

# E. Plan Update

## E.1 Changes in Development

The people and structures in Berkeley are continually changing. Since 2000, the City's population has grown steadily, increasing approximately nine percent each decade. The Department of Finance estimates that the City's population was 122,580 in 2020. Berkeley's population is anticipated to continue to grow steadily between 2020 and 2040 according to the Association of Bay Area Government's Plan Bay Area 2040 projections. The City's population is anticipated to reach about 136,000 by 2030 and 141,000 by 2040.

According to the Department of Finance, there were 51,523 housing units in Berkeley in 2020. This represents a four percent increase from 2010 and a 10 percent increase since 2000. Due to the built-out nature of the city's development pattern, the majority of new units constructed in the last ten years are part of multi-family buildings containing five or more units, and are located on in-fill sites, mostly along existing commercial corridors. Overall, the number of multi-family units in the City increased by seven percent while the number of single-family units increased by less than one percent.

The University of California, Berkeley is expanding its facilities both on and off the campus. UC Berkeley's 2021 Long Range Development Plan projects that the campus population will increase 22% in the next 15 years. To accommodate this growth, UC Berkeley is planning to add over 2 million gross square feet to the campus footprint, an additional 11,000 student housing units, and over 1,000 new parking spaces in the vicinity

of the existing campus, which is located at the eastern portion of the city.

Residents ages 15 to 24 comprise the largest age group in Berkeley, followed by people ages 25 to 34, likely due to the presence of UC Berkeley. The majority of households are renter-occupied (57%), and there is a sizeable proportion of the population residing in group quarters (about 11%) due to dormitories and other student housing associated with the University. The senior population (ages 64 to 84) represents about 12% of the residents in Berkeley, and has increased by 40% since 2010. Overall, 42 percent of Berkeley's households are considered lower income, earning less than 80 percent of the area median income (AMI). Special needs populations in Berkeley include senior-headed households (27% of total households), extremely low-income households earning up to 30% of AMI (21%), seniors living alone (12%), persons with a disability (8%), single-parent households, including those with children (8%), and large family households over five or more persons (4%). Additionally, about 1,100 persons (1%) are experiencing homelessness in Berkeley as of February 2022.

Housing cost burden is a prevalent issue in Berkeley, impacting over half of lower income households, and one third of moderate-income households. As of 2017, about 40 percent of Berkeley households are cost burdened with 23 percent experiencing a severe cost burden. Cost burden is notably more prevalent among renter households, with over half of renter households paying more than 30 percent of their income to housing expenses. Building new housing is one way to reduce housing cost burden in the city. As of December 2023, approximately 4,600 new housing units were in the pipeline for development, representing almost 9% of the existing housing stock in Berkeley. Due in part to the City's inclusionary housing ordinance, approximately 13% (620 units) of those

units are deed-restricted affordable according to federal and State statutory limits on household size and income.

City plans and policies guide decision-making to address the housing needs of Berkeley's residents. City resources should focus on housing affordability for people at the lowest income levels, and maintain and improve existing housing that will prepare buildings for a major seismic event. The City is working to expand the supply of housing for all residents through zoning amendments to increase the production of accessory dwelling units and infill 'middle housing' in high resource neighborhoods. Further, the City is focusing on housing for special needs groups through numerous programs and actions that prevent homelessness, seek solutions for those who are experiencing homelessness, and encouraging housing projects that include affordable units and those suitable for households with children and large families.

#### Effects on Berkeley's Risks and Vulnerabilities

As more people join the Berkeley community, the city will have more people who are exposed to the area's hazards. Additionally, as density and population increase, the demand for fire and emergency services also increases. For example, 911 calls will increase, with each call having an impact on the system, including the availability of resources. In 2023, the City completed a Standards of Coverage and Community Risk Assessment (SOC) to define appropriate levels of service based on a comprehensive analysis which included the impacts of increased density and vertical growth. The SOC determined that fire and emergency resources need to be enhanced to meet current and future demand.

Fortunately, because of Berkeley's built-out nature, new development tends not to add new geographic areas of hazard exposure. But with increased density, more people will be exposed to the area's hazards. All of Berkeley is exposed to earthquake shaking. All of Berkeley is exposed to wildland-urban interface fire, but the areas of heightened exposure are in the eastern hills. New state laws are mandating increased density throughout the city, including in the eastern hills, which are more exposed to wildland-urban interface fire and landslides.

The 100 year and 500 years floodplains are concentrated in west Berkeley along the Bay and around the Aquatic Park. These areas haven't changed since the last update, and development in this area of the City is characterized by industrial and heavy commercial uses. Any new development would be required to comply with the applicable regulations to ensure avoidance of and/or adequate mitigation of hazard-induced risk.

The city's western edge is also exposed to tsunami inundation and sea level rise from climate change. The tsunami inundation has increased slightly since the last update to reflect new science and local features. New science has also emerged evaluating the impact of shallow groundwater rising in low-lying coastal areas. Ultimately, low-lying inland areas could flood from below by emergent groundwater long before coastal floodwaters overtop the shoreline. Data shows that Berkeley already faces high groundwater in multiple areas in the west, meaning that the scenarios for sea level rise impacts are likely worse than previously thought. However, the actual areas of sea-level rise exposure, as well as the impacts of sea-level rise on the area's liquefaction and flooding hazards, are not yet clear, as it depends on carbon emissions.

New development in part reduces Berkeley's vulnerability to natural hazards. New construction adheres to modern design codes, including regulations for structural resistance to earthquakes, landslide mitigation efforts, fire-resistant materials, fire mitigation measures, and elevation above flood levels. Replacing or significantly renovating older structures significantly increases the Berkeley community's protection from natural hazards.

## **E.2 Changes in Priorities and Progress on Local Mitigation Efforts**

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While the City's goals and objectives have remained very similar to the 2019 plan, the 2024 LHMP reflects thorough revisions from the 2019 document. The 2024 Risk Assessment accounts for newly available science and research and emerging hazards. As a result of significant hazard events since the 2019 update, Poor Air Quality, Infectious Disease, Wind, and Utility Disruption have their own sections in the Risk Assessment. Climate change has been thoroughly integrated into each hazard, instead of having its own section, inspired by community outreach that overwhelmingly suggested that it shouldn't stand alone. The 2024 mitigation actions account for progress made on mitigation actions since 2019, changes in development in Berkeley, and our new understanding of the hazards we face. There are several new actions related to mitigating the risk of Wildland Urban Interface Fire, resulting from the creation of a new WUI Division in the Fire Department and the development of the Community Wildfire Protection Plan

(CWPP).

There are also new actions associated with mitigating the risks associated with Sea Level Rise and Flooding near the waterfront, especially in light of new data about the risks of rising groundwater.

The Mitigation Strategy also includes new actions associated with abiding by new state laws around evacuation and the upcoming process to update the City's General Plan, Environmental Justice and Safety Element.

For the first time, this Mitigation Strategy highlights the work that community members do to reduce risk in Berkeley. There are Actions listed for individuals and households to take to reduce their risks and contribute to collective mitigation efforts.

### Status of 2019 Mitigation Actions

This Plan was last adopted on December 20, 2019. Since that date, Berkeley has made steady progress on implementing 2019 plan actions and supporting activities.

The following categories are used to describe the progress made since 2019:

- Completed: Activity has been completed as written.
- Completed with modifications: Over the course of completing this action, the City modified the activity to better meet the associated objective.
- In Progress: Progress has been made since 2019, but the activity is still ongoing.
- Deferred: Progress has not been made since 2019, but the activity is still relevant.
- Deferred with Modifications: Progress has not been made since 2019, but the activity is still relevant, and the City modified the activity to better meet the

associated objective.

- Deleted: Progress has not been made since 2019, and the activity is no longer relevant.

In Progress activities are incorporated into the 2024 LHMP's mitigation strategy.

The Progress on the 2019 Actions are detailed in the Appendix in Status of 2019 Actions Spreadsheet.

### Integration of Information

As with previous updates, the 2019 LHMP was well integrated into other planning mechanisms.

LHMP as an Appendix to the General Plan

Upon its adoption by the Berkeley City Council, the 2019 LHMP was incorporated as an appendix to the Disaster Preparedness and Safety Element of the City's General Plan. The Plan's goals, objectives, and policies serve as a guide for day-to-day decisions that are essential for responsive government. Decisions made by Berkeley City Council and its advisory boards, and commissions about the physical development of the City should be consistent with the goals, objectives, and policies of the General Plan. The City Council and Planning Commission use the General Plan when evaluating land use changes and making funding and budget decisions. It will be used by the Zoning Adjustments Board and City staff to help regulate development proposals and make decisions on projects. The policies of the Plan apply to all property, both public and private, within the Berkeley city limits.

## Budget Process

Because the 2019 LHMP was by the City Council into the General Plan, the data and information from the Risk Assessment as well as the hazard mitigation goals and actions in the Mitigation Strategy influenced the City's budget process. The budget process assigns resources to address the goals, objectives, and community priorities set by the City Council. The budget process is the final step of assigning resources to implement mitigation actions.

In 2022 and 2023, the City of Berkeley considered the implication that extreme events, like natural disasters, could have on the City government's financial condition, particularly its reserve levels for the general fund. In this plan for the first time, some hazard sections Risk and Loss Estimates include analysis from the GFOA. The City engaged the GFOA to produce a recommendation to help it decide the appropriate reserve level for the general fund, given the risks from extreme events. GFOA is a non-profit association of more than 23,000 state and local government finance professionals and elected officials from across North America. A key part of GFOA's mission is to promote best practices in public finance, including reserve policies. The analysis by GFOA also shed light on the potential broader economic losses to the community from the risks posed by extreme events and created additional analysis incorporated into the 2024 LHMP.

## Community Wildfire Protection Plan

The Community Wildfire Protection Plan approved in 2023 integrates information from the 2019 LHMP, expanding upon the 2019 Hazard Analysis and Mitigation Strategy. The

Community Wildfire Protection Plan is a roadmap for fire hazard mitigation and preparedness at both the City of Berkeley and neighborhood level and offers ways to mitigate the risks posed by wildfires, including goals for improving wildfire response, community preparedness, fuel management, infrastructure, ignition reduction, home hardening, and more. Demonstrating the connection between these documents, the Community Wildfire Protection Plan provided additional data, information, and hazard mitigation goals related to wildland-urban interface fires

#### Vision 20250

Berkeley's Mayor Arreguin launched Vision 2050, an initiative to encourage long-term planning to meet the serious challenges to our infrastructure, including climate change, inequality, population increases, and obsolescence. The Berkeley community voiced their support for Vision 2050 with the passage of Measure R in the November 2018 election. The Vision 2050 Task Force was formed in Spring 2018 and included over 40 Berkeley community members with technical expertise and in-depth knowledge. The task force was organized into four working groups: quality of life, environment, technology, and finance/ management. The LHMP was one of the key plans reviewed and incorporated into the Vision 2050 Framework, particularly on the topics of earthquakes and landslides.

#### Housing Element

In 2023, the City of Berkeley adopted a 2023-2031 Housing Element, deemed in compliance with State Housing Element Law by the California Department of Housing and Community Development on February 28, 2023. This Housing Element Update, incorporated into Berkeley's General Plan, contains goals, policies, and programs to

guide the City's decision-making around the development and rehabilitation of housing, to meet the City's Regional Housing Needs Determination target of 8,934 new units of housing, across income levels, in Berkeley over 8 years.

The 2019 LHMP was used as a background document in the development of the 2023-2031 Housing Element and was referenced in regards to environmental constraints to housing production. Specifically, the comprehensive strategy from the 2019 LHMP used to mitigate Berkeley's WUI fire hazard, including annual property inspections, more restrictive local building code amendments, and vegetation management and defensible space, was used to determine safe housing development and rehabilitation in this area within the 2023-2031 Housing Element.