold due to the COVID-19. We have adjusted the scope of the effort to also include COVID-19 recovery in addition to flooding and earthquake to better address stakeholder concerns.	

C-1.03	Improve San Francisco’s implementation of the State Safety Assessment Program	
LEAD: ORCP	PROGRESS IN 2020: In 2020, the city conducted an exercise to test the SAP system in coordination with the state. Pursuing the next steps from that exercise will be the focus of future progress on this strategy.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

C-1.04		Develop a post hazard Open for Business campaign
LEAD: OEWD	PROGRESS IN 2020: In November of 2020 OEWD supported the Shop Local campaign as part of San Francisco's larger We Will Recover Campaign and built out a shop online component in addition to promoting patronage of local businesses. Additionally, in partnership with the Small Business Commission, Mayor Breed announced a shop local challenge in May 2021.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): Due to the impacts of the COVID-19 pandemic, this strategy was somewhat disrupted/delayed and supplemented by new initiatives to support local businesses better adopt models that allow them to stay open and generate income despite COVID restrictions. However, as reopening progressed again, OEWD also delivered on its Shop and Dine campaign to promote local businesses and supported Mayor Breed's Shop Local Challenge. OEWD will apply the lessons from COVID to campaigns related to potential future disasters, such as an earthquake.	

C-1.05		Continue to meet housing production goals
LEAD: MOHCD	PROGRESS IN 2020: 2020 Housing Production continued largely on schedule, despite COVID-19 which impacted construction productivity overall. Most projects are 2-8 weeks behind schedule at this time.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY):	

C-1.06	Develop a public outreach campaign and wayfinding plan for tsunami awareness and evacuation procedures	
LEAD: DEM	PROGRESS IN 2020: No notable progress in this reporting period. Staff was fully engaged on high priority COVID-19 response and recovery efforts during this reporting period.	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

C-1.07	Assess vertical evacuation options in high-hazard areas and guidance for large-building refuges	
LEAD: DBI, DEM	PROGRESS IN 2020: No notable progress in this reporting period. Staff was fully engaged on high priority COVID-19 response and recovery efforts during this reporting period.	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY):	

DOMAIN: RESILIENT COMMUNITY (C)

Primary Hazard Group: Weather-Related

New Strategy:

C-2.01			Conduct groundwater data collection and modeling to better understand the shallow groundwater response to sea level rise, including liquefaction risks.		
KEY PLANNING ISSUES: Assessment, Waterfront		VULNERABILITY ADDRESSED: Sea level rise may result in higher groundwater and increased liquefaction risk. Groundwater rise could damage buried infrastructure, below grade structures, and emerge aboveground as an urban flood hazard.			
LEAD: ORCP	PARTNERS: Planning, PUC, SFE	STRATEGY SUMMARY: The study fills a critical information gap related to shoreline vulnerability due to groundwater rise. This data collection and modeling effort will help San Francisco better understand how groundwater is expected to respond to sea level rise and where and when (which sea level rise scenarios) rising groundwater may become a hazard. This information is needed to adequately plan for shoreline adaptation and better understand what communities, infrastructure, and natural spaces might be at risk. This work will directly inform San Francisco’s vulnerability assessment and adaptation planning efforts.			
COST: Low: \$0–500K		SF GOVERNMENT ACTIVITY: Research, Planning, & Guidance		STATUS: New	

DOMAIN: RESILIENT COMMUNITIES (C)

Primary Hazard Group: Biological & Toxic

C-4.01	Expand household hazardous waste collection efforts	
LEAD: SFE	PROGRESS IN 2020: Although the pandemic appears to have slightly reduced the overall weight of Household Hazardous Waste collected through all HHW Programs by about 2%; the Shelter In Place appears to have resulted in about a 26% increase in the number of residents using the HHW Home Collection Service and an increase of about 14% in the total weight of HHW collected through that Service.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY):	

C-4.02	Replace mercury-containing lighting in preschools and daycare centers	
LEAD: SFE	PROGRESS IN 2020: No notable progress this reporting period.	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): This strategy relies on SFE obtaining outside grant funding to pilot replacement of mercury-containing lighting in SF preschools. No grant applications were submitted in 2020.	

C-4.03	Explore toxins abatement workforce development programs	
LEAD: OEWD	PROGRESS IN 2020: Due to the response to the COVID-19 pandemic, this strategy has not yet been started.	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY):	

C-4.04		Improve citywide resilience to pandemics and infectious diseases
LEAD: DPH	<p>PROGRESS IN 2020:</p> <p>During calendar year 2020, San Francisco improved resilience to the COVID-19 pandemic in many ways. Notable examples include the following. The City developed a robust COVID-19 testing program, including providing access through community partners like the Latino Task Force. The City also developed the Right to Recover program, providing financial assistance to allow low-income workers with COVID-19 to self-quarantine and recover. The City also developed the Shelter-in-Place hotel program to help get people experiencing homelessness into safe housing. The COVID Command Center supported community education initiatives about face coverings and social distancing. By the end of 2020, the City had also started the vaccination drive, starting with health care workers and nursing home residents.</p>	
STATUS: Progressing on schedule	<p>EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY):</p> <p>N/A</p>	

DOMAIN: RESILIENT COMMUNITIES (C)

Primary Hazard Group: All Hazards

C-5.01	Identify and create Clean Air/Cooling Hub (CACH) Public Respite Facilities	
LEAD: ORCP	PROGRESS IN 2020: During 2020, the city created the Heat and Air Quality Resilience Project which will act as a centralizing space for departments to come together and collaborate on resilience strategies in this area. An implementation team around emergency response has been created and will be working on creating standardized operational guidelines for public respite facilities, in addition to other measures in the emergency response space (including the purchase of portable air filtration and conditioning for deployment).	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

C-5.02	Develop a Homelessness Disaster Response Plan	
LEAD: HSH	PROGRESS IN 2020: Continued to work with the Technical Assistance Collaborative (TAC) through an HCD grant to develop the HSH Continuity of Operations Plan (COOP) which incorporated lessons learned from the City's and HSH's response to COVID-19 and provides a	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): Timeline was delayed due to the impacts of the pandemic. The HSH COOP plan was completed in Spring 2020. Adoption and implementation of this plan will inform next steps based on staffing capacity and subject to budgetary appropriations.	

C-5.03	Support volunteer emergency preparedness, response, and recovery programs including the Neighborhood Emergency Response Team (NERT) and Auxiliary Law Enforcement Response Team (ALERT).	
LEAD: SFFD	PROGRESS IN 2020: No notable progress during the reporting period	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): NERT funding was cut significantly in the budget	

C-5.03		Support volunteer emergency preparedness, response, and recovery programs including the Neighborhood Emergency Response Team (NERT) and Auxiliary Law Enforcement Response Team (ALERT).	
LEAD: SFPD		PROGRESS IN 2020: Beginning April 2020, the Auxiliary Law Enforcement Response Team in collaboration with the Neighborhood Emergency Response Team (NERT_ participated in the Mayor’s initiative “SIP Compliance Support in City Parks”. Over this period, ALERT members, accompanied by SFPD Officers and Cadets, participated in visits to community parks, underserved regions of the city, homeless shelters, food giveaway facilities, COVID testing and vaccination sites, and various other segments of the City. The ALERT and NERT team, through their engagement with the community, distributed over 400,000 facial coverings and interacted with thousands of city residents. ALERT Volunteers recently participated in several pivotal events at City Hall: Solidarity Rally sponsored by the Human Rights Commission and the Asians Are Strong Rally sponsored by several community advocacy groups.	
STATUS: Progressing on schedule		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

C-5.04		Create a program to coordinate existing City programs providing in-home and resident-facing services related to hazard and climate resilience	
LEAD: DPH		PROGRESS IN 2020: We’re in the process of developing the Heat and Air Quality Resilience Project (HAQR) that will increase Citywide collaboration on heat and air quality-related issues. This will begin to align many of the patient-facing programs.	
STATUS: Not yet started		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): The COVID-19 Pandemic delayed the development of this effort	

C-5.05	Develop a Preparedness Equipment Purchase Program to direct and fund the purchase of climate preparedness equipment	
LEAD: DPH	PROGRESS IN 2020: There was significant work done on this during Summer 2020 as part of the multi-hazard planning branch to the Covid-19 activation. However, this process was only somewhat successful and not replicable. The Heat and Air Quality Resilience (HAQR) project will address this strategy directly in the Emergency Response work group.	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): The COVID-19 Pandemic delayed the development of this effort	

C-5.06	Expand the Neighborhood Empowerment Network (NEN) Empowered Communities Program (ECP) to additional neighborhoods	
LEAD: NEN	PROGRESS IN 2020: Activated existing HUBs to respond to the Pandemic, onboarded one new community as a HUB partner community (Lakeshore) and initiated HUB development process in Visitation Valley	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY):	

C-5.07	Perform gap analysis of vulnerable populations (i.e., Access and Functional Needs) and available City services	
LEAD: NEN	PROGRESS IN 2020: No notable progress for this reporting period.	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): Additional resources from FEMA or other source are needed to undertake this work	

DOMAIN: RESILIENT COMMUNITIES (C)

Primary Hazard Group: All Hazards

C-5.08	Develop a community-based capacity building initiative	
LEAD: MOD	PROGRESS IN 2020: No notable progress for this reporting period.	
STATUS: Not yet started	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): Additional resources from FEMA or other source are needed to undertake this work.	

C-5.09	Establish an evacuation strategy for people with Access and Functional Needs	
LEAD: DAAS	PROGRESS IN 2020: Key Stakeholders and partners were identified.	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): This strategy was included as an action item in the San Francisco Age and Disability Friendly Action Plan within the Resiliency and Emergency Preparedness domain. As part of the implementation plan, several partners were identified as key stakeholders in order to meet this goal, from a variety of departments. The implementation of this action item has been delayed due to the COVID-19 pandemic and the deployment of many staff as part of the City's response.	

C-5.10		Continue Small Business Continuity of Operations (COOP) Assistance
LEAD: OEWD	PROGRESS IN 2020: Following the COVID crisis OEWD established a direct line of communication to the DPH and City Attorney’s office in order to help answer questions from small businesses about health orders and operational requirements that impacted their ability to operate. Additionally, OEWD supported businesses with COVID-19 safer reopening through efforts such as Shared Spaces, SF Shines for Reopening, and distributing millions of units of PPE to small essential businesses so that they could continue to operate without disruption within the requirements of health orders despite limited baseline resources and in the face of significant revenue losses. OEWD is working with other City departments to identify the businesses and locations that deliver critical goods and services to vulnerable populations so that in future disasters these business types and locations are known and immediate support can be delivered or otherwise made available.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

C-5.11		Support the Small Business Development Center (SBDC)
LEAD: OEWD	PROGRESS IN 2020: OEWD’s ongoing support for the SBDC ensured SBDC was optimally positioned to help small businesses get through the economic hardship of the pandemic and recover stronger. SBDC responded rapidly to the COVID impact on small businesses by focusing staff resources on helping small businesses apply for relief and provided guidance on available resources, cash flow concerns, supply chain interruptions, workforce capacity, insurance coverage and other issues.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): During the pandemic, SBDC temporarily pivoted to help small businesses mitigate the economic hardship of the pandemic. As reopening has progressed, SBDC has returned its focus to post-disaster support. These strategies could be applied to help small businesses in other disasters in the future.	

C-5.12		Establish disaster relief funding and small business resilience fund
LEAD: OEWD	<p>PROGRESS IN 2020:</p> <p>As a result of the COVID-19 Pandemic, OEWD and other City and community partners set up several economic relief and business resilience and recovery funds, including the COVID-19 Small Business Resiliency Fund, SF HELP, Neighborhood Mini-Grants, SF Relief Storefront Grants and Loans, and the Entertainment Venue Fund. OEWD also supported small business access to state and federal relief such as the California Small Business Grants, and the federal PPP, EIDL and Shuttered Venue and Restaurant Revitalization funds.</p>	
STATUS: Modified significantly (Provide explanation)	<p>EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY):</p> <p>This strategy was scaled up significantly faster than originally envisioned in order to respond to the severe economic impacts of the COVID-19 pandemic. OEWD quickly mobilized tens of millions of dollars in city funding through numerous programs to provide small businesses with direct financial relief, taking the form of grants and low- to zero-interest loans as well as ongoing technical and legal assistance to prevent the closure of small businesses impacted by the COVID emergency. OEWD will continue to apply the lessons from the pandemic to economic resilience to other disasters.</p>	

C-5.13		Expand layoff outplacement services
LEAD: OEWD	<p>PROGRESS IN 2020:</p> <p>Outplacement services were expanded to support workers facing layoffs and job dislocation due to the COVID-19 pandemic. In the face of massive layoffs across industries and businesses, OEWD set up a phone/email hotline where workers/employees could receive tailored guidance and support in six different languages and offered rapid response activities at scale several times a week in order to ensure that laid off and displaced workers had access to financial support and information and support in reconnecting to the workforce as quickly as possible. In addition, HSH and HSA launched a workforce development program in partnership with Goodwill Industries for rapid hiring up for the Shelter in Place (SIP) hotels.</p>	
STATUS: Progressing on schedule	<p>EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY):</p> <p>This effort was scaled up to respond to the severe COVID-19 impacts to certain sectors of the workforce, such as retail, hospitality, and entertainment.</p>	

C-5.14		Expand Women's Entrepreneurship Fund	
LEAD: OEWD		PROGRESS IN 2020: OEWD continues to support the Women's Entrepreneurship Fund in partnership with Mission Economic Development Agency. The Fund provides mini-grants of up to \$5,000 to San Francisco women-owned small businesses for projects and upgrades that will have a transformative impact on the business' ability to grow.	
STATUS: Progressing on Schedule		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): In response to the pandemic, the Fund was modified to offer \$1000 grants without any technical assistance requirement so as to get financial relief as quickly as possible in with the lowest possible barriers to women owned businesses facing hardship resulting from COVID-19. The availability and flexibility of the fund was vital to its ability to help address hardship created by the pandemic, and underscores its value to economic resilience in other disasters.	

C-5.15		Study the overlap between vulnerable populations and vulnerable buildings	
LEAD: DPH		PROGRESS IN 2020: With the ORCP, DPH has started the Heat and Air Quality Resilience Project, which will bring together City Departments to create interdepartmental capacity to implement the strategies identified in the Hazard and Climate Resilience Plan.	
STATUS: Progressing on Schedule		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): While somewhat delayed due to staff responding to the COVID-19 emergency, progress is being made through the Existing Buildings work group of the Heat and Air Quality Resilience Project.	

C-5.16		Develop and manage a system for hazard and climate resilience data	
LEAD: ORCP	PROGRESS IN 2020: Since last year, ORCP worked with DataSF on a pilot project sharing the analysis from the HCR process in a transparent and easily accessible format on the Socrata Open Data Platform. This data is aimed for use in other departmental planning efforts as well as for use by the public for education and awareness purposes. Additional accomplishments include the completion of a ESRI StoryMap visualizing these hazards in combination with information on how these hazards will combine with climate change to impact the city.		
STATUS: Progressing on schedule		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

C-5.17		Develop a communications strategy for citywide climate resilience efforts	
LEAD: ORCP	PROGRESS IN 2020: Consultant contract and change order were executed.		
STATUS: Progressing on schedule		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

C-5.18		Improve San Francisco's climate health research capacity	
LEAD: DPH	PROGRESS IN 2020: Connections were established with UCSF and Lawrence Berkeley Labs. Applied for and received a NOAA urban heat island grant. Formed the Heat and Air Quality Resilience Project. Additionally, worked with the Electronic Health Record to develop an automated way to track hospitalizations and emergency department visits during extreme heat events.		
STATUS: Progressing on schedule		EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

C-5.19	Develop and implement a Centralized Air Quality and Extreme Heat Preparedness campaign	
LEAD: DPH	PROGRESS IN 2020: There was significant effort put into this strategy during Spring/Summer 2020 as the Climate and Health Program worked prepare for the combined hazards of wildfire smoke, extreme heat, and COVID-19. This included surveys of community-based organizations, development of outreach and engagement material, and presentations to community groups.	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

C-5.20	Implement SFMTA's Traffic Signals Strategy	
LEAD: SFMTA	PROGRESS IN 2020: Three major signal upgrade projects reached substantial completion in 2020: Gough Street Signal Upgrade (17 locations), Arguello Street Signal Upgrade (6 locations), and Contract 34 Signal Modifications (15 locations). Several signal modification projects continued in design phase including: Western Addition Traffic Signal project (16 locations), Geneva Avenue Traffic Signal Upgrade (5 locations), and Contract 35 Traffic Signal Modifications (22 locations).	
STATUS: Progressing on schedule	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): N/A	

C-5.21	Improve and prepare behavioral health services for hazard events	
LEAD: DPH	PROGRESS IN 2020: No notable progress during this reporting period.	
STATUS: Delayed	EXPLANATION (IF DELAYED OR MODIFIED SIGNIFICANTLY): COVID-19 has reduced the capacity to pursue the effort over this reporting period	