Appendix 4-1

Socioeconomics Technical Report

BERKELEY SPACE CENTER AT NASA RESEARCH PARK

SOCIOECONOMICS TECHNICAL REPORT

PREPARED FOR:

University of California, Berkeley

National Aeronautics and Space Administration
Ames Research Center

PREPARED BY:

ICF
595 Market Street, Suite 950
San Francisco, CA 94105
Contact: Jessica Viramontes, Project Manager
Jessica.Viramontes@icf.com

April 2026

ICF. 2026. *Berkeley Space Center at NASA Research Park Socioeconomics Technical Report*. April. (ICF 104894.0.001.) San Francisco, CA. Prepared for the University of California, Berkeley and the National Aeronautics and Space Administration.

Contents

Tables

Figures

All figures can be found at the end of their respective chapter.

Acronyms and Abbreviations

Term	Definition
ABAG	Association of Bay Area Governments
ARC	Ames Research Center
Bay Area	San Francisco Bay Area
CEQA	California Environmental Quality Act
Development Guidelines	Berkeley Space Center Development Guidelines
EIR	environmental impact report
EIS	environmental impact statement
ERD	Environmental Resources Document
GDP	gross domestic product
HIA	housing impact area
ISP	Institutional Shared Pool
joint EIR/EIS	joint environmental impact report/environmental impact statement
Master Plan	Berkeley Space Center Master Plan
MTC	Metropolitan Transportation Commission
NADP	NASA Ames Development Plan
NASA	National Aeronautics and Space Administration
NEPA	National Environmental Policy Act
NRP	NASA Research Park
O&M	operation and maintenance
PEIS	programmatic environmental impact statement
proposed action	Berkeley Space Center at NASA Research Park
R&D	research and development
RHNA	regional housing needs allocation
ROD	Record of Decision
State	State of California
UC	University of California
UC Berkeley	University of California, Berkeley
UC Regents	Regents of the University of California
U.S.C.	United States Code

Glossary

Commutable Distance – A subjective term that depends on individual circumstances; it reflects a travel time in the context of a good work/life balance. Factors like traffic, mode of transportation, and personal tolerance are generally more important than a fixed mileage distance.

Commute Pattern – Collection of journey-to-work routes, including the distance and direction people travel from home to work.

Exclusive Federal Jurisdiction – The federal government alone has jurisdiction and provides law enforcement and public safety services (National Aeronautics and Space Administration, Ames Research Center 2002b, pp. 3.14–3.25).

Fiscal Conditions – The financial health and stability of a government or entity, particularly regarding its ability to meet its financial obligations.

General Fund Revenue – The general fund is the primary operating fund of a city or county. General fund revenues (income) can be used for any jurisdictional expense.

Housing Demand – The number of housing units that potential buyers and renters are able and willing to purchase or rent at a given price and time.

Housing Impact Area – The defined geographical zone that experiences significant changes or effects from a housing-related development or policy; in this case, it is considered due to project employment and related housing demand.

Household Income – The combined total gross income of all individuals living in the same residence during a specific period, typically a year.

Housing Market – The availability of housing stock, in terms of supply and demand.

Housing Unit/Housing Stock/Household –

- *Housing unit* refers to a single dwelling or living space, such as a house, apartment, or mobile home, where people live separately from others in the same building.
- *Housing stock* is the total number of existing housing units in a specific area, including occupied, vacant, and sometimes units that are under construction.
- *Households* specifically excludes vacant units because a household is defined by the presence of people occupying a housing unit as their usual place of residence.

IMPLAN Model – An economic input/output system that estimates the ripple effects of economic changes in a specific region by using a detailed dataset of economic factors, multipliers, and demographic statistics. It combines national industry production functions with localized data to analyze how an event, like a new business or policy change, creates direct, indirect, and induced economic impacts on output, employment, and income.

Jobs Housing Balance – The relationship between the number of jobs and the availability of housing in a specific geographic area. A balanced region has a healthy mix of jobs and housing, which can lead to shorter commutes, reduced traffic congestion, and more affordable housing. When there are

many more jobs than housing units, the condition is considered a jobs/housing mismatch, leading to increased housing costs, longer commutes, and a change in workforce income levels.

Labor Market – The availability of employment and labor, in terms of supply and demand.

Medium Home Price and Rent (versus average) – The median home price or rent is a middle value, with half the homes more expensive and half less expensive than the median, making it a more stable indicator when extreme prices are present. The average price is calculated by adding all prices and dividing by the number of sales, which can be heavily influenced by a few very high or very low prices.

Metropolitan Transportation Commission (MTC) Superdistrict – Large geographic subdivisions within the nine-county San Francisco Bay Area, including multiple cities and communities, combined for regional planning and data collection purposes. The MTC uses these superdistricts to aggregate data and analyze its regional transportation and housing plans, such as Plan Bay Area 2050. This approach allows the MTC to evaluate needs and allocate resources across broader subregions rather than analyzing each of the 101 individual cities separately.

National Environmental Policy Act – Federal law signed in 1970 requiring federal agencies to analyze and disclose the environmental impacts of proposed actions before they are undertaken.

Regional Housing Needs Allocation (RHNA) – The State of California– (State-) mandated process that determines the number of housing units, by income level, a region's local governments must plan for over an 8-year cycle. The Association of Bay Area Governments manages the local RHNA process.

Socioeconomics – In this case, the human-level elements that may be affected by a project. These categories can include topics such as relocation, available jobs, resulting economic changes, and local demographics.

Vacancy Rate – The percentage of units or positions that are unoccupied within a given timeframe.

Executive Summary

Moffett Partners, LLC (Project Proponent), a joint venture of The Regents of the University of California (UC Regents) and SKSP NRP, LLC, is proposing a master-planned mixed-use academic and research project, referred to as the Berkeley Space Center at the National Aeronautics and Space Administration (NASA) Research Park (NRP) (proposed project/proposed action).[1] The Project Proponent will require authorization from the UC Regents to proceed with the proposed project under the California Environmental Quality Act (CEQA), and NASA's approval to proceed with following analysis consistent with the National Environmental Policy Act (NEPA). NASA is the NEPA Lead Agency for the proposed action and, as the Authority Having Jurisdiction, NASA would issue building permits and monitor applicable mitigation measures related to development and operation of the proposed project. The UC Regents is the CEQA Lead Agency for the proposed project and would provide authorization before the proposed action is submitted for NASA's approval.[2]

The proposed project is located at NASA's Ames Research Center (NASA ARC) on an approximately 39-acre project site (Project Site), along with approximately 6 acres of off-site areas (Off-Site Areas) where utility improvements and building demolition would take place. Together, the Project Site and Off-Site Areas compose the approximate 45-acre limits of work (Limits of Work).

The University of California, Berkeley (UC Berkeley) (on behalf of UC Regents) and NASA are preparing a joint environmental impact report/environmental impact statement (joint EIR/EIS) for the proposed project that evaluates the following NEPA alternatives:[3]

- NEPA No-Action Alternative
- NEPA Build Alternative 1 (CEQA Proposed Project)
- NEPA Build Alternative 2 (CEQA Reduced Density Alternative)

This technical report characterizes existing conditions and evaluates the potential for socioeconomic impacts associated with construction and operation of the NEPA alternatives. The report documents the assumptions, methodologies, and findings used to support the impact analysis. Furthermore, where applicable, this report identifies mitigation measures that would avoid and minimize specific socioeconomic effects.

The impact analysis on socioeconomics uses a subset of significance thresholds identified with the 2002 programmatic environmental impact statement (PEIS) for the proposed NASA Ames Development Plan (NADP). The following is a summary of the relevant study areas and impacts under those thresholds.

Effects on the Local Economy

The study area for effects on the local economy focuses on Santa Clara County, which is where construction and operation of the proposed action would occur, as well as the cities of Sunnyvale and Mountain View, given that a concentration of employees would most likely commute from

[1] Throughout this report, *proposed project* refers to both the proposed project (under the California Environmental Quality Act) and the proposed action (under the National Environmental Policy Act).

[2] UC Regents is a legal entity that includes all of the University of California campuses.

[3] Throughout this report, the discussion of NEPA Build Alternative 1 and NEPA Build Alternative 2 correspond to the CEQA Proposed Project and the CEQA Reduced Density Alternative, respectively, under CEQA. Socioeconomics is not a topic required to be evaluated under CEQA. Therefore, this report refers to the NEPA alternatives.

these jurisdictions. Construction of both NEPA Build Alternatives and their Sub-Alternatives would result in temporary beneficial impacts on the local economy and employment, whereas the NEPA No-Action Alternative, by not including construction, would not provide this benefit. Operation of the NEPA No-Action Alternative would still result in new employees on the site (through reoccupation of existing buildings), but this would be a negligible percentage of overall county employment. In contrast, operation of NEPA Build Alternative 1 and its Sub-Variant would result in the greatest economic benefit of all the alternatives by providing an estimated 6,132 and 6,518 new employees and students, respectively.[4]

Housing Demand Impacts

The study area for housing demand impacts is larger than Santa Clara County because San Francisco Bay Area housing markets do not adhere strictly to county lines. As detailed in Section 3.1, the impacts on housing demand consider a broader geographical area that is tied to Metropolitan Transportation Commission superdistrict commute patterns for employees at the Project Site; this housing impact area (HIA) extends past Santa Clara County and into regions of San Mateo County and Alameda County, as shown in Figure 3-2. Based on Plan Bay Area forecast growth from 2026 through 2040, NEPA Build Alternative 1 and its Sub-Variant would generate housing demand equal to 1.24 and 1.35 percent of forecast growth in the HIA, thereby exceeding the NASA-selected NEPA threshold of 1 percent. There is no feasible mitigation for the Project Proponent to offset the exceedance in housing demand within the Project Site. NEPA Build Alternative 2 and its Sub-Variant would generate housing demand equal to 0.67 and 0.78 percent of forecast growth in the HIA, which is below the threshold of 1 percent. The NEPA No-Action Alternative would have the smallest effect, generating housing demand equal to 0.13 percent of forecast growth between 2020 and 2040.

Fiscal Impact on the Local Governments and Facilities

Because the Project Site is in Santa Clara County, the bulk of the demand on public and government facilities would be limited to the county; therefore, the study area for fiscal impacts on local governments and facilities is limited to Santa Clara County. Where direct effects on school districts outside of the Santa Clara County would occur, given that project employees would also most likely reside in the cities of Sunnyvale and Mountain View, additional analysis is provided. The analysis, supported by IMPLAN modeling, determined that construction and operation under each NEPA Build Alternative would generate significant increases in tax revenue and contributions to local general funds. Given the magnitude of the IMPLAN modeling results regarding fiscal contributions related to the NEPA Build Alternatives, the limited number of NASA ARC residents, and the dispersed nature of where project employees would live, an exceedance of the NEPA threshold related to creating a cost impact for a local government or school district that would amount to more than 0.5 percent of that jurisdiction's general fund or revenue limit would not occur under any of the alternatives.

[4] Throughout this report, both total and net project-generated employee and student values are presented. Total project values reflect values generated by the project, while net values account for the difference when considering the 42 existing employees.

Table ES-1. Impact Summary by NEPA Alternative and Impact Category

NEPA Alternative	Effect on Local Economy	Effect on Housing Demand	Fiscal Impact on Local Government or School District
NEPA No-Action Alternative	Minor Benefit	Below Threshold	Below Threshold
NEPA Alternative 1	Minor Benefit	Exceeds Threshold	Below Threshold
NEPA Alternative 1 No Student/Faculty Housing Sub-Alternative	Minor Benefit	Exceeds Threshold	Below Threshold
NEPA Alternative 2	Minor Benefit	Below Threshold	Below Threshold
NEPA Alternative 2 No Student/Faculty Housing Sub-Alternative	Minor Benefit	Below Threshold	Below Threshold

Chapter 1
Introduction

Moffett Partners, LLC (Project Proponent), a joint venture of The Regents of the University of California (UC Regents) and SKSP NRP, LLC, is proposing a master-planned mixed-use academic and research project, referred to as the Berkeley Space Center at the National Aeronautics and Space Administration (NASA) Research Park (NRP) (proposed project/proposed action).[5] The Project Proponent will require the UC Regents' authorization under the California Environmental Quality Act (CEQA) to proceed with the proposed project, and NASA's approval to proceed following analysis consistent with the National Environmental Policy Act (NEPA). NASA is the NEPA Lead Agency for the proposed action and, as the Authority Having Jurisdiction, NASA would issue building permits and oversee mitigation monitoring related to development and operation of the proposed project. The UC Regents is the CEQA Lead Agency for the proposed project and would provide authorization before the proposed action is submitted for NASA's approval.[6]

The University of California, Berkeley (UC Berkeley) (on behalf of UC Regents) and NASA are preparing a joint environmental impact report/environmental impact statement (joint EIR/EIS) for the proposed project that evaluates the following NEPA alternatives:[7]

- NEPA No-Action Alternative
- NEPA Build Alternative 1 (CEQA Proposed Project)
- NEPA Build Alternative 2 (CEQA Reduced Density Alternative)

UC Berkeley and NASA have also identified one sub-alternative for purposes of NEPA: the No Student/Faculty Housing Sub-Alternative, which includes uses that are different from those of the NEPA Build Alternatives.

This technical report has been prepared to support NASA's environmental review process and provide NASA with information regarding the potential socioeconomic effects associated with the proposed action. This report evaluates the potential for socioeconomic impacts associated with construction and operation of the proposed action, the NEPA Build Alternatives, and the sub-alternative. In addition, this report documents the assumptions, methodologies, and findings used to support the impact analysis.

In the context of NEPA, socioeconomic analysis is an examination of how a proposed action will affect the overall social and economic character of an area. The socioeconomic indicators discussed in relation to the project in this technical report include population and housing, labor supply and employment, and local government fiscal resources.

---

5 Throughout this report, *proposed project* refers to both the proposed project (under the California Environmental Quality Act) and the proposed action (under the National Environmental Policy Act).

6 UC Regents is a legal entity that includes all of the University of California campuses.

7 Throughout this report, the discussion of NEPA Build Alternative 1 and NEPA Build Alternative 2 correspond to the CEQA Proposed Project and the CEQA Reduced Density Alternative, respectively, under CEQA. Socioeconomics is not a topic required to be evaluated under CEQA. Therefore, this report refers to the NEPA alternatives.

Chapter 2
Project Description

2.1 Project Location

The proposed project is located at NASA's Ames Research Center (NASA ARC), as depicted in Figure 2-1, on an approximately 39-acre project site (Project Site), along with approximately 6 acres of off-site areas (Off-Site Areas) where utility improvements and building demolition would take place. Together, the Project Site and Off-Site Areas compose the approximate 45-acre limits of work (Limits of Work), as depicted in Figure 2-2 and as more fully described below.

The Limits of Work are located primarily on federal land within NASA ARC, an approximately 2,000-acre facility located in unincorporated Santa Clara County, California between U.S. 101 and the southwestern edge of San Francisco Bay. A small portion of the Off-Site Areas is on federal land owned by the United States Army (Army). The city of Mountain View borders NASA ARC to the north and southwest, and the city of Sunnyvale borders NASA ARC to the southeast and east. NASA ARC is approximately 33 miles south of the city of San Francisco and 8 miles north of the city of San José.

The Project Site is within the city of Mountain View Sphere of Influence but outside of any city's jurisdictional limits. The Off-Site Areas are also within the city of Mountain View Sphere of Influence; most of the Off-Site Areas are outside of any city's jurisdictional limits, with the exception of the northern portion and the southwestern portion, which are within the city of Mountain View. The Project Site is bounded by Wescoat Road to the north and Cody Road to the east.[8] The southern boundary of the Project Site is between Edquiba Road and Girard Road. The western boundary of the Project Site is within an empty lot immediately west of Bailey Road. The Project Site is a portion of Santa Clara County Assessor's Parcel Number 116-18-012.

The Limits of Work is currently developed with 18 one- to three-story buildings that total approximately 185,600 square feet, along with surface parking lots, roadways, and utility infrastructure. The existing buildings are mostly vacant; many were formerly used as ancillary buildings that supported Navy operations (e.g., offices, food service, a gas station, pool, recreation center, and lodging). The other existing buildings within the Limits of Work comprise industrial, storage, and utility facilities. As of mid-2024, approximately 42 people were employed within the Limits of Work; no full time residents or short term occupants (e.g., summer interns) lived within the Limits of Work.

The Project Site is relatively flat, with existing grades gradually sloping from south to north. The Project Site is currently covered with a substantial amount of impervious hardscape. This includes roads, surface parking lots, streets, and paths, which, in total, cover approximately 70 percent of the site. Existing landscaping includes approximately 245 trees located throughout the Project Site.

Soil and groundwater at the Project Site have been affected by contamination associated with the Middlefield-Ellis-Whisman (MEW) Superfund site and the U.S. Navy's operations at Naval Air Station Moffett Field, which is no longer in operation. The MEW extraction and treatment system is directly adjacent to and within the Project Site. Within the Project Site are several recovery wells and underground piping for the treatment system. No potable water supplies are fed or contaminated by

[8] Cody Road would be realigned to the east as part of the proposed project and would be the eastern boundary of the Project Site.

NASA ARC groundwater; all potable water is purchased from the San Francisco Public Utilities Commission, which contains some portion of off-site groundwater sources.

2.2 Proposed Berkeley Space Center Master Plan and Development Guidelines

The proposed project will include the proposed Berkeley Space Center Master Plan (Master Plan), which establishes the overall project vision, conceptual plans, and illustrative renderings, and the proposed Berkeley Space Center Development Guidelines (Development Guidelines), which provide Maximum and Minimum Development Parameters and standards for the proposed project buildings and open space. The Maximum and Minimum Development Parameters are a conceptual layout depicting the horizontal and vertical dimensions of the project. Standards are mandatory requirements that would be required to be implemented for the project. Together, the Master Plan and the Development Guidelines will be included as part of the project application submitted by the Project Proponent to NASA. The analysis of the environmental impacts of the proposed project is based on the proposed Maximum and Minimum Development Parameters and the standards established in the Development Guidelines.

2.3 Project Characteristics

The proposed project under consideration by NASA (i.e., the proposed action) would include academic and research facilities, consisting of offices, laboratories, research-and-development (R&D) uses, and related amenities (collectively, "Research and Office Uses"); conference center and related amenities ("Conference Uses"); ground-floor retail, food and beverage, maker spaces (i.e., collaborative work spaces for using various tools and materials), and other complementary accessory uses that would be publicly accessible (collectively, "Active Uses"); student/faculty housing, including associated amenities ("Student/Faculty Housing"); short-term lodging, including associated amenities ("Short-Term Lodging"); transportation networks; and open spaces, as well as landscaped spaces, to create a state-of-the-art research and education hub that shapes the future of technology and innovation and advance the UC Regents educational, scientific research, charitable, and other exempt purposes (within the meaning of Section 501(c)(3) of the United States Internal Revenue Code). Figure 2-3 shows the conceptual land use plan for the proposed project.[9] Implementation of the proposed project would include demolition of all existing buildings on the Project Site. In addition, as discussed above, the proposed project also includes Off-Site Areas for utility improvements and building demolition. Together, the Project Site and the Off-Site Areas compose the Limits of Work.

Pursuant to NEPA, the joint EIR/EIS evaluates the following NEPA alternatives at an equal level of detail:

- **NEPA No-Action Alternative**, under which the proposed action would not be constructed and operated at the Project Site. The buildings within the Limits of Work that are currently operational would continue to be operational. The buildings within the Limits of Work that are

[9] Both the parcel boundary and the Project Site boundary are shown in the conceptual plans. The parcel boundary includes the leased premises; it is provided for informational purposes only. The Project Site boundary includes the area that would be redeveloped as part of the proposed project.

currently vacant could be reoccupied consistent with the prior uses of the buildings (e.g., ancillary buildings that supported Navy operations as well as industrial, storage, and utility facilities); reoccupying the vacant buildings would not require construction activity. The NASA Ames Development Plan (NADP), which established NASA's vision for long-term development of NASA ARC, also allows other types of uses at the Project Site. The NEPA No-Action Alternative could result in retaining the approximately 185,600 square feet of existing mixed uses, resulting in approximately 668 employees.[10] The NEPA No-Action Alternative would not result in the reoccupation of any buildings formerly used for lodging; thus, the NEPA No-Action Alternative would not generate any new full-time residents or short term occupants (e.g., summer interns) within the Limits of Work.

- **NEPA Build Alternative 1**, which would create approximately 2.3 million square feet of Research and Office Uses, Conference Uses, Active Uses, Student/Faculty Housing, and Short-Term Lodging for visitors and conference attendees. The NEPA Build Alternative 1 would include approximately 2 million square feet for Research and Office Uses, 25,000 square feet for Conference Uses, 90,000 square feet for Active Uses, 130,000 square feet for Student/Faculty Housing, and 75,000 square feet for Short-Term Lodging. Only the NEPA Build Alternative 1 includes the Water Reuse Facility (WRF) Option and the Central Utility Plant (CUP) Option.[11]
- **NEPA Build Alternative 2**, which would create approximately 1.4 million square feet of Research and Office Uses, Conference Uses, Active Uses, Student/Faculty Housing, and Short-Term Lodging for visitors and conference attendees. Compared to the NEPA Build Alternative 1, NEPA Build Alternative 2 would provide less space for Research and Office Uses. The NEPA Build Alternative 2 would include approximately 1.1 million square feet for Research and Office Uses, 25,000 square feet for Conference Uses, 90,000 square feet for Active Uses, 130,000 square feet for Student/Faculty Housing, and 75,000 square feet for Short-Term Lodging.

The approximately 42 people employed within the Limits of Work as of mid-2024 would no longer work at the Project Site with implementation of the NEPA Build Alternatives. NEPA Build Alternative 1 would result in approximately 5,955 employees and 177 students working at the Project Site (i.e., net new employees and students would total 6,132). NEPA Build Alternative 2 would result in approximately 3,289 employees and 95 students working at the Project Site (i.e., net new employees would total 3,384). NEPA Build Alternative 1 would result in more employees because it would include more space for Research and Office Uses.

Table 1 summarizes the similarities and differences between NEPA Build Alternative 1 and NEPA Build Alternative 2.

No Student/Faculty Housing Variant/Sub-Alternative

The Project Proponent has identified one variant/sub-alternative that includes certain project features that are different from those of the NEPA Build Alternative 1 and NEPA Build Alternative 2: the No Student/Faculty Housing Variant/Sub-Alternative (Sub-Alternative).[12] Both

[10] This is based on a generation rate of 3.6 employees per 1,000 square feet.

11 Under the Water Reuse Facility Option, portions of the non-potable supply would be provided on-site rather than by Mountain View. The Central Utility Plant Option would provide a centralized heating and cooling system for all buildings instead of building-by-building heating, ventilation, and air-conditioning (HVAC) systems.

[12] Throughout this report, *Variant* refers to both the Variant (under CEQA) and the Sub-Alternative (under NEPA).

the NEPA Build Alternative 1 and the NEPA Build Alternative 1 include the Sub-Alternative. The Sub-Alternative would replace the 130,000 square feet of Student/Faculty Housing in Subarea 6 with 130,000 square feet of Research and Office Uses under both the NEPA Build Alternative 1 and NEPA Build Alternative 2. Specifically, the Sub-Alternative would include 90,000 square feet of laboratory and R&D uses, 25,000 square feet of office uses, and 15,000 square feet of academic uses. The Sub-Alternative would have the same type of land uses; the same general site plan; the same maximum building height; the same amount of Conference Uses, Active Uses, Short-Term Lodging, and open space; the same number of guests; the same roadway infrastructure; the same utility infrastructure; the same parking ratio; and the same construction activities proposed and evaluated under the NEPA Build Alternative 1 and NEPA Build Alternative 2. Because the amount of Research and Office Uses and the number of Student/Faculty Housing units would be different under the Sub-Alternative, the number of bicycle parking spaces, and the number of residents, employees, and students would likewise change. This potential difference in proposed land use is identified as a sub-alternative because it may or may not be included as part of the project during implementation. Figure 2-4 shows the conceptual land use plan for the Sub-Alternative.

The NEPA Build Alternative 1 with the Sub-Alternative would result in approximately 6,331 employees and 187 students working at the Project Site (i.e., net new employees and students would total 6,518), whereas the NEPA Build Alternative 2 with the Sub-Alternative would result in approximately 3,665 employees and 105 students working at the Project Site (i.e., net new employees and students would total 3,770).

Table 1. Summary of Similarities and Differences between the NEPA Build Alternative 1 and the NEPA Build Alternative 2

Characteristic	NEPA Build Alternative 1	NEPA Build Alternative 2
Similarities		
Types of Land Uses	Same	
Location of Land Uses	Same (see Figure 2-3)	
Site Plan	Same (see Figure 2-3)	
Limits of Work (i.e., Project Footprint)	Same (45 acres, including 39-acre Project Site and 6 acres of Off-Site Areas)	
Maximum Building Height[a]	Same (Approximately 80 feet, with an exceedance of up to 25 feet for mechanical equipment and screens)	
Amount of Conference Uses, Active Uses, Student/Faculty Housing, Short-Term Lodging, and Open Space	Same (25,000-square-foot conference center, 90,000 square feet of Active Uses, 145 Student/Faculty Housing units, 100 Short-Term Lodging units, and a minimum of 10 acres of open space)	
Number of Residents and Guests	Same (200 guests and 363 residents)	
Utility Infrastructure and Roadways[b]	Same	
Parking Ratio	Same	
Construction Start and End Dates	Same (begin in 2027 and end in 2040)	

Characteristic	NEPA Build Alternative 1	NEPA Build Alternative 2
No Student/Faculty Housing Variant/Sub-Alternative	Same (Variant included)	
Differences		
Number of Internal Floors[a]	Greater to accommodate increased square footage and building height restriction	Less given reduced overall square footage
Internal Floor-to-Floor Heights[a]	Lower to accommodate increased square footage and building height restriction	Higher given reduced overall square footage
Amount of Square Footage for Research and Office Uses	Greater (2,000,000 square feet)	Less (1,080,000 square feet)
Number of Employees and Students[c]	Greater (5,997 employees and 177 students)	Less (3,331 employees and 95 students)
Number of Parking Spaces[c]	Greater	Less
WRF Option and CUP Option[d]	Yes	No

Source: Proposed Berkeley Space Center Development Guidelines, Spring 2026.

Notes:

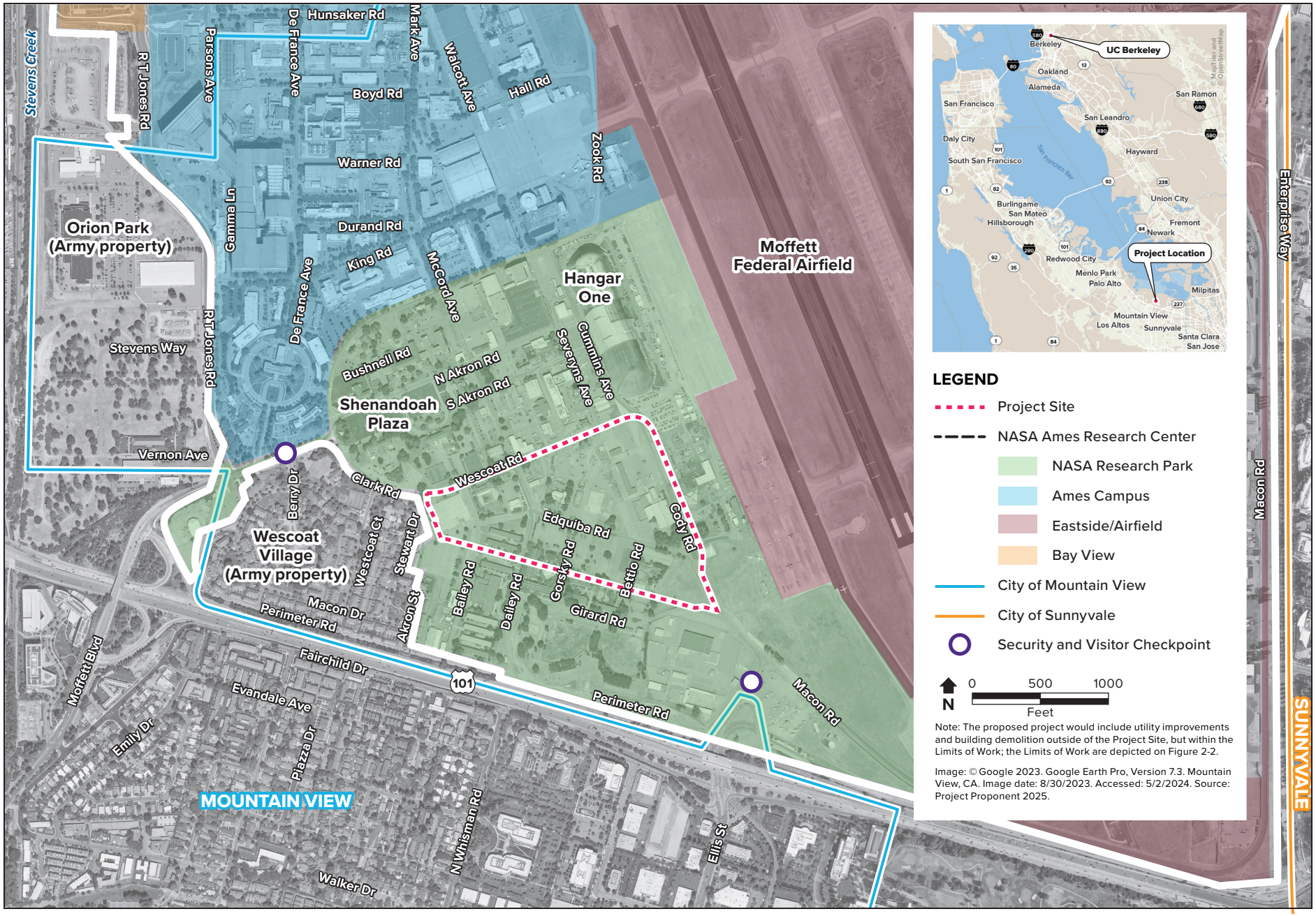
WRF = Water Reuse Facility; CUP = Central Utility Plant

a. The internal floor-to-floor heights could be lower under the NEPA Build Alternative 1 to accommodate more square footage in each building, whereas the internal floor-to-floor heights under the NEPA Build Alternative 2 could be higher because less square footage would need to be accommodated in each building.

b. Only the NEPA Build Alternative 1 includes the WRF Option and the CUP Option; see footnote "d" for more information regarding these options. The proposed roadways would be the same.

c. The difference in the number of employees, students, and parking is due to the greater amount of Research and Office Uses that would be included in the NEPA Build Alternative 1.

d Under the WRF Option, portions of the non-potable demand would be met using on-site reuse supply rather than recycled water from Mountain View. The non-potable demand that cannot be met by the WRF Option would require the use of potable water. The CUP Option would provide a centralized heating and cooling system for all buildings instead of building-by-building heating, ventilation, and air-conditioning (HVAC) systems.



Note: The proposed project would include utility improvements and building demolition outside of the Project Site, but within the Limits of Work; the Limits of Work are depicted on Figure 2-2.

Image: © Google 2023. Google Earth Pro, Version 7.3. Mountain View, CA. Image date: 8/30/2023. Accessed: 5/2/2024. Source: Project Proponent 2025.

Graphics ... 104894 (9-10-2025)

ICF

Figure 2-1
Project Location
Berkeley Space Center at NASA Research Park

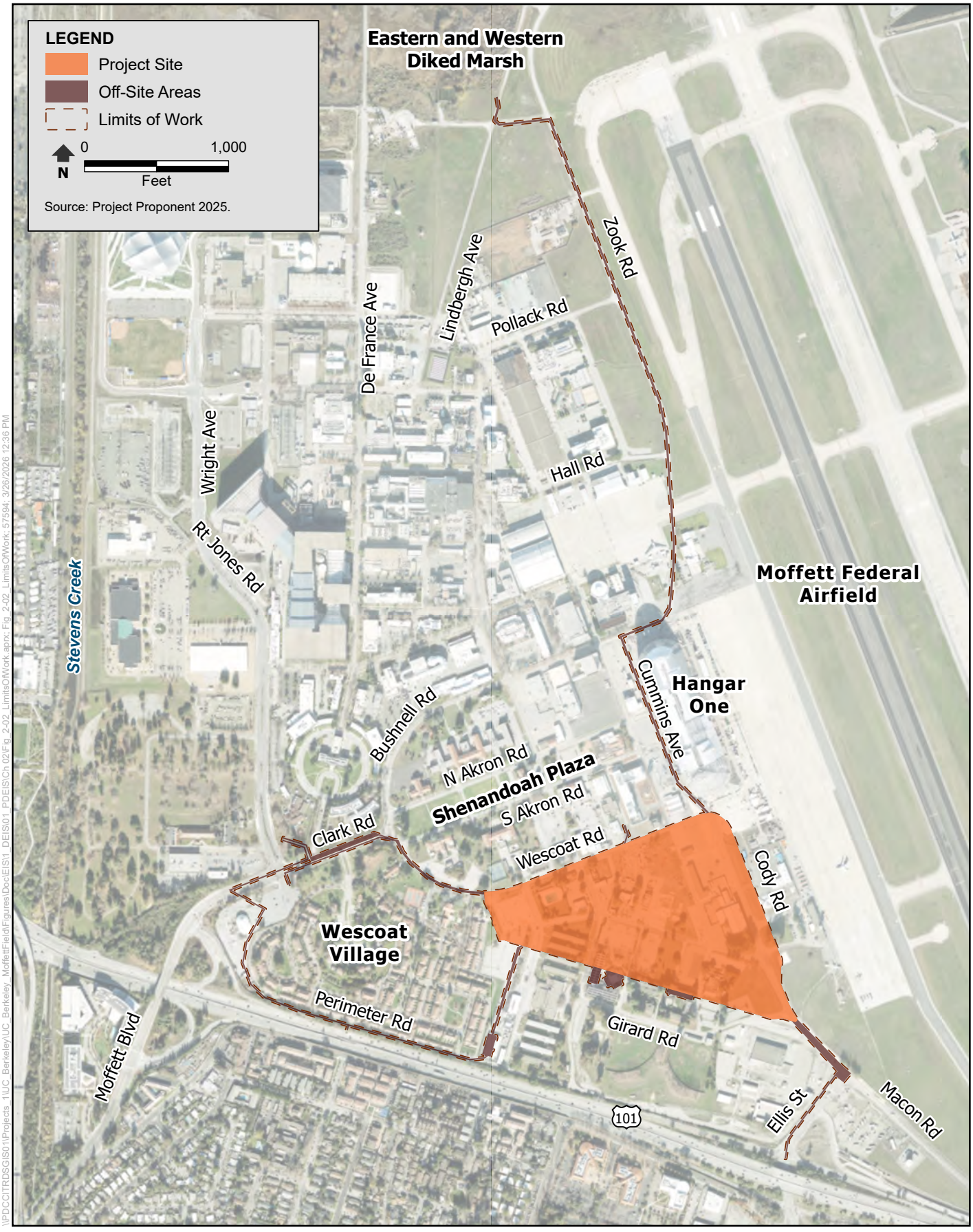
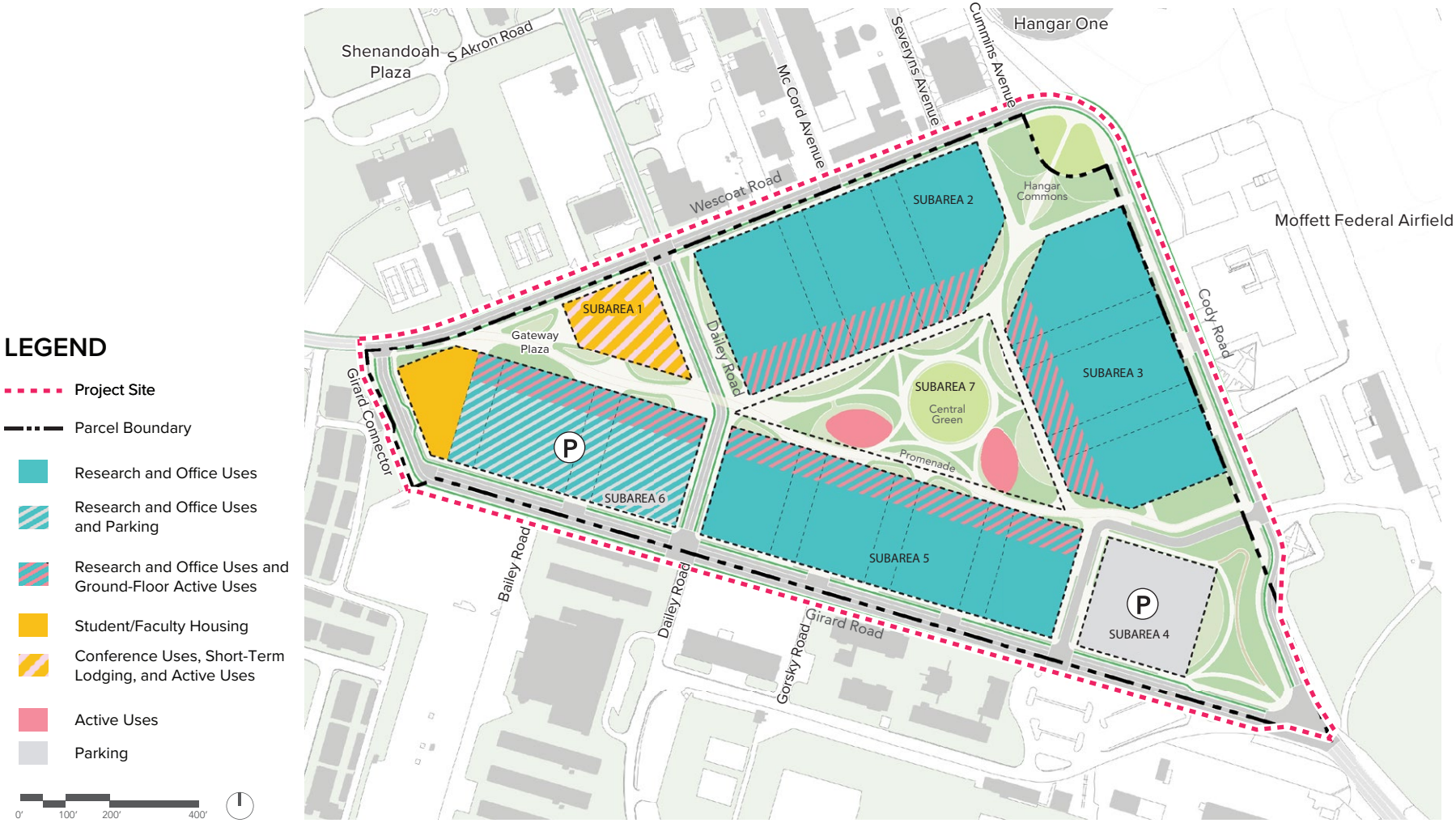


Figure 2-2
Limits of Work
Berkeley Space Center at NASA Research Park



Note: Images are conceptual until after project approval. The proposed project would include utility improvements and building demolition outside of the Project Site, but within the Limits of Work; the Limits of Work are depicted on Figure 2-2. The parcel boundary includes the leased premises; it is provided for informational purposes only.

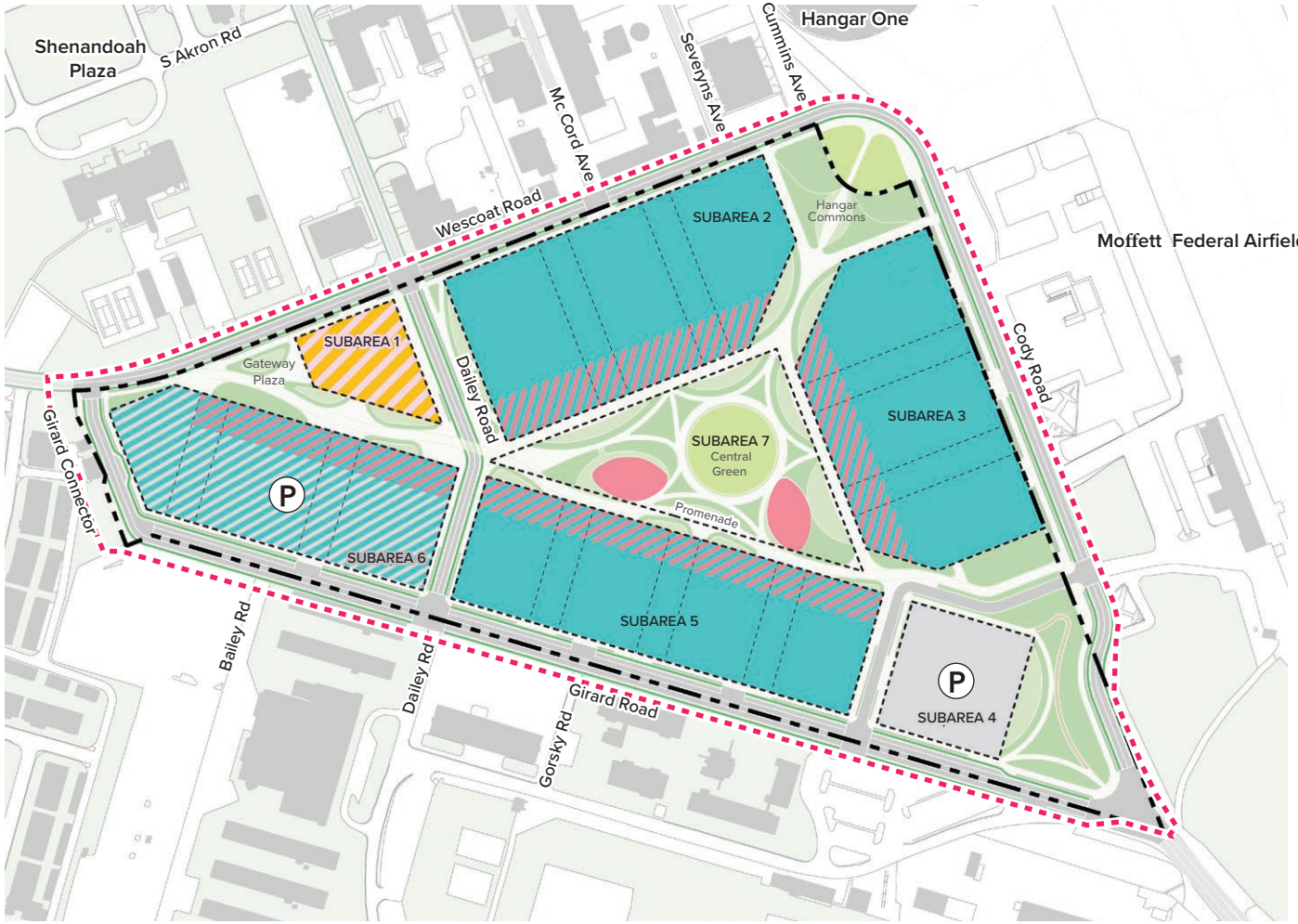
Source: Project Proponent 2024.

Graphics ... 104894 (9-9-2025) tg

Figure 2-3

Conceptual Land Use Plan for the NEPA Build Alternative 1 and NEPA Build Alternative 2

Berkeley Space Center at NASA Research Park



Note: Images are conceptual until after project approval. The proposed project would include utility improvements and building demolition outside of the Project Site, but within the Limits of Work; the Limits of Work are depicted on Figure 2-2. The parcel boundary includes the leased premises; it is provided for informational purposes only.

Source: Project Proponent 2025.

Graphics ... 104894 (9-10-2025) TG

Figure 2-4

Conceptual Land Use Plan (No Student/Faculty Housing Sub-Alternative)

Berkeley Space Center at NASA Research Park

Chapter 3
Affected Environment

This chapter describes the existing development and employment on-site as well as existing socioeconomic conditions in and around the Project Site. It also presents information about population and housing at the regional, county, and local level; the labor market and employment; and fiscal conditions in the Santa Clara County and local jurisdictions, including Mountain View and Sunnyvale.

In 2002, NASA prepared a programmatic environmental impact statement (PEIS) pursuant to NEPA that analyzed the environmental impact of implementation of the proposed NADP (National Aeronautics and Space Administration, Ames Research Center 2002b). NASA published its Record of Decision (ROD) to implement the NADP, which established NASA's vision for long-term development of NASA ARC. Since 2002, NASA (or authorized parties) has redeveloped portions of NASA ARC with entitled uses under the terms of several ground leases and other real property instruments. The Project Site is one of the parcels considered for redevelopment in the NADP and analyzed in 2002 PEIS; therefore, it is within the scope of the analysis set forth in that document and the ROD.

Information presented in this chapter was obtained from the 2002 PEIS, the Association of Bay Area Governments (ABAG) Plan Bay Area 2050 (Association of Bay Area Governments 2021), the California Department of Finance, the U.S. Census Bureau, local chamber of commerce data, and feedback from NASA.

3.1 Study Areas

To assess proposed action effects on the local economy, the larger housing impact area (HIA), and local governments, this report considers different regions for each analysis. The study area with respect to employment and effects on the local economy and with respect to fiscal effects on local governments is defined as Santa Clara County. The study area to assess project-related housing demand the study area is defined as the HIA (detailed below).

With respect to project housing demand, San Francisco Bay Area (Bay Area) housing markets do not necessarily conform with geographic and jurisdictional boundaries. Analyzing an overly broad study area spreads the impact across a large market, possibly masking effects on local communities. To avoid this, and consistent with the 2002 PEIS, the analysis herein takes a more conservative approach and examines an HIA to analyze the housing impacts of the project. The HIA from the 2002 PEIS was defined by comparing residential patterns of commuters to patterns found within the Metropolitan Transportation Commission (MTC) superdistrict, which includes the area covered by the NADP (see Figure 3-1, Commute Patterns by County). The HIA focused on those superdistricts that generated 1 percent or more to the total number of commuters to the NADP superdistrict (refer to Table 3.14-8, Commuters to Sunnyvale/Mountain View Superdistrict, and Table 3.14-9, Definition of the Housing Impact Area, in the NADP) (National Aeronautics and Space Administration, Ames Research Center 2002b). The regions that generated 1 percent or more to the commute percentage were Central San Mateo County, South San Mateo County, Northwest Santa Clara County, North Santa Clara County, West Santa Clara County, Central Santa Clara County, East Santa Clara County, Central-South Santa Clara Couty, South Santa Clara County, East Alameda County, and South Alameda County. These superdistricts correspond to the regions within San Mateo, Santa Clara, and Alameda Counties shown in Figure 3-2,

Housing Impact Area. The HIA, as defined in the 2002 PEIS, is the area for evaluating population and housing-related impacts, as well as labor supply, for the proposed action to maintain consistency with the 2002 PEIS. Commute patterns, which were based on geography, and the overall impact area have remained generally the same between the 2002 PEIS and the most recent year of commute data (2016), as shown in Table 2.[13]

Table 2. Commute Patterns by County (2010 and 2016)

County of Residence	Superdistricts of Residence	District of Work/[a] County of Work[b]	Estimate of 2010 Percentage of Commuters[a]	2016 Percentage of Commuters[b]
San Francisco	Downtown San Francisco, Richmond District, Mission District, Sunset District	Sunnyvale-Mountain View/Santa Clara	1.0%	2.7%
San Mateo	**Daly City/San Bruno, San Mateo/Burlingame, Redwood City/Menlo Park**	**Sunnyvale-Mountain View/Santa Clara**	**4.7%**	**5.9%**
Santa Clara	**Palo Alto/Los Altos, Sunnyvale/Mountain View, Saratoga/Cupertino, Central San José, Milpitas/East San José, South San José/Almaden, Gilroy/Morgan Hill**	**Sunnyvale-Mountain View/Santa Clara**	**76.2%**	**76.4%**
Alameda	**Livermore/Pleasanton, Fremont/Union City, Hayward/San Leandro, Oakland/Alameda, Berkeley/Albany**	**Sunnyvale-Mountain View/Santa Clara**	**9.2%**	**7.1%**
Contra Costa	Richmond/El Cerrito, Concord/Martinez, Walnut Creek/Lamorinda, Danville/ San Ramon, Antioch/Pittsburg	Sunnyvale-Mountain View/Santa Clara	1.5%	1.4%
Solano	Vallejo/Benicia, Fairfield/Vacaville	Sunnyvale-Mountain View/Santa Clara	0.2%	0.2%
Napa	Napa, St. Helena/Calistoga	Sunnyvale-Mountain View/Santa Clara	0.0%	0.0%
Sonoma	Petaluma/Sonoma, Santa Rosa/Sebastopol, Healdsburg/Cloverdale	Sunnyvale-Mountain View/Santa Clara	0.1%	0.1%
Marin	Novato, San Rafael, Mill Valley/Sausalito	Sunnyvale-Mountain View/Santa Clara	0.1%	0.1%
Total	—	—	***93.1%***	***93.9%***

[13] The long-term effects of the COVID-19 pandemic on the transportation system and travel behavior are unknown at this time. It would be unreasonable to speculate regarding how the transportation system and travel behavior could change in the future.

Sources:

a. National Aeronautics and Space Administration, Ames Research Center 2002b (2015 estimate, as forecast from Table 3.14-8, Population and Household Projections).

b. Metropolitan Transportation Commission 2016.

Note: Bolded counties and superdistricts are associated with the HIA. The 2010 estimate of commuters is based on a comparison of superdistrict-level commuter data to Sunnyvale/Mountain View superdistrict data; the estimate of 2016 commuters is based on a comparison of county-level commuter data to Santa Clara County data.

3.2 Population and Housing Characteristics

The population of Santa Clara County in 2025 is estimated to be 1,908,826; the population in 2040 is projected to be 1,949,323 (California Department of Finance 2025a). The Housing Element of the Santa Clara County General Plan (adopted February 2025) forecasts housing needs for 2023 through 2031 as part of the regional housing needs allocation (RHNA) process. ABAG allocated 3,125 additional units to the unincorporated county (between 2023 and 2031); it is currently projected to have 6,745 new units (County of Santa Clara 2025). The ABAG Final RHNA Allocations Plan for the Bay Area from 2023 to 2031 identifies 11,966 additional units in Sunnyvale, 11,135 additional units in Mountain View, and a total of 129,577 additional units countywide by 2031, including all cities within Santa Clara County (ABAG 2025a).

Table 3 shows household growth projections for the HIA between 2015 and 2040, based on ABAG data.[14] The 2002 PEIS used data from MTC commuter forecasts to estimate the projected number of households in the HIA (National Aeronautics and Space Administration, Ames Research Center 2002b, Table 3.14-8). In that analysis, MTC superdistricts were mapped to ABAG superdistricts by city. Table 3 shows the historical and projected households for the superdistricts within the HIA. The household projections between 2025 and 2040 show growth ranging from 12.2 to 79.5 percent, or 0.8 and 5.3 percent per year, in superdistricts within the HIA. Overall, household growth within the HIA is estimated to increase by 345,900, or 31.7 percent, between 2025 and 2040. Since certification of the 2002 PEIS, MTC and ABAG forecasts have been updated, with current forecasts published as Plan Bay Area 2050. Although the 2002 PEIS projected 2,753,440 households for the Bay Area in 2015, ABAG's Plan Bay Area 2050 estimated that there would be 2,677,000 households in 2015, or 2.8 percent fewer households than the number projected for 2002.

Table 3. Historical and Projected Households in the Housing Impact Area (2015–2040)

Superdistrict	Area	2015 Estimate/ 2015 Actual[a,b]	2025 Estimate[c]	2040 Estimate	Projected Growth (2025–2040)[c]	Projected Household Change (2025–2040), Percent per Year
Central San Mateo County	Half Moon Bay, Hillsborough, San Mateo, Foster City, Belmont, Burlingame (partial)	86,079/ 87,000	93,800	112,800	19,000 (+20.3%)	1.35%

[14] This analyzes 2015 estimates for comparison between the 2002 PEIS, which forecast the 2015 impact.

Superdistrict	Area	2015 Estimate/ 2015 Actual[a,b]	2025 Estimate[c]	2040 Estimate	Projected Growth (2025–2040)[c]	Projected Household Change (2025–2040), Percent per Year
South San Mateo County	Atherton, Menlo Park, Redwood City, Woodside, East Palo Alto, Portola Valley, San Carlos	82,447/ 80,000	85,200	99,700	14,500 (+17.1%)	1.14%
Northwest Santa Clara County	Los Altos Hills, Los Altos, Palo Alto (partial), Mountain View (partial)	75,777/ 74,000	79,600	95,200	15,600 (+19.7%)	1.31%
North Santa Clara County	Sunnyvale, Santa Clara (partial), Mountain View (partial), Milpitas (partial), San José (partial), Palo Alto (partial)	103,887/ 107,000	149,100	267,600	118,500 (+79.5%)	5.30%
West Santa Clara County	Los Gatos, Monte Sereno, Saratoga, Cupertino, Campbell (partial), Santa Clara (partial)	126,525/ 121,000	131,100	159,600	28,500 (+21.7%)	1.45%
Central Santa Clara County	Campbell (partial), San José (partial)	113,849/ 105,000	117,500	152,700	35,200 (+30.0%)	2.00%
East Santa Clara County	Milpitas (partial), San José (partial)	111,580/ 108,000	122,300	162,500	40,200 (+32.9%)	2.19%
Central South Santa Clara Couty	San José (partial)	76,134/ 73,000	76,600	86,600	10,100 (+13.1%)	0.88%
South Santa Clara County	Gilroy, Morgan Hill, San José (partial)	36,382/ 35,000	36,600	41,100	4,500 (+12.2%)	0.81%
East Alameda County	Dublin, Livermore, Pleasanton	85,111/ 72,000	83,900	117,400	33,500 (+40.0%)	2.66%
South Alameda County	Newark, Fremont, Union City	109,304/ 105,000	114,300	140,600	26,300 (+23.0%)	1.53%
Housing Impact Area Total		***1,009,775 / 967,000***	***1,089,900***	***1,435,800***	***345,900 (+31.7%)***	***2.12%***

Sources:

a. National Aeronautics and Space Administration, Ames Research Center 2002b (2015 estimate forecast from Table 3.14-2, Population and Household Projections).

b. The 2015 actual from ABAG (2021).

c. The 2025 and 2040 estimates have been projected in a secondary analysis, using total population growth per 5-year period, as estimated by ABAG (2021).

Note: Totals may not sum due to rounding.

Table 4 shows household projections in Santa Clara County and the Bay Area for the period from 2025 to 2040. The number of households in Santa Clara County is projected to grow from approximately 677,000 in 2025 to 965,300 in 2040, an increase of approximately 42.6 percent, or an average of 2.8 percent per year. Historical growth from 2015 to 2025 was slower than projected future growth, with the number of households in Santa Clara County growing an average of 0.9 percent per year from 2015 to 2025. The number of households in the Bay Area is projected to grow from approximately 2,893,000 in 2025 to 3,711,500 in 2040, an increase of approximately 28.3 percent, or an average of 1.9 percent per year. Historical growth from 2015 to 2025 was slower than projected future growth, with the number of households in the Bay Area growing an average of 0.8 percent per year from 2015 to 2025. Overall, the household growth rate in Santa Clara County (42.6 percent) is greater than that of the Bay Area as a whole (28.3 percent). In comparison, as seen in Table 3, household growth in the HIA is forecast to grow by 31.7 percent, or 2.12 percent per year, which is between that of Santa Clara County and Bay Area forecasts.

Table 4. Historical and Projected Households (2015–2040)

Area	2015[a]	2025[b]	2040[c]	Projected Growth (2025–2040)
Santa Clara County	623,000	677,000	965,300	288,324 (+42.6%)
Bay Area	2,677,000	2,893,000	3,711,500	818,544 (+28.3%)

Sources:

a. The 2015 actual from ABAG 2021.

b. California Department of Finance 2025b.

c. ABAG 2021 (the 2025 and 2040 estimates have been projected in a secondary analysis, using total population growth per 5-year period, as estimated by ABAG. These estimates align with actual population estimates from the California Department of Finance [2025b]).

According to the California Department of Finance, the average household size in Santa Clara County as of January 1, 2025, was 2.78 persons,[15] and the vacancy rate was 4.7 percent (California Department of Finance 2025b). The 2025 housing stock in Santa Clara County was made up of 50.9 percent single-family detached homes, 10.2 percent single-family attached homes, 7.1 percent multifamily homes with two to four units, and 29.3 percent multifamily homes with five or more units. In Santa Clara County, the housing type that experienced the most growth between 2020 and 2025 was multifamily housing with two to four units (California Department of Finance 2025b).

Table 5 presents housing supply data for cities within the HIA, as listed in Table 2, plus Santa Clara County as a whole. January 2025 housing estimates indicate 33,046 vacant housing units within Santa Clara County, representing a vacancy rate of 4.7 percent (California Department of Finance 2025b). There are currently an estimated 47,796 vacant housing units within the larger HIA.

Median home prices and rents vary across the HIA. For example, median home prices in Atherton are as high as $32.9 million (Realtor.com 2025); in Santa Clara County, the median home price in the first quarter of 2025 was approximately $1.6 million (National Association of Realtors 2025). The average amount of monthly rent in Santa Clara County was about $3,000 in 2023 (California Housing Partnership 2023).

[15] The total population of Santa Clara County living in a household was 1,879,358; when divided by the average household size of 2.78, the number of households is approximately 676,868.

Table 5. Housing Supply Estimates in the Housing Impact Area (2025)

City/County	2025 Total	2025 Vacant
Atherton	2,587	280 (10.8%)
Belmont	11,786	489 (4.1%)
Burlingame	13,991	732 (5.2%)
Campbell	18,575	866 (4.7%)
Cupertino	21,942	1,110 (5.1%)
Dublin	26,521	986 (3.7%)
East Palo Alto	8,273	446 (5.4%)
Fremont	81,876	3,189 (3.9%)
Foster City	13,816	679 (4.9%)
Gilroy	19,363	649 (3.4%)
Half Moon Bay	4,889	266 (5.4%)
Hillsborough	4,095	256 (6.3%)
Livermore	33,515	1,112 (3.3%)
Los Altos	12,056	636 (5.3%)
Los Altos Hills	3,197	231 (7.2%)
Los Gatos	14,043	775 (5.5%)
Menlo Park	14,209	1,143 (8.0%)
Milpitas	26,008	727 (2.8%)
Monte Sereno	1,384	83 (6.0%)
Morgan Hill	16,387	498 (3.0%)
Mountain View	40,534	3,124 (7.7%)
Newark	16,606	459 (2.8%)
Palo Alto	29,645	2,284 (7.7%)
Pleasanton	29,849	1,014 (3.4%)
Portola Valley	1,944	166 (8.5%)
Redwood City	33,516	1,814 (5.4%)
San Carlos	12,373	457 (3.7%)
San José	348,673	13,699 (3.9%)
San Mateo	43,817	2,040 (4.7%)
Santa Clara	54,109	3,328 (6.2%)
Saratoga	11,504	445 (3.9%)
Sunnyvale	64,268	3,005 (4.7%)
Union City	21,999	557 (2.5%)
Woodside	2,235	251 (11.2%)
HIA Total	***1,059,585***	***47,796 (4.5%)***
Santa Clara County Total[a]	***709,914***	***33,046 (4.7%)***

Source: California Department of Finance 2025b.

[a] This is the total of all cities and unincorporated areas within Santa Clara County.

Homes in cities with high vacancy rates may be prohibitively expensive for NASA ARC employees and students, meaning the pool of housing units may be smaller than indicated in Table 5. This is likely to introduce competition from other individuals who are seeking housing in the HIA.

The Build Alternatives propose the construction of new housing for students and faculty, which may alleviate some of the burden associated with absorbing new residents into the HIA. In turn, this increased housing stock could contribute to stabilized home prices and support housing affordability in the HIA.

3.3 Labor Supply and Employment

Employment growth is an important driver of housing demand, both regionally and locally. Unemployment rates have been low in the Bay Area. Recent data (as of July 2025) from the U.S. Bureau of Labor Statistics show that total unemployment in the San Francisco metro area increased from 4.0 percent in March 2024 to 4.1 percent in March 2025, while the unemployment rate in the San José metro area remained the same at 4.1 percent. The national unemployment rate increased from 3.9 to 4.2 percent during the same period (U.S. Department of Labor 2025). The number of construction jobs decreased in both metro areas from March 2024 to March 2025, with the number of construction jobs in San Francisco decreasing 4.0 percent and in San José decreasing 4.2 percent (U.S. Department of Labor 2025). Jobs in the professional and business services industry, which most likely includes construction jobs, also decreased in both metro areas between March 2024 and March 2025, with San Francisco down 1.7 percent and San José down 2.1 percent (U.S. Department of Labor 2025).

Table 6 presents the most recent available data on the number of employed persons in Santa Clara County and the Bay Area at large, along with ABAG projections regarding jobs that will be added by 2050, which are used throughout the analysis presented below.

Table 6. Employment Trends in Santa Clara County and the Bay Area (2015–2050)

	2015[a]	2024 (total employed persons)[b]	2040 (projected jobs)[c]	2050 (projected jobs)[a]	Growth (2024–2040)
Santa Clara County	1,099,000	999,346	1,478,600	1,610,000	479,254 (+32.4%)
Bay Area[d]	4,005,000	3,941,193	5,047,229	5,408,000	1,106,036 (+21.2%)

Sources:

a. The 2015 actual and 2050 projected from ABAG 2021.

b. The 2024 actual from U.S. Census Bureau 2024a (2024 American Community Survey).

c. The 2040 estimate has been projected in a secondary analysis, using total employment growth per 5-year period, as estimated by ABAG (2021).d. Includes San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, Solano, Napa, Sonoma, and Marin Counties. Note that this table considers estimates from the 5 year American Community Survey for consistency with Santa Clara County estimates, but should the Bay Area Council Economic Institute. 2024. Employed person estimate of 4,073,900 be considered, the 2024-2040 growth for the Bar Area, would remain similar at 21.9 percent.

As indicated in Table 6, projections for 2024 to 2040 show a steady increase in jobs in the Bay Area (21.9 percent). The projections for Santa Clara County identify a higher job gain (32.4 percent) compared with the Bay Area region.

Over the past 30 years, there have been periods where new home construction has not kept up with job growth, leading to a housing shortage in the region. At present, the ratio of jobs to housing units in the cities of Mountain View and Sunnyvale, based on 2024 employment numbers and 2025 housing stock data, is 1.21 and 1.37, respectively (U.S. Census Bureau 2024a).[16] In comparison, the ratio of jobs to housing units in Santa Clara County, based on 2024 employment numbers and 2025 housing stock data, is 1.41.[17] This means that for every housing unit in Mountain View and Sunnyvale and in Santa Clara County there are 1.21, 1.37, and 1.41 jobs (employed persons), respectively. Given that the number of employed residents in the Bay Area in 2024 was 4,073,900 (Bay Area Council Economic Institute 2024) and the number of households in the Bay Area was 2.9 million (2020 data from ABAG 2025b scaled to 2024, assuming a 0.5–1 percent annual growth rate), the Bay Area ratio of jobs to housing units is 1.4 [4,074,900/2,900,000 = 1.40]. Based on this context, there is not current evidence that the local region is experiencing a substantial shortage in housing relative to the number of workers, which would otherwise lead to longer commutes for employees living outside of Santa Clara County and an increase in housing prices and rental rates. Similarly, the lower value for Mountain View and Sunnyvale suggests a relatively higher availability of housing near the Project Site compared to other areas within Santa Clara County.

Table 7 presents Bureau of Labor Statistics employment estimates from May 2022, 2023, and 2024 for various construction occupations in San Benito and Santa Clara Counties (given that they are part of the San José-Sunnyvale-Santa Clara metropolitan statistical area; Bureau of Labor Statistics 2022, 2023, and 2024). The data indicate that some construction occupations experienced a decrease in employment between 2022 and 2024, with the highest losses being in the sheet metal worker and structural iron/steel worker occupations. Some of these perceived losses may be attributed to the reclassification of some roles as other occupations. Overall, the construction occupations required for construction of the project experienced growth of about 3.3 percent between 2022 and 2024 and can be expected to generally continue to grow until 2026, at which time the project is expected to break ground. As recently as July 2025, data indicated that construction jobs were among the highest-growing jobs month to month in San Benito and Santa Clara Counties, even as other occupations decreased (California Employment Development Department 2025b). Given the data, the region is expected to have an ample supply of construction trades workers for the anticipated start of project construction in 2026.

Table 7. Employment Growth in Construction Occupations (2022–2024)

San Benito and Santa Clara Counties (San José-Sunnyvale-Santa Clara MSA)	Year 2022	Year 2023	Year 2024	Percent Change (2022–2024)
Carpenters	5,230	4,230	4,800	-8.2%
Construction Laborers	4,570	4,470	4,100	-10.3%
Electricians	4,700	5,110	5,540	17.9%
Structural Iron and Steel Workers	250	300	210	-16.0%
Plumbers, Pipefitters, and Steamfitters	2,330	2,370	2,230	-4.3%
Operating Engineers and Other Construction Equipment Operators	1,180	1,090	1,350	14.4%

[16] The cities of Mountain View and Sunnyvale had 134,601 employed persons in 2023 (U.S. Census Bureau 2024a). Mountain View and Sunnyvale had 104,802 housing units in 2025, per Table 5 (134,601/104,802 = 1.28).

[17] Per Table 6, Santa Clara County had 999,346 employed persons in 2024. Santa Clara County had 709,914 units in 2025, per Table 5 (999,346/709,914= 1.41).

San Benito and Santa Clara Counties (San José-Sunnyvale-Santa Clara MSA)	Year 2022	Year 2023	Year 2024	Percent Change (2022–2024)
Cement Masons and Concrete Finishers	1,730	1,820	1,620	-6.4%
Roofers	1,290	1,390	1,670	29.5%
Sheet Metal Workers	1,120	1,030	860	-23.2%
Painters, Construction and Maintenance	2,310	2,040	2,600	12.6%
Supervisors of Construction and Extraction Workers	3,620	4,060	4,290	18.5%
Total	***28,330***	***27,910***	***29,270***	***3.3%***

Source: Bureau of Labor Statistics 2022, 2023, and 2024.
MSA = metropolitan statistical area

The project's construction workforce is expected to be derived from the greater San Francisco Bay Area. The project is not likely to induce workers to temporarily move closer to the Project Site during construction. A recent study indicates that more than 90 percent of construction workers in the Bay Area choose to drive during their commute, with a one-way drive averaging about 90 minutes (Argue 2024), suggesting that the existing construction labor force may choose to live outside of the urban center and commute rather than temporarily relocate closer to work.

The phases of construction under all Build Alternatives that would require the highest number of workers are those in which building cores and shells would be constructed. Under all Build Alternatives, the maximum number of construction personnel needed for these phases is estimated to be 80, most likely representing the various occupations found in Table 7. This small number of individuals relative to the overall Bay Area construction workforce (less than 0.3 percent as of 2024) is expected to be derived from the local workforce.

3.4 Local Economy

The Project Site is in the southern portion of the San Francisco Bay Area, between the cities of Sunnyvale and Mountain View in unincorporated Santa Clara County. In 2024, the population of the Bay Area was 7,648,014; the population of Santa Clara County was 1,926,325 (California Department of Finance 2025a). In 2023, the median household income in Santa Clara County was $159,674 and the per capita income was $77,018 (and 2024b). The total labor force in the San José-Sunnyvale-Santa Clara Metropolitan Statistical Area in 2023 was estimated to be 1,093,078 (U.S. Census Bureau 2023).

Table 8 depicts the 2023 distribution of household incomes in both Santa Clara County and the Bay Area. As of 2023, approximately 51.5 percent of households in Santa Clara County earned more than $150,000 annually; about 43.7 percent of households in the greater Bay Area earned more than $150,000 in 2023.

Table 8. Estimated Household Income Distribution (2023)

2023 Income	Santa Clara County	San Francisco Bay Area
Less than $10,000	3.3%	4.0%
$10,000 to $14,999	1.7%	2.4%
$15,000 to $24,999	3.0%	3.8%

2023 Income	Santa Clara County	San Francisco Bay Area
$25,000 to $34,999	3.2%	3.8%
$35,000 to $49,999	4.9%	6.0%
$50,000 to $74,999	8.6%	10.3%
$75,000 to $99,999	8.4%	9.6%
$100,000 to $149,999	15.2%	16.4%
$150,000 to $199,999	12.0%	12.1%
$200,000 or more	39.5%	31.6%
Median income (dollars)	***$154,954***	***$130,449***

Source: U.S. Census Bureau n.d.

Over the past 65 years, the economy of Santa Clara County has transitioned from agriculture to the technology, with Silicon Valley serving as the headquarters for some of the world's largest companies (Silicon Valley Chamber of Commerce 2025). Major employers in Santa Clara County include Alphabet, Cisco Systems, Ebay, Apple, and NASA (California Employment Development Department 2025a).

As of June 2023, NASA ARC had about 3,200 on-site employees and contractors (National Aeronautics and Space Administration 2023). The fiscal year 2021 NASA ARC budget was $805 million (National Aeronautics and Space Administration 2021). NASA had a 2021 California-wide economic impact of $15.2 billion (National Aeronautics and Space Administration 2023).

3.5 Local Governments and Facilities Budget Conditions

According to the 2002 PEIS, the NRP (i.e., where the Project Site is located) is under exclusive federal jurisdiction, meaning the federal government alone has jurisdiction and provides law enforcement and public safety services (National Aeronautics and Space Administration, Ames Research Center 2002b, pp. 3.14–3.25). Although UC Berkeley, as an educational agency of the State of California (State), would not be subject to real or personal property taxes, State and local sales and use taxes as well as income taxes apply in exclusive federal jurisdiction areas (National Aeronautics and Space Administration, Ames Research Center 2002b, pp. 3.14–3.26). In general, the City of Mountain View and Santa Clara County generate revenue primarily through sales and use taxes, utility users taxes, construction taxes, gas taxes, and motor vehicle in-lieu fees (National Aeronautics and Space Administration, Ames Research Center 2002b, pp. 4.14-9–4.14-43). In addition, the City of Mountain View assesses developer impact fees for the Mountain View-Whisman School District and Mountain View-Los Altos Union High School District. Each school district has a fee schedule applicable to those portions of NASA ARC within each district boundary but outside of exclusive federal jurisdiction.

As discussed in the 2002 PEIS, Mitigated Alternative 5,[18] the preferred alternative of the NADP, with application of Mitigation Measure SOCIO-1b, would generate a net surplus of $187,994 (2002 dollars) for the City of Mountain View. For Santa Clara County, the preferred alternative, with application of Mitigation Measure SOCIO-1b, would generate an increase in annual net revenue totaling $1,042,957 (2002 dollars). No net fiscal impacts on the San Francisco Water Department, East Bay Municipal Utility District, Sunnyvale Water Pollution Control Plant, or Palo Alto Regional Water Quality Control Plant were projected in the 2002 PEIS analysis.

NASA is required to comply with the funding mechanisms identified in the 2002 PEIS, unless otherwise noted below. For example, as part of its Congressional budget approval, NASA must seek to recover the costs of providing services to its partners (31 United States Code [U.S.C.] 9701 and Office of Management and Budget Circular A-25). Currently, NASA charges its tenants for services provided on demand and Institutional Shared Pool (ISP) costs for common levels of service provided throughout its property on an annual basis (e.g., security and law enforcement, fire department response and inspection, emergency medical response, first responder operations, common grounds [including recreational areas], roads, infrastructure maintenance and repairs, and basic environmental oversight), along with additional demand services above the common levels of service.

The 2024–2025 estimated budget revenues for the City of Mountain View and Santa Clara County are both depicted in Table 9. The adopted budget estimates that the City of Mountain View will earn about $452 million in revenue and transfers in fiscal year 2024–2025; about 34.6 percent of that revenue is projected to come from current property taxes. Santa Clara County is projected to earn about $11.4 billion in revenue in fiscal year 2024–2025. About 39.8 percent of Santa Clara County's revenue is expected to come from charges for services. For purpose estimating fiscal impacts for local jurisdictions from the project construction and operation, the analysis aggregated the three main entities around the Project Site: Mountain View, Sunnyvale, and the County of Santa Clara. In aggregate for the fiscal year 2024–2025, the annual comprehensive financial reports for Mountain View and Sunnyvale, and adopted budget for Santa Clara County indicate that general fund revenue across the three entities was about $583 million (County of Santa Clara 2024, Sunnyvale 2024, Mountain View 2024).

Table 9. Budget Revenues by Type (2024–2025 Adopted Budget)

Revenue Type	City of Mountain View[a]	Santa Clara County[b]
Aid From Government Agencies – Federal	—	$848,100,606
Aid From Government Agencies – State	—	$1,391,250,090
Charges for Services	$108,479,920	$4,543,870,378
Fines, Forfeitures, Penalties	$456,750	$8,982,500
Intergovernmental Revenues	$7,811,500	—
Licenses, Permits, Franchises	$16,520,300	$46,656,940
Other Financing Sources	—	$2,257,115,189

[18] Per 2002 PEIS Mitigation Measure SOCIO-1b, under Mitigated Alternative 5, NASA would require the provision of 1,120 townhomes and apartments in the Bay View area and 810 student apartments and dormitory units in the NRP area. If this level of housing cannot be achieved, NASA would commensurately scale back on the employment and student-generating components of the PEIS project.

Revenue Type	City of Mountain View[a]	Santa Clara County[b]
Revenue from Other Government Agencies	—	$114,133,454
Revenue from Use of Money/Property	—	$115,551,727
Taxes – Current Property	$156,511,600	$1,919,028,559
Taxes – Other than Current Property	$47,994,000	$158,706,632
Interfund Revenue	$30,388,490	—
Rents and Leases	$25,949,220	—
Investment Earnings	$25,602,741	—
Developer Fees and Contributions	$585,500	—
Other Revenue	$5,358,200	—
Transfers In	$26,492,296	—
Total	***$452,150,517***	***$11,403,396,075***

Sources:

a. City of Mountain View 2025a.

b. County of Santa Clara 2024.

Note: A portion of City of Mountain View revenue comprises Santa Clara County reimbursements and grants.

Figure 3-1
Commute Patterns by County
Berkeley Space Center at NASA Research Park

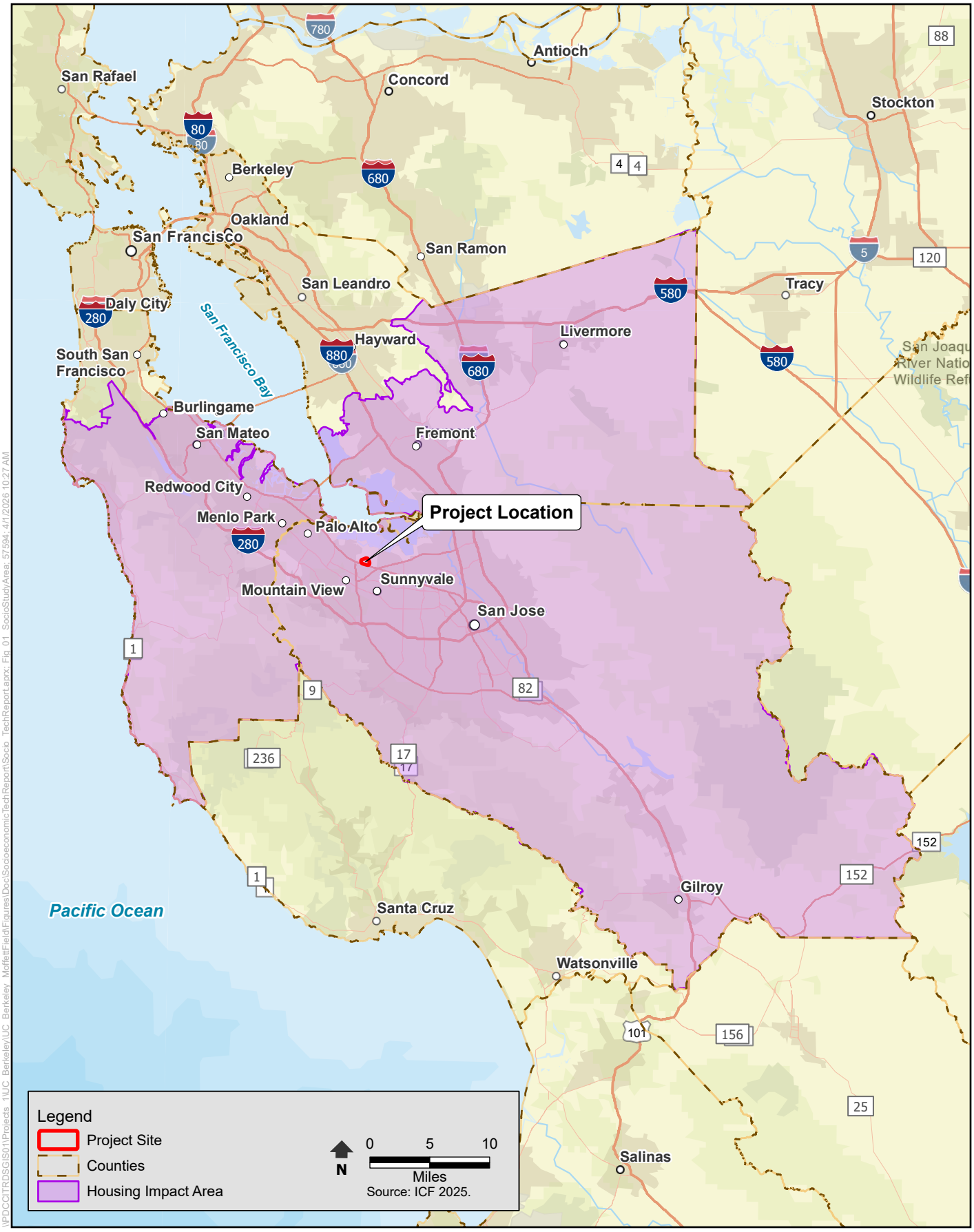


Figure 3-2
Housing Impact Area
Berkeley Space Center at NASA Research Park

Chapter 4
Regulatory Setting

NASA's Ames Research Center (ARC), including the area where the proposed action would be built and operated, is an area of exclusive federal jurisdiction. In the absence of an explicit waiver of sovereign immunity by Congress, state and local government regulations (e.g., city and county general plans, land use policies, zoning regulations, and state environmental laws) do not apply to areas of exclusive federal jurisdiction. Therefore, state and local government requirements will not be considered as applicable to the proposed action, when the proposed action and environmental effects are located on ARC jurisdictional property. This includes mitigation measures proposed in accordance with those state and local government regulations that are not applicable in areas of federal jurisdiction; such proposed mitigation measures are optional on the part of NASA. However, NASA may, at its discretion, expressly apply a state or local requirement for purposes of establishing a threshold or standard of significance and may elect to comply with mitigations measures required by state or local governmental agencies.

4.1 Federal

4.1.1 Title VI of the Civil Rights Act of 1964

Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race, color, or national origin in programs or activities that receive federal financial assistance.

4.1.2 NASA Ames Development Plan

The NADP details the transformation of the original 500-acre campus of NASA ARC and 1,500 acres of the former Naval Air Station Moffett Field into an integrated, dynamic research and education community. That transformation would be led by the establishment of the NRP, an R&D campus for partners from academia, industry, and non-profit organizations with shared goals in support of NASA's mission.

4.2 Local

4.2.1 Association of Bay Area Governments Projections

ABAG is responsible for forecasting changes in the Bay Area population and economy to help local governments prepare for an ever-changing environment. Plan Bay Area 2050 was adopted by the ABAG Executive Board and the MTC on October 21, 2021. The Plan Bay Area 2050 growth pattern shows the plan's projected household and job growth for the region looking out to 2050.

4.2.2 Association of Bay Area Governments Regional Housing Needs Allocation

ABAG conducts the RHNA process every 8 years, as required by State law. The heart of ABAG's work on the RHNA is developing the methodology for allocating a portion of the housing needs to each city, town, and county in the region.

4.2.3 Plan Bay Area 2050

Plan Bay Area 2050 is the region's long-range strategic plan. It focuses on the interrelated elements of housing, the economy, transportation, and the environment.

Chapter 5
Impact Analysis

This chapter identifies potential impacts on economic activity, housing demand, and the fiscal costs of local governments and economies associated with NASA ARC and the study area for each of the Build Alternatives.

5.1 Methodology

5.1.1 Effects on the Local Economy

Project analysis considers how construction and operation of each Build Alternative would affect the local economy by considering contributions to employment relative to the scale of development under each Build Alternative. The impact on the local economy is further studied using an economic modeling tool, IMPLAN.[19] To develop the inputs for IMPLAN, the analysis used data regarding daily one-way trips made by workers, heavy trucks, and supply trucks related to different construction activities. These trips were allocated to the annual full-time-equivalent (FTE) category for such activities. The information was then applied to classify the construction activities and allocate direct jobs to the appropriate construction sectors in IMPLAN. For example, construction of a parking structure is mapped to "construction of new commercial structures," while construction of a research building is mapped to "construction of new educational and vocational structures" in IMPLAN. For jobs involving operation and maintenance (O&M), IMPLAN sectors associated with R&D and the upkeep and support of the various buildings, including residential, research, and commercial buildings, were selected. Total labor income attributable to the construction phase was estimated from project cost and construction employment data. Subsequently, the aggregate expenditure on construction materials was calculated, and broader economic effects were assessed, using key indicators such as value added, total output, tax revenues, and total employment.

Buildout of the project would occur over four phases, spanning a total of approximately 14 years. Based on current information, it is anticipated construction would begin, at the earliest, in 2027 and be completed by 2040. However, based on information available at the time this report was prepared, economic impacts were quantified, assuming construction would begin in 2026 and be completed in 2039. The economic connectivity of the regional industries affected by project activities are likely very similar between these two construction periods; however, small differences would exist. Accordingly, the construction analysis reflects a conservative representation of emissions. This report identifies the actual modeled dates (i.e., construction beginning in 2026).

5.1.2 Housing Demand Impacts

To assess the impact of the Build Alternatives on the housing demand, this analysis relies on ABAG projections, California Department of Finance housing vacancy rates, and U.S. Census Bureau data. It also considers the compatibility of the NEPA Build Alternatives with the land uses from the 2002 PEIS.

[19] This IMPLAN analysis acknowledges that the build location is on federal land; however, the model does not differentiate between land types.

5.1.2.1 Construction

Given the short-term nature of construction projects, including the duration of this project (13.5 years), construction workers are expected to come from the existing labor force in the area. As discussed in Section 3.3*, Labor Supply and Employment*, the vast majority of Bay Area construction workers (more than 90 percent) commute by driving an average of 90 minutes one way, suggesting that there is an existing construction workforce within commutable distance to the Bay Area that would not require new accommodations during construction. Construction workers for the proposed action would therefore not result in a demand for housing. For purposes of housing demand analysis, all employees and residents generated by construction of the proposed action are conservatively assumed to live within the HIA. Construction worker calculations are incorporated consistent with other sections of this EIR/EIS, based on the Project Proponent construction estimate and IMPLAN data.

5.1.2.2 Operation

Per the thresholds of significance described in Section 5.2, below, a socioeconomic impact on housing demand is defined as the additional housing demand in the HIA generated by each Build Alternative. This technical report calculates project-generated household demand by following the approach used in the 2002 PEIS. This housing impact analysis first considers the number of employees and students (combined) generated by each Build Alternative. It is assumed that 1 project employee or student would occupy each of the 145 Student/Faculty Housing units; therefore, the number of occupants is subtracted from the total number of employees and students to calculate the number of employees and students requiring housing in the HIA.[20] The remaining employees and students would generate a household demand that would be calculated by dividing by 1.4, which was the number of employed residents by household in the Bay Area in 2024.[21] This process results in additional household demand in the HIA generated by the proposed action (Table 10).[22] This additional household demand is compared to the total number of households projected to be added to the HIA by 2040, which is when the Build Alternatives are expected to be fully operational. For the No-Action Alternative and all NEPA Build Alternatives, except the Build Alternative 1 No Student/Faculty Housing Sub-Alternative, the impact of net new students and employees introduced to the HIA is expected to represent less than 1 percent of new households by 2040. The number of currently vacant households, as discussed in Section 3.2, exceeds the number of households demanded under each of the proposed Build Alternatives; however, as previously discussed, many of these households may be located in areas that are prohibitively expensive for NASA ARC employees.

---

20 To account for anticipated partners/spouses and children of employees and students addressed elsewhere in the joint EIR/EIS, this analysis assumes an estimated 1 occupant would be a student or faculty member and up to 1.5 occupants could be their family/household members. Overall, there is an average occupancy of 2.5 persons per unit based on the following calculation: (two occupants per studio × 25 percent) + (two occupants per one-bedroom unit × 25 percent) + (three occupants per two-bedroom unit × 50 percent)/100 percent.

21 The number of employed residents in the Bay Area in 2024 (4,073,900) (Bay Area Council Economic Institute 2024) and the number of households in the Bay Area (2.9 million) (2020 data from ABAG 2025b scaled to 2024, assuming a 0.5–1 percent annual growth rate [4,074,900/2,900,000 = 1.40]).

22 Throughout this report, both the total and net project square generated employee and student values are presented. Total project values reflect that generated by the project, while net values account for the difference between the project generation when considering 42 existing employees.

In addition to new housing units within the HIA, project-generated household demand could be met by existing vacancies. As discussed in Section 3.2, *Population and Housing Characteristics,* there were 33,046 vacant housing units in Santa Clara County in 2025 (a 4.7 percent vacancy rate [refer to Table 5]) and 47,796 vacant housing units in the HIA (a 4.5 percent vacancy rate [refer to Table 5]).

Table 10. Additional Household Demand by Alternative

Alternative	Net New Employees and Students[a]	Residents in Proposed Student/ Faculty Housing[b]	Additional Household Demand in HIA[c]	Percentage of Total New Households in HIA 2025–2040[d]
NEPA No-Action Alternative[e]	626	0	447	0.13%
NEPA Build Alternative 1	6,132 (5,955 employees and 177 students)	145	4,276	1.24%
NEPA Build Alternative 1 with the Sub-Alternative	6,518 (6,331 employees, and 187 students)	0	4,656	1.35%
NEPA Build Alternative 2	3,384 (3,289 employees and 95 students)	145	2,314	0.67%
NEPA Build Alternative 2 with the Sub-Alternative	3,770 (3,665 and 105 students)	0	2,693	0.78%

Notes:
Short-Term Lodging, intended for visitors to the Project Site, is not considered in the housing impact calculation.
NEPA Build Alternative 1 would generate 177 students, and NEPA Build Alternative 2 would generate 95 students.

a. The 42 existing employees on the Project Site is deducted in this column.
b. Number of new employee and student residents assumed to be housed in proposed Student/Faculty Housing.
c. Equals net new employees and students (a) less residents in proposed Student/Faculty Housing (b) divided by employed residents per household for the Bay Area (1.4).
d. Total new households in HIA from 2025–2040 = 345,900, from Table 3.
e. Under the NEPA No-Action Alternative, 185,600 square feet of existing vacant buildings would be reoccupied at 3.6 employees per 1,000 square feet = 668 employees.

HIA = Housing Impact Area

The Project Site is one of the locations considered for redevelopment in the 2002 PEIS and within the scope of the analysis set forth in that document and the Record of Decision. The preferred alternative analyzed in the 2002 PEIS (i.e., Mitigated Alternative 5) anticipated 7,088 employees, 1,560 residents (which could be students/faculty), and 250 conference guests in the NRP.[23] The NADP (National Aeronautics and Space Administration, Ames Research Center 2002a) found that, under Mitigated Alternative 5, the preferred alternative, 810 residential units (student apartment and dormitory units) would be developed within the NRP to mitigate impacts of the NADP on the regional housing supply (refer to Mitigation Measure SOCIO-1b in the 2002 PEIS).

[23] Overall development of the NADP under Mitigated Alternative 5 would result in 1,930 residential units, 4,909 residents, and 7,088 employees.

NASA previously allocated approximately 1.4 million square feet of permitted uses for the proposed project, consisting of approximately 500,000 square feet of office/high density R&D uses; 514,700 square feet of educational uses; 250,000 square feet of conference center uses; and 144,200 square feet of retail/support uses (NASA 2025). As of 2025, the remaining developable area programmed in the NADP for NASA ARC that has not been allocated towards any current projects include approximately 2.7 million square feet consisting of 340,345 square feet for historic district space; 21,945 square feet for educational uses; 114,710 square feet for Hangar One uses; 1,843,000 square feet for housing; 12,000 square feet for public uses; 320,981 square feet of office/high density R&D uses; 12,000 square feet of retail; and 71,000 square feet of technical/low density office/R&D uses.

The proposed 145 Student/Faculty Housing units would contribute to the residential units programmed in the NADP that have not yet been developed in NASA ARC.[24] The proposed Student/Faculty Housing would be used by UC students or faculty on a short-term basis (i.e., academic calendar year, semester, or summer). Housing would prioritize UC students and faculty affiliated with the NEPA Build Alternative as well as on-site federal employees and student interns, per the Project Proponent's enhanced-use lease requirements. The Student/Faculty Housing would include a mix of studio, one-bedroom, and two-bedroom apartments as well as amenity space. Based on the above, the proposed Student/Faculty Housing units were programmed in the NADP and analyzed in the 2002 PEIS; thus, the proposed Student/Faculty Housing units have previously been considered in planning processes.

5.1.3 Fiscal Impact on Local Governments and Facilities

The analysis relies on feedback supplied by NASA and other public service providers regarding procedures to compensate for local government and facilities uses; it also considers the 2002 PEIS fiscal impact analysis. Section 3.5, *Local Governments and Facilities Budget Conditions*, provides the funding mechanisms NASA is committed to, which do not alter the commitments previously analyzed in the 2002 PEIS. Fiscal impacts on local governments analyzed herein focus on the government of Santa Clara County.

The Project Site is one of the locations considered for redevelopment in the 2002 PEIS and within the scope of the analysis set forth in that document and the Record of Decision. The preferred alternative analyzed in the 2002 PEIS (i.e., Mitigated Alternative 5) anticipated 7,088 employees, 1,560 residents (which could be students/faculty), and 250 conference guests in the NRP.[25]

NASA previously allocated approximately 1.4 million square feet of permitted uses for the proposed project, consisting of approximately 500,000 square feet of office/high density R&D uses; 514,700 square feet of educational uses; 250,000 square feet of conference center uses; and 144,200 square feet of retail/support uses (NASA 2025). Based on the above, the proposed project includes the types of land uses at the Project Site consistent with the types of land uses that were evaluated in the 2002 PEIS. However, the intensity of development for employment-generating land uses (i.e., Research and Office Uses) and housing (i.e., Student/Faculty Housing) under the proposed project is generally greater than the development intensity NASA allocated for the proposed project.

[24] The 100 Short-Term Lodging units would never be used for residential occupancy and are therefore not considered in this analysis.

[25] Overall development of the NADP under Mitigated Alternative 5 would result in 1,930 residential units, 4,909 residents, and 7,088 employees.

As of 2025, the remaining developable area programmed in the NADP for NASA ARC that has not been allocated towards any current projects include approximately 2.7 million square feet consisting of 340,345 square feet for historic district space; 21,945 square feet for educational uses; 114,710 square feet for Hangar One uses; 1,843,000 square feet for housing; 12,000 square feet for public uses; 320,981 square feet of office/high density R&D uses; 12,000 square feet of retail; and 71,000 square feet of technical/low density office/R&D uses. Based on the above, the amount proposed Student/Faculty Housing under the proposed project is less than the remaining unallocated space for housing programmed in the NADP for NASA ARC. However, the amount of proposed employment-generating land uses (i.e., Research and Office uses) under the proposed project is greater than the remaining unallocated space for office/high density R&D programmed in the NADP for NASA ARC.

As shown in Table 11, the Build Alternatives would generate new K–12 students as a result of the students and faculty at the Project Site. These public school students would be concentrated on-site Alternative-specific impacts are analyzed in Section 5.3.

Table 11. Additional K–12 Students by Alternative

Alternative	New Elementary and Middle School Students	New High School Students	Total New K–12 Students
NEPA No-Action Alternative	0	0	0
NEPA Build Alternative 1	18	7	25[26]
NEPA Build Alternative 1 with the Sub-Alternative			
NEPA Build Alternative 2	18	7	25[27]
NEPA Build Alternative 2 with the Sub-Alternative	—	—	—

Beyond growth related to on-site development, project-related population growth is expected to occur throughout the HIA, including outside of Santa Clara County, Sunnyvale, and Mountain View (impacts on all of which are discussed in Section 4.14.C of the 2002 PEIS). As shown in Section 3.1, Table 2, and Figure 3-1, more than 76 percent of employees are expected to commute from across Santa Clara County. The commuters with the next-highest percentages are estimated to reside in Alameda County (7.1 percent of commuting employees) and San Mateo County (5.9 percent of commuting employees). The Build Alternative that would introduce the most people to the HIA population is the NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative, which would bring an estimated 6,560 total employees and students to the area (6,518 net new, per Table 10). Following the commute distribution described, an estimated 466 employees would be expected to reside in Alameda County, with 387 employees in San Mateo County. Although both of these figures would impose a non-zero additional strain on public services in each county, both counties are projected to experience household growth of 1 percent or more per year through 2040, separately from the activity of any of the Build Alternatives (see Table 3). Public services such as utilities and schools are therefore assumed to be accounting for growth in households and

[26] Calculations: 12 elementary students= (145 x 0.085); 6 middle school students= (145 x 0.039); and 7 high school students= (145 x 0.047).
[27] Ibid.

population, regardless of the population introduced by any of the Build Alternatives, and are expected to be able to absorb the small additional populations that may be introduced.

5.2 Thresholds of Significance

To evaluate potential direct effects under NEPA, the proposed action would be considered to have a substantial adverse effect if it would result in any of the conditions listed below.

- Create a significant detriment or benefit to the local economy.
- Generate workers who would not be able to find on-site housing or represent more than 1 percent of the predicted new households in the identified HIA between 2025 and 2040. This would be considered significant due to the presence of a jobs-housing imbalance in the region (see Section 3.2*, Population and Housing Characteristics*).
- Create a cost impact on a local government or school district that amounts to more than 0.5 percent of that jurisdiction's general fund or revenue limit.

5.3 Impacts

5.3.1 NEPA No-Action Alternative

Under the NEPA No-Action Alternative, the proposed action would not be constructed and operated at the Project Site. However, the on-site buildings that are currently operational would continue to be operational, and the on-site buildings that are currently vacant (185,600 square feet) would be reoccupied pursuant to the NADP. This analysis assumes that reoccupancy of the existing buildings would not require any construction activity. Because there would be no construction activity under this alternative, analysis for this alternative does not consider supplemental IMPLAN modeling.

5.3.1.1 Effect on Local Economy

Overall, reoccupancy of the buildings that are currently vacant would generate some benefit to the local economy. Employees associated with the reoccupied buildings would directly and indirectly generate economic activity through both their spending habits and possible relocation to the HIA. This economic activity would occur at a lesser rate under the NEPA No-Action Alternative compared with the NEPA Build Alternatives because there would be fewer employees under the NEPA No-Action Alternative. However, without major construction activity, there would be no related construction spending under the NEPA No-Action Alternative as there would be under the NEPA Build Alternatives. Overall, the No-Action Alternative is not expected to have a significant detrimental or beneficial effect on local economies because the estimated 626 net new workers added under this alternative represents a negligible percentage of Santa Clara County's projected job growth (i.e., 466,891 new jobs by 2040).

5.3.1.2 Effect on Housing Demand

Overall, reoccupancy of the buildings that are currently vacant would generate some housing demand within the HIA. Employees associated with the reoccupied buildings could reside within the HIA at a rate similar to that calculated under the NEPA Build Alternatives but would generate a smaller demand because there would be fewer employees under the NEPA No-Action Alternative.

The reoccupancy of buildings under the NEPA No-Action Alternative would generate approximately 626 net new employees.[28] This analysis conservatively assumes that all of these employees would need new housing in the HIA. The net household demand in the HIA generated by the NEPA No-Action Alternative would be 447, which is 0.13 percent of total new households in the HIA from 2025 to 2040.[29] In addition to the new housing units in the HIA, as discussed in Section 3.2, *Population and Housing Characteristics,* there were 33,046 vacant housing units in Santa Clara County in 2025 and 47,796 vacant housing units in the HIA, which could also serve the household demand generated by the NEPA No-Action Alternative. The housing demand generated by the NEPA No-Action Alternative would not represent more than 1 percent of the predicted new households in the identified HIA between 2025 and 2040 and therefore would not exceed the threshold for significant adverse effects with respect to housing.

5.3.1.3 Fiscal Impact on Local Governments and Facilities

Overall, reoccupancy of the buildings that are currently vacant would result in a very limited increase in local sales tax revenues. Without construction activity, there would be no nexus for additional fees paid to local jurisdictions. Employees and visitors associated with the reoccupied buildings would contribute to local sales tax revenues at a lesser rate than they would under the NEPA Build Alternatives because there would be fewer employees. Under the NEPA No-Action Alternative, there would be a minimal effect on local government fiscal resources.

5.3.2 NEPA Build Alternative 1

5.3.2.1 Effect on Local Economy

Construction and operation of NEPA Build Alternative 1 would result in economic growth. Construction under NEPA Build Alternative 1 would have a minor beneficial though temporary impact on the local economy. Direct expenditures for construction-related materials would benefit local suppliers, and secondary spending by workers would benefit businesses near the Project Site, such as gas stations and restaurants. However, as presented below, IMPLAN modeling suggests that NEPA Build Alternative 1 would have a negligible impact on the total labor force as well as employment in the region because of the small number of construction jobs created. The IMPLAN results, presented below, suggest that the project would create, on average, 457 direct construction jobs annually (see Table 13). This represents a 1.6 percent increase compared to the 29,270 available construction jobs in the area (see Table 7). Ultimately, the beneficial impact of construction work on the local economy and employment would be temporary and limited to the 14-year duration of construction.

Operation of NEPA Build Alternative 1 would involve hiring approximately 6,132 new employees and students, or 5,329 more employees and 177 more students than the NEPA No-Action Alternative (refer to Table 10). Although the NEPA Build Alternative 1 would increase the number of employees, the

[28] This excludes the 42 employees or tenants currently on-site and includes only the approximately 626 employees who would be generated by the NEPA No-Action Alternative. The number of employees generated by the NEPA No-Action Alternative is based on a generation rate of 3.6 employees per 93 square meters (i.e., 1,000 square feet), as used in the 2002 PEIS, and the approximately 185,600 square feet of unoccupied buildings currently on-site.

[29] The net household demand in the HIA generated by NEPA No-Action Alternative 1 (447 units [see Table 10]) divided by the total new households in the HIA from 2025 to 2040 (345,900 [derived from Table 3]) equals the percentage (0.13 percent [from Table 10]).

overall increase would be relatively minor in the context of Santa Clara County's projected job growth, which is 1.3 percent of the 466,891 projected new jobs by 2040. The IMPLAN results show that, during O&M of all four phases, the project would create, on average, a total of 1.95 direct, indirect, and induced jobs for each direct job annually (see Table 16). Overall, NEPA Build Alternative 1 would result in an increase in the number of permanent personnel working at the Project Site and potentially a minor increase in the number of occupied households in Santa Clara County. Due to the small percentage of economic growth by employees, the additional personnel under NEPA Build Alternative 1 are anticipated to result in a minor beneficial impact on the local economy.

NEPA Build Alternative 1 IMPLAN Results

Table 12 presents the NEPA Build Alternative 1 employment inputs from NASA and the estimated cost of materials used for the economic analysis of construction investments in the region.

Table 12: NEPA Build Alternative 1 Construction Input, 2026–2039

Input	Cumulative Total
Employment (FTE)	
Activities such as grading, demolition, trenching, laying foundations, core and shell, architectural coatings, etc., for research buildings	4,069
Activities such as grubbing, land clearing, excavation, drainage, subgrade, and paving of roads	502
Activities such as grading, demolition, trenching, laying foundations, core and shell, architectural coatings, etc., for commercial structures, such as hotels, and parking structures	722
Activities such as grading, demolition, trenching, laying foundations, core and shell, architectural coatings, etc., associated with residential buildings	455
Construction activity such as trenching	316
Construction activity such as hauling	304
Road drainage and subgrade	36
Total Employment	***6,404***
Material Costs ($ million)	***$1,650***

The total project cost for NEPA Build Alternative 1 was estimated at $2.75 billion. Table 13 presents the projected employment impact from construction investments in the region. The investment is expected to support more than 11,300 cumulative job-years in the region over the 14-year construction period from 2026 to 2039, averaging slightly more than 800 jobs per year.

Table 13: NEPA Build Alternative 1 Construction Employment Impact, 2026–2039

Job Type	Total Job-Years (14 years)	Average Number of Annual Jobs
Direct	6,404	457
Indirect	2,963	212
Induced	2,016	144
Total	***11,383***	***813***

Table 14 shows the cumulative economic impact from construction investments in the region. Over the duration of the project, capital investments are projected to result in approximately $1.2 billion in additional labor income, $2 billion in value-added gross domestic product (GDP), $4.3 billion in additional economic output, and around $425 million in additional tax revenues. The direct impact on labor income, GDP, and output is estimated to be approximately $713 million, $1.03 billion, and $2.7 billion, respectively.

Table 14: NEPA Build Alternative 1 Cumulative Economic Impact, 2026–2039 ($ million)

	Labor Income	Value Added	Industry Output	Total Tax Revenue
Direct	$713	$1,036	$2,751	$198
Indirect	$366	$650	$1,100	$155
Induced	$171	$319	$461	$72
Total	***$1,250***	***$2,004***	***$4,311***	***$425***

In Santa Clara County alone, the investment is anticipated to generate more than 9,900 cumulative job-years. Although all directly created positions would be located within Santa Clara County, a portion of the indirect and induced employment opportunities would extend to other counties in the region. The majority of new jobs would be concentrated in the construction sector, with additional roles emerging in transportation, architectural and engineering services, as well as retail establishments specializing in building materials.

Table 15 presents the NEPA Build Alternative 1 employment inputs from NASA and the estimated cost of materials used for the economic analysis of O&M investments in the region.

Table 15: NEPA Build Alternative 1 Operation and Maintenance Input

Input	Employment (FTE)
Maintenance of non-residential structures	150
Maintenance of residential structures	150
Maintenance of streets, utilities	150
Facility support services	150
Research and development	5,397
Total O&M Employment	***5,997***

Table 16 presents the projected economic impacts from O&M activities in the region. The investment is expected to support more than 11,700 cumulative job-years in the region annually, starting in 2040. Some O&M employment is projected to begin with Phase 1 in 2031.

Table 16: NEPA Build Alternative 1 Operation and Maintenance Employment Impact

Job Type	Total Job-Years	Santa Clara Job-Years
Direct	5,997	5,997
Indirect	2,241	1,902
Induced	3,493	2,542
Total	***11,732***	***10,441***

Table 17 shows the annual economic impact from O&M activities in the region. Once all phases of the project are operational, annual activity is projected to result in approximately $2.2 billion in additional labor income, $3.2 billion in value-added GDP, $4.4 billion in additional economic output, and $617 million in additional tax revenues. The direct impact on labor income, GDP, and output is estimated to be approximately $1.5 billion, $2.1 billion, and $2.8 billion, respectively.

Table 17: NEPA Build Alternative 1 Operation and Maintenance Economic Impact ($ million)

	Labor Income	Value Added	Industry Output	Total Tax Revenue
Direct	$1,544	$2,115	$2,847	$388
Indirect	$363	$556	$792	$104
Induced	$300	$558	$804	$125
Total	***$2,207***	***$3,229***	***$4,443***	***$617***

In Santa Clara County, O&M investments lead to annual employment of about 10,440 job-years. The majority of jobs created are in scientific R&D services, maintenance and repair, and facilities support services sectors.

5.3.2.2 Effect on Housing Demand

During construction of NEPA Build Alternative 1, the average annual number of workers required would be 457. As addressed under the analysis of effects on the local economy (Section 5.3.2.1), these workers are anticipated to be sourced from the local workforce (1.6 percent of the workforce). However, even if all workers were "new" and required housing in the HIA, the 457 employees would represent less than 1 percent of anticipated 345,900 new households in the HIA (see Table 3). Therefore, the construction phase of NEPA Build Alternative 1 would not exceed the housing significance threshold.

Under operation of NEPA Build Alternative 1, up to approximately 6,132 employees and students would work at NASA ARC. This analysis conservatively assumes that none of these employees or students would be existing residents of the HIA. As a result, all of these employees and students would need housing in the HIA. Specifically, 145 employees and students would be expected to find short-term on-site housing in the 145 proposed Student/Faculty Housing units (at 2.5 occupants per unit, it is conservatively assumed the other 1.5 occupants are partners/spouses or children), with the remaining 5,987 employees and students (i.e., 4,276 households)[30] requiring housing elsewhere in the HIA. The net household demand in the HIA generated by NEPA Build Alternative 1 would be 1.124 percent of the total new households in the HIA from 2025 to 2040.[31] The housing demand generated by NEPA Build Alternative 1 would represent more than 1 percent of the predicted new households in the identified HIA between 2025 and 2040, thereby exceeding the housing significance threshold.

[30] Households are calculated by dividing the number of employees and students by the number of employed residents per household for the Bay Area in 2024 (1.4 [see Table 10]).

[31] The net household demand in the HIA generated by NEPA Build Alternative 1 (4,276 units [see Table 10]) divided by the total new households in the HIA from 2025 to 2040 (345,900 [derived from Table 3]) equals the percentage (1.24 percent [from Table 10]).

Although this alternative would generate workers who would not be housed on-site and who would represent more than 1 percent of the predicted new households in the HIA through 2015, there are some nuances to consider, including the existing housing vacancies in the HIA, the remaining undeveloped sites at NASA ARC, and the nature of the housing imbalance in the region. Regarding project demand for housing units in the HIA, as discussed in Section 3.2*, Population and Housing Characteristics,* there were 33,046 vacant housing units in Santa Clara County in 2025 and 47,796 vacant housing units in the HIA, which could serve household demand (4,276 households) generated by NEPA Build Alternative 1. As noted in Section 5.1.2, *Housing Demand Impacts*, the remaining developable area programmed in the NADP for NASA ARC that has not been allocated towards any current projects includes approximately 1,843,000 square feet for housing as of 2025. Given that projects are developed at different times, there will inevitably be temporary periods of imbalance. The NEPA Build Alternative 1 facilitates the overall vision of the NADP, a planning-level document, by developing an underutilized site with land uses consistent with the NADP. As further noted in Section 3.3, *Labor Supply and Employment,* the housing imbalance is at a regional level and varies by jurisdiction; based on current rates, there no longer seems to be a substantial job-housing imbalance in the region.[32] Although this is a planning-level threshold and NASA could achieve an improved balance for NASA ARC through future projects, there is no available mitigation for the Project Proponent to pursue to support increased housing to offset the demand.

5.3.2.3 Fiscal Impact on Local Governments and Facilities

The Project Site is one of the parcels considered for redevelopment in the 2002 PEIS for the NADP. Although NEPA Build Alternative 1 proposes a higher amount of square footage, the land uses are within the scope of the analysis set forth in the document and the ROD. As discussed in Section 5.1.1, *Effects on the Local Economy,* the construction and operational cost numbers in the 2002 PEIS were updated for the IMPLAN modeling. Based on economic modeling in IMPLAN, total tax revenues generated from construction activities, including federal, State, and local taxes in Santa Clara County, amount to $425 million, averaging $30.4 million annually. The total tax revenue from O&M activities is about $617 million annually.

As addressed in Section 3.5, the fiscal year 2024–2025 adopted budget for Santa Clara County, Sunnyvale, and Mountain View indicates that general fund revenue was about $583 million collectively (County of Santa Clara 2024, Sunnyvale 2024, Mountain View 2024). When excluding State and federal taxes, the cumulative total for local tax from construction activities is $59 million (about 14 percent of total tax revenue), with an annual average contribution of $4.3 million (a contribution rate of 0.7 percent of local taxes a year),[33] and the local tax from the O&M activities is amounts to $43 million annually (about 7.3 percent of the total tax revenue). Although project-specific tax break exemptions at the Project Site may reduce the annual contributions, and the ultimate allocation between jurisdictions is unclear and subject to where future employees reside and do business, based on the above modeling by IMPLAN, these additional tax revenues are included. The general fund revenue across the three main communities would increase by roughly 0.7 percent in a year with construction and 7.3 percent during years with all four phases of O&M activities.

[32] As detailed in Section 3.3, for every housing unit in Mountain View, Sunnyvale, and Santa Clara County, there are 1.21, 1.37, and 1.41 employed persons, respectively,

[33] *Local tax* refers to the revenue collected by a county, city, township, village government, public school district, or fire district. *Total tax* refers to the revenue collected by federal, State, and local governments.

The anticipated tax revenues discussed above would be offset by additional use of public services and facilities. NEPA Build Alternative 1 would generate 145 Student/Faculty Housing units (with 2.5 occupants per unit) and have a corresponding increase in demand for public services. The Project Proponent would compensate NASA for services provided to the proposed project through the ISP. The Project Proponent would comply with the requirements of the ISP on an annual basis. Payment of the ISP fees would address any increased demand on NASA services as a result of NEPA Build Alternative 1. Furthermore, the demand for 4,276 housing units under this alternative would be spread throughout the HIA, constituting a negligible marginal cost increase in the HIA.[34] The increase in the number of new residents across the County is expected to be offset by the growth in tax revenue from construction as well as operation, resulting in negligible service impacts.[35] The potential tax revenues for County and state jurisdictions from NEPA Build Alternative 1 would far exceed the potential increased costs from the use of government facilities. NEPA Build Alternative 1 would not result in a cost impact on a local government that would amount to more than 0.5 percent of a jurisdiction's general fund or revenue limit. In addition, the proposed Student/Faculty Housing is expected to generate 25 additional K–12 students that would attend Mountain View-Whisman School District (MVWSD) and Mountain View-Los Altos Union High School District (MVLA). Enrollment across MVLA's comprehensive high schools exceeds total capacity at those schools.[36] NEPA Build Alternative 1 could generate approximately seven new high-school students in MVLA. Therefore, it is likely that this increase in enrollment would exceed school capacity levels if any of the students enroll in Mountain View High School. Even if all seven new students attend Mountain View High School, this would represent less than 1.0 percent increase in enrollment at Mountain View High School. However, high-school aged students would likely attend various schools throughout MVLA and would not affect one individual school. In addition, due to the nature of the proposed project, it is not anticipated that the proposed project would generate school-aged children. In addition, the increase in employment opportunities could result in indirect impacts on schools because a small number of employees (with school-aged children) may choose to move to Mountain View to be closer to their work location. NEPA Build Alternative 1 would result in up to 6,132 net new employees and university students on-site. It is anticipated that that the majority of NEPA Build Alternative 1 employees already live in the San Francisco Bay Area and that the net number of new employees that would choose to relocate to Mountain View would not be substantial enough to generate unplanned population growth and result in a substantial increase in the demand for school services. Furthermore, it would not be easy for families of employees who do not reside in the city of Mountain View to send their children to school at MVWSD or MVLA schools; they would be required to request an inter-district transfer from their school district to send their school-aged children to schools in Mountain View. The likelihood of a new inter-district transfer into MVWSD being approved or wait listed is low.[37] In addition, given that both high schools in MVLA are close to

[34] For context, the student count for Santa Clara County is 253,000, according to 2025 data from the California Department of Education (https://www.cde.ca.gov/ds/ad/cefenrollgradetype.asp).

[35] The 2002 PEIS explored the recreational expenses of the City of Mountain View by estimating per capita expenses and comparing to tax revenue. This assessment over estimates the impacts of new residents because the majority of residents would be outside the Mountain View area. The increase in expenses is estimated to be less than 10 percent of the incremental tax revenue generated by the facility.

[36] Mike Mathiesen, Associate Superintendent – Business, Mountain View Los Altos High School District. Personal Communication, June 2, 2025.

[37] Mountain View Whisman School District. 2026. *Interdistrict Transfers*. Available: https://www.mvwsd.org/services_and_requests/register_a_student/interdistrict_transfers. Accessed: March 16, 2026.

or exceeding capacity, there are very few slots available for inter-district transfers.[38] Nonetheless, although NEPA Build Alternative 1 would not result in substantial population growth, and the increases in enrollment across MVLA and MVWSD is anticipated to be 1.0 percent or less, NEPA Build Alternative 1 would result in an increase in the demand for public school services. This impact would be potentially significant.

5.3.3 NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative

5.3.3.1 Effect on Local Economy

Construction of the NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative would have a temporary beneficial effect on the local economy similar to that of NEPA Build Alternative 1. As with the NEPA Build Alternative 1, the IMPLAN results for this Sub-Alternative, presented below, suggest that the project would create, on average, 457 direct construction jobs annually (see Table 19) compared to the 29,270 available construction jobs in the area (see Table 7), a 1.6 percent increase.

Operation of the NEPA Build Alternative 1 Sub-alternative would generate more new employees and students than NEPA Build Alternative 1 (6,518 vs. 6,132), or 5,705 more employees and 187 more students than the NEPA No-Action Alternative. Similar to the NEPA Build Alternative 1, the new 6,331 permanent employees at the Project Site under the Sub-Alternative would be a small percentage of Santa Clara County's projected job growth, accounting for only 1.4 percent of the 466,891 projected new jobs by 2040. The IMPLAN results show that, during O&M for all four phases, the project would create, on average, a total of 1.95 direct, indirect, and induced jobs for each direct job annually (see Table 21). In summary, the Sub-Alternative would result in an increase in the number of permanent personnel working at the Project Site and potentially a minor incremental increase in the number of occupied households in Santa Clara County. Given the small percentage associated with economic growth from employees, the additional personnel under the NEPA Build Alternative 1 No Student/ Faculty Housing Sub-Alternative are anticipated to result in a minor beneficial impact for the local economy.

NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative IMPLAN Results

Table 18 presents the NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative employment inputs from NASA and the cost of materials used for the economic analysis of construction investments in the region.

Table 18: NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative Construction Input, 2026–2039

Input	Cumulative Total
Employment (FTE)	

[38] MVLA School District. 2026. *Transfer Process and Policies*. Available: https://www.mvla.net/Departments/Educational-Services/Policies-and-Procedures/Transfer-Process-and-Policies/. Accessed: March 16, 2026.

Input	Cumulative Total
Activities such as grading, demolition, trenching, laying foundations, core and shell, architectural coatings, etc., for research buildings	4,069
Activities such as grubbing, land clearing, excavation, drainage, subgrade, and paving of roads	502
Activities such as grading, demolition, trenching, laying foundations, core and shell, architectural coatings, etc., for commercial structures, such as hotels, and parking structures	722
Activities such as grading, demolition, trenching, laying foundations, core and shell, architectural coatings, etc., associated with residential buildings	455
Construction activity such as trenching	316
Construction activity such as hauling	304
Road drainage and subgrade	36
Total Employment	***6,404***
Material Costs ($ Million)	***$1,650***

Table 19 presents the NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative projected employment impact from construction investments in the region. The investment is expected to support more than 11,300 cumulative job-years in the region over the 14-year construction period from 2026 to 2039, averaging slightly more than 800 jobs per year.

Table 19: NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative Construction Employment Impact, 2026–2039

Job Type	Total Job-Years (14 years)	Average Annual Jobs
Direct	6,404	457
Indirect	2,963	212
Induced	2,016	144
Total	***11,383***	***813***

Table 20 shows the cumulative economic impact from construction investments in the region under the NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative. Over the duration of the project, capital investments are projected to result in approximately $1.2 billion in additional labor income, $2 billion in value-added GDP, $4.3 billion in additional economic output, and around $425 million in additional tax revenues. The direct impact on labor income, GDP, and output is estimated to be approximately $713 million, $1 billion, and $2.7 billion, respectively.

Table 20: NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative Cumulative Economic Impact, 2026–2039 ($ million)

	Labor Income	Value Added	Industry Output	Total Tax Revenue
Direct	$713	$1,036	$2,751	$198
Indirect	$366	$650	$1,100	$155
Induced	$171	$319	$461	$72
Total	**$1,250**	**$2,004**	**$4,311**	**$425**

In Santa Clara County alone, the investment is anticipated to generate more than 9,900 cumulative job-years. Although all directly created positions would be located within Santa Clara County, a portion of the indirect and induced employment opportunities would extend to other counties in the region. The majority of new jobs would be concentrated in the construction sector, with additional roles emerging in transportation, architectural and engineering services, as well as retail establishments specializing in building materials.

Table 21 presents the NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative employment inputs from NASA and the cost of materials used for the economic analysis of O&M activities in the region.

Table 21: NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative Operation and Maintenance Input

Input	Employment (FTE)
Maintenance of non-residential structures	159
Maintenance of residential structures	159
Maintenance of streets, utilities	159
Facility support services	159
Research and development	5,735
Total O&M Employment	***6,371***

Table 22 presents the projected economic impacts from O&M activities in the region under the NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative. The investment is expected to support more than 11,700 cumulative job-years in the region annually, starting in 2040. Some O&M employment is projected to begin with Phase 1 in 2031.

Table 22: NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative Operation and Maintenance Employment Impact

Job Type	Total Job-Years	Santa Clara Job-Years
Direct	6,371	6,371
Indirect	2,381	2,021
Induced	3,712	2,701
Total	**12,464**	**11,092**

Table 23 shows the annual economic impact from O&M activities in the region. Once all phases of the NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative are operational, annual activity is projected to result in approximately $2.3 billion in additional labor income, $34 billion in value-added GDP, $4.7 billion in additional economic output, and $656 million in additional tax revenues. The direct impact on labor income, GDP, and output is estimated to be approximately $1.6 billion, $2.2 billion, and $3 billion, respectively.

Table 23: NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative Operation and Maintenance Economic Impact ($ million)

	Labor Income	Value Added	Industry Output	Total Tax Revenue
Direct	$1,641	$2,247	$3,025	$412
Indirect	$386	$590	$842	$110
Induced	$318	$593	$854	$133
Total	***$2,345***	***$3,431***	***$4,720***	***$656***

In Santa Clara County, the O&M investments lead to annual employment totaling 11,092 cumulative job-years. The majority of the jobs created are in scientific R&D services, maintenance and repair, and facilities support services sectors.

5.3.3.2 Effect on Housing Demand

Similar to NEPA Build Alternative 1, the average annual number of workers required for the construction phase of the NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative would be 457. As addressed under NEPA Build Alternative 1, even if all workers were "new" and required housing in the HIA, the 457 employees would represent less than 1 percent of anticipated 345,900 new households in the HIA (see Table 3). Therefore, the construction phase of the NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative would not exceed the housing significance threshold.

Operation of the NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative would generate approximately net new 6,518 employees and students. This analysis conservatively assumes all of these employees and students would need housing in the HIA. Although housing is not proposed under the Sub-Alternative, operation would generate a level of housing demand amounting to 4,656 households,[39] or 1.35 percent of the total number of new households in the HIA from 2025 to 2040.[40] The housing demand generated by the NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative would represent more than 1 percent of the predicted new households in the identified HIA between 2025 and 2040, thereby exceeding the threshold, similar to NEPA Build Alternative 1 but with a greater exceedance.

5.3.3.3 Fiscal Impact on Local Governments and Facilities

The NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative would generate fees related to the additional 130,000 square feet of Research and Office Uses instead of the 130,000 square feet of Student/Faculty Housing in Subarea 6 under NEPA Build Alternative 1. Because the Sub-Alternative would still be subject to the NASA fee schedule, fiscal effects would be similar to those of NEPA Build Alternative 1, although with fees calculated on different land use types. Based on the economic modeling in IMPLAN, total tax revenues generated from construction activities,

[39] Households are calculated by dividing the number of employees and students by the number of employed residents per household for the Bay Area in 2024 (1.4). See Table 10.

[40] The household demand in the HIA generated by NEPA Build Alternative 1 (4,374 units [see Table 10]) divided by the total new households in the HIA from 2025 to 2040 (345,900, derived from Table 3) equals the percentage (1.35 percent, from Table 10).

including federal, State, and local taxes in Santa Clara County, amount to $425 million, averaging $30 million annually. Total tax revenue from O&M activities is about $656 million annually.

As addressed in Section 3.5, the fiscal year 2024–2025 adopted budget for Santa Clara County, Sunnyvale, and Mountain View indicates that general fund revenue was about $583 million collectively (County of Santa Clara 2024, Sunnyvale 2024, Mountain View 2024).

When excluding State and federal taxes, the cumulative total local tax from construction activities is $60 million (about 14 percent of the total tax revenue), with an annual average of $4 million (a contribution rate of about 0.7 percent of local taxes per year),[41] and the local tax from O&M activities amounts to $46 million (about 7.9 percent of the total tax revenue). Although project-specific tax break exemptions at the Project Site may reduce the annual contributions, and the ultimate allocation between jurisdictions is unclear and subject to where future employees reside and do business, based on the above modeling by IMPLAN, these additional tax revenues are included. The general fund revenue across the three main communities would increase by roughly 0.7 percent in a year with construction and 7.9 percent during years with all four phases of O&M activities.

These tax revenues would be slightly offset by additional use of public services and facilities. Under the NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative, the 4,656 additional housing units are expected to be dispersed throughout the study area. Any additional K–12 students would constitute a negligible marginal cost increase in the study area.[42] The Project Proponent would compensate NASA for services provided to the proposed project through the ISP. This increase in the use of government facilities would not constitute a substantial increase above the 0.5 percent threshold. The 2002 PEIS explored the fiscal impacts on local governments by studying the per capita expenditures on recreation. The increase in new residents across the study area is expected to be offset by the growth in tax revenue from construction and O&M, resulting in negligible service impacts.[43] The potential tax revenues for local city, county, and State jurisdictions from NEPA Build Alternative 1 No Student/Faculty Housing Sub-Alternative far exceed the potential increased costs from use of government facilities.

5.3.4 NEPA Build Alternative 2

5.3.4.1 Effect on Local Economy

The NEPA Build Alternative 2 would not change the basic characteristics of the NEPA Build Alternative 1, with the same types of land uses at the same locations and the same site plan. The NEPA Build Alternative 2 would include approximately 1.1 million square feet for Research and Office Uses whereas the NEPA Build Alternative 1 would include approximately 2 million square feet for Research and Office Uses. With 920,000 fewer square feet than NEPA Build Alternative 1, NEPA Build Alternative 2 would reduce direct expenditures for construction-related materials, which

41 *Local tax* refers to the revenue collected by a county, city, township, village government, public school district, or fire district. *Total tax* refers to the revenue collected by federal, State, and local governments.

42 For context, the student count for Santa Clara County is 253,000, based on 2025 data from the California Department of Education.

43 The 2002 PEIS explored the recreational expenses of the City of Mountain View by estimating per capita expenses and comparing to tax revenue. This assessment over estimates the impacts of new residents because the majority of residents would be outside the Mountain View area. The increase in expenses is estimated to be less than 10 percent of the incremental tax revenue generated by the facility.

would affect local suppliers and secondary spending by workers because they would be on-site for a shorter period of time, thereby affecting businesses near the Project Site such as gas stations and restaurants. The IMPLAN results presented below suggest that the project would create, on average, 232 direct construction jobs annually (see Table 25) compared to the 29,270 available construction jobs in the area (see Table 7), a 0.7 percent increase. The beneficial impact of construction work on the local economy and employment would be temporary.

Operation of NEPA Build Alternative 2 would generate 3,394 new employees and students, or 2,663 more employees and 95 more students than under the NEPA No-Action Alternative.[44] However, NEPA Build Alternative 2 would generate fewer permanent employees and students than NEPA Build Alternative 1 (3,384 vs 6,132). Although the NEPA Build Alternative 2 would increase the number of permanent employees at the Project Site, this increase would be relatively minor in the context of the county's projected job growth, accounting for only 0.7 percent of projected 466,891 new jobs by 2040. The IMPLAN results show that, during O&M of all four phases, NEPA Build Alternative 2 would create, on average, a total of 1.95 direct, indirect, and induced jobs for each direct job annually (see Table 28). In summary, NEPA Build Alternative 2 would result in an increase in the number of permanent personnel working at the Project Site and potentially a minor increase in the number of occupied households in Santa Clara County. Given the small percentage associated with economic growth from employees, the additional personnel under NEPA Build Alternative 2 are anticipated to result in a minor beneficial impact for the local economy.

NEPA Build Alternative 2 IMPLAN Results

Table 24 presents the NEPA Build Alternative 2 employment inputs from NASA and the cost of materials used for the economic analysis of construction investments in the region.

Table 24: NEPA Build Alternative 2 Construction Input, 2026–2039

Input	Cumulative Total
Employment (FTE)	
Activities such as grading, demolition, trenching, laying foundations, core and shell, architectural coatings, etc., for research buildings	1,954
Activities such as grubbing, land clearing, excavation, drainage, subgrade, and paving of roads	250
Activities such as grading, demolition, trenching, laying foundations, core and shell, architectural coatings, etc., for commercial structures, such as hotels, and parking structures	354
Activities such as grading, demolition, trenching, laying foundations, core and shell, architectural coatings, etc., associated with residential buildings	228
Construction activity such as trenching	151
Construction activity such as hauling	286
Road drainage and subgrade	18
Total Employment	***3,241***
Material Costs ($ million)	***$757***

[44] With 42 employees at the Project Site, the NEPA Build Alternative 2 would generate a total of 3,331 employees.

The total project cost for NEPA Build Alternative 1 was estimated at $2.75 billion. Because the number of direct jobs associated with NEPA Build Alternative 2 is 51 percent lower than that of NEPA Build Alternative 1, the total project cost for NEPA Build Alternative 2 is estimated at $1.4 billion. Table 25 presents the projected employment impact from construction investments in the region under NEPA Build Alternative 2. The investment is expected to support more than 5,600 cumulative job-years in the region over the 14-year construction period from 2026 to 2039, averaging slightly more than 400 jobs per year.

Table 25: NEPA Build Alternative 2 Construction Employment Impact, 2026–2039

Job Type	Total Job-Years (14 years)	Average Annual Jobs
Direct	3,241	232
Indirect	1,409	101
Induced	985	70
Total	***5,636***	***403***

Table 26 shows the cumulative economic impact from construction investments in the region under NEPA Build Alternative 2. Over the duration of the project, capital investments are projected to result in approximately $611 million in additional labor income, $973 million in value-added GDP, $2.06 billion in additional economic output, and around $207 million in additional tax revenues. The direct impact on labor income, GDP, and output is estimated to be approximately $354 million, $509 million, and $1.3 billion, respectively.

Table 26: Cumulative Economic Impact, 2026–2039 ($ million)

	Labor Income	Value Added	Industry Output	Total Tax Revenue
Direct	$354	$509	$1,313	$98
Indirect	$174	$308	$522	$74
Induced	$84	$156	$225	$35
Total	***$611***	***$973***	***$2,061***	***$207***

In Santa Clara County alone, the investment is anticipated to generate about 5,000 cumulative job-years. Although all directly created positions would be located within Santa Clara County, a portion of the indirect and induced employment opportunities would extend to other counties in the region. The majority of new jobs would be concentrated in the construction sector, with additional roles emerging in transportation, architectural and engineering services, as well as retail establishments specializing in building materials.

Table 27 presents the NEPA Build Alternative 2 employment inputs from NASA and the estimated cost of materials used for the economic analysis of O&M investments in the region.

Table 27: NEPA Build Alternative 2 Operation and Maintenance Input

Input	Total Employment (FTE)
Maintenance of non-residential structures	83
Maintenance of residential structures	83
Maintenance of streets, utilities	83
Facility support services	83
Research and development	2,998
Total O&M Employment	***3,330***

Table 28 presents the projected economic impacts from O&M activities in the region. The investment is expected to support more than 6,500 cumulative job-years in the region annually, starting in 2040. Some O&M employment is projected to begin with Phase 1 in 2031.

Table 28: NEPA Build Alternative 2 Operation and Maintenance Employment Impact

Job Type	Total Job-Years	Santa Clara Job-Years
Direct	3,330	3,330
Indirect	1,244	1,056
Induced	1,940	1,412
Total	***6,514***	***5,798***

Table 29 shows the annual economic impact from O&M activities in the region. Once all phases of NEPA Build Alternative 2 are operational, annual activity is projected to result in approximately $1.2 billion in additional labor income, $1.7 billion in value-added GDP, $2.4 billion in additional economic output, and $343 million in additional tax revenues. The direct impact on labor income, GDP, and output is estimated to be approximately $858 million, $1.17 billion, and $1.5 billion, respectively.

Table 29: NEPA Build Alternative 2 O&M Economic Impact ($ million)

	Labor Income	Value Added	Industry Output	Total Tax Revenue
Direct	$858	$1,175	$1,581	$216
Indirect	$202	$309	$440	$58
Induced	$166	$310	$446	$70
Total	***$1,226***	***$1,793***	***$2,467***	***$343***

In Santa Clara County, O&M investments lead to annual employment totaling 5,800 cumulative job-years. The majority of the jobs created are in scientific R&D services, maintenance and repair, and facilities support services sectors.

5.3.4.2 Effect on Housing Demand

Compared with NEPA Build Alternative 1, NEPA Build Alternative 2 would have a reduced effect on housing demand because it would generate fewer employees and, therefore, a reduced demand on future households.

During the construction phase of NEPA Build Alternative 2, the average annual number of construction workers required would be 232. As addressed under the analysis for effects on the local economy (Section 5.3.4.1), these workers are anticipated to be sourced from the local workforce (0.7 percent of the workforce). However, even if all workers were "new" and required housing in the HIA, these employees would represent less than 1 percent of the anticipated 345,900 new households in the HIA (see Table 3); therefore, the construction phase of NEPA Build Alternative 2 would not exceed the housing significance threshold.

NEPA Build Alternative 2 would generate approximately 3,384 net new employees and students. This analysis conservatively assumes all of these employees and students would require housing in the HIA; a magnitude finding of *negligible* may be useful to support an impact characterization 145 employees and students are expected to find short-term on-site housing in the 145 proposed Student/Faculty Housing units (with 2.5 occupants per unit, 1 being an employee or student and 1.5 a partner/spouse or child), with the remaining 3,239 employees and students (i.e., 2,314 households)[45] requiring housing elsewhere in the HIA. The net household demand in the HIA generated by NEPA Build Alternative 2 would be 2,314, which is 0.67 percent of the total new households in the HIA from 2025 to 2040.[46] In addition to the total new housing units in the HIA, as discussed in Section 3.2, *Population and Housing Characteristics,* there were 33,046 vacant housing units in Santa Clara County in 2025 and 47,796 vacant housing units in the HIA, which could serve the household demand generated by NEPA Build Alternative 2. The housing demand generated by NEPA Build Alternative 2 would not represent more than 1 percent of the predicted new households in the identified HIA between 2025 and 2040.

[45] Households are calculated by dividing the number of employees and students by the number of employed residents per household in the Bay Area in 2024 (1.4 [see Table 10]).

[46] The net household demand in the HIA generated by NEPA Build Alternative 2 (2,314 units [see Table 10]) divided by the total new households in the HIA from 2025 to 2040 (345,900 [from Table 3]) equals the percentage (0.67 percent [from Table 10]).

5.3.4.3 Fiscal Impact on Local Governments and Facilities

The Project Site was one of the parcels considered for redevelopment in the 2002 PEIS for the NADP and therefore is within the scope of the analysis set forth in that document and the ROD. The preferred alternative analyzed in the 2002 PEIS, Mitigated Alternative 5, included 7,088 employees, 1,560 residents in the NRP area, and 250 conference guests. By being within the scope of analysis in the 2002 PEIS, the land uses and square footage numbers for NEPA Build Alternative 2 evaluated in this technical report do not exceed those analyzed in the 2002 PEIS. Given that none of the alternatives analyzed in the 2002 PEIS generated a significant fiscal impact on local jurisdictions and there are no new exceptions for fee commitments or new costs from those identified in the 2002 PEIS, and given the funding mechanisms NASA has committed to (refer to Section 3.5, *Local Governments and Facilities Budget Conditions*), NEPA Build Alternative 2 would not result in a cost impact on a local government that would amount to more than 0.5 percent of that jurisdiction's general fund or revenue limit.

According to the economic modeling in IMPLAN, the total tax revenues generated from construction activities, including federal, State, and local taxes in Santa Clara County, amount to $207 million, averaging to $15 million annually. The total tax revenue from O&M activities is about $343 million annually. As addressed in Section 3.5, the fiscal year 2024–2025 adopted budget for Santa Clara County, Sunnyvale, and Mountain View indicates that general fund revenue was about $583 million collectively (County of Santa Clara 2024, Sunnyvale 2024, Mountain View 2024). When excluding State and federal taxes, the cumulative total local tax from construction activities is $29 million (about 5 percent of the total tax revenue), with an annual average of $2 million (a contribution of 0.3 percent of local taxes a year).[47] The local tax from the O&M activities amounts to $24 million (about 4.1 percent of the total tax revenue). Although project-specific tax break exemptions at the Project Site may reduce these annual contributions, and the ultimate allocation between jurisdictions is unclear and subject to where future employees reside and do business, based on the above modeling by IMPLAN, these additional tax revenues are included. The general fund revenue across the three main communities would increase by roughly 0.3 percent in a year with construction and 4.1 percent during years with all four phases of O&M activities.

The anticipated tax revenues discussed above would be offset by additional use of public services and facilities. NEPA Build Alternative 2 would generate 145 Student/Faculty Housing units (with 2.5 occupants per units) and have a corresponding increase in demand for public services. The Project Proponent would compensate NASA for services provided to the proposed project through the ISP. The Project Proponent would comply with the requirements of the ISP on an annual basis. Payment of the ISP fees would address any increased demand on NASA services as a result of NEPA Build Alternative 2. The increase in the number of new residents across the County is expected to be offset by the growth in tax revenue from construction as well as operation, resulting in negligible service impacts.[48] The potential tax revenues for County and state jurisdictions from NEPA Build Alternative 2 would far exceed the potential increased costs from

[47] *Local tax* refers to the revenue collected by a county, city, township, village government, public school district, or fire district. *Total tax* refers to the revenue collected by federal, State, and local governments.

[48] The 2002 PEIS explored the recreational expenses of the City of Mountain View by estimating per capita expenses and comparing to tax revenue. This assessment over estimates the impacts of new residents because the majority of residents would be outside the Mountain View area. The increase in expenses is estimated to be less than 10 percent of the incremental tax revenue generated by the facility.

the use of government facilities. NEPA Build Alternative 2 would not result in a cost impact on a local government that would amount to more than 0.5 percent of a jurisdiction's general fund or revenue limit.

In addition, the proposed Student/Faculty Housing is expected to generate 25 additional K–12 students that would attend MVWSD and MVLA school districts. Enrollment across MVLA's comprehensive high schools exceeds total capacity at those schools.[49] NEPA Build Alternative 2 is expected to generate approximately seven new high-school students in MVLA. Therefore, it is likely that this increase in enrollment would exceed school capacity levels if any of the students enroll in Mountain View High School. Even if all seven new students attend Mountain View High School, this would represent a less than 1.0 percent increase in enrollment at Mountain View High School. However, high-school aged students would likely attend various schools throughout MVLA and would not affect one individual school. As such, NEPA Build Alternative 2 could result in a less than 1.0 percent increase in enrollment at Mountain View High School. In addition, the increase in employment opportunities could result in indirect impacts on schools because a small number of employees (with school-aged children) may choose to move to Mountain View to be closer to their work location. NEPA Build Alternative 2 would result in up to 6,132 net new employees and university students on-site. It is anticipated that that the majority of NEPA Build Alternative 2 employees already live in the San Francisco Bay Area and that the net number of new employees that would choose to relocate to Mountain View would not be substantial enough to generate unplanned population growth and result in a substantial increase in the demand for school services. Furthermore, it would not be easy for families of employees who do not reside in the city of Mountain View to send their children to school at MVWSD or MVLA schools; they would be required to request an inter-district transfer from their school district to send their school-aged children to schools in Mountain View. The likelihood of a new inter-district transfer into MVWSD being approved or wait listed is low.[50] In addition, given that both high schools in MVLA are close to or exceeding capacity, there are very few slots available for inter-district transfers.[51] Nonetheless, although NEPA Build Alternative 2 would not result in substantial population growth, and the increases in enrollment across MVLA and MVWSD is anticipated to be 1.0 percent or less, NEPA Build Alternative 2 would result in an increase in the demand for public school services. This impact would be potentially significant.

5.3.5 NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative

5.3.5.1 Effect on Local Economy

Construction of the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative would have a temporary beneficial effect on the local economy, similar to that of NEPA Build Alternative 2, given that

[49] Mike Mathiesen, Associate Superintendent – Business, Mountain View Los Altos High School District. Personal Communication, June 2, 2025.

[50] Mountain View Whisman School District. 2026. *Interdistrict Transfers*. Available: https://www.mvwsd.org/services_and_requests/register_a_student/interdistrict_transfers. Accessed : March 16, 2026.

[51] MVLA School District. 2026. *Transfer Process and Policies*. Available: https://www.mvla.net/Departments/Educational-Services/Policies-and-Procedures/Transfer-Process-and-Policies/. Accessed : March 16, 2026.

the square footage would be the same. The IMPLAN modeling results presented below suggest that the project would create, on average, 232 direct construction jobs annually (see Table 31) compared to the 29,270 available construction jobs in the area (see Table 7), a 0.7 percent increase.

Operation of the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative would generate 3,770 new employees and students, or 3,039 more employees and 105 more students than under the NEPA No-Action Alternative. This would more permanent employees and students than NEPA Build Alternative 2 (3,770 vs. 3,289). Similar to the above Build Alternatives, the overall increase in the number of permanent employees at the Project Site under NEPA Build Alternative 2 would be relatively minor in the context of the county's projected job growth, accounting for only 0.8 percent of the 466,891 projected new jobs by 2040. The IMPLAN modeling results show that, during O&M of all four phases, the project would create, on average, a total of 1.95 direct, indirect, and induced jobs for each direct job annually (see Table 34). In summary, the Sub-Alternative would result in an increase in the number of permanent personnel working at the Project Site and potentially a minor incremental increase in the number of occupied households in Santa Clara County. Given the small percentage associated with economic growth from employees, the additional personnel under the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative are anticipated to result in a minor beneficial impact for the local economy.

NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative IMPLAN Results

Table 30 presents the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative employment inputs from NASA and the cost of materials used for the economic analysis of construction investments in the region.

Table 30: NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative Construction Input, 2026–2039

Input	Cumulative Total
Employment (FTE)	
Activities such as grading, demolition, trenching, laying foundations, core and shell, architectural coatings, etc., for research buildings	1,954
Activities such as grubbing, land clearing, excavation, drainage, subgrade, and paving of roads	250
Activities such as grading, demolition, trenching, laying foundations, core and shell, architectural coatings, etc., for commercial structures, such as hotels, and parking structures	354
Activities such as grading, demolition, trenching, laying foundations, core and shell, architectural coatings, etc., associated with residential buildings	228
Construction activity such as trenching	151
Construction activity such as hauling	286
Road drainage and subgrade	18
Total Employment	***3,241***
Material Costs ($ million)	***$757***

Table 31 presents the projected employment impact from construction investments in the region under the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative. The investment is expected to support more than 5,600 cumulative job-years in the region over the 14-year construction period from 2026 to 2039, averaging slightly more than 400 jobs per year.

Table 31: NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative Construction Employment Impact, 2026–2039

Job Type	Total Job-Years (14 years)	Avg Annual Jobs
Direct	3,241	232
Indirect	1,409	101
Induced	985	70
Total	***5,636***	***403***

Table 32 shows the cumulative economic impact from construction investments in the region under the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative. Over the duration of the project, capital investments are projected to result in approximately $611 million in additional labor income, $973 million in value-added GDP, $2.06 billion in additional economic output, and around $207 million in additional tax revenues. The direct impact on labor income, GDP, and output is estimated to be approximately $354 million, $509 million, and $1.3 billion, respectively.

Table 32: NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative Cumulative Economic Impact, 2026–2039 ($ million)

	Labor Income	Value Added	Industry Output	Total Tax Revenue
Direct	$354	$509	$1,313	$98
Indirect	$174	$308	$522	$74
Induced	$84	$156	$225	$35
Total	***$611***	***$973***	***$2,061***	***$207***

In Santa Clara County alone, the investment is anticipated to generate approximately 5,000 cumulative job-years. Although all directly created positions would be located within Santa Clara County, a portion of the indirect and induced employment opportunities would extend to other counties in the region. The majority of new jobs would be concentrated in the construction sector, with additional roles emerging in transportation, architectural and engineering services, as well as retail establishments specializing in building materials.

Table 33 presents the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative employment inputs from NASA and the cost of materials used for the economic analysis of O&M activities in the region.

Table 33: NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative Operations and Maintenance Input

Input	Employment (FTE)
Maintenance of non-residential structures	93
Maintenance of residential structures	93
Maintenance of streets, utilities	93
Facility support services	93
Research and development	3,336
Total O&M Employment	***3,708***

Table 34 presents the projected economic impacts from O&M activities in the region under the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative. The investment is expected to support more than 7,250 cumulative job-years in the region annually, starting in 2040. Some O&M employment is projected to begin with Phase 1 in 2031.

Table 34: NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative O&M Employment Impact

Job Type	Total Job-Years	Santa Clara Job-Years
Direct	3,708	3,708
Indirect	1,385	1,176
Induced	2,160	1,571
Total	***7,253***	***6,455***

Table 35 shows the annual economic impact from O&M activities in the region. Once all phases of the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative are operational, annual activity is projected to result in approximately $1.3 billion in additional labor income, $1.9 billion in value-added GDP, $2.7 billion in additional economic output, and $382 million in additional tax revenues. The direct impact on labor income, GDP, and output is estimated to be approximately $955 million, $1.3 billion, and $1.7 billion, respectively.

Table 35: NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative O&M Economic Impact ($ million)

	Labor Income	Value Added	Industry Output	Total Tax Revenue
Direct	$955	$1,308	$1,760	$240
Indirect	$224	$344	$490	$64
Induced	$185	$345	$497	$77
Total	***$1,364***	***$1,996***	***$2,747***	***$382***

In Santa Clara County, the O&M investments would result in annual employment totaling 6,455 cumulative job-years. The majority of the jobs created would be in scientific R&D services, maintenance and repair, and facilities support services sectors.

5.3.5.2 Effect on Housing Demand

Similar to NEPA Build Alternative 2, the construction phase of the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative would require, on average, 232 construction workers annually. Even if all of these employees were "new" and required housing in the HIA, the 232 employees would represent less than 1 percent of the anticipated 345,900 new households in the HIA (see Table 3); therefore, the construction phase of the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative would not exceed the housing significance threshold.

The NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative would generate approximately 3,770 employees and students. This analysis conservatively assumes that all of these employees and students would need housing in the HIA. Although housing is not proposed under this Sub-Alternative, operation would generate a level of household demand amounting to 2,693 households,[52] which is 0.78 percent of the total new households in the HIA from 2025 to 2040.[53] In addition to the new housing units in the HIA, as discussed in Section 3.2, *Population and Housing Characteristics,* there were 33,046 vacant housing units in Santa Clara County in 2025 and 47,796 vacant housing units in the HIA, which could serve household demand generated by the sub-alternative. The housing demand generated by the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative would not represent more than 1 percent of the predicted new households in the identified HIA between 2025 and 2040.

[52] Households are calculated by dividing the number of employees and students by the number of employed residents per household in the Bay Area in 2024 (1.4 [see Table 10]).

[53] The net household demand in the HIA generated by the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative (2,693 units [see Table 10]) divided by the total new households in the HIA from 2025 to 2040 (345,900 [from Table 3]) equals the percentage (0.78 percent [from Table 10]).

5.3.5.3 Fiscal Cost on Local Governments and Facilities

The NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative would generate fees related to the additional 130,000 square feet of Research and Office Uses instead of the 130,000 square feet of Student/Faculty Housing in Subarea 6 under NEPA Build Alternative 2. Because the sub-alternative would still be subject to the NASA fee schedule, fiscal effects would be similar to those of NEPA Build Alternative 2, although the fees would be calculated on different land use types. The economic modeling in IMPLAN indicates that total tax revenues generated from construction activities, including federal, State, and local taxes in Santa Clara County, would amount to $207 million, or, on average, $15 million annually. Total tax revenue from O&M activities is about $382 million annually. As noted in Section 3.5, the fiscal year 2024–2025 adopted budget for Santa Clara County, Sunnyvale, and Mountain view indicates that general fund revenue was about $583 million collectively (County of Santa Clara 2024, Sunnyvale 2024, Mountain View 2024). When excluding State and federal taxes, the cumulative total for local tax from construction activities would be $29 million (about 5 percent of total tax revenue), with an annual average of $2 million (roughly 0.3 percent of local taxes a year).[54] The local tax from the O&M activities is about 7 to $27 million (about 4.6 percent of the total tax revenue). Although project-specific tax breaks exemptions at the Project Site may reduce these annual contributions, and the ultimate allocation between jurisdictions is unclear subject to where future employees reside and do business, based on the above modeling by IMPLAN, these additional tax revenues are included, the general fund revenue across the three main communities would increase by roughly 0.3 percent in a year with construction and 4.6 percent during years with all four phases of O&M activities.

These tax revenues would be slightly offset by additional use of public services and facilities. Under the NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative, the 2,693 additional housing units are expected to be dispersed throughout the study area, and any additional K–12 students would constitute a negligible cost increase in the study area.[55] The Project Proponent would compensate NASA for services provided to the proposed project through the ISP. This increase in the use of government facilities would not constitute a substantial increase above the 0.5 percent threshold. The 2002 PEIS explored the fiscal impacts on local governments by studying the per capita expenditures on recreation. The increase in the number of new residents across the study area is expected to be offset by the growth in tax revenue from construction and O&M, resulting in negligible service impacts.[56] The potential tax revenues for local, county, and State jurisdictions from NEPA Build Alternative 2 No Student/Faculty Housing Sub-Alternative far exceed the potential increased costs from use of government facilities.

---

54 *Local tax* refers to the revenue collected by a county, city, township, village government, public school district, or fire district. *Total tax* refers to the revenue collected by federal, State, and local governments.

55 For context, the student count for Santa Clara County is 253,000, based on 2025 data from the California Department of Education.

56 The 2002 PEIS explored the recreational expenses of the City of Mountain View by estimating per capita expenses and comparing to tax revenue. This assessment over estimates the impacts of new residents because the majority of residents would be outside the Mountain View area. The increase in expenses is estimated to be less than 10 percent of the incremental tax revenue generated by the facility.

Chapter 6
References

Argue, Ethan. 2024. *A Study of Commuting Conditions for Construction Professionals in the San Francisco Bay Area.* California Polytechnic State University. Available: https://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1970&context=cmsp. Accessed July 31, 2025.

Association of Bay Area Governments. 2021. *Plan Bay Area 2050*. Forecasting and Modeling Report. Updated: January 21, 2021. Available: https://planbayarea.org/sites/default/files/documents/Plan_Bay_Area_2050_Forecasting_Modeling_Report_October_2021.pdf. Accessed: July 29, 2025.

Association of Bay Area Governments. 2025a. *Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031.* Adopted December 2021, Updated June 2025.

Association of Bay Area Governments. 2025b. *Bay Area Census.* Available: https://census.bayareametro.gov/households. Accessed: August 29, 2025.

Bay Area Council Economic Institute. 2024. *Bay Watch: A Weekly Look into the Bay Area Economy.* Available: https://www.bayareaeconomy.org/bay-watch/bay-watch-january-2024-jobs-report-and-benchmark-revision/. Accessed: August 29, 2025.

Bureau of Labor Statistics. 2022. *May 2022 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates San José-Sunnyvale-Santa Clara, CA.* U.S. Department of Labor. Available: https://www.bls.gov/oes/2022/may/oes_41940.htm#47-0000. Accessed: July 30, 2025.

Bureau of Labor Statistics. 2023. *May 2023 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates San José-Sunnyvale-Santa Clara, CA.* U.S. Department of Labor. Available: https://www.bls.gov/oes/2023/may/oes_41940.htm#47-0000. Accessed: July 30, 2025.

Bureau of Labor Statistics. 2024. *May 2024 Metropolitan and Nonmetropolitan Area Occupational Employment and Wage Estimates San José-Sunnyvale-Santa Clara, CA.* U.S. Department of Labor. Available: https://data.bls.gov/oes/#/area/0041940. Accessed: July 30, 2025.

California Department of Education. 2025. *Enrollment/Number of Schools by Grade Span & Type.* Available: https://www.cde.ca.gov/ds/ad/cefenrollgradetype.asp.

California Department of Finance. 2025a. *Demographic Research Unit Report P-2A: Total Population Projections, California Counties, 2020–2070 (Baseline 2023 Population Projections; Vintage 2025 Release).* April 2025. Sacramento: CA.

California Department of Finance. 2025b. *E-5 Population and Housing Estimates for Cities, Counties and the State—January 1, 2021–2025.* May 2025. Sacramento, CA.

California Employment Development Department. 2025a. *Major Employers in Santa Clara County.* Available: https://labormarketinfo.edd.ca.gov/majorer/countymajorer.asp?CountyCode=000085. Accessed: June 2, 2025.

California Employment Development Department. 2025b. *San José-Sunnyvale-Santa Clara Metropolitan Statistical Area*. Labor Market Information Division. Available: https://labormarketinfo.edd.ca.gov/file/lfmonth/sjos$pds.pdf. Accessed July 31, 2025.

California Housing Partnership. 2023. *Santa Clara County 2023 Affordable Housing Needs Report.* Available: https://chpc.net/wp-content/uploads/2023/05/Santa-Clara-County_Housing-Report_2023.pdf. Accessed: July 29, 2025.

City of Mountain View. 2025a. *Table 1, Annual Report Broken Down by Revenues*. Updated: July 30, 2025. Available: https://mountainview.opengov.com/transparency#/76534/accountType=revenues&embed=n&breakdown=types&currentYearAmount=cumulative&currentYearPeriod=years&graph=bar&legendSort=desc&proration=true&saved_view=540864&selection=A96C93923EA996E40E7B9446D5B424D2&p. Accessed: July 31, 2025.

City of Mountain View. 2025b. *Annual Comprehensive Financial Report*. Available: https://www.mountainview.gov/home/showpublisheddocument/12666/639020856765230000. Accessed: February 2, 2026.

County of Santa Clara. 2024. *Fiscal Year 2024–2025 Adopted Budget.* Funds Summary – All Funds, Revenues by Type. Available: https://files.santaclaracounty.gov/2024-10/fy-2024-2025-adopted-budget.pdf?VersionId=mPrgC2w4I6bie3stRWk_CJmR4Wc66oNn. Accessed: July 31, 2025.

County of Santa Clara. 2025. *County of Santa Clara Housing Element Update, 2023–2031.* Table 3.1, page 171. Available: https://files.santaclaracounty.gov/exjcpb1361/2025-01/full-heu-adopted-1.28.25.pdf?VersionId=hmZZAShxgrc81qC0khFQQTUvsjYxlpb3. Accessed: May 28, 2025.

Metropolitan Transportation Commission. 2016. *Commute Patterns, May 2020.* Commute Flows between Bay Area Counties. Available: https://vitalsigns.mtc.ca.gov/indicators/commute-patterns#section-7MKeoRzqQ_D0CmMTR9-tK. Accessed: July 31, 2025.

National Aeronautics and Space Administration. 2021. *NASA FY 2021 Economic Impact Report State Fact Sheets, California.* Available: california-nasa-arc-afrc-jpl-fy21-eir-state-sheet.pdf. Accessed: June 3, 2025.

National Aeronautics and Space Administration. 2023. *NASAfacts: NASA's Ames Research Center.* June 1, 2023. Available: https://www.nasa.gov/wp-content/uploads/2023/07/amesfactsheet-final.pdf?emrc=2bd2a3. Accessed: June 2, 2025.

National Aeronautics and Space Administration, Ames Research Center. 2002a. *NASA Ames Development Plan*. December. Moffett Field, CA.

National Aeronautics and Space Administration, Ames Research Center. 2002b. *NASA Ames Development Plan Final Programmatic Environmental Impact Statement*. Prepared by: Design, Community & Environment, Berkeley, CA.

National Aeronautics and Space Administration, Ames Research Center. 2015. *Environmental Resources Document, National Aeronautics and Space Administration Ames Research Center, Moffett Field, CA*. Prepared by: Earth Resources Technology, Inc. Moffett Field, CA.

National Aeronautics and Space Administration. 2025. *Berkeley Space Center at NASA Research Park - NASA ARC Buildout Assumptions Memorandum*. December 16, 2025

National Association of Realtors. 2025. *Median Home Prices and Mortgage Payments by County.* Available: https://www.nar.realtor/research-and-statistics/housing-statistics/county-median-home-prices-and-monthly-mortgage-payment. Accessed: July 29, 2025.

Realtor.com. 2025. *Home Values in Atherton, CA*. Available: https://www.realtor.com/realestateandhomes-search/Atherton_CA/overview. Accessed: September 10, 2025.

Silicon Valley Chamber of Commerce. 2025. *Our History*. Available: https://www.svcentralchamber.com/our-history/. Accessed: June 2, 2025.

Sunnyvale, City of. 2025. *Annual Comprehensive Financial Report*. Available: https://www.sunnyvale.ca.gov/home/showpublisheddocument/6307/639010391944870000. Accessed: February 2, 2026.

U.S. Census Bureau. 2023. *American Community Survey, ACS 1-year Estimates.* Selected Economic Characteristics. Data Profiles, Table DP03. U.S. Department of Commerce. Available: https://data.census.gov/table/ACSDP1Y2023.DP03?q=santa+clara+county+employment&g=050XX00US06001,06013,06041,06055,06069,06075,06081,06095,06097_310XX00US41940. Accessed: July 29, 2025.

U.S. Census Bureau. 2024a. *2019–2023 American Community Survey (5-year Estimates).* Selected Economic Characteristics" Data Profiles, Table DP03. December 12, 2024. Available: https://data.census.gov/table/ACSDP5Y2024.DP03?q=DP03&g=050XX00US06001,06013,06041,06055,06075,06081,06085,06095,06097_160XX00US0649670,0677000. Accessed: March31, 2026.
https://data.census.gov/table/ACSDP5Y2024.DP03?q=DP03&g=050XX00US06001,06013,06041,06055,06075,06081,06085,06095,06097_160XX00US0649670,0677000. Accessed on 31 Mar 2026.

U.S. Census Bureau. 2024b. *Quick Facts: Santa Clara County, California*. Available: https://www.census.gov/quickfacts/fact/table/santaclaracountycalifornia/INC110223. Accessed: June 2, 2025.

U.S. Census Bureau. n.d. *Income in the Past 12 Months (in 2023 Inflation-adjusted Dollars).* American Community Survey, ACS 1-year Estimates Subject Tables, Table S1901. U.S. Department of Commerce. Available: https://data.census.gov/table/ACSST1Y2023.S1901?q=Income+distribution&g=050XX00US06001,06013,06041,06055,06075,06081,06085,06095,06097&moe=false. Accessed: July 29, 2025.

U.S. Department of Labor. 2025. *San Francisco Area Economic Summary*. Bureau of Labor Statistics. Available: www.bls.gov/regions/west/summary/blssummary_sanfrancisco.pdf. Updated: April 30, 2025. Accessed: June 2, 2025.

Chapter 7
Preparers

Jennifer Ostner, Senior Environmental Planner, ICF

Heather Hammermeister, Senior Editor, ICF

Caitlyn Ackerman, Senior Public Policy Specialist, ICF

Anna Neidhart, Senior Economics Analyst, ICF

David Ryder, Senior Economist, ICF

George Voigt, Senior Economics Analyst, ICF

Bansari Saha, Senior Director of Economics, ICF

Pratistha Gyawali, Lead Energy Economist, ICF