

CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

North Hills West Resiliency Plan - Community Spaces and Heat

A graduate project submitted in partial fulfillment of the requirements

For the degree of Master of Urban Planning

By

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## TABLE OF CONTENTS

Signature Page	ii
Abstract	iv

## Abstract

### North Hills West Resiliency Plan - Community Spaces and Heat

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The neighborhood of North Hills West is located in the core of the San Fernando Valley. North Hills West was originally part of the Fernandeano Tataviam Band of Mission Indian's territory. Mexico ceded California to the United States in 1848. The completion of the Los Angeles Aqueduct in 1913 propelled the San Fernando Valley and North Hills West into dynamic growth. North Hills West is located in Mission Acres, which was developed with one-acre agricultural lots with single-family homes after the aqueduct was opened. The National Aid Highway Act of 1956 funded Interstate 405 and spurred rapid suburban development which transformed the agricultural lands into residential and industrial uses. Most of the existing single-family residential homes in North Hills West were built in the 1950s and 1960s. Both the Veterans Administration Hospital and Interstate 405 define the neighborhood. Since the 1960s, North Hills West has withstood two large earthquakes that resulted in disaster area declarations. North Hills West rebuilt after these disasters and continues as a neighborhood defined by single-family housing.

North Hills West resembles other suburban San Fernando Valley neighborhoods, but the neighborhood has seen an increase in ethnic diversity over the last decade. In 2010, North Hills West was predominantly Latino, White, and Asian; however, the community has seen the highest proportional increase for those with two or more races in 2019. The community has education attainment levels (bachelor's degree or higher) that are higher than the San Fernando Valley. Given the correlation between educational attainment and income, household income levels have also increased more than the San Fernando Valley. Despite the growth in diversity, education, and income, North Hills West is still predominantly single-family housing, a feature of great importance to the residents.

Resilience aims to empower individuals, communities, institutions, businesses and systems of North Hills West to lead, adapt, connect, and grow despite stressors, disruption, or disasters. Resiliency planning is inclusive, people-centered, and informative; it will direct planning efforts to best match the neighborhood's unique needs and resources. Long-term resilience planning can provide resources for the community to prepare and recover from disasters such as earthquakes. We analyzed variables such as community networks, housing, crime safety, traffic safety, business environment, transportation, infrastructure, community spaces, food and water, air quality, natural disasters, urban heat island and tree canopy effect to aid in the capacity of North Hills.

A resilient community includes strong social ties nurtured by supportive community spaces. This is important for resiliency since a strong sense of community can build resources and knowledge that can be shared during difficult times. The

neighborhood of North Hills West boasts several schools and a library but lacks in parks and other communal spaces within its boundaries. Strengthening their existing assets may be the most affordable and quickest options to build community spaces.

High-quality community space can include mature trees that are beautiful and keep people shaded. Trees are an essential part of resilience by supporting native ecosystems, being able to resist extreme weather, and filter the air. North Hills West tree canopy coverage is less than the City of Los Angeles or the San Fernando Valley but is estimated to have great canopy potential that can counteract the large amounts of pavement and buildings that retain heat.

North Hills West is estimated to have an annual average temperature increase of 4°C to 8°C (7°F to 14°F). Heat is a powerful aspect of climate, where extreme heat days or heatwaves can negatively affect vulnerable people, such as the elderly, people with disability, children, and low-income households. A resilient community is capable of withstanding extreme heat events and are able to adapt by learning what they can do to better support each other and fill gaps in managing heat. Resiliency may come in the form of a strong sense of community motivating neighbors to check up on each other to see if they have access to fresh water, cooling with AC or green spaces, and offering help.

Community engagement was instrumental in developing the plan's final recommendations. Expert interviews provided background on North Hills West. During the November 18, 2021, North Hills West Neighborhood Council meeting an hour was spent discussing the meaning of resiliency, the history of the neighborhood, and the

indicator research with the attendees. A survey was used to further understand these indicators. Then an online town hall was held on February 26, 2022, to gain feedback on which indicators were most important to the community. A survey was also conducted letting the public prioritize these indicators. Based on the indicator feedback, recommendations were developed and discussed with the public during the last online town hall held on April 2, 2022. Along with the results from a concurrent survey, the final recommendations for the plan were developed. Through the community input process, community spaces were not identified as a high priority. However, the community valued tree coverage and a recommendation to utilize city resources to request additional trees for street or personal property was developed. The City of Los Angeles has identified urban forestry as a major component for addressing climate change and offers a several programs to promoted tree planting. The city has free programs to deliver and plant trees in both private and city property when requested by Los Angeles residents.