



22. CAPABILITY ASSESSMENT

This section provides a comprehensive review and evaluation of City capabilities used to support, promote and coordinate mitigation planning and activities.

A capability assessment is an inventory of a community's missions, programs, and policies and an analysis of its capacity to carry them out (FEMA 2003). Mitigation capabilities are the resources necessary to achieve desired mitigation outcomes and may encompass laws, regulations, policies, programs, administrative and technical staffing, funding, and community resources such as volunteer organizations.

This essential component of the planning process examines existing governmental programs, policies, regulations, and funding that may either support or impede mitigation efforts. By assessing its capabilities, a community can determine its ability to implement specific mitigation actions by evaluating the following factors:

- Limitations that may exist on undertaking actions
- The range of local and/or state administrative, programmatic, regulatory, financial, and technical resources available to assist in implementing mitigation actions
- Actions that are infeasible because they are outside the scope of current capabilities
- Types of mitigation actions that may be technically, legally, administratively, politically, or fiscally challenging or infeasible because they are outside of current capabilities
- Opportunities to enhance local capabilities to support long-term mitigation and risk reduction

This chapter presents a summary and description of the existing plans, programs, and regulatory mechanisms at all levels of government (federal, state, and local) that reduce hazard risks and support hazard mitigation within the City. These capabilities are presented in four categories:

- Planning and regulatory
- Administrative and technical
- Fiscal
- Outreach and Education

In addition to the above categories, evaluating the community's engagement in the National Flood Insurance Program (NFIP) offers an opportunity to assess the effectiveness of the community's capacity to administer and enforce the program. This is crucial for reducing the risk of flood damage through the management of development in flood-prone areas. Successful administration and enforcement of the NFIP represents a proactive approach for a community to manage flood risks and optimize resources for recovery and mitigation efforts.



22.1 UPDATE PROCESS SUMMARY

The City’s agencies were provided with a capabilities assessment survey to inventory and evaluate their existing capabilities. Participating agencies were asked to identify the capabilities they manage across various categories, including planning and regulatory, administrative and technical, fiscal, and outreach and education. Additionally, agencies were requested to provide insights on how these capabilities could be expanded or enhanced. The assessment provided an opportunity to identify how participants integrate hazard mitigation into their current planning, regulatory, and operational/administrative frameworks, as well as their plans for ongoing integration.

The HMWG was convened on August 23, 2024, to review a preliminary inventory of capabilities identified by the Core Planning Team. During this meeting, participants were provided with opportunities to identify any additional capabilities that were not included in the preliminary inventory.

A summary of the results from the capabilities assessment and the findings from the capabilities review is presented in the following sections.

22.2 PLANNING AND REGULATORY CAPABILITIES

Planning and regulatory capabilities are based on ordinances, policies, local laws, state statutes, plans, and programs related to managing growth and development. They refer not only to current plans and regulations but also to the City’s ability to change and improve those plans and regulations as needed. An overview of planning and regulatory capabilities available to the City is provided in Table 22-1. This table has been adapted from FEMA’s Local Hazard Mitigation Planning Handbook (2023). Capabilities regarding the National Flood Insurance Program (NFIP), land use, and building codes are detailed below.

Table 22-1. Planning and Regulatory Capabilities in the City

Capability	Description
Capital Improvement Plan	The Department of Budget and Fiscal Services is responsible for establishing the City’s operating program and budget and capital improvement program and budget.
Climate Change Adaptation Plan	Climate Ready O’ahu (2024): This plan is the island’s climate adaptation strategy, aimed at protecting the environment by proactively addressing climate change. This plan outlines strategies and actions essential for preparing, protecting, and safeguarding the island community against current and future climate impacts. Key climate hazards addressed include sea level rise, heat, drought, wildfire, flash flooding, and hurricanes, ensuring resilience for generations of O’ahu residents. In addition, the City has also developed the Climate Action Plan, Ola: O’ahu Resilience Strategy, Area Adaptation Plans, Adapt Waikīkī 2050, and produces an annual Sustainability Report. The City also has initiatives to further assess heat and flood risk.



Capability	Description
Community Wildfire Protection Plan	<p>A Community Wildfire Protection Plan (CWPP) identifies regions at increased risk of wildfires and serves as a strategic document for reducing wildland fire hazards. Three CWPPs were developed by the Hawaii Wildfire Management Organization (HWMO) within the City: North Shore O’ahu Community Wildfire Protection Plan, Western O’ahu Community Wildfire Protection Plan, and East Honolulu.</p> <p>CWPPs are voluntary and unfunded initiatives. In the City, the efforts to update CWPPs have primarily been led by the Hawaii Wildfire Management Organization (HWMO) in collaboration with the Honolulu Fire Department (HFD) and the Department of Land and Natural Resources Division of Forestry and Wildlife (DLNR-DOFAW). The development of these plans relies on grant funding, and a common challenge in the update process is the extended timeline associated with securing competitive grants. In 2024, HWMO, in partnership with HFD and DLNR-DOFAW, applied for federal funding to support the development of CWPPs for Central and Windward O’ahu.</p>
Comprehensive Master Plan and Land Use	<p>O’ahu General Plan (2021): The General Plan sets forth the City’s objectives and broad policies for the long-range development of the island. The General Plan was adopted by City Council on December 1, 2021, as Resolution 21-023, CD1, and signed by the Mayor on January 14, 2022 (Honolulu DPP 2024). In addition to the General Plan, DPP prepares Development and Sustainable Communities plans for the City’s eight regional planning areas. DPP is prioritizing the integration of climate change considerations into these plans.</p> <p>The General Plan and Development and Sustainable Communities plans are developed by DPP on a periodic basis. The City has established a standardized amendment process to ensure the plans remain current.</p>
Continuity of Operations Plan	<p>Each City Department is required to maintain a Continuity of Operations Plan that addresses plans for the continuation or restoration of essential functions.</p>
Economic Development Plan	<p>City and County of Honolulu Comprehensive Economic Development Strategy (2023): This document outlines the framework for economic progress, recovery, and long-term resilience for the island of O’ahu.</p>
Local Emergency Operations Plan	<p>An Emergency Operations Plan (EOP) provides a comprehensive framework for the management and coordination of emergency response and recovery efforts in the City. This plan adopts an all-hazards approach, addressing both natural and human-made hazards. DEM develops the EOP for the City. At the time of publication, this plan is undergoing rewrite and will be titled the Comprehensive Emergency Management Plan, which will incorporate the Local Hazard Mitigation Plan and Long-Term Recovery Plan as components.</p>
Stormwater Management Plan	<p>Stormwater Management Program Plan (SWMPP) (2021): The City is required to develop and implement a SWMPP due to the City’ storm drain system being regulated under a National Pollutant Discharge Elimination System (NPDES) permit. The plan describes the City’s requirements for permanent, long-term stormwater management.</p>
Transportation Plan	<p>O’ahu Vision Zero Action Plan (2024): To address traffic hazards, the City has developed a comprehensive strategy aimed at eliminating road fatalities and severe injuries while promoting safe, healthy, and equitable transportation.</p>



Capability	Description
Other Plans	<p>Watershed Management Plan: This plan focuses on the sustainable management of O’ahu's watersheds. It aims to protect and enhance water quality and quantity, promote sustainable watersheds, and safeguard Native Hawaiian rights and traditional practices.</p> <p>Waters Master Plan: This comprehensive plan looks ahead 30 years to evaluate O’ahu's entire water system, quantify future demands, and identify necessary improvements. It aims to ensure the long-term sustainability of the water supply by balancing needs and costs.</p> <p>Threat Hazard Identification and Risk Assessment (THIRA) and Stakeholder Preparedness Report (SPR): DEM is responsible for the completion of the City's annual THIRA and SPR. This assessment identifies the most significant hazards to the City, evaluates the potential impacts and risks, assesses City capabilities and gaps, and outlines strategies to build or sustain emergency management core capabilities.</p> <p>Long-Term Disaster Recovery Plan (LTDR): CCSR develops the LTDR in collaboration with DEM. It is a component of the City’s Comprehensive Emergency Management Plan and provides a roadmap for efficient, equitable recovery, as outlined in Action 19 of the City’s Ola: O’ahu Resilience Strategy. The Plan focuses on presidentially declared disasters requiring extensive reconstruction efforts.</p>

22.2.1 NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

The U.S. Congress established the NFIP with the passage of the National Flood Insurance Act of 1968. The NFIP is a federal program enabling property owners in participating communities to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages. Communities participate in the NFIP by adopting and enforcing floodplain management ordinances to reduce future flood damage. In exchange, the NFIP makes federally backed flood insurance available to homeowners, renters, and business owners in these communities. Flood damage in the United States is reduced by nearly \$1 billion each year through communities implementing floodplain management requirements and property owners purchasing flood insurance.

Community participation in the NFIP is voluntary. Participating communities are required to adopt a flood damage prevention ordinance (also sometimes called a “floodplain management ordinance”) and update this ordinance when the regulatory NFIP Flood Insurance Rate Maps (FIRM) are officially updated. Participating communities may adopt higher regulatory standards than required by the provisions of the NFIP.

The Department of Land and Natural Resources (DLNR) is the State Coordinating Agency for the NFIP. DLNR’s primary function is to act as a liaison between FEMA and the State’s counties. In addition, DLNR provides technical assistance and support to assist counties with maintaining NFIP eligibility. (DLNR n.d.)



The City actively participates in the NFIP. DPP holds responsibility for administering and enforcing the City's floodplain management regulations and maintaining the City's Flood Insurance Rate Maps (FIRMs). The City, in collaboration with FEMA and DLNR, initiated updates to the FIRMs in 2019, to leverage the latest hydrologic and hydraulic data. The preliminary FIRMs for the City were received from FEMA on July 31, 2024. The City is collaborating with FEMA and the State to initiate public outreach efforts to inform affected households in the coming months, with, and are anticipated to be finalized by 2026.

As of January 2025, there were 41,303 NFIP policies in force in the City. There have been 2,792 claims filed, totaling approximately \$57,800,000.00. There are 119 NFIP Repetitive Loss (RL) properties and 13 Severe Repetitive Loss (SRL) properties in the City.

As an additional component of the NFIP, the CRS is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum NFIP requirements. As a result, flood insurance premium rates are discounted to reflect the reduced flood risk resulting from the community actions meeting the three goals of the CRS: (1) reduce flood losses; (2) facilitate accurate insurance rating; and (3) promote the awareness of flood insurance (FEMA 2021).

There are 10 CRS classes that determine the amount of reduction in flood insurance premiums. Class 1 requires the most credit points and gives the largest premium reduction; Class 10 receives no premium reduction. CRS premium discounts range from 5 percent for Class 9 communities to 45 percent for Class 1 communities. The CRS recognizes 18 creditable activities that are organized under four categories: Public Information, Mapping and Regulations, Flood Damage Reduction, and Flood Preparedness.

As of March 2025, the City participates in the CRS program and has a class 8 rating resulting in a 10 percent insurance premium discount for policy holders with properties within the special flood hazard area (SFHA).

22.2.2 ZONING CODE

The zoning code is integrated into the ROH and provides the regulatory framework that governs land use within the City. The zoning code includes the zoning maps. City zoning regulates and restricts the height and size of buildings and other structures, the percentage of a building site that may be occupied, off-street parking, setbacks, size of yards, courts, and other open spaces, the density of population, and the location and use of buildings, structures, and land for trade, industry, residence, or other purposes. The zoning regulations are applied and administered within the framework of the General Plan, which is a long-range, comprehensive, general plan prepared to guide the overall future development of the City. The City follows the State's land use classifications (urban, rural, agricultural, and conservation), but establishes local zoning districts.



22.2.3 CITY BUILDING CODE

The building code is integrated into the ROH. The City has adopted the 2018 International Building code with amendments, the 2018 International Residential Code (IRC), and 2018 International Existing Building Code (IEBC).

Communities In Hawai'i have two years from the date of establishment of the Hawai'i State Building Code to adopt the state building code as the local building code, including any locally approved amendments. While having any code in effect to govern how structures are constructed considering the impacts from natural hazards is beneficial, this 2-year lag for code adoption has created challenges for the state in meeting FEMA's goals for consensus-based codes. Consensus-based codes are the latest published editions of codes from nationally recognized authorities such as the International Code Council. FEMA Policy 104-009-11 has established minimum requirements for consensus-based codes for certain eligibility under its Public Assistance (PA) and BRIC programs. The State of Hawai'i and its communities have not been successful pursuing grant funding under the BRIC program because of this limitation.

FEMA has developed a program to track the adoption of consensus-based codes in response to directives from the Disaster Recovery Reform Act of 2018 (Building Code Adoption Tracking Program [BCAT], <https://www.fema.gov/emergency-managers/risk-management/building-science/bcat>). The BCAT program tracks code adoption by each state and then categorizes each county based on code adoption. The BCAT program has identified the City as having old or weakened IBC/IRC which they also categorize the same as not having a code adopted.

The building code could be enhanced going forward by increasing collaboration across agencies during reviews, amendments, and updates. Agencies with responsibilities related to public safety and property protection should be engaged in development of the building code to foster a multidisciplinary approach.

22.2.4 LAND USE

The 1978 Hawai'i State Planning Act sets policy for all activities, programs, and decisions made by local and state agencies. Current priorities are planning for climate change impacts, ensuring the sustainable and economic use of ocean and coastal resources, and supporting scientific and cultural knowledge to better manage natural resources (OPSD 2022). All lands in the state are classified into four categories as required by HRS 205; the four categories are urban, rural, agricultural, and conservation. The classification of lands is required to be reviewed every five years in accordance with HRS 205-18.



In 2021, land use and environmental policy functions of different agencies were consolidated to form the Office of Planning and Sustainable Development (OPSD). OPSD is responsible for the following activities:

- Comprehensive planning and program coordination
- Strategic planning
- Planning coordination and cooperation
- Statewide planning and GIS
- Land use planning
- Coastal and ocean policy management
- Regional planning studies
- Regional, national, and international planning

The Hawai'i State Plan establishes overall themes, goals, objectives, and policies for the state. The State Plan is composed of a statewide planning system, which includes county general plans that align with the State Plan. In addition to the State Plan, OPSD also develops the Hawai'i Sustainability Plan and Ocean Resource Management Plan.

22.3 ADMINISTRATIVE AND TECHNICAL CAPABILITIES

Administrative capability is the availability of departmental and personnel resources for implementing mitigation-related activities. Technical capability is the knowledge and technical expertise of local government employees to execute mitigation activities or the ability to contract outside resources for this expertise. Technical personnel needed for hazard mitigation include planners, engineers, building inspectors, scientists, emergency managers, floodplain managers, land surveyors, and other professionals, with expertise in land development, construction practices, natural and human-caused hazards and community vulnerability, geographic information systems, resource development, and grant writing. This section summarizes administrative and technical capabilities in the City. An overview of administrative and technical capabilities available to the City is provided in Table 22-2. This table has been adapted from FEMA's Local Hazard Mitigation Planning Handbook (2023). Capabilities regarding DEM, CCSR, and DPP are detailed below.



Table 22-2 Administrative and Technical Capabilities in the City

Capability	Department
Chief Building Official	Department of Planning and Permitting
Civil Engineer	Department of Environmental Services
Community Planner	Department of Planning and Permitting
Emergency Manager	Department of Emergency Management
Floodplain Administrator	Department of Planning and Permitting
GIS Coordinator	Department of Planning and Permitting and Board of Water Supply
Planning Commission	Department of Planning and Permitting
Grant Writing	Department of Community Services and Office of Economic Revitalization
Hazard data and information	Department of Emergency Management and Office of Climate Change, Sustainability, and Resilience
Mutual Aid Agreements	Department of Design and Construction, Board of Water Supply, and Department of Transportation

22.3.1 DEPARTMENT OF EMERGENCY MANAGEMENT

DEM coordinates emergency management programs for the City, which include preparedness, response, recovery and mitigation programs and activities. DEM’s work involves convening and coordinating activities and initiatives with city, state, federal, private, corporate, and non-government entities. DEM’s duties and authorities as the local emergency management agency are established by Hawaii Revised Statute (HRS) 127A Emergency Management, and City ordinance. DEM was established in 2007 by Section 6-103, page 34 of the Revised Charter of the City and County of Honolulu. Prior to 2007, the department was known as the O’ahu Civil Defense Agency.

In performing emergency management functions, DEM conforms to the standards for local preparedness set forth by the FEMA. DEM programs address all hazards that pose risk for the City, including both human caused and natural hazards.

DEM has established the role of Mitigation, Recovery, and Infrastructure Staff Officer, intended to serve as the agency’s subject matter expert in hazard mitigation and to coordinate the mitigation program. Additionally, DEM employs a grants manager position, which provides oversight of the grants received by the department to ensure compliance with relevant regulations. Furthermore, there is a grant accountant role that facilitates financial tracking associated with mitigation and other grants received by the agency.

Opportunities to enhance DEM’s current administrative and technical capabilities include hiring additional positions to assist with planning and community outreach and creating supervisory positions within its organization structure to allow for career progression and a better span of control.



22.3.2 OFFICE OF CLIMATE CHANGE, SUSTAINABILITY AND RESILIENCY

The CCSR is mandated by the City Charter and is responsible for monitoring climate change science and potential impacts on City facilities, coordinating City departmental actions and policies to enhance community preparedness, developing resilient infrastructure to address climate change effects, and integrating sustainable and environmental values into City plans, programs, and policies. The office's main focus areas are climate action, climate adaptation, equity, food, and hazards. CCSR has a broad diversity of staff supporting hazard mitigation and climate adaptation. Currently, there are three full-time and two temporary hire planners supporting hazard mitigation and climate adaptation work; one full-time planner supporting DPP with floodplain management; one full-time budget and operations specialist; and two full-time GIS and data analysts.

Opportunities to enhance CCSR's current administrative and technical capabilities include providing additional training and considering the employment of additional staff to support GIS and data analysis efforts. Additionally, transitioning current temporary positions to permanent roles could strengthen overall capacity.

22.3.3 DEPARTMENT OF PLANNING AND PERMITTING

Chapter 15 of the Charter of the City and County of Honolulu establishes the Department of Planning and Permitting (DPP) to oversee the improvement and development of the island of O'ahu. The DPP creates and updates long-range plans for the island and its regions, and administers and enforces zoning, subdivision, park dedication, building, and housing ordinances.

DPP employs a team of building inspectors and engineers dedicated to post-disaster damage assessments, as well as planners who facilitate community engagement to prepare for both pre- and post-disaster scenarios. The department's GIS analysts are skilled in identifying potential threats and proposing effective solutions. Additionally, the floodplain manager possesses the expertise to assess flood risks and guide development practices to mitigate impacts, such as ensuring appropriate elevation above the base flood elevation.

22.4 FISCAL CAPABILITIES

Mitigation actions are largely dependent on available funding, so it is critical to identify available funding sources to support the implementation of the mitigation strategies identified in this plan update. Communities fund mitigation projects through existing local budgets, local appropriations (including referendums and bonding), and a myriad of federal and state loan and grant programs.

The City's agencies can allocate financial resources for mitigation-related activities through various channels, including utility fees, impact fees, and annual operational budgets. However, these financial resources remain quite limited. While agencies have the opportunity to incorporate funding for mitigation-related activities into their operational budgets, available funding is frequently constrained. Additionally,



the potential to pursue external funding sources, such as grants, is hindered by the absence of dedicated grant writers within most agencies. Grant writing tasks are typically assigned as additional responsibilities to existing staff rather than employing specialized personnel for this function. An overview of fiscal capabilities available to the City is provided in Table 22-3. This table has been adapted from FEMA’s Local Hazard Mitigation Planning Handbook (2023).

Table 22-3. Fiscal Capabilities in the City

Capability	Department
Capital improvements project funding	Budget and Fiscal Services
Community Development Block Grant	Budget and Fiscal Services
Federal funding programs (non-FEMA)	Budget and Fiscal Services
Fees for water, sewer, gas, or electric services	Board of Water Supply

Members of the HMWG have observed that even when grants are awarded, several challenges may arise in effectively utilizing these funds. These challenges encompass administrative hurdles, such as insufficient staffing to manage grants, the need for improved inter-agency coordination, and the requirement that City funds be expended first, with reimbursement subsequently obtained through the grant funding.

The capabilities section of 2023 State of Hawai'i Hazard Mitigation Plan (2023) features a section on mitigation-related funding administered by state agencies that eligible jurisdictions can use to fund mitigation actions.

22.5 OUTREACH AND EDUCATION CAPABILITIES

Hazard mitigation and risk information is effectively communicated to the City’s communities through various agencies and multiple platforms. Many agencies employ Public Information Officers and maintain active websites and social media channels to disseminate relevant messaging. Table 22-4 provides a summary of HMWG organizations that conduct activities to address each hazard; these outreach and education activities may include distribution of materials online and in-print, hosting community events and workshops, etc.

City agencies also conduct outreach initiatives directed towards socially vulnerable populations to assist in developing effective messaging and communication strategies aimed at reducing their vulnerability, including susceptibility to hazards. For example, the Department of Community Services collaborates with DEM to support outreach efforts specifically targeted at older adults and individuals experiencing homelessness.



Table 22-4. City Department Outreach Activities by Hazard

Department	Climate Change and Sea Level Rise	Deliberate Hazards	Drought	Earthquake	Floods	Hazardous Materials	Health Risks	Hurricane	Infrastructure Failure	Invasive Species	Landslides	Tsunami	Volcanic Gas	Wildland Fire	Windstorm
Board of Water Supply			•		•				•						
Department of Design and Construction	•				•						•				
Department of Emergency Management	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Department of Environmental Services	•														
Department of Facility Maintenance					•										
Department of Planning and Permitting	•				•										
Department of Information Technology		•													
Honolulu Fire Department						•									•
Honolulu Police Department		•													
Office of Climate Change, Sustainability, and Resilience	•		•		•		•	•				•	•	•	•

Opportunities to expand and enhance these capabilities include minimizing duplication of efforts and creating a unified message across the City for all agencies to support and integrate into their specific communications. Additionally, further training is necessary to equip staff with the skills to lead discussions related to disaster management and resilience.